# Journal of Economics, Finance and Management Studies

ISSN (print): 2644-0490, ISSN (online): 2644-0504 Volume 6 Issue 2 February 2023 Article DOI: 10.47191/jefms/v6-i2-08, Impact Factor: 6.274 Page No. 626-638

Analysis of The Influence of Application Design, Customer Service, Security/Privacy, and Fulfillment Towards Customer Loyalty Through Customer Satisfaction and Customer Trust as Intervening Variable on The Customers of Shopee Application in Medan, Indonesia



# Winar Sari Valencia<sup>1</sup>, Ronald Suryaputra<sup>2</sup>, Amelia<sup>3</sup>

<sup>1,2,3</sup>Economics and Business School, Pelita Harapan University, Surabaya, Indonesia

**ABSTRACT:** This study is conducted to analyze the influence of application design, customer service, security/privacy, and fulfillment towards customer loyalty through customer satisfaction and customer trust as intervening variable on the customers of Shopee in Medan, Indonesia. This study is conducted on 275 respondents with the characteristics of male and female, ranging from 18-60 by age, lives in Medan, and has conducted transaction using Shopee Application at least twice in the past year. This study is conducted by adopting quantitative approach with causal- comparative research method. The result of this study which is obtained from the Structural Equation Model (SEM) by AMOS software version 22.0 shows that application design has significant influence towards customer satisfaction, application, customer service has significant influence towards customer trust, customer trust, security/privacy has no significant influence towards customer satisfaction, fulfillment has significant influence towards customer trust, fulfillment has significant influence towards customer satisfaction, fulfillment has significant influence towards customer trust, security, privacy has no significant influence towards customer satisfaction, fulfillment has significant influence towards customer trust, fulfillment has significant influence towards customer loyalty, and customer trust has significant influence towards customer loyalty.

**KEYWORDS:** Application Design, Customer Service, Security/Privacy, Fulfillment, Customer Trust, Customer Satisfaction, Customer Loyalty

## I. INTRODUCTION

The development of technologies in the past decade has changed the perspective towards lifestyle, especially after the presence of coronavirus in 2019. Based on the survey conducted by *We Are Social* in April 2021, Indonesia ranks as the highest *e-commerce* user in the world with 1% increment compared to 2020, where 88.1% of the population conduct online shopping in the last few months with the average of e-commerce users is 78.6% globally. In comparison, eight out of ten said that online shopping is more convenient than shopping in an online store. Several reasons which encourage people to shop online are free shipping (50.5%), coupons and discounts (48.3%), customer reviews (48.3%), convenient checkout process (41.7%), likes and comments on social media (37.1%), easy return process (28.2%), Cash on Delivery (COD) option (24.7%), eco-friendly credentials (24%), delivery the next day (22.8%), loyalty points (16.6%), exclusive content (15.8%), live chat box (14.9%), 0% instalment (13.8%), availability to pick-up order from store (12.5%), and the availability to purchase via social media (11.4%).

This study focus on the loyalty of Shopee application users as one of the most used e-commerce platforms in Indonesia. Shopee is an e-commerce platform with headquarters in Singapore under the Sea Group (formerly known as Garena), which was founded by Forrest Li in 2009. Shopee first launched in Singapore in 2015, and continue to expand their business to Malaysia, Thailand, Taiwan, Indonesia, Vietnam and the Philippines to reach more users across the Southeast Asia Region and Taiwan (https://careers.shopee.co.id/about). Shopee is considered quite late in entering the e-commerce market where Tokopedia in 2009, Bukalapak in 2011, and then followed by Lazada and Zalora in 2012. Therefore, Shopee did something different. While other e-commerce focuses on building a website as the main platform, Shopee examine the available data and identify patterns of trends, then launches an e-commerce application and invests a large amount to create a shopping experience by rolling out

attractive marketing campaigns. However, based on the survey conducted by Katadata.co.id (2021), Tokopedia wins as the most used app (158.136.700 visitors) which followed by Shopee with 134.383.300 visitors in Q3 2021. Therefore, it is important for Shopee to increase customer loyalty from its users. According to Kyurova and Davidkova (2020), customer loyalty plays an important role in the long-term success of small and medium-sized businesses in an environment of global and intense competition. Maintaining customer loyalty is very difficult and challenging for every company. However, when customers feel satisfied with a certain product/service, they tend to remain loyal to a company (Nguyen et al., 2018). Maintaining customer loyalty is very crucial and challenging for every company. However, when customers are satisfied with a product/service, they tend to remain loyal to a company (Nguyen et al., 2018).

