

## Analysis of the Influence of Environment Quality, Delivery Quality, and Outcome Quality Factors on Behavioral Intention through Customer Satisfaction on Shopee Apps Users in Surabaya



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**ABSTRACT:** Shopee Apps is one of the most frequently used e-commerce applications with the number of transactions increasing by up to 130% in 2020. Shopee Apps is also the community's top e-commerce application for shopping online during the Covid-19 pandemic. Therefore, it is important for Shopee Apps to be able to determine the quality of services that can be offered that have an influence on consumer satisfaction and behavioral intentions of consumers. The service quality studied is e-service quality which consists of three factors, namely environment quality, delivery quality, and outcome quality. This research was conducted with a causal research type and a quantitative research approach. This research was conducted on Shopee Apps users who live in the city of Surabaya. Data was collected by distributing questionnaires to each consumer. The sampling technique was carried out by snowball sampling. Then the analysis technique used is structural equation modeling (SEM) with the help of AMOS and the Sobel test. The results of the study prove that environment quality, delivery quality, and outcome quality have a significant positive effect on customer satisfaction and behavioral intention. The results of the study also explain that customer satisfaction has a positive effect on behavioral intention. On the indirect effect, the research results show that environment quality, delivery quality, and outcome quality have a significant effect on behavioral intention through customer satisfaction on Shopee Apps users in Surabaya.

**KEYWORDS:** Environment quality, Delivery quality, Outcome quality, Customer satisfaction, Behavioral intention, and Shopee Apps.

### INTRODUCTION

The current Covid-19 pandemic has had various impacts on consumer behavior. Research conducted by Inventure Indonesia explains that the first behavioral change is a stay at home lifestyle, which tends to do everything from home. The next behavior change is the back to bottom pyramid which refers to Maslow's pyramid of needs, where consumers shift the main needs to the bottom of the pyramid, namely physiological needs, such as food and health. The next behavioral change is digitalization, where consumers will reduce physical contact and do online shopping activities (Rabbi, 2021).

In relation to the shift in consumer behavior that tends to choose online shopping over direct shopping, it is known from the results of a study conducted by Google, Temasec, and Bain & Company in 2020, Indonesia became the country with the highest digital economy transaction value in Asean with a value of US\$44 billion (Tolok, 2020). The results of research conducted by Sirclo with the title Navigating Indonesia's E-Commerce Covid-19 Impact & The Rise of Social Commerce added that during the pandemic until November 2020 there were 12 million new e-commerce users. The research results also explain that 40% of them have made online shopping a habit (Jamaludin, 2020). Based on these results, it can be explained that the Covid-19 pandemic has encouraged consumer behavior to do shopping activities digitally or online so that the growth of e-commerce is so rapid.

The trend of online shopping that continues to increase has made MarkPlus Inc. conducted research to find out the competitive map of e-commerce applications in Indonesia during the pandemic in the third quarter of 2020. The research results show that Shopee is the most frequently used e-commerce by 90% of respondents. Next are Tokopedia with 58% of respondents, Lazada with 35% of respondents, Bukalapak with 22% of respondents, and Blibli with 14% of respondents. The results of the research also show that Shopee is the top-of-mind e-commerce or e-commerce that is most remembered by 71% of respondents, followed by Tokopedia by 15% of respondents, Lazada by 8% of respondents, Bukalapak by 2% of respondents, and Blibli by 1% respondent (Rahayu, 2020). Similar research results were also shown by DailySocial and Populix, which are market research

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platforms, explaining that the most widely accessed e-commerce application by consumers is Shopee with 85% of respondents, followed by Tokopedia with 66% of respondents, Lazada by 49% of respondents, Bukalapak by 41% of respondents, JD.id and Blibli each 27% of respondents (Nabila, 2020).

The two research results explain that in the 2020 period, Shopee has become the most frequently used and most memorable e-commerce for the Indonesian people. Research conducted by the Institute for Development and Finance (INDEF) revealed that Shopee Apps during April to June 2020 recorded more than 260 million orders with an average number of transactions per day of 2.8 million. The number of these orders has increased by 130% on an annual basis (Katadata, 2019).

