



The Influence of Perceived Usefulness, Perceived Ease of Use, Internet Self-efficacy, Subjective Norms and Behavioral Control on Online Purchasing Decisions

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Abstract. Internet users continue to experience an increase in Indonesia, including their use in online buying and selling transactions. This study aims to see the effect of perceived usefulness, perceived ease of use, internet self-efficacy, subjective norms and behavioral control on online purchasing decisions. This research uses descriptive quantitative analysis research using multiple regression method. The sample in this research is 160 students who are consumers of e-commerce with the sampling method using purposive sampling. The respondents' criteria are 1) internet users, 2) have shopped online, 3) have internet network devices to access e-commerce sites. The research instrument used a valid questionnaire and analyzed using a Likert scale. The results showed that the dependent variable perceived usefulness, perceived ease of use, internet self-efficacy, subjective norms, behavioral control had an influence of 65.1% on the independent variables of online purchasing decisions.

Keywords: perceived usefulness · perceived ease of use · internet self-efficacy · subjective norms · behavioral control · online purchasing decisions

1 Introduction

The 9th Piceeba international conference was held in Padang in 2022 with the theme “Leap to the imminent future: Seizing Opportunities in Education, Economics, and Business.” In the current era of technology, it is an opportunity for the development of education and business. This study is in line with the conference theme which discussed opportunities in the e-commerce business. The development of technology and information strongly supports the development of e-commerce in Indonesia.

Internet users in Indonesia continue to experience an increase, starting in 1998 Indonesia has been familiar with the internet. At the beginning of its use in 1998, internet users in Indonesia were only about 0.5 million people, but now it has experienced a very rapid increase until in 2021 it will reach 200 million people who use the internet. The largest use of the internet is in the use of social media and online shops. Indonesia is the country that uses the highest e-commerce in the world in 2021 (Fig. 1).

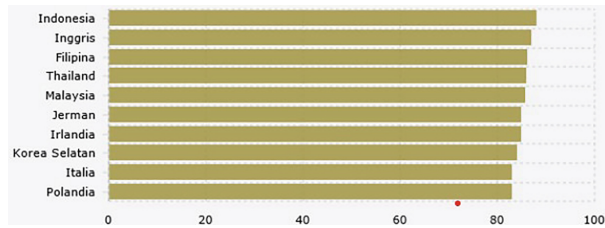


Fig. 1. E-Commerce usage in the world (2021). Source: databoks

Purchasing decisions are an important factor in the development of E-commerce in Indonesia. Based on previous research, it can be seen that due to the various conveniences offered by online shops, the number of online purchases continues to increase. According to Hartono (2007) Perception of Ease is defined as a person's belief in the use of technology that will reduce his efforts to do something [1]. Perception of convenience will have an impact on one's behavior, namely the higher one's perception of the ease of use of an application, the more useful the information technology will be [2].

Various factors determine consumer purchasing decisions online, including perceived usefulness, perceived ease of use, internet self-efficacy, subjective norms, behavioral control. The existence of perceived usefulness and perceived ease of use as well as high usability of online applications will make it easier for consumers to make purchases.

Perceived usefulness shows how big the level of individual trust in technology that can help improve its performance. Perceived ease of use shows that the use of technology is able to facilitate one's work.

User satisfaction is directly influenced by perceived usefulness and the user's desire to be able to take advantage of the technology [3]. Another research conducted by Tananjaya (2012) also shows that the user's decision to accept an accounting software is indicated by the level of satisfaction with the use of the software which is influenced by the ease of use [4]. Similar research results were also shown by several researchers [5–9].

In addition to being related to satisfaction, with the convenience provided by a system, the user will feel more benefits so that the perception of ease has a relationship with the perception of usefulness. Writz et al. (2016), in determining certain brands that consumers choose, the perception of the ease of use of the technology has an effect on providing convenience for consumers in conducting transactions [10]. Perceived ease of use affects customers' perceived usefulness in online stores [11]. Similar results were stated by Pavlou (2001), that theoretically perceived ease of use has a significant effect on perceived usefulness [12].

The existence of perceived usefulness and perceived ease of use allows consumers to be able to operate online applications. However, the ability of consumers to use a technology is influenced by self-efficacy. With self-efficacy, consumers are able to learn and understand the use of a technology in it, including online shops [13]. Self efficacy can be done based on one's own experience and the experience of others. If they have high self-efficacy, consumers will make the right purchase decision [14].

To make decisions in purchasing is also influenced by subjective norms and behavioral control. Subjective norms have an influence on purchasing decisions because in purchasing consumers need the opinions of others in helping decision making. With the many services and conveniences offered by online shops, it also requires behavioral control from consumers in making purchasing decisions.

