

User Factors Towards Purchasing Attitudes via E-Commerce in Tangerang City

Veronica, Julio Evan Desnito and Muhaimin Sasni Arita

Information Systems Department, Binus University, Indonesia

Article history

Received: 21-06-2024

Revised: 08-08-2024

Accepted: 14-11-2024

Corresponding Author:

Veronica

Information Systems Department,

Binus University, Indonesia

Email: veronica@binus.edu

Abstract: Advances in information technology have made the use of the internet a primary need for society, especially in the context of economics, such as e-commerce. Interest in online shopping is increasing, thus driving the growth of e-commerce platforms in Indonesia. This encourages each e-commerce platform to implement the best strategy to increase sales, either through improving appearance, adjusting prices, or other aspects. In Indonesia, the use of e-commerce is very large, increasingly driven by rapid technological developments. Many e-commerce platforms have been established in Indonesia, serving a large number of users. This analysis applies a quantitative approach, utilizing a descriptive design that integrates causal relationships. This study identifies factors that influence user attitudes towards purchasing through e-commerce in Tangerang City. The Hypothesis Test results in this study showed 8 hypotheses were accepted, while 2 hypotheses were rejected. The rejected hypothesis showed a T-Statistic value < 1.96 and a P-Value > 0.05 . While the accepted hypothesis showed a T-Statistic value > 1.96 and a P-Value < 0.05 .

Keywords: User Attitude, Purchase, E-Commerce

Introduction

In this modern era, the information technology development has made the internet increasingly popular and widely used, reaching the status of a primary necessity for society. Indonesian Internet Service Providers Association (APJII, 2023) reported Indonesia had 221,563,479 internet users in 2024, out of a total population of 278,696,200 in 2023. This phenomenon has led to various changes, including in the economic structure. The previously traditional economic system has now shifted to a model based on information technology. Various information can be accessed remotely, and transactions no longer require face-to-face meetings. The implementation of information technology in enhancing the economic system, including business, sales, and product purchases, can be seen in the form of e-commerce. According to a report by the Industry Ministry of Indonesia, total e-commerce users in Indonesia was 196 million in 2023. BPS (Hafifah & Marsino, 2022) reported that the population of South Tangerang City using e-commerce is 942,336.

E-commerce has become an online transaction platform that facilitates users, both individuals and organizations. Several e-commerce platforms in Indonesia adopt a marketplace business model, targeting sellers and buyers as the main market. These e-commerce platforms provide space for sellers to market

their products and offer various facilities for buyers to find the products they are looking for or want to buy. The increasing purchasing interest and the rapid e-commerce growth in Indonesia have driven each platform, including Tokopedia, to aggressively implement the best strategies to boost sales within their e-commerce ecosystem. This has prompted efforts to highlight their platform's capabilities and uniqueness to attract more users and retain existing customers. With the intensifying competition in the e-commerce market, similar platforms must remain adaptive and responsive to changing trends and market needs. This includes leveraging data and analysis to understand consumer behavior and adjusting their strategies according to the ever-evolving market demands. Thus, from the aspect of e-commerce appearance, price, ease of access and transactions, to the information presented in the application, e-commerce companies must understand the factors that can impact the general public's willingness to use these applications. This is important as a strategy to support strategic decision-making.

Government regulations, especially Bank Indonesia Regulation No.18/40/PBI/2016, have played a role in the e-commerce growth by encouraging innovations in financial technology. These rules are designed to improve the payment system infrastructure, enhancing the security, efficiency, and accessibility of online transactions for the public (Bank Indonesia, 2016).

It is essential to comprehend consumer behavior and the factors that drive the e-commerce application. to analyze various determinants including Performance expectancy, hedonic motivation, social influence, effort expectancy, facilitating conditions, price value, and habit. The UTAUT-2 (Unified Theory of Acceptance and Use of Technology 2) acts as a comprehensive framework for examining these factors, offering insights into User acceptance and usage behavior refer to how individuals adopt and interact with a particular technology or system, often affected by factors including perceived usefulness, ease of use, social norms, and individual beliefs about the technology's benefits. (Venkatesh, 2003).

Performance expectancy is the belief that applying e-commerce platforms will yield positive outcomes, Effort expectancy including how easy it is to apply these platforms, while social influence investigates how social networks influence the adoption of e-commerce (Abrahão *et al.*, 2016).

The problem in this analysis is to test the hypothesis of factors that affect the intention to use e-commerce platforms in Indonesia, including performance expectations, price value, social influence, facilitation conditions, business expectations, hedonic motivation, and habits. The research objectives are:

1. To evaluate the levels of PE, EE, SI, FC, HM, PV, and habit concerning e-commerce usage in Indonesia.
2. To determine these factors impacts on the intention to use e-commerce platforms in Indonesia.

This analysis provides valuable insights for e-commerce businesses and policymakers, helping them to develop strategies that enhance user adoption and satisfaction, thereby driving the e-commerce sector growth in Indonesia.