Based on the description of the facts that have been explained, it is known that the high interest in using Shopee Apps from the public as an e-commerce tool during the pandemic shows that the application offers quality services so that it can lead to satisfaction for the people who use it. Not only feeling satisfaction, people who have used Shopee Apps to fulfill their online shopping needs also feel other impacts which can then affect the behavioral intentions of the community.

The results of previous studies, it is known that Carlson and O' Cass (2011) explain that environment quality, delivery quality, and outcome quality are dimensions of e-service quality that have a positive effect on customer satisfaction. Different results are shown in the research of Chandra and Juliani (2018) which states that the dimensions of e-service quality have no significant effect on customer satisfaction. This is because the object is a local brand, which consumers are not familiar with the local brand, so even though every aspect of service quality is good, it does not determine that consumers will be satisfied with local brand services, users are fewer and rarely exposed, therefore e-commerce service quality cannot directly affect satisfaction, but must pass customer value. Customer value is a condition when consumers feel good service quality, then consumers will feel more value than local brands with other e-commerce, when consumers can feel that, their satisfaction will be affected.

This study seeks to provide support for one of the studies whether the current research supports the research of Carlson and O' Cass (2011) or Chandra and Juliani (2018). Therefore, the researcher conducted a study that aims to determine the service quality factors that can be offered by Shopee Apps on customer satisfaction and behavioral intention. The quality of the service studied is e-service quality which consists of aspects, namely environment quality, delivery quality, and outcome quality.

### **LITERATURE REVIEW**

#### **Effect Of Environment Quality On Customer Satisfaction**

Environment quality describes the visual picture or what is seen for the first time by consumers in using e-commerce applications. The better the quality of the visual environment of the user interface shown by an e-commerce application will encourage consumers who use it to experience satisfaction (Zhao et al., 2012). Carlson and O' Cass (2011) explain that a neat and clear menu display will make consumers feel more satisfied using e-commerce applications. The results of research conducted by Chuang et al. (2016) also explained that environment quality has a significant positive effect on consumer satisfaction. These results explain that the better the environment quality of an e-commerce application, the better satisfaction for consumers.

H1: Environment Quality has a significant effect on Customer Satisfaction

#### **Effect Of Delivery Quality On Customer Satisfaction**

Delivery quality can be explained as the quality of all interaction processes that exist between consumers and e-commerce applications. Hossain and Kim (2018) explain that delivery quality is related to how applications can meet the information needs and choice of products and services expected by consumers. The more complete each information and choice of products and services offered, consumers will evaluate that the e-commerce application has been able to meet expectations and consumers will feel better satisfaction. Chuang et al. (2016) also explained that the ability of e-commerce applications to provide a pleasant use experience will have a major influence on consumer satisfaction. Carlson and O' Cass (2011) explain that the delivery quality shown by better e-commerce applications will encourage better service quality improvements, such conditions can increase consumer satisfaction while using e-commerce applications.

H2: Delivery Quality has a significant effect on Customer Satisfaction

#### **Effect Of Outcome Quality On Customer Satisfaction**

Outcome quality describes the ability of e-commerce applications to provide reliability and benefits as long as consumers use the application. Zhao et al. (2012) explained the research results that consumer satisfaction can be influenced dominantly by outcome quality. The effect is when consumers can feel a pleasant experience to make consumers comfortable using e-commerce applications, indicating that consumers have high satisfaction with the services available in e-commerce applications (Chuang et al., 2016). Carlson and O' Cass (2011) explain that a change in responses regarding outcome quality can affect the e-service quality provided by an e-commerce apps, the impact will be able to affect the satisfaction of consumers who use e-commerce applications.

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H3: Outcome Quality has a significant effect on Customer Satisfaction

### **Effect Of Environment Quality On Behavioral Intention**

Behavioral intention can be explained as an intention or form of consumer desire to make a consumer towards a product or service. According to Carlson and O' Cass (2011), it is explained that behavioral intention can be determined by service quality. This explains that consumers who can experience quality service according to their expectations will tend to influence their desire to reuse and give a positive response to the e-commerce applications used. Dabholkar et al. (2000) explains that the better environment quality of services that can be provided through e-commerce applications will be able to influence consumer behavioral intentions towards the apps. Caruana (2000) also explains that the quality of service is getting better, which means that the environment quality in it is also in better condition to be one of the factors that can determine the attitude of consumers who are loyal to a product or service.

