



Effect Of Ecommerce Post-Purchase Activities On Customer Retention In Shopee Indonesia

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ABSTRACT

The purpose of this paper is to understand the relationship between post-purchase activities with customer satisfaction and customer retention in Shopee Indonesia. This research is intended to provide deeper literature insight related to customer service, shipping, tracking, return, and order fulfilment in ecommerce setting which can be used as managerial guidance. Data from 412 respondents which are Shopee Indonesia users were collected through questionnaire using purposive sampling method and analyzed using SmartPLS version 3.0. Findings of the research shows significant positive effect of customer service, shipping, return and order fulfilment on customer satisfaction. It is also found that customer satisfaction leads to customer retention. This study aims to provide relevant knowledge regarding the importance of customer service, shipping, tracking, return, and order fulfilment in online shopping environment which can be implemented to satisfy and retain online customers.

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1. Introduction

Globalization, Industry 4.0, and covid-19 pandemic has changed the way we shop to an unprecedented level. Despite a challenging year for retail industry worldwide, ecommerce sales managed to reach over \$4 trillion (eMarketer, 2021). This shows how much people all around the world transitioned to online shopping last year and further growth for ecommerce is still expected to be at least approximately 14% higher this year (eMarketer, 2021). Based on survey conducted by Indonesia Internet Service Provider Association, in 2018 itself the level of internet penetration stands at 64,8% which is an increase of approximately 10% in comparison to 2017 (APJII, 2018). From which, up to almost 90% of the country's 150 million internet users has made an online purchase for either services or products (Kemp & Moey, 2019). This data made Kemp & Moey (2019) believe that "Indonesia has the highest rate of ecommerce use of any country in the world".

Ecommerce sector in Indonesia has started to flourished since a few years back and today, the industry is filled with various competent players from both local and overseas. One of the dominant ecommerce forces in Indonesia is Shopee, an online retailer platform operating under Sea Ltd, a Singapore based internetcompany listed in NYSE. Shopee allows individual, small business, up to official big brands to open their online store through Shopee's website and mobile application, making their products accessible to millions of Shopee users every day. By 2019, Shopee is the second most visited ecommerce site in Indonesia with over 88 million visits each month (List of 50 Ecommerce Website & Applications in Indonesia, 2020).

Furthermore, Shopee managed to attract an entirely new customer base due to covid-19 pandemic where people are prohibited from offline shopping and shifted to online shopping instead. On 2nd quarter of 2020, Shopee Indonesia reported 130% year-on-year increase in transaction numbers (Parama, 2020). Regardless, Shopee parent company Sea Group itself reported that despite Shopee's significant increase in revenue, they are still suffering EBITDA loss at \$0.6 per order (Milton, 2020). As Shopee already earned the first rank of most visited site, they should not focus merely on

acquiring new customers, but maximized retention of existing customers instead to create more profit in the future. Accordingly, Harvard Business Review article reported that an increase in customer retention can lead up to 95% increase in profitability (Charlton, 2018). The aim of this study is to determine whether Shopee's post-purchase activities has effects on Shopee's customer satisfaction and whether it further affects Shopee's customer retention. This paper is an adaptation from another study conducted in China & Taiwan by Cao et al. (2018) that proofed positive correlation between ecommerce post-purchase activities with customer satisfaction and eventually purchase intention. This paper develops previous study's core idea by adding another variable which is order fulfilment, antecedent to customer satisfaction and chose customer retention as the consequence that matters.

1.1 Theoretical background and hypothesis

In this section a comprehensive review on literature background of the role of customer service in online shopping, logistic post-purchase activities and order fulfilment in relation with customer satisfaction, and customer retention of Shopee Indonesia users. The review further lead to the development of this research hypotheses.