2 Method

This research uses descriptive quantitative analysis research using multiple regression method. This study uses six variables, namely perceived usefulness, perceived ease of use, internet self-efficacy, subjective norms, behavioral control and online purchasing decisions.

The sample in this research is 160 students who are consumers of e-commerce with the sampling method using purposive sampling. The criteria for respondents are 1) internet users, 2) have shopped online, 3) have internet network devices to access e-commerce sites. The research instrument used a valid questionnaire and analyzed using a Likert scale.

3 Results and Discussion

a. Multiple Linear Regression Analysis

Processing the regression model data used the SPSS version 25 program, the results of data processing are described as follows:

		Coefficients ^a					Correlations		
		Unstandardized Coefficients		Standardized Coefficients			Zero-order	Partial	Part
Model		B	Std. Error	Beta	t	Sig.			
1	(Constant)	3.311	.980		3.379	.001			
	Perceived usefulness	.015	.071	.014	.209	.835	.579	.017	.010
	Perceived Ease of Use	.428	.109	.279	3.939	.000	.706	.303	.184
	Internet self efficacy	.247	.064	.260	3.840	.000	.688	.296	.180
	Subjective Norms	.217	.094	.130	2.317	.022	.510	.184	.108
	Behavior Control	.435	.101	.298	4.293	.000	.713	.327	.201

a. Dependent Variable: buying decision

Based on the table the regression coefficient value and the regression equation can be arranged as follows:

Y = 3.311 + 0,15 X1 + 0,428 X2 + 0,247 X3 + 0,217 X4 + 0,435 X5

From the regression equation it can be explained that:

- a) The variables perceived usefulness, perceived ease of use, internet self-efficacy, subjective norms, behavioral control have a positive coefficient direction towards online purchasing decisions with a value of 3.311.

- b) The coefficient of perceived usefulness gives a positive value of 0.015, meaning that the more useful the e-commerce application with the assumption that other variables are fixed, it will increase purchasing decisions by 1:0.015.
- c) The coefficient of perceived ease of use gives a positive value of 0.428 which means that if it is easier to use e-commerce applications assuming other variables are fixed, it will increase purchasing decisions by 1: 0.428
- d) The internet self-efficacy coefficient gives a positive value of 0.247, meaning that if consumers increasingly trust information from the internet with the assumption that other variables are fixed, it will increase purchasing decisions by 1: 0.247.
- e) The subjective norm coefficient gives a positive value of 0.217 which means that if consumers increasingly trust information from other people about the product assuming other variables remain, it will increase purchasing decisions by 1: 0.217
- f) The behavioral control coefficient gives a positive value of 0.435 meaning that the more consumers can control themselves with the assumption that other variables are fixed, it will increase purchasing decisions by 1: 0.435

From the results of the analysis, it can be seen that the most dominant variable in influencing consumer purchasing decisions is the behavioral control variable of 0, 435 or 43.5% purchasing decisions are influenced by the behavioral control of a consumer. In this case, it can be seen that behavioral control variables are very important in every decision making, especially in purchasing products online.

b. The Result of the Coefficient of Determination R²

The coefficient of determination R² result seen in the output of data analysis as follows:

Model Summary ^b										
Model	R	R Square		Std. Error of the Estimate	R Square Change	Change Statistics				Sig. F Change
		R Square	Adjusted R Square			F Change	df1	df2		
1	.814 ^a	.662	.651	1.732	.662	60.440	5	154		.000

a. Predictors: (Constant), Behavioral Control, Subjective Norms, Perceived usefulness, Internet self efficacy, Perceived Ease of Use

b. Dependent Variable: buying decision

Based on the data analysis above, the Adjusted R Square (R²) value is 0.651 or 65.1%. It means that the dependent variable is perceived usefulness, perceived ease of use, internet self-efficacy, subjective norms, and behavioral control has an influence of 65.1% on the independent variables of online purchasing decisions. While the remaining 34.9% is influenced by other factors outside the variables studied in this study.

4 Discussion

Online purchasing decisions are influenced by several factors, including perceived usefulness, perceived ease of use, internet self-efficacy, subjective norms, and behavioral control. The most dominant factors in online purchasing decisions are behavioral control factors and perceived ease of use or ease of transactions in online purchases.

The Effect of Perceived Usefulness on Online Purchasing Decisions

Perceived ease of use illustrates that someone trusts and uses an online shop as a technology that is able to provide convenience in transactions [15]. As for the indicators used to see a person's level of perceived ease of use in using an online shop, among others are flexible, and easy to learn for consumers in making purchases. The easier it is for an online shop application to be used in every process from selecting and comparing goods to the payment and delivery process will determine how many items will be purchased by consumers [16].