Literature Review

E-Commerce

The transition from traditional in-store shopping to online purchasing has fueled the growth of e-commerce, primarily because it offers features designed to enhance user sfaction (Tsagkias, 2020). These features include search functionalities (Tsagkias, 2020), live streaming, pay-later options (Puri *et al.*, 2022), and more. The e-commerce evolution has also incorporated the use of Artificial Intelligence (AI) to boost business interaction (Panigrahi & Karuna, 2021). Building trust among e-commerce users is crucial, as transactions are conducted over the internet, making it essential to uphold the integrity of e-commerce to foster user confidence (Soegoto & Putera, 2019). E-commerce facilitates digital business transactions, including distribution, purchasing, sales, and services, with key indicators such as internet accessibility, ease of information access, human resource capability, managerial information responsibilities,

processes, marketing, and payment systems (Teresya, 2022).

Unified Theory of Acceptance and Use of Technology 2

The acceptance of technology usage can be evaluated through many models, like the TAM (Technology Acceptance Model), TPB (Theory of Planned Behavior), and UTAUT (Unified Theory of Acceptance and Use of Technology), which has further evolved into UTAUT2, as developed by Aminah *et al.* (2024). UTAUT identifies four independent variables: performance expectations, social influence, effort expectations and facilitating conditions—as key factors of behavioral intentions, according to Zhou *et al.* (2023). The evolution to UTAUT2 offers a more comprehensive framework for examining customer perspectives on their technology use, as noted by Agarwal & Sahu (2022). The Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) provides a thorough basis for comprehending and forecasting technology adoption and usage behavior by combining ideas from eight well-known theoretical frameworks: the Theory of Reasoned Action (TRA), the Technology Acceptance Model (TAM), the Motivational Model (MM), the Theory of Planned Behavior (TPB), the integrated TAM-TPB model, the Innovation Diffusion Theory (IDT), and the Social Cognitive Theory (SCT).

Performance Expectancy (PE)

PE shows the extent to which a person believes that applying a system will develop their job performance. Recent research has highlighted its significance in different settings. For instance, PE has been identified as a behavioral intention key factor in mobile banking application (Amin, 2020).

Effort Expectancy (EE)

EE pertains to the ease with which a system can be used. Studies show that systems deemed easy to use have a higher likelihood of being adopted. Venkatesh *et al.* (2012) emphasized that EE greatly influences user acceptance in e-learning platforms, where ease of access and navigation are vital for engaging users.

Social Influence (SI)

SI encompasses the effect of others on decision to pply technology. This factor is particularly influential in environments where peer opinions and social norms play a significant role. Alalwan *et al.* (2017) showed SI positively affects the application of social media marketing tools among businesses.

Facilitating Conditions (FC)

FC refer to the availability of resources and support to apply the system. Adequate facilitating conditions

enhance users' confidence in using technology. Recent findings by Dwivedi *et al.* (2020) suggest that FC significantly contributes to the adoption of smart home devices, where technical support and resource availability are critical.

Hedonic Motivation (HM)

HM refers to the pleasure one gets from applying technology. Studies have shown that HM is a strong key of behavioral intention, especially in contexts like gaming and entertainment. For instance, Verhagen & van Dolen (2011) obtained HM significantly affects the acceptance of augmented reality applications in retail.

Price Value (PV)

PV represents the users' mental evaluation of the benefits they perceive versus the financial cost of applying the technology. A positive value enhances adoption likelihood. In the context of mobile apps, Yang (2021) reported that PV is essential in determining user intention to purchase premium features.

Habit

Habit refers to the degree to which a person engages in a behavior simultaneously because of learned habits. It significantly impacts behavioral intention and use behavior. Limayem *et al.* (2007) found habit is a strong factor of continuous usage of fitness tracking devices.

Moderating Effects of Gender and Age

The factor affects behavioral intention and use behavior is moderated by demographic variables like gender and age. Studies indicate that these moderating effects vary across different technologies and user groups. For example, gender differences in the adoption of e-commerce platforms were explored by Slyke *et al.* (2020), showing that males and females prioritize different factors when adopting new technologies.

Behavioral Intention (BI) and Use Behavior (UB)

BI is the primary factor of actual UB. The stronger the intention to use a technology, the higher the likelihood of its actual usage. Venkatesh *et al.* (2012) demonstrated that BI is a robust predictor of UB across various technological contexts, including mobile applications and online services.

Materials and Methods

This analysis examined how people in Indonesia intend to use, utilize, and adopt electronic money services, applying the UTAUT-2 as a framework, which builds upon prior research by Thong and Xu (2012).

The study employed quantitative methods, utilizing a descriptive research design that integrates causal relationships. These quantitative approaches are noted for their precision in measuring behaviors, knowledge,

opinions, and attitudes. They are commonly used in various fields due to their effectiveness in testing models or hypotheses (McCombes, 2023).