1.2 Relationship between customer service with customer satisfaction

Although customer service is intangible it cannot be separated from tangible product in terms of creating value for customers' money especially in ecommerce setting where customer direct contact with seller representative is almost non-existent. A good service in fact can served as an effective competitive advantage for businesses because it is one way to differentiate one's product from others available in the market (Murali et al., 2016). As customer service are often regarded as a major aspect affecting overall service quality in ecommerce industry, Blut (2016) came up with four important dimensions that measures overall service quality among which Customer service refers to "helpful, responsive service that responds to customer inquiries and addresses returns/complaints quickly during or after the sale.". The literature also reported that customer service contributes greatly to overall quality assessments that customers formed on an online store or ecommerce entity (Blut, 2016). Cao et al. (2018) research indicated that customer service in Taiwan positively related to customer satisfaction in an ecommerce setting. Accordingly, Jain et al. (2017) also found that improved customer service is responsible for the accelerated use of ecommerce and online shopping in recent years. Hence, this study proposed the following hypotheses:

H1. Shopee's customer service has positive effect on customer satisfaction

1.3 Relationship between shipping, tracking, and return with customer satisfaction

In ecommerce setting, unlike brick-and-mortar traditional retailer customer made their purchase without seeing the product first. Hence, the location of the store does not matter much but physical distribution or logistic part became an increasingly important factor in determining customer satisfaction and purchase intentions during online shopping (Ma, 2017). Meanwhile, customer satisfaction can be measured in terms of "the fulfilment of the gap between customer expectation and customer actual experience" according to Ibojo & Asabi (2015). Thus, post-purchase logistic activities plays an inevitably important role in determining a customer's satisfaction level. Kusumawardani & Hastayanti (2020) stated that ecommerce desperately need assistance from logistics industry to grow which is why in Indonesia, shipping or logistic companies are innovating to match the needs of rapidly growing ecommerce sector. Shipping refers to the delivery of a right product in a right packaging, having an adequate amount and quality, to the set time and set place, with minimum expenses (Vasic et al., 2019). Cao et al. (2018) considered shipping as part of post-purchase logistic activities along with tracking and return. The term tracking can be identified as "collecting and managing the information of the present location of a product(s) or delivery item (s)" (Shamssuzzoha & Helo, 2011). While, return policy is a tool used by retailers to reduce consumer risk and increase demand as they will be allowed to send back purchased item for various reason (Janakiraman et al., 2015). It is of great importance to conduct research regarding the impact of ecommerce return policy as it has been found to have critical impact on ecommerce success and considered to be major source of competitive advantage (Rao et al., 2018). With that in mind, this research will further study the relation between shipping, tracking, and return service provided by Shopee in relation towards their customer satisfaction through the proposes hypotheses below :

H2. Shopee's shipping service has positive effect on customer satisfaction

H3. Shopee's tracking service has positive effect on customer satisfaction

H4. Shopee's return service has positive effect on customer satisfaction

1.4 Relationship between order fulfilment with customer satisfaction

Fulfilment is defined as activities that ensure customers receive exactly what they ordered, elements of the process include delivery timeliness, order accuracy, and delivery condition (Blut, 2016). All of which can only be assessed post-purchase or after the payment is made. Customers expect their packages to arrive non-defective and un-damaged throughout the delivery process, otherwise customer satisfaction level will be severely impacted (Jain et al., 2017). Aside from having fast delivery and return options, whether a customer received exactly what they ordered and the condition of that particular item upon arrival is just as important. Rita et al. (2019) study shows that online shoppers in Indonesia highly valued order fulfilment, which positively affect overall online service quality. Accordingly, Kumar & Anjaly (2017) research indicated that receiving product in good condition as expected is one of the crucial elements that will determine customer satisfaction and repurchase activity. Hence, this research aims to prove the relation between Shopee's order fulfilment process with its customer satisfaction :

