

# CUSTOMER SATISFACTION IN USING SHOPEE MARKETPLACE: GENDER BASED COMPARISON

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**Abstract:** This study analyzes the information quality, perceived price, and system quality predictors of Shopee customer satisfaction. Also, in this research, we test gender as a moderator construct. This study used 100 samples. Using Smart PLS version 3, we can find that three latent constructs are significant predictors of Shopee customer satisfaction. However, gender as a moderator cannot have a significant effect. For further research, we suggest the additional construct, such as online review to be tested as a predictor.

**Keywords:** information quality, perceived price, system quality

## 1. INTRODUCTION

First, e-Commerce gained popularity in 1995 when various companies needed a sales system that could be implemented through electronic media (Laudon & Laudon, 2015). A stable internet network was needed to implement electronic sales so that consumer services could run perfectly. Internet network stability is essential, especially for retail companies that deal directly with consumers so that consumers get a pleasant shopping experience.

Currently, e-Commerce has become an important primary strategy in today's business activities, especially when the Covid-19 virus pandemic hit Indonesia. By prioritizing e-Commerce, companies can still create sales even with declining sales volumes. Abdua & Wasiyanti (2019) also said that e-Commerce is also able to increase efficiency in business operations so that e-Commerce is a fascinating topic for further research.

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As we all know, the Corona-19 virus has directly changed people's habits in health midwives and shopping behavior. It is undeniable that along with the development of information technology, people's lifestyles have undergone massive changes, especially the desire to meet needs quickly and efficiently so that people are more encouraged to use online shopping applications (market space) to support government programs, namely breaking the chain. The spread of the Covid-19 virus.

Based on commercial data in Indonesia, the estimated total e-Commerce Transactions during the Covid-19 pandemic reached its peak after the Large-Scale Social Restrictions (PSBB) announcement on March 31, 2020, which amounted to 670,755 transactions. The total estimated sales during this period are quite high at Rp 12.3 billion (Dirgantari et al., 2020). Prior to that, Kemp & Moey (2019) (in Mulyapradana et al., 2020) stated that Indonesia is a country with an e-commerce market utilization rate of 90% of all internet users with an age range of 16–64 years.

In line with this, many companies in Indonesia are trying to build their e-Commerce system while still focusing on customer service. Rapid technological developments impact the progress of online commerce, especially e-Commerce in Indonesia. According to Reichheld & Schefter (2000), the rapid growth of the market space has created new opportunities and challenges.

This research will focus on one of the existing marketplaces in Indonesia, Shopee, which was launched for the first time in Singapore with a consumer-to-consumer (C2C) business model. With its business development, Shopee has changed its business model to hybrid C2C and business-to-consumer (B2C) since its launch of Shopee Mall. Shopee Mall is an online store platform for well-known brands. Furthermore, in 2015, Shopee began to expand to neighboring countries, including Indonesia, equipped with features for free shipping, Cash on Delivery, a money back policy, Shopee Pay, Shopee Koin, and Shopee Game. Apart from the previously mentioned features, Shopee also offers purchases on credit supported by Shopee Pay Later, Akulaku, Kredivo, and credit card installments.

The use of the shopee application is currently very massive in Indonesia. Not only limited to women but also men. However, the product categories chosen by both men and women are, of course, different. Even so, this

contradicts what was previously proven by Lim & Yazdanifard (2014), where men are more likely to make online purchases more often than women. This is because men have a better understanding of the use of technology when compared to women. This is the additional explanation regarding the gender difference in e-commerce adoption.

However, Szymkowiak & Garczarek-Bak (2018) convey a different fact where women are more often involved in e-commerce since various social media applications provide information about a new product. While men are more focused on the technical aspects of the e-commerce platform, such as the user interface, women are more concerned with aspects of price and product availability. This difference can potentially trigger differences in the level of satisfaction in using Shopee when making transactions. Based on the background stated above, the researcher formulated the following research questions. Do price, information, and system quality predictors of Shopee customer satisfaction? Also, does the gender have the significant effect as a moderator variable?

## 2. LITERATURE REVIEW

### 2.1 Gender Differences in E- Commerce

During the previous decades, men and women had different motives, perspectives, and rational considerations when shopping. (Hasan, 2010). Furthermore, Akturan (2011) stated that consumer behavior, in general, can be influenced by gender, especially those related to expectations, desires, needs, lifestyles, product attributes, and adaptability. However, women generally prefer to see the product in person, feel it and evaluate it before making a purchase (James, 2013).