The research gap in this study is based on the study conducted by Al-Adwan and Al-Horani (2019), Security/Privacy has no influence towards customer satisfaction however according to Mahdani and Widodo (2021), Security/Privacy has a significant influence towards customer satisfaction.

#### II. LITERATURE REVIEW

#### **Customer Loyalty**

Customer loyalty according to Kotler and Keller (2016: 153) is a customer's commitment to repurchase a preferred product or service in the future despite situational influences and marketing efforts that can trigger changes in consumer behavior. Therefore, to build customer loyalty, companies must have good relationships with consumers so that companies can better understand the needs, wants and expectations of their customers. Customer loyalty is seen as one of the keys to the company's success (Khan, 2013).

#### **Customer Satisfaction**

According to Buttle and Maklan (2015: 41), customer satisfaction is a feeling of pleasure or disappointment that arises after comparing the perceived performance (or results) of a product or service with their actual expectations. Customer satisfaction increases because customer insights enable companies to understand their customers better and to create better customer value propositions and better customer experiences. Customer satisfaction is associated with the feedback given by consumers after purchasing a product and believing that the product meets their expectations. Therefore, customer satisfaction can be said as a way to increase market share with company profits (Rua et al., 2020).

#### **Customer Trust**

Hidayat et al. (2021) describes customer trust as one of the main components that drives purchases, where customer trust can be interpreted as an assessment of one's relationship with other people who will carry out certain transactions in an uncertain environment. Customer trust must be built early on, developed and proven consistently over time. According to Putrianti and Samuel (2018), customer trust is the most important factor in online transactions where they define customer trust as the belief that other parties will behave in a socially responsible manner, and thus, will meet the expectations of those who trust without taking advantage from vulnerability.

#### **Application Design**

Application design is the aspect that is first seen by users even before testing and testing an application. Sabukunze and Arakaza (2021) state that application design can improve service quality and increase customer satisfaction by implementing user experience. Kim (2012) states that an application that is designed effectively can increase user satisfaction, trust, and retention, which allows users to stay in touch with sellers, facilitate other business processes, and add value in the era of fast communication.

#### **Customer Service**

Customer service according to Oni et al. (2020) is the willingness of staffs to help and answer customer questions quickly and responsively. Customers are more interested and demanding when the service can be delivered right the first time. Complete information provided such as order status, privacy policy, frequently asked questions will also affect the buyer's intention to purchase at e-commerce. Gümüş and Çark (2021) also define customer service as services provided in meeting customer needs and requests, such as providing goods/services of interest to them and tracking them online, as well as responding to emergencies.

#### Security/Privacy

Rath and Kumar (2020) define security/privacy as an individual's right to keep information and personal matters confidential and to control that information. Security/privacy can also be a state of being free from unwanted distractions and distractions. Syahbuddin et al. (2020) defines information security/privacy as all matters relating to the protection and maintenance of confidentiality, integrity, authenticity, availability, and reliability of information that require steps to detect, document, and counter threats to that information.

#### Fulfillment

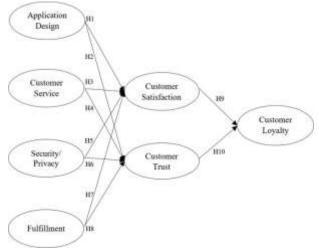
Isac (2014) defines e-fulfillment as a service where operators carry out all order fulfillment processes on behalf of e-commerce, starting from storage, receiving orders, packing and shipping or e-commerce management, based on cloud system management, reporting, and order tracking. Yoo and Won (2018) defines order fulfillment as all activities that enable companies to fulfill customer requests. This process can maximize profits by receiving feedback from vendors and customers.

Hypothesis of this study is listed as following:

- H1: Application design has a significant influence on customer satisfaction.
- H2: Application design has a significant influence on customer trust.
- H3: Customer service has a significant influence on customer satisfaction.
- H4: Customer service has a significant influence on customer trust.
- H5: Security/Privacy has a significant influence on customer satisfaction.
- H6: Security/Privacy has a significant influence on customer trust.
- H7: Fulfillment has a significant influence on customer satisfaction.
- H8: Fulfillment has a significant influence on customer trust.
- H9: Customer satisfaction has a significant influence on customer loyalty.
- H10: Customer trust has a significant influence on customer loyalty.

