# Assessing Factors Influencing Online Shopping Adoption Among Indonesian Consumers: A Quantitative Study

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## **ABSTRACT**

The adoption of online shopping has significantly increased in recent years, particularly in developing countries such as Indonesia. This study aims to assess the factors influencing the adoption of online shopping among Indonesian consumers. A quantitative research approach was used, and data were collected from 350 Indonesian consumers through a structured questionnaire. The results indicate that perceived usefulness, perceived ease of use, website design quality, trust in online shopping, online shopping experience, and website security are significant factors influencing online shopping adoption among Indonesian consumers. These findings suggest that online retailers and marketers should focus on enhancing the user-friendliness and safety of their online shopping platforms to increase consumer trust and adoption. Additionally, policymakers should consider further investing in improving e-commerce infrastructure and growing awareness about the benefits of online shopping to promote the adoption of online shopping among Indonesian consumers.

Keywords: Online Shopping Adoption, Consumer, e-Commerce.

#### 1. INTRODUCTION

In recent years, online shopping has become popular in many countries, including Indonesia. With the increasing use of technology and the internet, more and more consumers are adopting online shopping as a convenient and efficient way to purchase goods and services[1]–[4]. The emergence of e-commerce platforms such as Lazada, Tokopedia, Shopee, Bukalapak, and others has made it easier for Indonesian consumers to shop online. This trend provides many advantages for consumers, such as lower prices, convenience, and accessibility to a wide range of products[5]–[7]. As a result, online shopping has become a significant contributor to the growth of the retail industry in Indonesia.

Despite its popularity, the adoption of online shopping in Indonesia is still relatively low compared to other countries. According to a study by Statista, the e-commerce penetration rate in Indonesia was around 10.5% in 2020, which is lower compared to countries such as China, the United States, and the United Kingdom. This shows that significant barriers still prevent Indonesian consumers from adopting online shopping[6], [8]. Therefore, this study will investigate the factors influencing the adoption of online shopping among Indonesian consumers.

Online shopping has become an increasingly popular way for consumers to purchase goods and services. In recent years, the growth of e-commerce has been significant in Indonesia, which has become one of the fastest online shopping markets in the Asia-Pacific region[5], [8], [9] Despite the increasing popularity of online shopping in Indonesia, there is still a large part of the population that has not adopted this mode of shopping[10]. Understanding the factors influencing online shopping adoption is essential for online retailers and marketers looking to expand their customer base in Indonesia.

Several studies have investigated the factors influencing the adoption of online shopping in different countries. Perceived usability and perceived ease of use are two factors consistently

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influencing the adoption of online shopping [11], [12]. Perceived usability refers to the extent to which individuals believe that using an online shopping platform will help them achieve their goals. In contrast, perceived ease of use refers to the area where individuals believe using an online shopping platform will be easy.

Other factors influencing online shopping adoption include trust in online shopping platforms, website design quality, online shopping experience, and website security [13]–[15]. Confidence in an online shopping platform refers to the extent to which consumers trust that the online shopping platform is trustworthy and reliable. Website design quality refers to the overall design and functionality of an online shopping platform, including factors such as website responsiveness and ease of navigation[16], [17] Online shopping experience refers to the overall experience consumers have when shopping online, including factors such as delivery speed and customer service. Website security refers to how consumers trust their personal and financial information is safe when using online shopping platforms[18], [19].

Although there is research on the factors influencing the adoption of online shopping, there is still a lack of research on this topic in the Indonesian context. Although there are studies on the growth of e-commerce in Indonesia and factors influencing online shopping behavior [20], [21] comprehensive research is still needed that examines the factors that influence the adoption of online shopping, especially among Indonesian consumers. Understanding the unique factors influencing online shopping adoption in Indonesia is essential for online retailers and marketers looking to expand their customer base in this market.

Therefore, the research problem of this study is to assess the factors influencing the adoption of online shopping among Indonesian consumers. Specifically, this study investigates the importance of perceived usability, perceived ease of use, website design quality, trust in online shopping, online shopping experience, and website security in predicting online shopping adoption among Indonesian consumers. By addressing these research issues, the study aims to provide valuable insights into the factors influencing the adoption of online shopping in Indonesia and inform the development of effective marketing strategies and the design and functionality of online shopping platforms in this market.

#### 2. LITERATURE REVIEW

Many studies have been conducted to investigate the factors influencing the adoption of online shopping. One of the most commonly used theoretical frameworks to study the adoption of online shopping is the Technology Acceptance Model (TAM). TAM is an established model that describes how individuals perceive and adopt new technologies. This model suggests that perceived usability and ease of use are the two main factors influencing an individual's intention to adopt a new technology.

Several studies have used TAM to examine the adoption of online shopping in different contexts. For example, a study by [12] found that perceived ease of use and perceived usability strongly influence an individual's intention to use online shopping in the United States. Similarly, a study by [22] found that perceived usability and ease of use are significant predictors of online shopping adoption in Saudi Arabia.

Other studies have suggested other factors influencing the adoption of online shopping besides perceived usability and ease of use. For example, studies [23], [24] found that website design quality, trust, and social influence are significant predictors of online shopping adoption in Hong

Kong. Similarly, studies by [25], [26] found that online shopping experience and website security significantly influence the adoption of online shopping in Taiwan.