H4: Environment Quality has a significant effect on Behavioral Intention

### **Effect Of Delivery Quality On Behavioral Intention**

Behavioral intention is a form of consumer intention to behave towards a product or service. Carlson and O' Cass (2011) explain in their research results that delivery quality related to the interactions that exist between e-commerce applications and consumers while using these applications determines consumer behavior in the future. This future consumer behavior is described in the form of their desire to reuse, give a good rating, to recommend to others. This is also explained by Caruana (2000) that the loyal attitude shown by consumers can be directly influenced by the quality of the product or service used. Rita (2019) explains that e-service quality has a significant positive influence on consumer behavior. These results explain that every aspect of e-service quality, including the quality of interactions that occur as long as consumers use e-commerce applications can determine consumer behavior for the better and more profitable for companies providing e-commerce applications.

H5: Delivery Quality has a significant effect on Behavioral Intention

### **Effect Outcome Quality On Behavioral Intention**

Behavioral intention which describes the consumer's intention to use a product or service can also be determined directly by outcome quality. The results of research by Carlson and O'Cass (2011) explain that consumers who can feel comfortable while using e-commerce applications will have a greater intention to reuse the apps in the future. This is also explained in the research results of Rita et al. (2019) that e-service quality can have a significant positive effect on consumer behavioral intentions which are shown through reusing behavior and word of mouth. These results explain that the behavioral intentions of consumers will be determined by aspects of service quality, including those related to outcome quality.

H6: Outcome Quality has a significant effect on Behavioral Intention

### **Effect Customer Satisfaction On Behavioral Intention**

Customer satisfaction is the result of evaluations made by consumers on the quality of services offered in an e-commerce application with consumer expectations. If the quality of service provided is better than expectations, then consumers will feel better satisfaction, such conditions will be a driving factor for consumers in determining behavior towards e-commerce applications (Zeglat et al., 2016). The behavior is behavior in the form of reusing the application to recommending it to others. This is also expressed in research conducted by Caruana (2000) that consumers who feel better satisfaction will tend to show an attitude of loyalty to a service or product that is being used. Carlson and O' Cass (2011) also explain in their research that satisfaction is one of the factors that can be used to predict consumer behavior in the future. H7: Customer Satisfaction has a significant effect on Behavioral Intention

### **Indirect Effect Of Environment Quality On Behavioral Intention Through Customer Satisfaction**

The indirect effect explains the mediating role of the intervening variable which in this study is customer satisfaction on the influence of environmental quality aspects on behavioral intention. Dabholkar et al. (2000) explained that customer satisfaction can mediate the influence of service quality aspects on behavioral intention. These results explain that the better service quality of the product or service will be able to increase consumer satisfaction which can then affect the behavioral intention of consumers to always use the product or service. Caruana (2000) also explains that service quality will have a positive effect on consumer loyalty when there is a mediating role of satisfaction. Carlson and O' Cass (2011) explain that environment quality is an important issue that can determine consumer satisfaction so that it can influence consumer behavioral intentions in using e-commerce applications. The results of this study explain that the quality that can be provided by the digital environment in an e-commerce

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application can determine consumer satisfaction and influence consumer behavior towards the e-commerce application. H8: Environment Quality has a significant effect on Behavioral Intention through Customer Satisfaction

### Indirect Effect Of Delivery Quality On Behavioral Intention Through Customer Satisfaction

The next indirect effect is related to delivery quality, which is explained as part of the interaction process that occurs between consumers and e-commerce application services. Carlson and O' Cass (2011) explain that the better delivery quality in the interaction process between consumers and e-commerce applications will be able to lead to greater satisfaction for consumers, because it can exceed consumer expectations. As a result, consumers will have an incentive to show behavioral intentions that tend to provide benefits for applications and companies that provide e-commerce applications. This is also explained in the research results of Ismail et al. (2017) that customer satisfaction can mediate the effect of service quality on behavioral intention. These results explain that consumers who feel better satisfaction with the perceived service quality, including satisfaction with well-established interactions while using an e-commerce application, will have a tendency to behave in loyalty to the company's e-commerce application. Dabholkar et al. (2000) also explain the results of his research that customer satisfaction has a strong mediating role on the effect of service quality on behavioral intention. These results explain that customer satisfaction is one of the factors that has a more dominant influence, while service quality is a factor that consumers evaluate about a service or product that has been used.