H5. Shopee's order fulfilment has positive effect on customer satisfaction

1.5 Relationship between customer satisfaction with customer retention

There was a growing recognition that customers, like products, have a life-cycle that companies should attempt to manage. Customers are acquired, retained and can be grown in value over time. Retained customers may pay higher prices than newly acquired customers, and are less likely to receive discounted offers that are often made to acquire new customers (Almohaimmed, 2019). Danish et al. (2015) refers to customer retention as the process of building customer loyalty toward a particular brand, thus having customers to repurchase its products or services over time. More specifically, customer retention is a long-lasting customer commitment towards a brand and their decision to maintain such relationship is a result of positive perceptions and past experiences (Boohene et al., 2013). With the importance of customer retention as a business' competitive advantage in mind, numerous study has been done on the past to learn about antecedents of customer retention. Danish et al. (2015) study in Pakistan concluded that "customer retention is not possible without satisfaction". in Ghana's hospitality industry Adzoyi et al. (2018) study found that customer satisfaction has significant impact towards customer retention. In Indonesia itself researchers has been conducted on customer retention topic. One of which is on banking sector specifically in Makassar, whereby customer satisfaction is once again proven to have positive correlation with customer retention (Parawansa, 2018). Rita et al. (2019) also found similar result while conducting study on Indonesia's ecommerce industry, showing positive association between customer satisfaction with repurchase intention. This study aims to look deeper into the effect of Shopee Indonesia's customer satisfaction with customer retention through the following hypothesis :

H6. Shopee's customer satisfaction has positive effect on customer retention

1.6 Research Framework

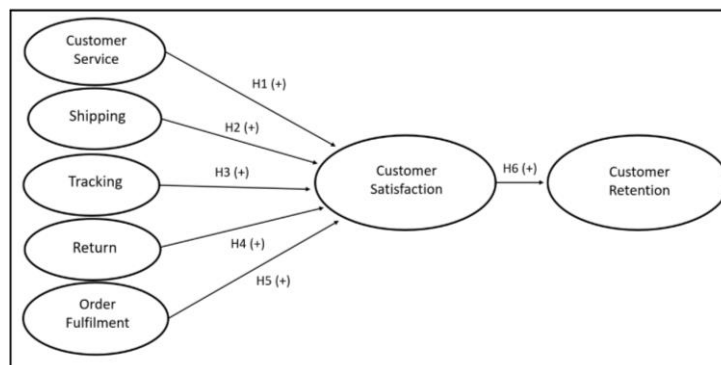


Fig 1. Research Framework

2. Research Method

2.1 Data Collection

Data collected in this research is obtained through questionnaire distributed online. Survey was conducted with Shopee Indonesia users who are residing in Indonesia as targeted population in this study. The reason behind this is because only Shopee users who have experienced its services by conducting online shopping would be able to answer the survey questions accurately based on their own experience. Hence, purposive sampling is implemented in this research. The minimum number of sample that is required in order for a study to be valid is between 5 – 10 times the number of independent variables (Hair et al., 2010). This study managed to collect 412 responses which can be considered as valid since there are 5 independent variable in this research.

2.2 Construct and research instrument

Likert-scale was implemented for each construct surveyed, it is a five-point scale with 1 = "Strongly Disagree", 2 = "Disagree", 3 = "Neutral", 4 = "Agree" and 5 as "Strongly Agree". The survey instrument was tested prior to the real study with 46 respondents. The research instrument is further refined after preliminary test result was run through partial least square model or PLS-SEM using software SmartPLS 3.0 version. Questionnaire item consist of all 7 constructs which are Customer Service, Shipping, Tracking, Return, Order Fulfilment, Customer Satisfaction, and Customer Retention.

3. Results and Discussion

3.1 Measurement Model

Validity and reliability test was conducted to measure the validity of the research model. Validity test was conducted by measuring Average Variance Extracted (AVE) and Outer Loadings values. AVE and outer loadings values should be greater than 0.5 and 0.7 respectively for the model to be considered as valid and reliable (Hair et al., 2019). Discriminant validity was also conducted to see if there are any inconsistency within the construct. This study use HTMT Ratio table and the value should be less than 0.85 otherwise it might indicate the presence of discriminant validity problem.