Thus, the features that are the main attraction for women are the availability of detailed information, the convenience of use, and the availability of product choices and sizes. This is different from men in online shopping. Lim & Yazdanifar (2014) also explain that men tend to focus on saving time and convenience in choosing a product and directly on the product they are looking for without further exploration of other product offerings. Previous research has even shown that women tend to be more careless in online shopping because of women's lack of understanding of internet-based technology (Gao et al., 2017).

In addition, the research conducted by Hasan (2010), Kim et al. (2013), and Sohaib & Kang (2015) have proven that gender causes differences in intentions to shop on the internet.

## 2.2 IS Success Model

DeLone and McLean first proposed Information System Success Model in 1992. This model suggests that an individual's beliefs determine attitudes and behavior about the quality of information and systems. According to DeLone & McLean (2003), construct a quality system measuring the success of the technical aspects of Information Systems. Further, Santoso (2018) stated that the system's quality is characteristic of an e-commerce system in terms of ease of use, consistency, traction, logout speed, and download time.

In addition, perceived information quality is defined as the degree to which users believe the information on the website is correct. In addition, Faqih & Jaradat (2015) explained that in addition to being responsive and interactive, the website must have clear policies on security and privacy and have the facility to search for goods. Perceived Information Quality refers to the assessment and evaluation made by consumers regarding information characterized by the level of accuracy in informing a product in full and in detail (Gao et al., 2012). An understanding of the perceived information quality was also conveyed by Zhang et al. (2013), where information becomes an attribute attached to products, brands, and companies that have significant benefits for consumers to evaluate their quality.

The impact of Perceived Information Quality on the intention to purchase products on the internet network that leads to consumer satisfaction has been proven through previous research conducted by Kiem & Niehm (2009) and Liu & Arnett (2000). Furthermore, Dickinger & Stangl (2013) also reveal that in conducting online transactions, satisfied consumers rely heavily on descriptions of photos, pictures, and text available on online shopping sites to make product purchase decisions. Thus, because shopping activities on the internet rely on available information, the marketplace needs to pay more attention to the clarity of the information available, the brightness level of the site or application display, the systematic arrangement of product categories, and the availability of alterna-

tive product choices (Kim et al., 2012). ). However, the difference in research results is shown by Park & Stoel (2005), who reveals that the perceived information quality does not have any significant impact on getting consumer satisfaction in online shopping.

Further, the system's quality theoretically refers to the technical level that reflects the characteristics of the marketplace system or network site that produces information and facilitates transactions (Chen et al., 2017). In addition, although the perceived quality of the system has become an essential aspect in predicting consumer satisfaction, each marketplace certainly has some limitations that can result in different levels of satisfaction. However, various previous studies have proven that the perceived influence of system quality is quite significant in building consumer satisfaction in shopping online (Hariguna & Berlinana, 2017; Alshibly, 2014; Nistah et al., 2019) by using the constructs of accessibility, ease of use, feature availability and flexibility

### **2.3 Perceived Price**

Perceived price is a construct commonly used in various marketing research that measures the level of sacrifice consumers make to obtain a product or service (Zeithaml, 1998). In addition, Kartikasari (2020) explicitly states that price is the amount of money needed to get goods and services or the number of values that consumers will exchange to get the benefits.

Previously, Kumar (2016) defined the perceived price as the burden felt by consumers to get a product, including financial and social costs such as time, the effort required, psychological aspects, and risks. Previous studies have shown a significant impact of perceived prices on general consumer satisfaction (Salim et al., 2020; Razak et al., 2016). However, the difference in research results is also proven by Ali & Basin (2019), which show that the perceived price does not have a significant effect on realizing consumer satisfaction.

### **2.3 Customer Satisfaction**

One of the goals of creating a marketplace application is to provide better satisfaction for its customers. On the other hand, consumers will always make comparisons between price and perceived quality. Theoretically, customer satis-

faction can be understood as a consumer experience interacting with a business organization that results in the sense of satisfaction and creates a desire to repurchase the product (Khalid et al., 2018).

Because of the importance of consumer satisfaction for business actors, various studies have previously been carried out to predict customer satisfaction's determinants. Some of these studies show the perceived system quality (Lin et al., 2012), service quality (Khalid et al., 2018), and perceived information quality (Eid, 2011). Previously, Hsu (2008) conducted research by adopting the consumer satisfaction index in America and showed that the perceived price also had a significant impact. However, the price comparisons offered by each Marketplace are not far apart, so the price comparisons become more competitive.