#### **III. RESEARCH ISSUE AND METHODOLOGY**

This research will adopt a quantitative approach with causal-comparative research method, which will prove that there is a causal relationship between the variables studied based on observations of the consequences that occur (Syahza, 2021: 33). Causal-comparative research is ex post facto in nature, meaning that data is collected after observing a phenomenon that has already occurred and reviewing ongoing and past data. Darwin et al. (2021) also added that research using the causal-comparative method aims to describe the situation that occurs from the variables and hypotheses that exist in a study to draw a conclusion. Non-probability sampling method, namely snowball sampling is implemented in this study as the number of Shopee application users in Medan, Indonesia is unknown. The characteristics of the respondents are men and women aged between 18-60, lived in Medan, Indonesia, and have purchased using the Shopee application at least twice in the past year. The sample in this study is collected from questionnaires filled by 275 respondents with a total of 55 indicators. The measurement scale adopted in this study is Likert scale with the scale between 1-5 with scale values includes strongly disagree (1), disagree (2), neutral (3), agree (4) and strongly agree (5). The results of this study will refer to the Structural Equation Model (SEM) analysis method using AMOS 22.0 software.



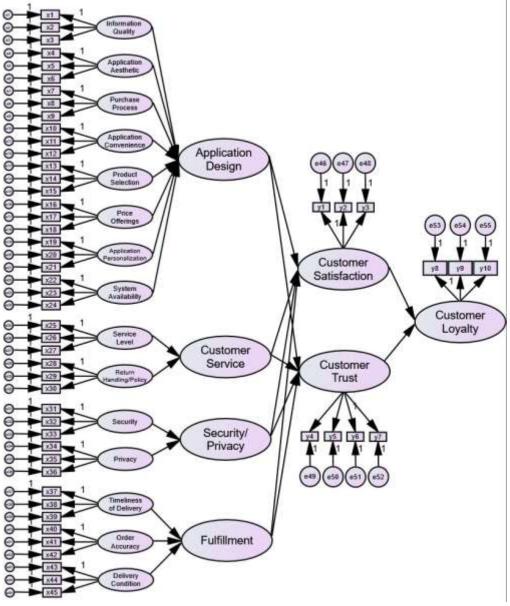


Figure 1. Research Framework

The Structural Equation Model in this study is described as following.  $CSat = \alpha 1.AD + \alpha 3.CServ + \alpha 5.SP + \alpha 7.Ful + \delta 1$   $CT = \alpha 2.AD + \alpha 4.CServ + \alpha 6.SP + \alpha 8.Ful + \delta 2$  $CL = \alpha 9.CSat + \alpha 10.CT + \delta 3$ 

With: CSat = Customer Satisfaction AD = Application Design CServ = Customer Service SP = Security/Privacy Ful = Fulfillment CT = Customer Trust CL = Customer Loyalty

# IV. FINDINGS

### **Characteristics of Respondents**

As explained previously, the data are retrieved using non-probability sampling method on 275 respondents, in which the details can be seen as below.

#### **Table 1. Respondent Profile**

Demographics Variable	Category	Total Respondent	Ratio (%)
Gender	Male	100	36.36
Gender	Female	175	63.64
	18-30	202	73.45
Age	31-40	47	17.09
	41-60	26	9.45
	University Student	96	34.91
	Private Sector Employee	87	31.64
Job Profile	Public Sector Employee	34	12.36
	Entrepreneur	46	16.73
	Housewife	12	4.36
	Highschool	107	38.91
Latest Education	Diploma	11	4.00
	Bachelor	139	50.55
	Master	18	6.55
Frequency of using	2-5 kali	61	22.18
Frequency of using	5-10 kali	117	42.55
Shopee Application	>10 kali	97	35.27

#### **Evaluation of Outliers**

Outliers are observations which are different when compared to other observations in an extreme form of single and combination variables (Hair et al., 1995 in Ferdinand, 2002). Outliers evaluation was divided into two, namely univariate outliers and multivariate outliers.

#### **Univariate Outliers**

Univariate outliers are done by determining the threshold value, the outliers will then be categorized as outliers in the form of a z-score, by converting the values from the research data. The conversion results of these data values will then produce an average value of zero and a standard deviation value of one. For the number of samples above 8, the guideline for evaluating the threshold value of the z-score is at -4 to 4 (Hair et al., 1995 in Ferdinand, 2002). Based on the z-score conversion results which can be seen in table 4.23 where all variables have maximum and minimum values spread between the ranges of -4 to 4, it is concluded that this study does not have univariate outliers.