The Effect of Perceived Ease of Use on Online Purchasing Decisions

A benchmark in the use of technology for someone, especially in the use of online shop applications, is called perceived ease of use. Flexible, easy to learn, easy to use, and can control consumers in making purchases is a Several indicators that can be used to measure perceived ease of use. The easier it is for an online shop application to be used in every process from selecting and comparing goods to the payment and delivery process will determine how many items will be purchased by consumers [16].

The Influence of Internet Self Efficacy on Online Purchasing Decisions

Self-efficacy originally emerged from the social theory of TB (Theory of behavioral change) by Bandura in 1977. Bandura defines self-efficacy as self-perception of the ability to achieve an activity [17]. Self-efficacy is an individual's belief about the ability possessed based on the experience gained by the individual to perform a task or solve a problem that is contextual and prospective. Individuals with high self-efficacy will tend to perceive problems as a challenge, not as a burden. Individuals with low self-efficacy will be vulnerable in the face of pressure, they tend to give up and experience stress. While individuals with high self-efficacy will rise and survive when facing challenges, they will enter stressful situations with confidence so that they can withstand stress reactions [18]. Self efficacy is one of the determining factors in studying the use of online applications in making purchasing decisions[19]. IT self-efficacy has been shown to increase individual competence, as well as increase attitudes and beliefs towards technology [20, 21].

The Influence of Subjective Norms on Online Purchasing Decisions

A person's perception of the social pressure that is around him that gives an influence to do something or not is called a subjective norm [22]. In this theory, a person's behavior depends on one's intentions and desires, then the intention to behave depends on the attitude and subjective norms or opinions of others [23]. Beliefs about behavior and judgments will determine a person's behavior. Normative beliefs and motivation to follow the opinions of others will determine subjective norms. The theory of subjective attitudes and norms is also known as Reasoned Action Theory [22].

In the online buying process, consumers are also influenced by the opinions of others or it can be said as subjective norms. The more people around who use a particular online shop will determine the choice of an online shop that will also be used by these consumers. Subjective norms is also used when consumers buy goods by paying attention to testimonial comments from previous consumers, the more people buy the product and a high star rating will increase consumer confidence to buy the product. Mas'ud (2012) states that intention is used [24].

Attitude is a reflection of a person's positive or negative feelings towards an object or event or certain behavior. While subjective norms are various social influences that influence a person to behave or act. The influence given to someone will have an influence on someone's decision in making purchasing decisions. Perceived behavioral control relates to the various resources that are owned and the opportunities that a person has to do something [25].

The Effect of Behavioral Control on Online Purchasing Decisions

Person's feelings about his ability to perform certain behaviors and can solve every problem of realizing these behaviors namely behavioral control [22]. According to Rotter's control behavior has a close relationship with different feelings through the locus of control. The control center relates to a person's belief that is stable in all situations. Perceptions related to the control of a person's behavior and change that influenced by the conditions and situations as well as the type of behavior carried out.

Based on the results of the study indicate that the control of consumer behavior is very influential on online purchasing decisions. When a person is able to control himself and exercise good behavior control, he will not be easily influenced by factors other than needs, such as promos or the convenience of online transactions. Consumers who have control to be able to buy goods according to their needs and based on prior analysis. The individual's belief that his success in doing everything depends on his own efforts and control is related to that [26]. Meanwhile, behavioral intention is a proposition that relates to future actions. Estimating the future behavior of a consumer, especially their buying behavior, is a very important aspect in forecasting and marketing planning [24]. When planning strategy, marketers need to predict consumer buying and usage behavior weeks, months, or sometimes years in advance.

5 Conclusion

There are several conclusions that can be given based on the data result, namely the ease of transacting through e-commerce is able to increase consumer purchasing power but for every decision making, behavioral control is still needed from the consumer itself. Transacting online does offer various conveniences for its users, but consumers must also be able to use various information related to the product to be purchased and include opinions from other people. Trust in certain e-commerce also determines consumers to make purchases. The quality of interaction between consumers and producers must continue to be improved so that online transactions can develop even better. Online shopping websites that are developing a lot should continue to make innovations that make consumers believe in the quality of the goods offered, not only from previous buyer comments.

Involving at least three parties in online transactions, namely online shops, delivery services and financial institutions in one application, makes consumers often tempted to spend their money quickly. This needs to be limited by the existence of behavioral control for consumers so that consumers are able to buy goods that are really needed.

This study only examines how the perceived usefulness give effect to purchasing decisions, and the other variable that give effect is perceived ease of use, internet self-efficacy, subjective norms, and behavioral control on online purchases only. In the future, further research can be carried out on other variables that influence purchasing decisions, such as maturity level or consumer age and background. Educational and occupational background that may have an influence on purchasing decisions. Regarding online shops, research on service quality and completeness of features can be carried out on consumer purchasing decisions. Due to the continued development of online business, research and development still needs to be carried out to support the economy to develop better in line with technological developments.

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