H9: Delivery Quality has a significant effect on Behavioral Intention through Customer Satisfaction

### Indirect Effect Of Outcome Quality On Behavioral Intention Through Customer Satisfaction

The next indirect effect is on outcome quality related to the reliability and benefits that can be felt by consumers while using e-commerce applications on customer satisfaction and behavioral intention. According to Carlson & O' Cass (2011), e-commerce applications that can provide reliable and consistent services will make consumers interested in the quality of services offered by ecommerce applications. This condition then affects consumer satisfaction for the better and can encourage consumers to show behavior that can benefit e-commerce application providers. Rita et al. (2019) also explains that e-service quality has a significant positive effect on customer satisfaction and then affects repurchase intention, word of mouth, and site revisit on an e-commerce website. Research results Rita et al. (2019) explains that good quality electronic services, including outcome quality, will determine consumer satisfaction to cause consumers to carry out behaviors that lead to increased loyalty to electronic services, such as websites or e-commerce applications. Dabholkar et al. (2000) added that customer satisfaction has a large mediating role on the effect of service quality on behavioral intention.

H10: Outcome Quality has a significant effect on Behavioral Intention through Customer Satisfaction

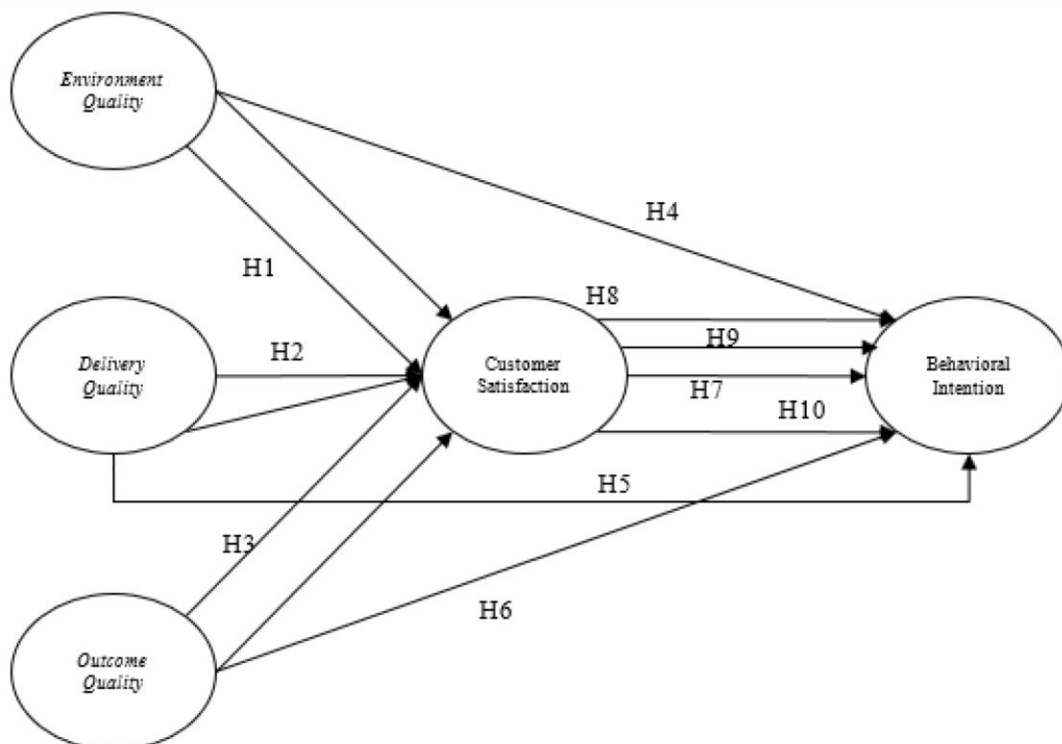


Figure 1. Research Framework

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## METHODS

### Research Approach

This study uses a type of causal research with a quantitative approach. This study uses data in the form of numbers obtained from survey results using a questionnaire instrument that has been distributed to research respondents and then analyzed using statistical analysis (Sugiyono, 2017). This study uses a quantitative approach because this study uses data in the form of survey results which are then analyzed using statistical analysis with SEM AMOS.