#### **Multivariate Outliers**

Evaluation of multivariate outliers needs to be done with the aim of avoiding the appearance of outliers, because even though the data being analyzed does not show outliers at the univariate level, there is a possibility that these observations can become outliers if they have been combined with each other. This evaluation is carried out through the Mahalanobis Distance test to show the distance from observations to the average of all variables in a multidimensional space (Hair et al., 1995; Norusis, 1994; Tabachnuck and Fidell, 1996 in Ferdinand, 2002). The mahalanobis distance test can be carried out using criteria at the *p* level <0.001 and then the mahalanobis distance can be evaluated using  $X^2$  at a number of degrees with the indicator used in the study, namely 55. As the mahalanobis distance in this study is lower than 93.16753, it can be concluded that the data are multivariate outliers.

### **Evaluation of Multicollinearity and Singularity**

Multicollinearity can be detected through the determinants of the covariance matrix. The smaller the value of the determinant of the covariance matrix indicates that the greater the indication given to the presence of problems in multicollinearity or singularity (Tabachnick and Fidell, 1998 in Ferdinand, 2002). In the AMOS software, if there is a singularity in the covariance matrix, the AMOS software application will give a warning by giving a notification or warning. Based on the test results through the AMOS software, the determinant matrix 296390 is obtained which is far from zero. Therefore, it can be concluded that there is no evidence of multicollinearity or singularity from the combination of variables in the data, so that further analysis can be carried out.

#### **Confirmatory Factor Analysis of Exogenous Variables**

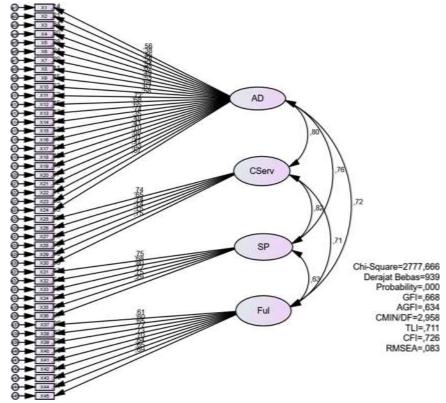


Figure 2. Confirmatory Analysis for Application Design, Customer Service, Security/Privacy, and Fullfillment

Confirmatory analysis Application Design, Customer Service, Security/Privacy, and Fullfillment is carried out to test the suitability of the model and the dimensionality of exogenous constructs. In this study, there are four independent variables which will then be used as measurement models for confirmatory analysis of exogenous constructs, namely Application Design, Customer Service, Security/Privacy, and Fullfillment. The Application Design variable consists of 24 indicators, Customer Service consists of 6 indicators, Security/Privacy consists of 6 indicators, and Fulfillment consists of 9 indicators.

Table 2. Factor Weight	Test and F	Factor Value	Loading for	Application	Design,	Customer	Service,	Security/Privacy, a	and
Fulfillment									

			Estimate	S.E.	C.R.	Р	Std. Estimate
X1	<	AD	1,000				,564
X2	<	AD	,634	,111	5,731	***	,378
Х3	<	AD	1,112	,167	6,674	***	,459
X4	<	AD	1,651	,206	8,032	***	,585
X5	<	AD	1,313	,173	7,602	***	,544
X6	<	AD	1,745	,209	8,334	***	,619
X7	<	AD	,851	,121	7,046	***	,492

X8	<	AD	,998	,133	7,528	***	,535
X9	<	AD	1,860	,217	8,557	***	,644
X10	<	AD	1,589	,182	8,722	***	,668
X11	<	AD	1,254	,159	7,897	***	,577
X12	<	AD	1,742	,189	9,227	***	,723
X13	<	AD	1,460	,164	8,882	***	,677
X14	<	AD	1,835	,213	8,612	***	,653
X15	<	AD	1,753	,187	9,356	***	,738
X16	<	AD	,953	,181	5,256	***	,347
X17	<	AD	1,235	,179	6,918	***	,481
X18	<	AD	1,207	,199	6,061	***	,410
X19	<	AD	1,473	,162	9,091	***	,703
X20	<	AD	1,456	,162	8,963	***	,682
X21	<	AD	1,183	,144	8,227	***	,605
X22	<	AD	1,460	,215	6,801	***	,470
X23	<	AD	1,003	,201	4,988	***	,326
X24	<	AD	1,394	,176	7,916	***	,572
X25	<	CServ	1,118	,091	12,281	***	,741
X26	<	CServ	,886	,084	10,562	***	,649
X27	<	CServ	1,114	,091	12,192	***	,736
X28	<	CServ	1,139	,092	12,441	***	,740
X29	<	CServ	1,260	,101	12,477	***	,749
X30	<	CServ	1,000				,749
X31	<	SP	1,000				,746
X32	<	SP	1,117	,103	10,852	***	,682
X33	<	SP	1,267	,100	12,721	***	,797
X34	<	SP	,997	,084	11,833	***	,723
X35	<	SP	1,249	,102	12,242	***	,754
X36	<	SP	,557	,119	4,690	***	,294
X37	<	Ful	1,000				,608
X38	<	Ful	1,014	,121	8,394	***	,597
X39	<	Ful	1,123	,122	9,199	***	,648
X40	<	Ful	1,215	,122	9,997	***	,770
X41	<	Ful	,962	,099	9,687	***	,727
X42	<	Ful	1,218	,129	9,450	***	,700
X43	<	Ful	,924	,105	8,828	***	,638
X44	<	Ful	,976	,109	8,971	***	,652
X45	<	Ful	1,091	,118	9,244	***	,689
L							

