

## DETERMINANTS OF INTENTION TO USE E-COMMERCE BASED ON THE TECHNOLOGY ACCEPTANCE MODEL

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### **ABSTRACT**

*Due to the development of e-commerce platforms in Indonesia, it is important to understand the factors that encourage user acceptance. This study explores the determinants of users' behavioral intention to use e-commerce platforms based on the Technology Acceptance Model (TAM). TAM is represented by perceived ease of use and perceived usefulness. This research is a quantitative study with data collection techniques through distributing questionnaires. The sample in this study was 100 respondents. The analysis technique used multiple linear regression analysis through SPSS 26. The results showed that perceived ease of use and perceived usefulness had a significant positive effect on behavioral intention to use. This provides actionable insights for businesses to conduct sales strategies by considering consumer perceptions of e-commerce users.*

**Keywords:** *Technology Acceptance Model, Perceived Ease Of Use, Perceived Usefulness*

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## INTRODUCTION

The development of information technology has brought about a profound transformation, shaping the way consumers interact with the market through *e-commerce*. Indonesia, as one of the countries with rapid economic growth, is experiencing a surge in *e-commerce* usage (Kominfo, 2015). In 2021, it was seen that the number of e-commerce users continued to increase (Kominfo, 2021) along with the widespread internet penetration and the growth of *smartphone* usage (Ratnasari & Majorsy, 2022). Tokopedia, Shopee, and Bukalapak have become very popular e-commerce platforms, creating intense competition that benefits consumers with a wide range of choices. The adoption of m-commerce, cashless transactions, and diversification of products and services also support the growth of e-commerce in Indonesia.

E-commerce is no longer just about purchasing physical products but also involves various sectors such as services, travel tickets, and food. Within this framework of digital innovation and transformation, this research aims to explore the factors that influence consumers' intention to adopt and use e-commerce platforms, focusing on the variables of perceived ease of use and perceived usefulness within the Technology Acceptance Model (TAM) framework. Through a deeper understanding of e-commerce consumer behavior, it is hoped that this research can provide insights for companies and business practitioners to develop more effective strategies in responding to the dynamics of the modern market.

Previous research has been conducted by (Khadijah & Janrosl, 2022; Wibasuri et al., 2022) which shows that Perceived Ease of Use and Perceived Usefulness can affect individual interest in using financial technology. Meanwhile, research (Setiono et al., 2022) shows that perceived ease of use does not affect intention to use, as well as (Hantono et al., 2023) which shows the result that Perceived Usefulness does not affect intention to use. The existence of this research gap makes further research interesting to study. The novelty of this research is to analyze the effect of TAM on interest in using E-Commerce which is different from previous studies that have examined the use of financial technology such as e-wallets, gopay, etc.

## **LITERATURE REVIEW**

### **Technology Acceptance Model (TAM)**

Technology Acceptance Model (TAM) adalah kerangka kerja teoritis yang dikembangkan untuk memahami penerimaan dan penggunaan teknologi oleh individu. Teori ini dikembangkan oleh Davis pada tahun 1989 dan telah banyak digunakan dalam penelitian perilaku konsumen terhadap teknologi. Dua konsep kunci dalam TAM adalah Perceived Ease of Use (Persepsi Kemudahan Penggunaan) dan Perceived Usefulness (Persepsi Manfaat). Perceived Ease of Use mencerminkan sejauh mana individu percaya bahwa penggunaan teknologi akan mudah, sementara Perceived Usefulness menilai sejauh mana teknologi dianggap membawa manfaat bagi pengguna. Studi-studi sebelumnya, seperti yang dilakukan oleh (Venkatesh & Davis, 2000) dan (Ruiz-Herrera et al., 2023), menunjukkan bahwa persepsi positif terhadap kemudahan penggunaan dan manfaat teknologi berpengaruh pada niat penggunaan.

### **Theory of Planned Behavior (TPB)**

Teori Planned Behavior (TPB) dikembangkan oleh Ajzen pada tahun 1991 sebagai perluasan dari teori sebelumnya, yaitu Theory of Reasoned Action. TPB menyertakan faktor kontrol perilaku yang dinamakan Perceived Behavioral Control, yang mencerminkan sejauh mana individu percaya bahwa mereka memiliki kendali atas perilaku tersebut (Ajzen, 2012). Dalam konteks penggunaan e-commerce, TPB dapat membantu memahami bagaimana niat pengguna dipengaruhi oleh faktor-faktor psikologis dan kendali individu terhadap perilaku penggunaan teknologi.