### Population and Sample

In this study, the population used were Shopee Apps users, both based on Android or IOS, who were domiciled in the city of Surabaya. Determination of the sample used in this study using snowball sampling which is included in non-probability sampling. This study uses a snowball sampling technique with the aim of anticipating the limitations of researchers in obtaining information to determine the research sample. The application of the snowball sampling technique in this research is to ask for recommendations from respondents who have been given a questionnaire regarding relatives that can be used as samples for the next research. This study limits the distribution area of the questionnaire, namely for those who are domiciled in the city of Surabaya. In addition to using the snowball sampling technique, the determination of the research sample also uses criteria, namely men and women aged 18 to 60 years who have done online shopping using Shopee Apps. The criteria with this age range were chosen because they are included in the adult age, where respondents have good awareness to be able to make choices or actions to be taken. This study also uses criteria such as those who have done online shopping using Shopee Apps at least 6 times in the last 6 months or once a month. This criterion is used to provide the assumption that consumers have good knowledge about the services provided in Shopee Apps to support online shopping activities so that they can determine the satisfaction and behavioral intention of consumers.

### Data Collection Method and Data Analysis

Collecting data in this study using a questionnaire instrument. The distribution of the questionnaires was done online using Google Form. The aim is to make it easier for researchers to reach research respondents who belong to predetermined population criteria. The questionnaire used in this study also uses a measurement scale to determine the value of the responses or answers from respondents. The measurement scale used is an ordinal Likert scale with a range of strongly disagree to strongly agree or a scale of 1 to 5. The data analysis method used is a structural equation model (SEM) with AMOS version 22.

## RESULT AND DISCUSSION

This study uses respondents who are Shopee Apps users who live in the city of Surabaya and have shopped through Shopee Apps. The number of respondents used in this study were 140 Shopee Apps users with respondent profiles consisting of gender, age, occupation, and frequency of purchases through Shopee Apps.