Table 1. Measurement Model Evaluation

Variable	Item	Outer Loadings
Customer Service (AVE = 0.739, CR = 0.894)		
CS_1	I have received prompt service from Shopee Customer Service	0.843
CS_3	CS Shopee show sincere interest in solving customers problems	0.873
CS_4	My issues are resolved with kind assistance from Shopee Customer Service	0.862
Shipping (AVE = 0.624, CR = 0.892)		
SP_1	My package was delivered on within promised time from Shopee Sellers	0.795
SP_2	My package arrived within the promised/expected time	0.853
SP_3	I often find shipping options that best fit my preference	0.794
SP_4	I often receive free/discounted shipping	0.733
SP_5	Shopee have features that allow me to track my package during shipment	0.770
Tracking (AVE = 0.833, CR = 0.909)		
TR_2	I am able to use Shopee website to track my package delivery status	0.905
TR_3	I am able to track my package through Shopee mobile application	0.921
Return (AVE = 0.701, CR = 0.875)		
RT_1	1. It is easy to return products in Shopee	0.832
RT_2	2. Shopee have clear return policy	0.857
RT_3	3. I often do not have trouble getting the returned item to the shipping company	0.822
Order Fulfilment (AVE = 0.711, CR = 0.880)		
OF_3	Shopee is truthful about its offerings	0.783
OF_4	The product was not damaged during delivery	0.839
OF_5	The ordered products arrived in good condition	0.904

Variable	Item	Outer Loadings
Customer Satisfaction (AVE = 0.803, CR = 0.942)		
CUSA_1	The services provided by Shopee are very food	0.874
CUSA_2	Shopee provides good customer service quality	0.891
CUSA_3	My online shopping experience is satisfying	0.892
CUSA_4	I am satisfied with my experience using Shopee	0.927
Customer Retention (AVE = 0.815, CR = 0.946)		
CR_1	I plan to continue my relationship with Shopee in future	0.893
CR_2	I would encourage friends and relatives to use Shopee	0.939
CR_3	I have said positive things about Shopee to others	0.890
CR_4	I consider Shopee as my first choice	0.890

Note : AVE = Average Variance Extracted; CR = Composite Reliability

Source: Data Processing Result (2021)

Below is Table 2 which shows discriminant validity test result using HTMT Ratio method.

Table 2. HTMT Ratio

Variable	Customer Retention	Customer Satisfaction	Customer Service	Order Fulfilment	Return	Shipping	Tracking
Customer Retention							
Customer Satisfaction	0.835						
Customer Service	0.574	0.591					
Order Fulfilment	0.630	0.809	0.505				
Return	0.514	0.516	0.560	0.461			
Shipping	0.715	0.793	0.627	0.740	0.496		
Tracking	0.598	0.653	0.553	0.611	0.502	0.768	

Source: Data Processing Result (2021)

3.2 Structural Model

To evaluate the structural model of this study, determinant coefficient or R² values, collinearity test, and hypothesis test are conducted. R² values represent the accuracy of predictive ability that independent variable have towards the dependent variables. Table 3 below shows that Customer Satisfaction and Customer Retention have R² value of 0.629 and 0.596 respectively. According to Hair et al., 2019 this can be categorized as moderate strength predictivity since R² value between 0.25 – 0.50 represents weak predictive accuracy, 0.50 – 0.75 moderate predictive accuracy, and greater than 0.75 means substantial predictive accuracy.

Table 3. R² values

Variable	R-Square (R ²)
Customer Retention	0.596
Customer Satisfaction	0.629

Source: Data Processing Result (2021)

As for collinearity test which is conducted to determine whether this research model have multicollinearity presence, Variance Inflation Factor (VIF) value of each construct is evaluated. The VIF value of variables should not be greater than 5. Any value greater than 5 might indicates the presence of multicollinearity, the ideal value should be less than 3 (Hair et al., 2019). Table 4 below shows that VIF results of variables in this study is no greater than 3 thus, the model managed to pass collinearity test.