In addition to these studies, Meidita et al. (2016) and Zheng et al. (2013) stated that consumer satisfaction is also strongly influenced by what consumers expect of the quality of the products offered, the clarity of information provided through networking sites or applications, and perceptions of prices offered through the marketplace application. The novelty of this research is that the research team places the gender construct as a moderator in the information system success model that has been modified. For this reason, the researcher proposes the following hypothesis to be tested in this study.

- H1: Information quality become significant predictor toward customer satisfaction in using Shopee marketplace.
- H2: Price become significant predictor toward customer satisfaction in using Shopee marketplace.
- H3: System quality become significant predictor toward customer satisfaction in using Shopee marketplace.
- H4: There are significant difference of Shopee's customer satisfaction based on gender.

### 3. RESEARCH METHODS

#### 3.1 Results

In the end, this study used 100 respondents who used to shop in the Shopee marketplace for at least one year. The data collection technique used in

this study was using electronic questionnaires arranged by Google Forms and sent directly to respondents by Whatsapp application. Targeted respondents can quickly fill out the questionnaire by clicking the available hyperlink. The measuring instrument in this study is tested by the value of T-statistic provided by the Smart PLS program, shown on Average Variance Extracted and Composite Reliability for the reliability; and Outer Loading for the construct validity. The measurement is reliable and valid if they pass the significance T – Statistic value at 1.64.

Further, to test the proposed hypotheses, researchers used the Smart PLS 3.3 with a significance level of 0.05 single-tailed. The Smart PLS program is a data analysis program that can process data with a limited sample, unlike other path analysis programs that require large samples for each construct (Abdillah & Hartono, 2015). Using this program, the research team could confirm the model with a small sample size without ignoring the academic strength of each construct.

Tables 1 and 2 below show the measurement reliability based on the average variance extracted and also the composite reliability, respectively.

**Table 1 Average Variance Extracted**

Constructs	Sampel Mean	T Statistic	P Values
Information quality	0.850	20.865	0.00
Price	0.690	31.406	0.00
Sistem quality	0.531	13.440	0.00
Satisfaction	0.500	12.685	0.00

Source: Data Tested

**Table 2 Composite Reliability**

Constructs	T Statistic	P Value
Information quality	37.453	0.00
Price	10.447	0.01
System quality	9.608	0.00
Satisfaction	22.642	0.00

Source: Data Tested

In accordance with the parameters previously set, based on table 1 and 2 above, we conclude that the measurement is reliable. Also from the table 3 below, we agree that all indicators implemented in this research are valid.

**Table 3 Indicators Outer Loading**

Indicators	T Statistic	P Value
Information Quality --> inf2	143.684	0.00
Information Quality --> inf3	16.852	0.00
Price --> price1	404.841	0.00
Price --> price2	12.297	0.00
Price --> price3	4.544	0.00
Price --> price4	404.841	0.00
System Quality --> sist1	19.147	0.00
System Quality --> sist2	2.893	0.00
Satisfaction --> sat1	14.920	0.00
Satisfaction --> sat3	14.395	0.00
Satisfaction --> sat4	17.218	0.00
Satisfaction --> sat5	2.508	0.00

Source: Data Tested

After we found that all measurement is reliable and valid, we continue to test the hypotheses proposed and the result showed by table 4 below.

**Table 4 Path Coefficient**

Path	T Statistic	P Value
Information quality --> satisfaction	3.050	0.03
Information quality --> moderating effect (gender) --> satisfaction	0.030	0.976
Price --> satisfaction	12.543	0.00
Price --> moderating effect (gender) --> Satisfaction	0.001	0.999
System quality --> satisfaction	3.140	0.02
System quality --> moderating effect (gender) --> satisfaction	0.065	0.948
Satisfaction	22.642	0.00