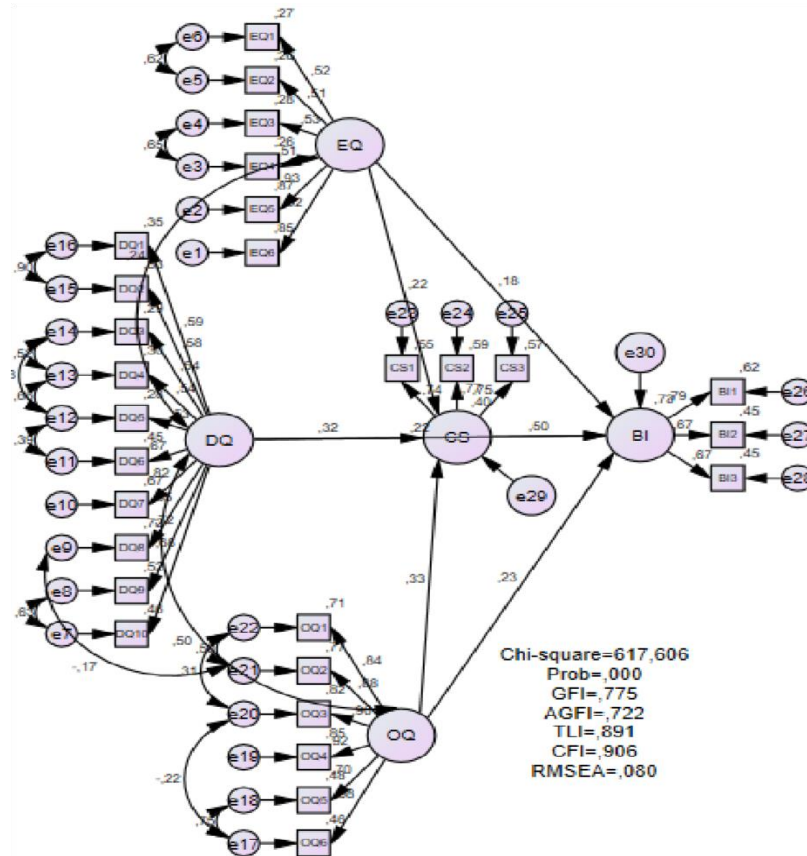
**Table 1. Respondent Characteristic**

No	Description	Frequency	Percentage
1	<b>Gender</b>		
	Men	42	30.0
	Women	98	70.0
2	<b>Age</b>		
	18-35 years old	90	64.3
	35-50 years old	40	28.6
	50-60 years old	10	7.1
3	<b>Occupation</b>		
	Student	78	55.7
	State Civil Apparatus	1	0.7
	Entrepreneur	32	22.9
	Private Sector Employee	24	17.1
	Housewife	5	3.6

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4 Frequently Using Shope e Apps			
7 times	95	67.9	
8 times	20	14.3	
> 8 times	25	17.9	
<b>Amount</b>	<b>140</b>	<b>100.0</b>	

This study conducted a direct effect test using SEM analysis with the following model.



The results of the analysis of the goodness of fit value in the SEM model used can be shown in Table 2 below.

Table 2. Goodness Of Fit Model

Goodness of Fit Index	Cut Off Value	Result	Description
Probability Chi-square	$\geq 0.05$	0.000	Poor fit
Cmin/DF	$\leq 2.00$	1.883	Good fit
GFI	$\geq 0.90$	0.775	Poor fit
RMSEA	$\geq 0.08$	0.080	Good fit
TLI	$\leq 0.95$	0.891	Marginal fit
CFI	$\geq 0.95$	0.906	Marginal fit
AGFI	$\geq 0.90$	0.722	Poor fit

The results of the comparison of the goodness of fit value in the modified SEM model show that of the 7 criteria studied, 4 of them have shown good fit and marginal fit or have met the requirements and three other criteria, namely Probability Chi-square, GFI, and AGFI which show poor fit or does not meet the criteria. Overall, the modified SEM model has met the goodness of fit criteria.



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**Table 3. Direct Effect Hypothesis Test Results**

Hip.		Estimate	S.E.	C.R.	P	Label
H1	CustomerSatisfaction <-- EnvironmentQuality -	0.208	0.082	2.522	0.012	par_24
H2	CustomerSatisfaction <-- DeliveryQuality -	0.394	0.145	2.725	0.006	par_25
H3	CustomerSatisfaction <-- OutcomeQuality -	0.303	0.098	3.096	0.002	par_26
H4	BehavioralIntention <-- EnvironmentQuality -	0.150	0.068	2.203	0.028	par_27
H5	BehavioralIntention <-- DeliveryQuality -	0.245	0.116	2.116	0.034	par_28
H6	BehavioralIntention <-- OutcomeQuality -	0.193	0.080	2.397	0.017	par_29
H7	BehavioralIntention <-- CustomerSatisfaction -	0.454	0.116	3.925	0.000	par_30

The results shown in Table 3 show that hypotheses 1 to 7 proposed in this study can be accepted. These results explain that environment quality, delivery quality, and outcome quality have an effect on customer satisfaction and behavioral intention. In addition, customer satisfaction has an effect on behavioral intention.

Analysis through the Sobel test was carried out in this study to determine the mediating role of the customer satisfaction variable in the research model. Sobel test is a statistical test used to prove variables that are suspected to mediate or have a significant mediating effect or not. The criteria used in the sobel test is to compare the p-value of the sobel test with a critical value of 0.05.