Causal research seeks to identify the reasons behind a problem and can be conducted through either experimental or non-experimental methods (McCombes, 2023). In this study, the researchers maintain objectivity by simply observing and recording individual responses without manipulation or intervention (Indrawati, 2017). The analysis focused on individuals, particularly those familiar with or who have used mobile payment systems (Sekaran, 2017).

The population targeted in this study comprises all individuals, events, or objects of interest to the researchers (Indrawati, 2017). Given the impracticality of studying an entire large population, a sample was drawn from this population based on specific criteria determined by the researchers.

1. Knowing about E-commerce
2. Performed More Than One Purchase on E-Commerce

Operational Variable

Variables, as defined by Sugiyono (2019), are essential elements researchers define to collect data and make conclusions. This study utilizes three types of research variables: a) Independent Variable (X): According to Sugiyono (2019), this variable causes changes or influences the dependent variable. This analysis's independent variables include PE (X1), EE (X2), SI (X3), FC (X4), HM (X5), PV (X6), and habit (X7). b) Dependent Variable (Y): Sugiyono (2019) describes the dependent variable as being affected or determined by the independent variable. Then, this analysis used the intention to adopt (Y) as dependent variable in this analysis is. Table 1 represents all the variables that have been used for this research.

This research utilizes the PLS-SEM approach. Tenenhaus *et al.* (2005) as referenced in Abdillah and Jogiyanto (2015), describe PLS (Partial Least Squares) as a robust method for testing various assumptions. It is particularly useful for predicting models with limited theoretical backing, handling data that may not meet classical assumptions, and managing small sample sizes. PLS is applicable to both formative and reflective constructs.

PLS is a kind of SEM that can assess measurement and structural models simultaneously. The measurement model evaluates validity and reliability. Meanwhile the structural model evaluates causality using hypothesis testing with predictive models.

Hypothesis

In 2012, an advanced model of UTAUT known as UTAUT-2 was improved, building on the original UTAUT model initially created by Venkatesh *et al.* (2003). UTAUT-2 is a framework frequently used in

research related to technology acceptance and usage. This model has significant influence and is often

employed to understand how users accept and adopt information technology.

Table 1: Research Instrument

Variables	Indicator	Number
Performance expectation (X1) Performance expectation refers to the degree to which an individual believes that utilizing the system will provide a benefit in enhancing their job performance (Marheni, 2022)	I feel that E-commerce provides convenience in accessing product searches	1
Effort expectation (X2) EE refers to how easy it is to use the system (Marheni, 2022)	Do you agree that the navigation and features in E-commerce are easy to understand	2
	I find it easy to use the product search and filtering features on E-commerce platform	3
Social Influence (X3) SI is the degree to which a person perceives that the opinions and actions of others regarding the use of a new system will impact their own decision to use the system (Marheni, 2022)	I feel that the use of certain E-commerce platforms has become a trend in my social environment	4
Facilitating Condition (X4) Facilitating Condition is "the degree to which person believes that technical and organizational infrastructure aims to support use of the system (Marheni, 2022)	I find it easy to find the help or guidance I need when using an E-commerce platform	5
	I feel that E-commerce platforms meet my needs and preferences for online shopping	6
	My shopping experience on E-commerce platforms aligns with the technology and devices I use daily	7
	My shopping experience on E-commerce platforms aligns with the technology and devices I use daily	8
Hedonic motivation (X5) Hedonic Motivation refers to the enjoyment or pleasure gained from using technology, which plays a crucial role in determining consumer acceptance and usage of technology (Shaw & Sergueeva, 2019)	I enjoy shopping through this E-commerce platform because of its ease and convenience	9
	Using E-commerce platform brings satisfaction and enjoyment to me.	10
	I feel that additional features such as games or entertainment content on the E-commerce platform add excitement to the shopping process	11
	I believe that the quality of products offered on this E-commerce platform is worth the price set	12
Price Value (X6) Price Value is a way of choosing a product price, appropriate to the product's feasibility and willingness to pay, not on production costs (Marheni, 2022)	I feel that the products I buy on this E-commerce platform provide added value or benefits that justify their price	13
	I tend to make purchases after considering alternatives and comparing prices on this E-commerce platform.	14
	Sometimes I find it difficult not to use this E-commerce platform even though I don't actually need it.	15
	I intend to continue applying this E-commerce in the future	16
Habit (X7) Habit is a routine activity that is repeated continuously and occur subconsciously. It often manifests as an automatic response to certain situations or cues (Ioannis, 2021)	I plan to use this E-commerce regularly for my shopping activities in the future	17
	I am satisfied with the service quality of this E-commerce platform, including delivery speed, customer service responsiveness, and overall user experience	18
	To me, reading product reviews from other users is crucial in the decision-making process before purchasing a product on an E-commerce platform.	19
	I often find myself automatically opening the E-commerce platform's app or website without a specific purpose and devices I use daily	20
Behavioral Intention (X8) BI is the degree to which an individual has formulated conscious plans whether to conduct or not certain future behaviors (Marheni, 2022)	I plan to continue using this platform for my shopping activities in the future	21
	I feel that E-commerce platforms provide various features and tools that facilitate the purchasing and usage process	22
	I am satisfied with the service quality of the E-commerce platform	23
Use Behavior (X9) UB is the observable actions, reactions, or responses exhibited by an individual, group, or organism in a particular context or environment (Marheni, 2022)	I feel that this E-commerce platform provides service that meets and even exceeds my expectations in terms of quality	24
	I plan to continue using this platform for my shopping activities in the future	25