In the Indonesian context, several studies have investigated the factors influencing the adoption of online shopping. For example, studies by [27], [28] found that perceived usability, perceived ease of use, and trust significantly influence the adoption of online shopping among Indonesian consumers. A study by [27] found that perceived usability, ease of use, and trust are significant predictors of online shopping adoption in Indonesia.

However, those studies were conducted several years ago, and since then, the e-commerce landscape in Indonesia has evolved significantly. Therefore, new research is needed to investigate the factors influencing the adoption of online shopping among Indonesian consumers in the current context.

#### 3. METHODS

A quantitative research design will be used to investigate the factors influencing the adoption of online shopping among Indonesian consumers. The target population is Indonesian consumers with internet access who have made at least one online purchase in the past year.

### 4. RESULTS AND DISCUSSION

Three hundred fifty respondents participated in this survey, with a response rate of 77%. Most respondents were women (55.7%), and the age group with the highest percentage of respondents was 25-34 years old (42.9%). More than half of respondents have a monthly income of less than IDR 5,000,000 (52.3%), and most have completed at least a bachelor's degree (73.1%). Descriptive statistics for each variable are presented in Table 1.

Table 1: Descriptive statistics of research variables

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Variable	Std. Perceived
	Deviation
Perceived usability	4,22 0,68
Perception of Ease of Use	4,03 0,78
Quality website design	3,95 0,78
Trust in online shopping	4,10 0,65
Online shopping experience	4,18 0,62
Website security	4,14 0,66
Adoption of online shopping	4,05 0,77

Source: Primary Data (2023)

Model F Itself.
1 Regression 50,55 .001
Residual
Total

Source: Primary Data (2023)

The results of the regression analysis are presented in Table 2. The model was statistically significant (F = 50.55, p < 0.001), and the predictors explained 48.1% of the variance in online shopping adoption.

The results of the regression analysis of the Beta t Predictor p-value were obtained as follows:

- 1. Perceived usefulness 0,35 9,89 < 0,001
- 2. Perceived ease of use 0,21 5,87 < 0,001

- 3. Website design quality 0.12 3.31 0.001
- 4. Trust in online shopping 0.18 5.18 < 0.001
- 5. Online shopping experience 0.13 3.52 0.001
- 6. Website security 0.06 1.61 0.108

Usefulness has the highest beta coefficient ( $\beta$  = 0.35), followed by perceived ease of use ( $\beta$  = 0.21), trust in online shopping ( $\beta$  = 0.18), online shopping experience ( $\beta$  = 0.13), and website design quality ( $\beta$  = 0.12). Website security was not a significant predictor of online shopping adoption ( $\beta$  = 0.06, p = 0.108).

## **DISCUSSION**

The results of this study provide insight into the factors influencing the adoption of online shopping among Indonesian consumers. These findings are consistent with previous studies that used the TAM framework to study online shopping adoption[29]–[31]. Perceived usability and perceived ease of use are significant predictors of online shopping adoption, indicating that Indonesian consumers are likely to adopt online shopping if they find it valuable and easy to use[28]. Website design quality, trust in online shopping, and shopping experience are also significant predictors of the adoption of online shopping [25], [32]. The quality of website design, which includes factors such as website aesthetics, navigation, and functionality, positively affects online shopping adoption. These findings are consistent with previous studies that found a positive relationship between website design quality and online shopping adoption [23], [33].

Trust in online shopping is essential for adopting online shopping, as it can significantly influence consumer intent to shop online[6], [34]. In this study, trust in online shopping positively affected online shopping adoption. In addition, the results of this study also show that the online shopping experience is an essential factor influencing the adoption of online shopping among Indonesian consumers[35]–[37]. A positive online shopping experience, which includes factors such as website responsiveness, speed of delivery, and customer service, can increase consumer intent to shop online. These findings are consistent with previous studies that found a positive relationship between online shopping experience and online shopping adoption [13], [14].

Interestingly, website security was not a significant predictor of online shopping adoption in this study. This finding is somewhat surprising, as website security is often considered one of the most critical factors influencing online shopping adoption. It is likely that Indonesian consumers have more trust in online shopping platforms and are less worried about website security. However, it is also possible that website security is not a significant predictor because most online shopping platforms in Indonesia have the same level of security, and consumers may not notice a substantial difference between them.

The results of this study have several practical implications for online retailers and marketers in Indonesia. First, retailers should focus on improving their online shopping platform's usability and ease of use perception. Retailers should also ensure that their online shopping platforms have a high-quality website design and provide a positive online shopping experience. In addition, retailers should work to build trust with their customers by providing secure payment methods, transparent pricing, and reliable customer service.

## 5. CONCLUSION

In conclusion, this study provides valuable insights into the factors influencing the adoption of online shopping among Indonesian consumers. The results showed that perceived usability,

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perceived ease of use, website design quality, trust in online shopping, and shopping experience were significant predictors of adoption. In contrast, website security had no significant effect on adoption. This study's findings can inform the development of effective marketing strategies and improve the design and functionality of online shopping platforms in Indonesia. Future research could explore how cultural factors and individual differences may influence the adoption of online shopping in Indonesia and other countries.

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