Table 2 describe the critical ratio for the Application Design, Customer Service, Security/Privacy, and Fulfillment variables which is greater than 2.00. Thus, it can be concluded that all the indicators are from latent factors meaning that all indicators are accepted. Table 2 also shows the value of the lambda loading factor for each variable that has a value greater than 0.40 and these indicators simultaneously show unidimensional latent variables.

**Confirmatory Factor Analysis of Endogenous Variables** 

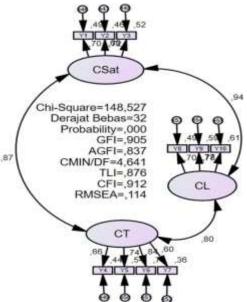


Figure 3. Confirmatory Analysis for Customer Satisfaction, Customer Trust, dan Customer Loyalty

There are three dependent variables in this study that are used as a measurement model for endogenous construct confirmatory analysis, namely Customer Satisfaction, Customer Trust and Customer Loyalty. There are 3 indicators for Customer Satisfaction, 4 indicators for Customer Trust, and 3 indicators for Customer Loyalty. The results of the confirmatory analysis can be seen in Figure 3.

			Estimate	S.E.	C.R.	Р	Std. Estimate
Y1	<	CSat	1,000				,697
Y2	<	CSat	,932	,092	10,096	***	,677
Y3	<	CSat	1,001	,091	10,995	***	,724
Y8	<	CL	1,000				,703
Y9	<	CL	1,071	,095	11,328	***	,767
Y10	<	CL	1,299	,111	11,713	***	,783
Y4	<	СТ	1,000				,662
Y5	<	СТ	1,251	,127	9,844	***	,735
Y6	<	СТ	1,386	,128	10,853	***	,844
Y7	<	СТ	,929	,106	8,735	***	,597

Table 3. Factor Weight Test and Factor Value Loading for Customer Satisfaction, Customer Trust, dan Customer Loyalty

Based on table 3, the critical ratio for the variables Customer Satisfaction, Customer Trust, and Customer Loyalty is greater than 2.00, which means that all indicators are significantly indicators derived from the resulting latent factors. Therefore, all indicators are acceptable. The table above also shows the value of the lambda loading factor in each variable which has a value greater than 0.40 so that these indicators simultaneously present unidimensional to latent variables.

**Full Stuctural Equation Model Analysis** 

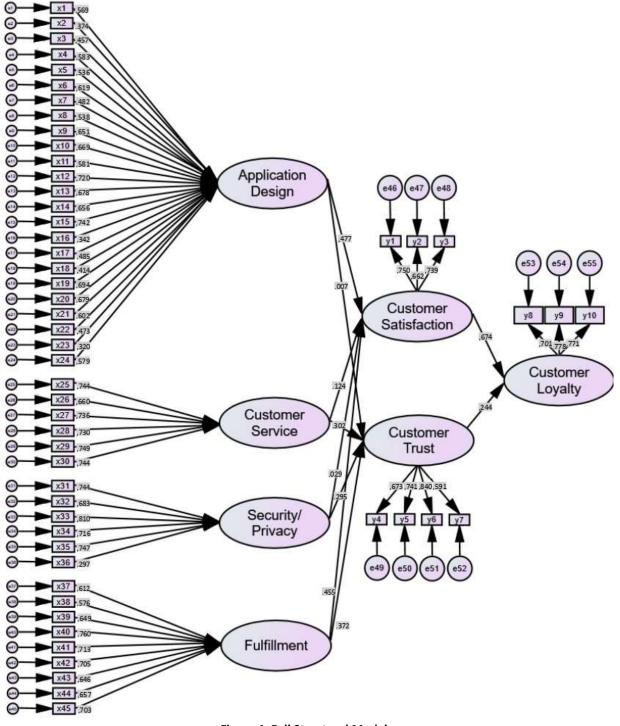


Figure 4. Full Structural Model

Figure 4 show that all model suitability criteria were met, which allows the structural model to be accepted. A good fit indicates that the model has a good model fit, where marginal fit indicates that the model is within acceptable parameters.