The UTAUT-2 model has 7 independent variables: PE, EE, SI, FC, HM, PV, and habit, along with one dependent variable: behavioral intention.

Fig. 1 below shows the relationship between variables and also the hypothesis in Table 2.

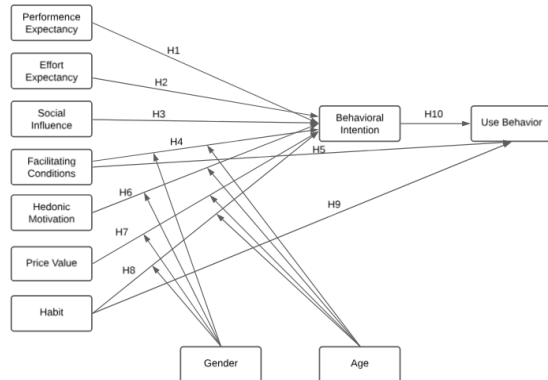


Fig. 1: Research Model

Table 2: Hypothesis

No.	Hypothesis
H1	PE positively and significantly affects BI.
H2	EE positively and significantly affects BI.
H3	SI positively and significantly affects BI.
H4	FC positively and significantly affects BI.
H4a	The effect of FC on BI was moderated by Age.
H4B	The effect of FC on BI is moderated by Gender.
H5	HM positively and significantly affects Behavioral Intention
H5a	The effect of HM on BI was moderated by Age.
H5B	The effect of HM on BI is moderated by Gender.
H6	The Effect of PV on BI Moderated by BI
H6a	The Effect of PV on BI Moderated by Age
H6B	The Effect of PV on BI Moderated by Gender
H7	The influence of Habit on BI is moderated by BI
H7a	The Influence of Habit on BI Moderated by Age
H7B	The Influence of Habit on BI Moderated by Gender
H8	FC positively and significantly affects UB.
H9a	The effect of FC on UB moderated by age
H9B	The Effect of FC on UB Moderated by Gender
H10	Habit positively and significantly affects UB
H10a	The Effect of Habit on UB Moderated by Age
H10B	The Effect of Habit on UB Moderated by Gender
H11	BI positively and significantly influences UB

State of The Art

Previous studies have enriched research discussions in the field of e-commerce adoption, providing valuable benchmarks for comparison with the current analysis. Two international journals were particularly relevant in examining the application of the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) framework within the e-commerce context.

Wang and Zhang (2019) investigated factors affecting e-commerce adoption using a mixed-methods approach

that combined surveys and interviews with e-commerce users. Their analysis within the UTAUT2 framework highlighted performance expectations, effort expectations, and facilitating conditions as critical determinants influencing consumer adoption of e-commerce. The findings confirmed the applicability of UTAUT2 in explaining e-commerce adoption behavior, thereby reinforcing the model's robustness in diverse consumer contexts.

Similarly, Ali and Rahman (2020) conducted a survey among online buyers to analyze factors influencing online shopping behavior through the lens of UTAUT2. Their study identified performance expectations, effort expectations, and social influences as significant predictors of consumers' intentions to shop online. These insights not only validated the UTAUT2 model but also provided practical implications for businesses seeking to enhance the online shopping experience by addressing consumer expectations and leveraging social influence.

Taken together, these studies demonstrate the centrality of UTAUT2 constructs in understanding e-commerce adoption and provide a strong foundation for differentiating the current research focus from earlier investigations.

Table 3: AVE Result

Variable	Average Variance Extracted	Cronbach's Alpha	Composite Reliability
Performance Expectancy	1.000	1.000	1.000
Effort Expectancy	0.834	0.802	0.910
Social Influence	1.000	1.000	1.000
Facilitating Conditions	0.781	0.907	0.935
Hedonic Motivation	0.786	0.909	0.936
Price Value	0.780	0.906	0.934
Habit	0.801	0.917	0.946
Behavioral Intention	0.775	0.802	0.834
Use behavior	1.000	1.000	1.000

Table 4: T-Statistics

Connection	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
BI -> UB	0.282	0.281	0.095	2.963	0.003
EE -> BI	0.164	0.163	0.049	3.349	0.001
FC -> BI	0.162	0.160	0.061	2.652	0.008
FC -> UB	0.073	0.071	0.090	0.806	0.421
Habit -> BI	0.147	0.140	0.063	2.351	0.019
Habit -> UB	0.495	0.497	0.100	4.940	0.000
HM -> BI	0.166	0.170	0.053	3.133	0.002
PE -> BI	0.036	0.038	0.039	0.913	0.362
PV -> BI	0.234	0.235	0.055	4.252	0.000
SI -> BI	0.093	0.094	0.038	2.475	0.014

Results and Discussion

The AVE results in Table 3 show values above 0.50 for each variable. Additionally, the CA and CR test results indicate values above 0.70 for each variable. These results demonstrate that the questionnaire outcomes are accurate and reliable due to their satisfactory consistency.