## **METHOD**

The method used in this research is the quantitative method. The data collection technique was carried out by distributing questionnaires to randomly selected respondents. The sample in this study was 100 respondents who were e-commerce users from Generation Z in the Garut Higher Education environment.

The dependent variable in this study is Behavioral Intention to use (Y), which is measured through three indicators: interest in using e-commerce, interest in using e-

commerce in the future, and interest in recommending the use of e-commerce to others. Independent variables consist of Perceived Ease of Use (X1) and Perceived Usefulness (X2). Perceived Ease of Use is measured through four indicators, such as ease of making purchases/transactions through e-commerce, ease of learning how to use e-commerce, ease of access to make online purchases/transactions, and flexibility in using e-commerce. Meanwhile, Perceived Usefulness is measured through four indicators, such as: making it easier for users to get/buy the desired product, the perceived benefits of e-commerce, the efficiency of using e-commerce, and purchases/transactions through e-commerce can save time.

The analysis technique uses multiple linear regression analysis. Multiple linear regression analysis was used to test the research hypothesis and assess the significance of the influence of the independent variable on the dependent variable. The collected data were processed using Statistical Package for the Social Sciences (SPSS) software version 26.

## RESULTS AND DISCUSSION

### Statistical Test Results

Multiple linear regression is used in this study to determine whether there is an influence between perceived convenience (X1) and perceived usefulness (x2) on intention to use (Y). By using the SPSS version 26 program, the results of multiple linear regression calculations can be seen in Table 1.

**Table 1. Multiple Linear Regression Test Results**

	<b>Beta</b>	<b>t</b>	<b>Sig.</b>
Perceived Ease of Use (X1)	0,352	2,653	0,009
Perceived Usefulness (X2)	0,500	3,765	0,000

*Source: Processed data (2023)*

The significance test results for X1 obtained a number of 0.009 which is smaller than  $\alpha = 0.05$ . This shows that perceived convenience (X1) has a significant effect on intention to use (Y). Table 1 shows a positive relationship, which means that the better the perceived convenience, the greater the intention to use.

The significance test results for X2 also obtained a number of 0.000 which is smaller than  $\alpha = 0.05$ . This shows that perceived benefits (X2) have a significant effect on intention to use (Y). Table 1 shows a positive relationship, which means that the better the perceived benefits perceived by users, the greater the intention to use e-commerce. To find out how much influence the independent variable has on the dependent variable, the coefficient of determination is used.

**Table 2. Results of the Coefficient of Determination**

	R Square	Adjusted R Square	Sig. F Change
Sub Structural	.692	.686	.000

*Source: Processed data (2023)*

Based on Table 2, the coefficient of determination R square is 0.692, meaning that variable X influences Y by 69.2%. While the remaining 30.8% is explained by other variables outside the research model.

## Discussion

The analysis results show that perceived ease of use has a positive and significant effect on behavioral intention to use. This result supports the research hypothesis (H1). In other words, the easier it is for users to operate and transact on an e-commerce platform, the higher their intention to adopt and use the platform. This finding is in line with (Salam & Krisnawati, 2020; Wibasuri et al., 2022) which emphasizes that perceived ease of use of technology is an important factor in shaping intention to use.

The analysis results also show that perceived usefulness has a positive and significant influence on behavioral intention to use. This result supports the research hypothesis (H2). That is, the greater the benefits perceived by users from using an e-commerce platform, the higher their intention to adopt and use the platform. This result is in line with (Khadijah & Janrosl, 2022; Salam & Krisnawati, 2020) which shows that the perceived benefits or usefulness of technology plays a key role in shaping user intentions.

## CONCLUSION

Based on the research results, it can be concluded that the Perceived Ease of Use and Perceived Usefulness variables have a positive and significant effect on Behavioral Intention to use in e-commerce users. That is, the easier it is for users to operate and transact on e-commerce platforms, and the greater the perceived benefits of using the platform, the higher their intention to adopt and use e-commerce services. These results validate the relevance of the Technology Acceptance Model (TAM) concept in understanding e-commerce user behavior, and the implication is that platform developers and marketers can focus on improving user experience and emphasizing perceived benefits to increase user acceptance and engagement in adopting e-commerce services.

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