Table.4 Variance Inflation Factor (VIF)

Variable	Customer Retention	Customer Satisfaction	Customer Service	Order Fulfilment	Return Shipping	Tracking
Customer Retention						
Customer Satisfaction	1.000					
Customer Service		1.542				
Order Fulfilment		1.682				
Return		1.391				
Shipping		2.280				
Tracking		1.812				

Source : Data Processing Result (2021)

To test whether proposed hypothesis in this study is supported, directional hypothesis test is conducted. This study implements directional hypothesis test where statistical test result will show t-statistics value with t-table one tail test value of 1.65 and significance level of 0.05. If t-statistics value of a construct relation is greater than 1.65 then the hypothesis is supported. Table 5 shows that every proposed hypothesis is supported except for H₃ : Shopee's tracking has positive effect on customer satisfaction.

Table 5. Hypothesis Test Result

Hypothesis	Variables Correlation	Original Sample (O)	T Statistics (O/STDEV)	P Values	Conclusion
H1	Customer Service -> Customer Satisfaction	0.115	2.753	0.003	Accepted
H2	Shipping -> Customer Satisfaction	0.323	6.111	0.000	Accepted
H3	Tracking -> Customer Satisfaction	0.084	1.565	0.059	Rejected
H4	Return -> Customer Satisfaction	0.086	2.096	0.018	Accepted
H5	Order Fulfilment -> Customer Satisfaction	0.377	7.515	0.000	Accepted
H6	Customer Satisfaction -> Customer Retention	0.772	35.757	0.000	Accepted

Source: Data Processing Result (2021)

3.3 Discussion

The first hypothesis on this research is supported, data collected and processed showed that there is a significant positive correlation between customer services with customer satisfaction in online shopping. The result of this research is aligned with study conducted by Cao et al. (2018) that included customer service as one of post-purchase activities that influences customer satisfaction. Zeitham et al. (2002) mentioned that when a customer is conducting a purchase online, they expected customer service to be responsive (Zeitham et al., 2002). In fact, customer service benefit towards customer satisfaction and business success has long been recognized even on the offline industry. In online shopping however, customer service became even more crucial as customer service is the only access for customer to interact with a store representative. Hence, this study adopted Blut (2016) definition of customer service as responsive service to address any inquiries or complaints after sales. The result of this hypothesis shows that Shopee's customer service do indeed have positive effects towards satisfaction level of its users.

Hypothesis two of this research is also supported, data collected and process shows that there is significantly positive relationship between shipping and customer satisfaction. As Cao et al. (2018) stated, shipping is one of post-purchase activity during online purchase that affects customer satisfaction level. Shipping is an important part of online shopping experience as it determined when and at what cost the customer get their order (Vasic et al., 2019). The same result was also obtained by Handoko (2016) who studied about the impact of delivery towards Indonesian online shoppers satisfaction. Hence, we can safely conclude Shopee users will be satisfied if Shopee shipping services managed their expectation in providing various options to choose from, on-time delivery, and free or discounted shipping fee is involved.

Third hypothesis in this study is not supported, meaning that the data collected does not show significantly positive relationship between tracking with customer satisfaction. Tracking is an element of post-purchase activity that ensure customer are able to know the location of their shipped packages through various channels such as Shopee mobile application and website (Cao et al., 2018). Kovac et al. (2017) studied the significance and importance of delivery in ecommerce in Croatia and found that tracking is not as prioritized when compared to other factors in delivery service such as delivery speed and low delivery cost. The result of this study is also in line with Widiyanti et al. (2020) finding that tracking and tracing information in Indonesia has low level of importance. Thus, this result does not necessarily mean tracking does not have any association with customer at all but is not as significant as other services in determining Shopee users satisfaction level.