Goodness-of-fit-index	Cut-off Value	Analysis Result	Model Evaluation
X2-chi-square	Small, ≤ 754,3079	3950,633	Marginal fit
Significant Probability	≥0,05	0	Marginal fit

RMSEA	≤0.08	0.080	Good fit
CMIN/DF	≤2.0	2.794	Marginal fit
TLI	≥0.95	0.704	Marginal fit
CFI	≥0.95	0.719	Marginal fit

#### Table 5. Hypothesis Analysis Result

Hypothesis	Std. Estimate	C.R.	p-value	Analysis
H1: Application design has a significant influence on customer satisfaction.	,477	5,024	***	Accepted
H2: Application design has a significant influence on customer trust.	,007	,069	,945	Rejected
H3: Customer service has a significant influence on customer satisfaction.	,124	1,151	,250	Rejected
H4: Customer service has a significant influence on customer trust.	,302	2,488	,013	Accepted
H5: Security/Privacy has a significant influence on customer satisfaction.	,029	,316	,752	Rejected
H6: Security/Privacy has a significant influence on customer trust.	,295	2,914	,004	Accepted
H7: Fulfillment has a significant influence on customer satisfaction.	,455	5,712	***	Accepted
H8: Fulfillment has a significant influence on customer trust.	,372	4,486	***	Accepted
H9: Customer satisfaction has a significant influence on customer loyalty.	,674	5,700	***	Accepted
H10: Customer trust has a significant influence on customer loyalty.	,244	2,265	,024	Accepted

The hypothesis analysis result shown in table 5 is concluded from the following explanation:

- 1. The result for the Application Design and Customer Satisfaction variables shows an estimation parameter with significant results, with a value of C.R = 5,024 and a regression coefficient of 0.477, meaning that better application design will create better customer satisfaction. Thus, it can be concluded that Hypothesis 1 is accepted.
- 2. The result for the Application Design and Customer Trust variables shows an estimation parameter with non-significant results, with a value of C.R = 0.069 and a regression coefficient of 0.007, which means that application design does not have a significant influence towards customer satisfaction. Thus, it can be concluded that Hypothesis 2 is rejected.
- 3. The result for the Customer Service and Customer Satisfaction variables shows an estimation parameter with significant results, namely with a value of C.R = 1.151 and a regression coefficient of 0.124, , which means that customer service does not have a significant influence towards customer satisfaction. Thus, it can be concluded that Hypothesis 3 is rejected.
- 4. The result for the Customer Service and Customer Trust variables shows an estimation parameter with significant results, with a value of C.R = 2,488 and a regression coefficient of 0.302, meaning that better customer service will create better customer trust. Thus, it can be concluded that Hypothesis 4 is accepted.
- 5. The result for the Security/Privacy and Customer Satisfaction variables shows an estimation parameter with significant results, namely with a value of C.R = 0.316 and a regression coefficient of 0.029, which means that security/privacy does not have a significant influence towards customer satisfaction. Thus, it can be concluded that Hypothesis 5 is rejected.
- 6. The result for the Security/Privacy and Customer Trust variables shows an estimation parameter with significant results, with a value of C.R = 2.914 and a regression coefficient of 0.295, meaning that better security/privacy will create better customer trust. Thus, it can be concluded that Hypothesis 6 is accepted.
- 7. The result for the Fulfillment and Customer Satisfaction variables shows an estimation parameter with significant results, with a value of C.R = 5.712 and a regression coefficient of 0.455, meaning that better fulfilment degree will create better customer satisfaction. Thus, it can be concluded that Hypothesis 7 is accepted.

- 8. The result for the Fulfillment and Customer Trust variables shows an estimation parameter with significant results, with a value of C.R = 4.486 and a regression coefficient of 0.372, meaning that better fulfilment degree will create better customer trust. Thus, it can be concluded that Hypothesis 8 is accepted.
- 9. The result for the Customer Satisfaction and Customer Loyalty variables shows an estimation parameter with significant results, with a value of C.R = 5,024 and a regression coefficient of 0.477, meaning that better customer satisfaction degree will create better customer loyalty. Thus, it can be concluded that Hypothesis 9 is accepted.
- 10. The result for the Customer Trust and Customer Loyalty variables shows an estimation parameter with significant results, with a value of C.R = 2.265 and a regression coefficient of 0.244, meaning that better customer trust will create better customer loyalty. Thus, it can be concluded that Hypothesis 10 is accepted.