The hypothesis testing results in Table 4 shows that 8 hypotheses were accepted, while 2 were rejected. The rejected hypotheses showed T-Statistic values below 1.96 and P-Values above 0.05. Conversely, the accepted hypotheses had T-Statistic values above 1.96 and P-Values below 0.05.

Based on the researchers' observations, the sampling procedures for this analysis are outlined in Table 5.

Table 5: Sampling

Information	Number	%
Total questionnaires distributed	280	100
Total questionnaires not returned	0	0.00
Total damaged questionnaires	0	0.00
Total questionnaires processed	280	400

Table 6: Performance Expectancy Variable

No Statement	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Total Score	Ideal Score	Result
1 I feel that E-commerce provides convenience in accessing product searches	0	0	0	105	175	1295	1400	Good

Table 7: Effort Expectancy Variable

No Statement	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Total Score	Ideal Score	Result
1 Do you agree that the navigation and features in E-commerce are easy to understand	0	0	0	173	107	1227	1400	Good
2 I find it easy to use the product search and filtering features on E-commerce platform	0	0	0	96	184	1304	1400	Good

Table 8: Social Influence Variable

No Statement	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Total Score	At 0%	Ideal Score	Result
1 I feel that the use of certain E-commerce platforms has become a trend in my social environment	0	0	0	120	160	1280	0	1400	Good

Table 9: Facilitating Condition Variables

No Statement	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Total Score	At 0%	Ideal Score	Result
1 I find it easy to find the help or guidance I need when using an E-commerce platform	0	0	11	107	162	1271	0	1400	Good
2 I feel that E-commerce platforms provide various features and tools that facilitate the purchasing and usage process	7	0	3	113	157	1253	0	1400	Good
3 I feel that E-commerce platforms meet my needs and preferences for online shopping	0	8	2	119	151	1253	0	1400	Good
4 My shopping experience on E-commerce platforms aligns with the technology and devices I use daily	0	11	2	119	148	1244	0	1400	Good

Descriptive Analysis

The descriptive analysis summarizes and presents the responses of 200 participants regarding their perspectives on various factors affecting their intention to use e-commerce. These factors include PE, EE, SI, as well as perceived risk and cost, evaluated through 25 statements and the diagram test results shown in Fig 2.

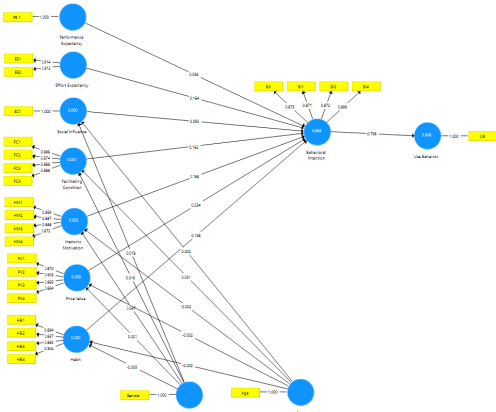


Fig. 2: Diagram Test Result using SMART-PLS

Table 10: Hedonic Motivation Variables

No	Statement	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Total Score	At 0%	Ideal Score	Result
1	I enjoy shopping through this E-commerce platform because of its ease and convenience	0	0	14	107	159	1265	0	1400	Good
2	Using E-commerce platform brings satisfaction and enjoyment to me.	8	0	4	108	160	1252	0	1400	Good
3	I feel that additional features such as games or entertainment content on the E-commerce platform add excitement to the shopping process	0	7	2	117	154	1260	0	1400	Good
4	I believe that the product quality on this E-commerce platform is worth the price set	0	11	3	121	146	1245	0	1400	Good

Table 11: Price Value Variables

No	Statement	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Total Score	At 0%	Ideal Score	Result
1	I feel that the products I buy on this E-commerce platform provide added value or benefits that justify their price	0	0	12	108	160	1268	0	1400	Good
2	I tend to make purchases after considering alternatives and comparing prices on this E-commerce platform	7	0	2	112	159	1256	0	1400	Good
3	Sometimes I find it difficult not to use this E-commerce platform even though I don't actually need it.	0	7	2	119	152	1256	0	1400	Good
4	I intend to continue applying this E-commerce platform in the future	0	11	2	127	140	1236	0	1400	Good