**Table 4. Indirect Effect Hypothesis Test Results**

Hip.	Effect Between Variables	Test statistic	Standard errors	P value
H8	<i>Environment quality → customer satisfaction → behavioral intention</i>	2.129	0.044	0.033
H9	<i>Delivery quality → customer satisfaction → behavioral intention</i>	2.232	0.080	0.026
H10	<i>Outcome quality → customer satisfaction → behavioral intention</i>	2.426	0.057	0.015

The results in Table 4 show the p value to prove the mediating role on the influence of environment quality, delivery quality, and outcome quality on behavioral intention. The Sobel test in this study was carried out with the help of a calculation tool provided by quantpsy through the website <http://quantpsy.org/sobel/sobel.htm>. The results shown in Table 4 are the results by including the regression coefficient value and standard error value on the direct influence of environment quality, delivery quality, and outcome quality on customer satisfaction and behavioral intention.

Based on the results of the analysis that has been carried out, it can be explained that behavioral intention is influenced by customer satisfaction and e-service quality variables consisting of environment quality, delivery quality, and outcome quality. The variable that has a dominant influence on behavioral intention is the customer satisfaction variable with a regression coefficient of 0.454. These results explain that in order to improve the shopping behavior of Shopee Apps users, it is necessary to increase the satisfaction of users while using Shopee Apps. When Shopee Apps users feel happy while shopping and have a pleasant shopping experience through Shopee Apps, users will increasingly use Shopee Apps as the main choice for shopping. In addition, the behavioral intention of Shopee Apps users can also be directly influenced by the variables included in e-service quality, which consist of environment quality, delivery quality, and outcome quality.

Customer satisfaction from Shopee Apps users is also directly influenced by the variables included in e-service quality. The variable that has a dominant influence on customer satisfaction and behavioral intention of Shopee Apps users is delivery quality

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with a regression coefficient value of 0.394 for customer satisfaction and a regression coefficient value of 0.245 for behavioral intention. These results explain that if Shopee Apps managers want to improve consumer satisfaction and behavior in using Shopee Apps, then efforts can be made to improve the technical capabilities of Shopee Apps. The technical ability itself is related to the ability of Shopee Apps to be able to meet the shopping needs of application users easily and quickly. The technical capabilities can be in the form of providing a wide and complete selection of products or services so that Shopee Apps users can find what suits their needs. Apart from providing complete products and services, it is also possible to provide up-to-date information that is easy to understand by users, so that users can experience pleasure and a pleasant experience while shopping using Shopee Apps.

Delivery quality has a dominant influence on customer satisfaction and behavioral intention because the majority of Shopee Apps users are female users with an age range of 18 to 35 years who tend to be interested in shopping for new and up to date products and do not want to experience shopping difficulties. This means that Shopee users take advantage of shopping through Shopee Apps to get convenience and speed in purchasing the products they need. Therefore, the provision of various and complete products and services supported by easy-to-understand information is a matter that needs to be considered by Shopee Apps managers. As an example, users tend to use Shopee Apps to shop for their needs, but besides that, users also do not rule out the possibility to search or just see interesting products or services, which can be seen in the quality of products and services through the availability of clear information, so that consumers become easier. in shopping. This can provide a pleasant shopping experience for Shopee Apps users, thus leading to increased satisfaction and behavior to reuse Shopee Apps in the future. In the delivery quality variable, the results of the study show that the speed of shopping at Shopee Apps is one of the important things to be able to improve delivery quality for the better. Efforts that can be made by the Shopee Apps manager is to display products on the application's main page based on the user's location. The goal is that the product displayed on the home page or on the product search page that the application user wants is a measure of the closest location to the user's location. This can be done by using the user location checking feature. So that users can shop more easily and quickly because every product displayed on the main page is a product that is located not far apart and can reduce the process of sending products to the user's place. This can provide satisfaction for users who shop through Shopee Apps.