#### V. CONCLUSION

Based on research that has been conducted on 275 respondents, who are men and women with an age range of 18-60 years and based on a literature review, from the research obtained significant support that the Application Design shows a significant influence towards Customer Satisfaction with regression coefficient value of 0.477, Customer Service shows a non-significant influence towards Customer Trust with regression coefficient value of 0.302, Security/Privacy shows non-significant influence towards Customer Satisfaction with regression coefficient value of 0.029, Security/Privacy shows non-significant influence towards Customer Trust with regression coefficient value of 0.295, Fulfillment shows a significant influence towards Customer Trust with regression coefficient value of 0.455, Fulfillment shows a significant influence towards Customer Trust with regression coefficient satisfaction shows a significant influence towards Customer Trust with regression coefficient value of 0.455, Fulfillment shows a significant influence towards Customer Trust with regression coefficient value of 0.372, Customer Satisfaction shows a significant influence towards Customer Loyalty with regression coefficient value of 0.674, and Customer Trust shows a significant influence towards Customer Loyalty with regression coefficient value of 0.244.

#### SUGGESTION

#### 1. Application design

- Include feed and explore features to the app to allow sellers to upload products marketed in the form of photos that allow them to appear and reach more app users.
- Fix bugs that may appear on the application, such as unresponsive applications especially at the time of payment, and ensures that the application loads quickly.

#### 2. Customer service

- Provide training to customer service staff to keep professional in listening to customer complaints and helping them, by maintaining friendliness.
- Implement free-of-charge return program, which will help to increase customer satisfaction and reduce disappointment.
- Tracking customer's complaints via the existing customer management system so it can be solved within service level agreement (SLA).

#### 3. Security/privacy

- Provide regular notifications via email or SMS to customers to always be able to maintain customer privacy data.
- Provide proof of transaction in the form of e-invoice which can be seen on the application and sent to customer emails.
- Improve in-app security system to minimize the possibility of breaching by a third party.
- Perform double verification on every transaction, such as requesting an OTP verification code when making a payment, in order to reduce the occurrence of fraudulent transactions.

#### 4. Fulfillment

- Ensure that products ordered by customers arrive within the specified time frame by cooperate with more professional and trusted shipping vendors
- Adjust the automatic cancellation policy if the store is inactive from 7 (seven) days to 3 (three) days from the time the order is made except for pre-order products in order to increase the credibility of Shopee.

# 5. Customer Satisfaction

 Improving its service and performance by always providing a choice of stores and products needed by customers, providing convenience and a sense of security in the transaction process and providing 24-hour service with a fast and reliable response.

# 6. Customer trust

- Providing the best solution for customers who are experiencing problems.
- Restoring access for customers to be able to choose the preferred shipping partner according to the list of vendors who
  cooperate with Shopee and also provide more choices regarding payment methods to enjoy free shipping promos so that
  customers remain loyal.