Hypothesis four in this research is supported, data collected and processed showed that there is significant positive correlation between return to customer satisfaction in online shopping. This result is in accordance with study conducted by Janakiraman et al. (2016) that found lenient return policy resulted in higher customer satisfaction and repurchase intention. The quality of return service is often associated with perceived risk, when an option to return their order is available, customer feel more secure to commit the purchase (Janakiraman et al., 2016). It is also important to note that return leniency might varies between countries as they adopt different culture as China have stricter policy with limited time period but USA return regulation is a lot more effortless (Cao et al. 2018; Linzbach et al., 2019). This research shows that Shopee have clear return regulation and managed to perform to customers' expectation when it come to returning their orders thus, Shopee Indonesia users are satisfied.

Fifth hypothesis of this study is supported, data gathered and processed shows that there is a significant positive association between order fulfilment and customer satisfaction. This shows that not only customer care about when their order arrived but also about how it . Rita et al. (2019) study on Indonesia ecommerce sector also shows that customers satisfaction level depends on whether customers received exactly what they ordered and if they are in good condition. During online shopping, customers can only see their purchased item only after it is done hence, fulfilment became a crucial step to nail for online retailers. This study finding is similar to Jain et al. (2017) who also found positive relation between order fulfilment with customer satisfaction and repurchase intention.

Hypothesis six regarding correlation between customer satisfaction and customer retention is also supported, data shows significant positive relationship between these two variables. Customer retention on ecommerce industry is a must competitive advantage, especially when ecommerce is highly competitive industry where there are a lot of substitutes available for online shoppers to choose from (Danish et al., 2015). Study conducted by Rita et al. (2019) found that online shoppers in Indonesia who are satisfied tends to conduct repurchase activity on that particular ecommerce site. As customer retention refers to the continuity relationship between organization and its customer, it can only happened when customer have satisfying past experience (Ibojo & Asabi, 2015). In line with this research, customer retention is also found to be the result of customer satisfaction in Pakistan (Nazir et al., 2016). Hence, the result of this study allow us to conclude that when Shopee managed to keep their users satisfied they will be retained.

4. Conclusions

The result of hypothesis test conducted indicates that customer service, shipping, return, and order fulfilment have significant positive effect on customer satisfaction while tracking is not proven to have significant positive effect on customer satisfaction. Furthermore, customer satisfaction is also proven to have significant positive effect on customer retention.

5. References

- U. Achlison, "Analisis Implementasi Pengukuran Suhu Tubuh Manusia dalam Pandemi Covid-19 di Indonesia," *J. Ilm. Komput. Graf.*, vol. 13, no. 2, pp. 102–106, 2020, [Online]. Available: <https://journal.stekom.ac.id/index.php/pixel/article/view/318>.
- Supria and M. Nasir, "Monitoring of Body Temperature Non Contact Using AMG8833 Thermal Camera And Face Detection," in *Seminar Nasional Terapan Riset Inovatif (SENTRINOV)*, 2020, vol. 6, no. 1, pp. 396–403, [Online]. Available: <https://proceeding.isas.or.id/index.php/sentrinov/article/view/379>.
- M. Jiono, S. Sendari, S. Wibawanto, and ..., "Thermal Camera Sebagai Pengendalian Covid-19 Di Dusun Turi, Desa Kepuharjo, Kecamatan Karangploso," *Pros. Has. Pengabd. Kpd. Masy. (HAPENAS 2)*, vol. 2, no. 1, pp. 524–534, 2020, [Online]. Available: <http://conference.um.ac.id/index.php/hapemas/article/view/288>.
- S. M. Liem, M. Y. Tuga, and E. A. Lisangan, "Prototype Aplikasi Pengawasan Masyarakat Menggunakan Smart Camera Dalam Mendeteksi COVID-19," *J. Fokus Elektroda Energi List. Telekomun. Komputer, Elektron. dan Kendali*, vol. 05, no. 03, pp. 15–19, 2020, [Online]. Available: <http://ojs.uho.ac.id/index.php/JFE/article/view/13211>.