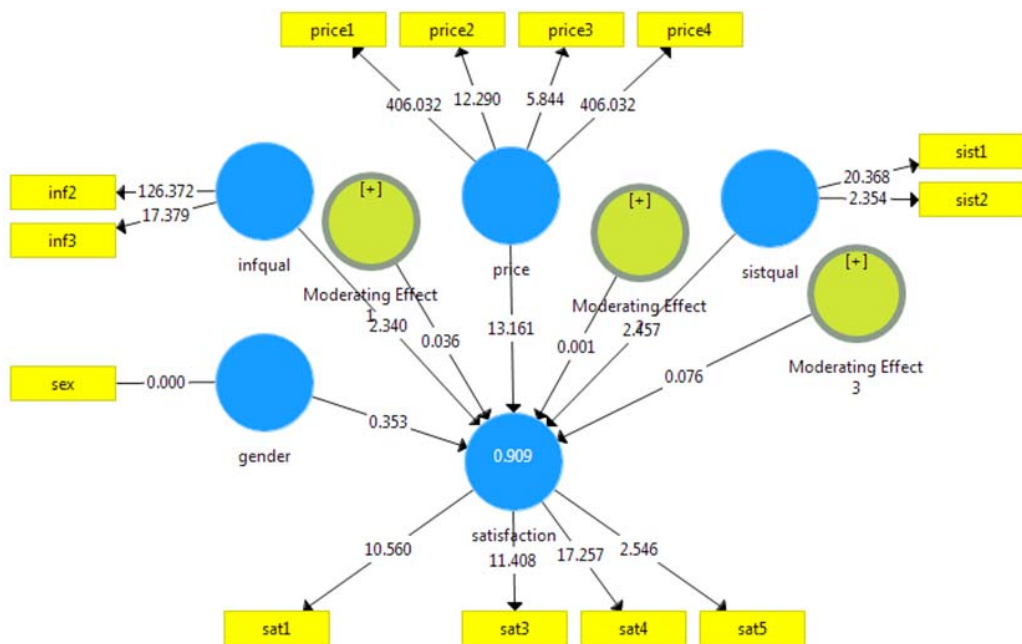


Figure 1 Research Model

#### 4. DISCUSSION

According to table 4 and Figure 1, information quality, price, and system quality become significant predictors of Shopee’s customer satisfaction. All T-Statistic values surpass 1,64 as a parameter; thus, H1, H2, and H3 are supported. However, gender as a moderator variable is proven insignificant toward Shopee’s customer satisfaction. From this evidence, we can say that there is no difference in satisfaction levels based on gender. Generally, as the respondents of this research, men and women feel the same level of satisfaction.

In general, this study proved that the satisfaction level between male and female consumers in shopping using Shopee was not significantly different. This is because these two consumer groups view the information available on the Shopee application as very informative and easy to understand. In addition, the detailed information provided by Shopee for each product category offered is excellent, so with sufficient information on the Shopee application, users feel comfortable and safe shopping online. This has also been proven previously

through research conducted by Santoso (2018), which shows a significant relationship between the perceived quality of information on the product repurchase.

In purchasing goods and services using applications, the brightness level of the product displayed on the user interface also plays an important role. As stated by Kim et al. (2012), with a clear, bright, and easy-to-read display, users will feel comfortable and lead to satisfaction with using the Shopee application. In addition to the quality of information, the price construct has the most significant impact on Shopee user satisfaction compared to the other two constructs.

Generally, Shopee users in this research positioned price as the main attraction in buying products. Marketplace applications that can provide the most attractive prices are seen to maintain purchase intentions first, then achieve satisfaction. However, the results of this research contradict the results of Ali & Basin (2019) research. Price is one of the essential factors for customer satisfaction, then the lowest price with high quality is one of the main attractions for consumers. In addition to cutting expenses, reasonable prices will increase consumer loyalty, for that price must be very concerning.

The easy-to-use marketplace application is one of the essential factors in increasing customer satisfaction and Shopee. In addition, many features are offered on Shopee, such as claiming coins every day, Shopee Games that can generate coins, and free shipping that can be claimed every day. Coins on the Shopee application can be used at discounted prices or used to buy other vouchers. In addition, now Shopee has also presented a currently trending feature, namely Shopee Food; this application is the same as gofood or grab food. We can order foods and beverages that can be delivered quickly on the same day. Thus the system on the Shopee application is one of the significant influences on consumer satisfaction.

## 5. CONCLUSION

Based on hypothesis testing followed by the discussion above, this study concludes that information quality, price, and system quality become significant predictors of Shopee's customer satisfaction. Besides, gender is not significantly

proven as a mediator toward Shopee's customer satisfaction. The limitation of this study is based on the single marketplace used in the research. Thus the result may vary from other marketplaces. Besides, the online review of Shopee as a marketplace should be tested as a predictor in further research because occasionally, people will seek the product review provided by Google Playstore

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