# REFERENCES

- 1) Al-Adwan, A. S. & Al-Horani, M. A. (2019). Boosting Customer E-Loyalty: An Extended Scale of Online Service Quality, Information 2019, 10, 380. DOI:10.3390/info10120380
- 2) Buttle, Francis & Maklan, Stan. (2015). Customer Relationship Management : Concepts and Technologies. 3rd Edition. New York: Routledge
- 3) Gümüş, N. & Çark, O. (2021). The Effect of Customers' Attitudes Towards Chatbots on Their Experience and Behavioral Intention in Turkey, Interdisciplinary Description of Complex Systems 19(3), 420-436, 2021. DOI: 10.7906/indecs19.3.6
- 4) Hidayat, A., Wijaya, T., Ishak, A., Endi Catyanadika, P. (2021). Consumer Trust as the Antecedent of Online Consumer Purchase Decision. Information 2021, 12, 145. https://doi.org/10.3390/info12040145
- 5) Isac, C. (2014). E-Fulfillment A New Challenge for Electronic Business, Annals of the University of Petroşani, Economics, 14(1), 2014, 121-128
- 6) Khan, M. T. (2013) Customers Loyalty: Concept & Definition (A Review), International Journal of Information, Business and Management, Vol. 5, No.3, 2013. ISSN 2076-9202
- 7) Kim, J (2012). The Effect of Design Characteristics of Mobile Applications on User Retention: An Environmental Psychology Perspective, Eighteenth Americas Conference on Information Systems, Seattle, Washington, August 9-12, 2012. https://aisel.aisnet.org/amcis2012/proceedings/HCIStudies/13
- 8) Kotler, P & Keller, K. (2016). Marketing Management Global Edition. England: Pearson Education Limited
- 9) Kyurova, V & Davidkova, B. K. (2020). Study of Customer Loyalty in Small and Medium-Sized Enterprises in the Field of Trade in Bulgaria, SHS Web of Conferences Globalization and its Socio-Economic Consequences 2020. https://doi.org/10.1051/shsconf/20219207036
- 10) Mahdani, N. M. A. & Widodo, T. (2021). EFEK DIMENSI KUALITAS LAYANAN ELEKTRONIK TERHADAP NIAT PEMBELIAN KEMBALI PELANGGAN LAYANAN APLIKASI REKSA DANA MELALUI KEPUASAN PELANGGAN SEBAGAI VARIABEL INTERVENING (STUDI KASUS: BAREKSA), e-Proceeding of Management : Vol.8, No.5 Oktober 2021. ISSN : 2355-9357
- 11) Nguyen, T. H., Nguyen, H., Nyuyen, N. D., Phan, C. (2018). Determinants of Customer Satisfaction and Loyalty in Vietnamese Life-Insurance Setting, Sustainability 2018, 10, 1151. DOI:10.3390/su10041151
- 12) Oni, R. U., Sentanu, W., Valentinus, N. & Manaf, P. A. (2020). Factors That Influence Online Purchase Intention Through E-Commerce in Indonesia, International Journal of Management (IJM) Volume 11, Issue 11, November 2020, pp. 158-171. 10.34218/IJM.11.11.2020.016
- 13) Putrianti, A. S. & Semuel, H. (2018). The Analysis of E-service Quality, Customer Trust, Perceived Value, and Behavioral Intention on Online Transportation in Surabaya, International Journal of Business Studies, Vol. 1, No. 1, June 2018: 1–10. DOI: 10.9744/ijbs.1.1.1–10
- 14) Rath, D. K. & Kumar, A. (2020). Information Privacy Concern at Individual, Group, Organization and Societal Level A Literature Review, Vilakshan – XIMB Journal of Management Vol. 18 No. 2, 2021 pp. 171-186 Emerald Publishing Limited 0973-1954. DOI: 10.1108/XJM-08-2020-0096
- 15) Rua, S. Saldanha, E., D., S. & Amaral, A., M. (2020). Examining the Relationships between Product Quality, Customer Satisfaction and Loyalty in the Bamboo Institute, Dili, Timor-Leste, Timor-Leste Journal of Business and Management Vol.2, Issue 1, pp. 33-44, 2020
- 16) Sabukunze, I. D. & Arakaza, A. (2021). User Experience Analysis on Mobile Application Design Using User Experience Questionnaire, Indonesian Journal of Information Systems (IJIS) Vol. 4, No. 1, August 2021.

https://doi.org/10.24002/ijis.v4i1.4646

- 17) Syahbuddin, B. H., Azzahro, F., Afrida, W. G., Hidayanto, A. N. & Phusavat, K. (2020). The Implementation of Multiple Information Security Governance (ISG) Frameworks Strategy and Critical Success Factors in Indonesia's Oil and Gas Industry: Case Study of PT X, Jurnal Sistem Informasi (Journal of Information System), Volume 16, Issue 2, October 2020
- 18) Yoo, M. & Won, Y. (2018). A Study on the Transparent Price Tracing System in Supply Chain Management Based on Blockchain, Sustainability 2018, 10, 4037. DOI:10.3390/su10114037
- 19) https://databoks.katadata.co.id/datapublish/2021/11/18/tokopedia-masih-jadi-e- commerce-paling-banyak-dikunjungipada-kuartal-iii-2021 (downloaded on 01 April 2022) https://databoks.katadata.co.id/datapublish/2021/06/04/penggunaan-e-commerce-indonesia-tertinggi-di-dunia (downloaded on 08 April 2022)
- 20) https://careers.shopee.co.id/about (downloaded on 09 April 2022)



There is an Open Access article, distributed under the term of the Creative Commons Attribution – Non Commercial 4.0 International (CC BY-NC 4.0)

(https://creativecommons.org/licenses/by-nc/4.0/), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.