Table 12: Habbit Variables

No	Statement	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Total Score	At 0%	Ideal Score	Result
1	I plan to use this E-commerce platform regularly for my shopping activities in the future	0	0	10	107	163	1273	0	1400	Good
2	I am satisfied with the service quality of this E-commerce platform, including delivery speed, customer service responsiveness, and overall user experience	7	0	1	114	158	1256	0	1400	Good
3	To me, reading product reviews from other users is crucial in the decision-making process before purchasing a product on an E-commerce platform.	0	8	2	121	151	1261	0	1400	Good
4	I often find myself automatically opening the E-commerce platform's app or website without a specific purpose and devices I use daily	0	11	1	126	142	1239	0	1400	Good

Table 13: Behavioral Intention Variables

No	Statement	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Total Score	At 0%	Ideal Score	Result
1	I plan to continue using this platform for my shopping activities in the future	0	0	30	148	102	1192	0	1400	Good
2	I feel that E-commerce platforms provide various features and tools that facilitate the purchasing and usage process	0	0	32	155	93	1181	0	1400	Good
3	I am satisfied with the quality of service provided by the E-commerce platform.	0	8	50	100	122	1179	0	1400	Good
4	I feel that this E-commerce platform provides service that meets and even exceeds my expectations in terms of quality	0	0	45	138	97	1172	0	1400	Good

Table 14: Use Behavior Variables

No	Statement	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Total Score	At 0%	Ideal Score	Result
1	I plan to continue using this platform for 0 my shopping activities in the future	0	0	121	159		1283	0	1400	Good

Performance Expectancy (PE)

From the descriptive analysis results in Table 6, the PE variable is in the good category with a 1295 total score out of an ideal score of 1400, which is 92.5%. The statement "I feel that E-commerce provides convenience in accessing product searches" received 105 agree responses and 175 strongly agree responses. This indicates that the majority of respondents feel that e-commerce platforms provide ease in searching for products they desire.

Effort Expectancy (EE)

From the descriptive analysis results in Table 7, the overall EE variable is in the good category. The first statement "Do you agree that the navigation and features in E-commerce are easy to understand?" obtained a total score of 1227 out of an ideal score of 1400, which is 87.64%. The second statement "I find it easy to use the product search and filtering features on the E-commerce platform" received a total score of 1304 out of an ideal score of 1400, which is 93.14%. This shows that respondents generally find the navigation and features on e-commerce platforms easy to understand and use.

Social Influence (SI)

From the descriptive analysis results in Table 8, the SI variable is in the good category with a 1280 total score out of an ideal score of 1400, which is 91.43%. The statement "I feel that the use of certain E-commerce platforms has become a trend in my social environment" received 120 agree responses and 160 strongly agree responses. This indicates that the majority of respondents feel that using e-commerce platforms has become a trend in their social environment.

Facilitating Conditions (FC)

From the descriptive analysis results in Table 9, the FC variable is in the good category. The statement "I find it easy to find the help or guidance I need when using an E-commerce platform" received a total score of 1271 out of an ideal score of 1400, which is 90.79%. The statement "I feel that E-commerce platforms provide various features and tools that facilitate the purchasing and usage process" received a total score of 1253 out of 1400, which is 89.5%. The statement "I feel that E-commerce platforms meet my needs and preferences for online shopping" also received a total score of 1253 out of 1400, which is 89.5%. Lastly, "My shopping experience on E-commerce platforms aligns with the technology and devices I use daily" received a total score of 1244 out of 1400, which is 88.86%. These results

show that respondents generally feel that e-commerce platforms provide adequate support and features to facilitate their shopping experience.

Hedonic Motivation (HM)

From the analysis results in Table 10, the HM variable is in the good category. The statement "I enjoy shopping through this E-commerce platform because of its ease and convenience" received a total score of 1265 out of an ideal score of 1400, which is 90.36%. The statement "Using E-commerce platform brings satisfaction and enjoyment to me" received a total score of 1252 out of 1400, which is 89.43%. The statement "I feel that additional features such as games or entertainment content on the E-commerce platform add excitement to the shopping process" received a total score of 1260 out of 1400, which is 90%. Lastly, "I believe that the quality of products offered on this E-commerce platform is worth the price set" received a total score of 1245 out of 1400, which is 88.93%. These results indicate that respondents generally enjoy using e-commerce platforms and find them entertaining and satisfactory.

Price Value (PV)

From the analysis results in Table 11, the PV variable is in the good category. The statement "I feel that the products I buy on this E-commerce platform provide added value or benefits that justify their price" received a total score of 1268 out of an ideal score of 1400, which is 90.57%. The statement "I tend to make purchases after considering alternatives and comparing prices on this E-commerce platform" received a total score of 1256 out of 1400, which is 89.71%. The statement "Sometimes I find it difficult not to use this E-commerce platform even though I don't actually need it" also received a total score of 1256 out of 1400, which is 89.71%. Lastly, "I intend to continue using this E-commerce platform in the future" received a total score of 1236 out of 1400, which is 88.29%. These results demonstrate that respondents feel that the prices on e-commerce platforms are justified by the value and benefits they receive.

Habit

From the analysis results in Table 12, the Habit variable is in the good category. The statement "I plan to use this E-commerce platform regularly for my shopping activities in the future" received a total score of 1273 out of an ideal score of 1400, which is 90.93%. The statement "I am satisfied with the quality of service provided by this E-commerce platform, including delivery speed, customer service responsiveness, and

overall user experience" received a total score of 1256 out of 1400, which is 89.71%. The statement "To me, reading product reviews from other users is crucial in the decision-making process before purchasing a product on an E-commerce platform" received a total score of 1261 out of 1400, which is 90.07%. Lastly, "I often find myself automatically opening the E-commerce platform's app or website without a specific purpose" received a total score of 1239 out of 1400, which is 88.5%. These results suggest that respondents have developed strong habits related to their use of e-commerce platforms.

Behavioral Intention (BI)

From the analysis results in Table 13, the BI variable is in the good category. The statement "I plan to continue using this platform for my shopping activities in the future" received a total score of 1192 out of an ideal score of 1400, which is 85.14%. The statement "I feel that E-commerce platforms provide various features and tools that facilitate the purchasing and usage process" received a total score of 1181 out of 1400, which is 84.36%. The statement "I am satisfied with the quality of service provided by the E-commerce platform" received a total score of 1179 out of 1400, which is 84.21%. Lastly, "I feel that this E-commerce platform provides service that meets and even exceeds my expectations in terms of quality" received a total score of 1172 out of 1400, which is 83.71%. This means that respondents generally intend to continue applying to e-commerce platforms due to their positive experiences and satisfaction with the services provided.

Use Behavior (UB)

From the analysis results in Table 14, the UB variable is in the good category. The statement "I plan to continue using this platform for my shopping activities in the future" received a total score of 1283 out of an ideal score of 1400, which is 91.64%. This high score suggests that respondents have a strong intention to continue applying the e-commerce platform for their future shopping needs.

Conclusion

This study demonstrates that Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, Hedonic Motivation, Price Value, and Habit exert significant positive effects on Behavioral Intention (BI) to use e-commerce platforms, while BI itself significantly influences actual Use Behavior (UB). The descriptive analysis further indicates that all constructs, including PE, EE, SI, FC, HM, PV, BI, Habit, and UB, fall within a favorable category, underscoring the robustness of the e-commerce adoption framework.

The findings highlight the need for sustained efforts to enhance e-commerce adoption and usage. Specifically,

greater promotion of platform benefits is recommended to increase awareness and accessibility across diverse user groups. Ensuring consumer confidence through financial, social, and psychological security is critical to sustaining trust. Continuous improvements in accessibility, application quality, and service efficiency should be prioritized to encourage repeat usage. Moreover, enhancing usability through user-friendly navigation and leveraging social trends can further accelerate adoption. Finally, refining product and service value propositions to meet evolving consumer expectations will be essential to maintain competitiveness and long-term user engagement.

Acknowledgment

We are thankful to our families and friends for their unwavering moral support and understanding during the entire research and writing process.

Funding Information

This research was funded by our institution, BINUS University.

Author's Contributions

Veronica: Conceptualization, methodology, data analysis and findings, writing paper, and Correspondence author.

Julio Evan Desnito: Questionnaire, Data Analysis and findings, writing Paper.

Muhaimin Sasni Arita: Questionnaire, Data Analysis and findings, writing Paper.

Ethics

This article is original and contains unpublished material. The corresponding author confirms that all of the other authors have read and approved the manuscript and that no ethical issues are involved.

References

- Abdillah, W., & Jogiyanto, H. (2015). *Partial Least Square (PLS): Alternatif Structural Equation Modeling (SEM) dalam Penelitian Bisnis*.
- Abrahão, R. de S., Moriguchi, S. N., & Andrade, D. F. (2016). Intention of adoption of mobile payment: An analysis in the light of the Unified Theory of Acceptance and Use of Technology (UTAUT). *RAI Revista de Administração e Inovação*, 13(3), 221–230.
<https://doi.org/10.1016/j.rai.2016.06.003>
- Agarwal, V., & Sahu, R. (2022). Predicting repeat usage intention towards O2O food delivery: extending UTAUT2 with user gratifications and bandwagoning. *Journal of Foodservice Business Research*, 25(4), 434–474.
<https://doi.org/10.1080/15378020.2021.1951074>

- Alalwan, A. A., Rana, N. P., Dwivedi, Y. K., & Algharabat, R. (2017). Social media in marketing: A review and analysis of the existing literature. *Telematics and Informatics*, 34(7), 1177–1190. <https://doi.org/10.1016/j.tele.2017.05.008>
- Amin, H. (2020). Mobile banking adoption: The impact of usability and perceived risk. *Journal of Financial Services Marketing*, 25(3), 204–217. <https://doi.org/10.1057/s41264-020-00074-1>
- Aminah, S., Aditya, A., & Kanthi, Y. A. (2024). The Role of UTAUT2 in Understanding Technology Adoption: A Study of the Merdeka Mengajar Platform Among Indonesian Teachers. *Teknika*, 13(3), 460–470. <https://doi.org/10.34148/teknika.v13i3.1082>
- APIII. (2023). *Indonesian Internet Service Providers Association*.
- Dwivedi, Y. K., Hughes, D. L., Kar, A. K., Baabdullah, A. M., & Grover, P. (2020). Adoption of smart home technologies: An empirical investigation. *Journal of Business Research*, 118, 142–154. https://doi.org/10.1007/978-3-030-29374-1_25
- Hafifah, S., & Marsisno, W. (2022). Permasalahan dan Potensi dalam Diseminasi Official Statistics pada Badan Pusat Statistik. *Seminar Nasional Official Statistics*, 2022(1), 323–332. <https://doi.org/10.34123/semnasoffstat.v2022i1.1419>
- Indrawati, S. (2017). *Metode penelitian: Suatu pendekatan praktik*.
- Ioannis, K. (2021). Habit formation and automaticity in consumer behavior. *Journal of Consumer Psychology*, 31(2), 345–360. <https://doi.org/10.1002/jcpy.1201>
- Limayem, M., Hirt, S. G., & Cheung, C. M. K. (2007). How Habit Limits the Predictive Power of Intention: The Case of Information Systems Continuance. *MIS Quarterly*, 31(4), 705–737. <https://doi.org/10.2307/25148817>
- Marheni, E. S. (2022). Performance expectancy in technology adoption. *International Journal of Technology Management*, 48(1), 25–40.
- McCombes, S. (2023). Causal research: Definition, examples, and methods. *Research Methods Guide*.
- Panigrahi, P., & Karuna, S. (2021). Artificial intelligence and its applications in e-commerce. *Journal of Retailing and Consumer Services*, 60, 102434. <https://doi.org/10.1016/j.jretconser.2021.102434>
- Puri, P., Gupta, S., & Sharma, V. (2022). Exploring the impact of live-streaming and buy-now-pay-later features on consumer behavior in e-commerce. *International Journal of Information Management*, 64, 102474. <https://doi.org/10.1016/j.ijinfomgt.2022.102474>
- Sekaran, U. (2017). *Metode penelitian untuk bisnis. 6th udg*.
- Shaw, N., & Sergueeva, K. (2019). The non-monetary benefits of mobile commerce: Extending UTAUT2 with perceived value. *International Journal of Information Management*, 45, 44–55. <https://doi.org/10.1016/j.ijinfomgt.2018.10.024>
- Slyke, C. V., BÄ©langer, F., Johnson, R. D., & Hightower, R. (2020). Gender-Based Differences in Consumer E-Commerce Adoption. *Communications of the Association for Information Systems*, 26. <https://doi.org/10.17705/1CAIS.02602>
- Soegoto, S., & Putera, M. (2019). Building trust in e-commerce: The role of online transaction integrity. *Journal of Business and Technology*, 28(2), 105–120.
- Sugiyono. (2019). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*.
- Tenenhaus, M., Vinzi, V. E., Chatelin, Y.-M., & Lauro, C. (2005). PLS path modeling. *Computational Statistics & Data Analysis*, 48(1), 159–205. <https://doi.org/10.1016/j.csda.2004.03.005>
- Teresya, S. (2022). Key indicators of digital business transactions in e-commerce: Internet accessibility and managerial responsibilities. *Journal of Electronic Commerce Research*, 34(1), 15–32.
- Tsagkias, M. (2020). The transition from traditional in-store shopping to online purchasing: Growth of e-commerce and user satisfaction. *Journal of Retailing and Consumer Services*, 45, 215–231.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). *User Acceptance of Information Technology: Toward a Unified View*. MIS Quarterly. <https://doi.org/10.2307/30036540>
- Venkatesh, V., Thong, J. Y., & Xu, X. (2012). *Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology*. MIS Quarterly. <https://doi.org/10.2307/41410412>
- Verhagen, T., & van Dolen, W. (2011). The influence of online store beliefs on consumer online impulse buying: A model and empirical application. *Information & Management*, 48(8), 320–327. <https://doi.org/10.1016/j.im.2011.08.001>
- Yang, K. (2021). Understanding the adoption of mobile applications in the B2B sector: An integrated perspective. *Industrial Marketing Management*, 93, 1–12.
- Zhou, M., Yin, J., Li, G., Han, D., & Li, M. (2023). Determinants of E-government Technology Adoption for Government Employees in China: Based on the UTAUT3 Model. *Lex Localis - Journal of Local Self-Government*, 21(4), 1043–1066. [https://doi.org/10.4335/21.4.1043-1066\(2023\)](https://doi.org/10.4335/21.4.1043-1066(2023))