The next variable that has a major influence on customer satisfaction and behavioral intention is the outcome quality variable with a regression coefficient value of 0.303 for the customer satisfaction variable and a regression coefficient value of 0.193 for the behavioral intention variable. These results explain that Shopee Apps is one of the applications that has provided benefits that can be felt by application users. If the Shopee Apps manager wants to improve outcome quality, then the manager can maintain the reliability of the application. The reliability can be used in any conditions, such as for example there are consumers who urgently need a product or service immediately, Shopee Apps can provide it without experiencing problems. The outcome quality variable has the second largest influence on customer satisfaction and behavioral intention because the majority of consumers who use Shopee Apps are female users and are students with a minimum monthly purchase frequency of shopping through Shopee Apps. Female consumers have a tendency to feel happy when they can shop easily and reliably at any time in uncertain conditions. This is because women, especially students, tend to be reluctant to experience difficult shopping, especially with the intensity of spending that tends to be routine. Therefore, the reliability of Shopee Apps to be reliable without experiencing problems, both technical and non-technical is a matter that is also considered to be able to provide satisfaction to users so that users have a tendency to use Shopee Apps again for shopping needs in the future. In the outcome quality variable, the results of the study show that the ability to provide service needs is the main thing to be able to improve outcome quality on Shopee Apps. Based on these results, an effort that can be made is to offer a short questionnaire to Shopee users that can be displayed on the application's home page, to find out the needs that users are looking for but are not yet available on Shopee Apps. The goal is that managers can consider improving services to users so that users do not use e-commerce applications other than Shopee Apps to meet their desired needs.

The last variable of e-service quality that has an influence on customer satisfaction and behavioral intention is environment quality with a regression coefficient value of 0.208 for customer satisfaction and a coefficient value of 0.150 for behavioral intention. These results explain that the better the user interface provided by Shopee Apps can provide users with a pleasant shopping experience so that it creates satisfaction and behavior to use Shopee Apps in meeting future needs. Therefore, the Shopee Apps management can pay attention to every aspect that is visually presented in the apps, such as a layout that can make it easier for users to find their needs, the size and type of text that is easy to read, easily recognizable symbols or logos to images of the products displayed. also in good quality. The goal is to make it easier for users to find their needs and provide comfort while using Shopee Apps to meet their needs. The magnitude of the influence of environment quality on customer satisfaction and behavioral intention is due to the majority of Shopee Apps users aged 18 to 35 years who are still students. Users with this profile have a tendency to be attracted by the visual appearance of the apps that is attractive but also interactive and clear, so that when



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users are looking for needs on Shopee Apps, it doesn't take a long time. The visual appearance of the apps is an important matter, because it is the first thing that Shopee Apps users see, if the visual appearance of the apps is attractive, informative and can help users meet their needs easily and quickly, users can feel more satisfied and cause behavior to use Shopee Apps. in the future. The results of the study show that the most important indicator that needs to be considered in order to improve the environment quality on Shopee Apps is related to the menu display in Shopee Apps. These results explain that Shopee Apps users are basically comfortable with the clear appearance of the Shopee Apps page. However, the Shopee Apps manager can update some details, such as entering the help menu option on the application's home page, which is intended for users who cannot find the product or service they need. The goal is for users to feel the ease and satisfaction in shopping. The results of the study also explain that the layout can also determine the environment quality in Shopee Apps. Efforts that can be made are to rearrange the layout of products and services into several groups that have uniform characteristics. Such as placing payment services for various types of bills in one group, so that consumers can easily find out the position of the desired service, then product information that is being promoted is also placed in one group so that Shopee Apps users can easily be directed to products that are being promoted. This can trigger a pleasant shopping experience because of the convenience that Shopee Apps users feel.

The results of the Sobel test show the mediating role of customer satisfaction on the effect of e-service quality variables consisting of environment quality, delivery quality, and outcome quality on behavioral intention. The test results explain that customer satisfaction has a partial mediating role on the influence of environment quality, delivery quality, and outcome quality on behavioral intention. This is shown through the calculation of the VAF value which shows an indirect influence coefficient value of 0.094 and a probability value of 0.033 on the influence of environment quality on behavioral intention; the indirect influence coefficient value is 0.179 and the probability value is 0.026 on the effect of delivery quality on behavioral intention; The indirect influence coefficient value is 0.138 and the probability value is 0.015 on the effect of outcome quality on behavioral intention. These results explain that Shopee Apps can improve user behavior to continue using Shopee Apps in the long term when it can increase user satisfaction through improving environment quality, delivery quality, and outcome quality. Regarding the customer satisfaction variable, the results of the study explain that the Shopee Apps manager needs to be able to know things that can make Shopee Apps users feel comfortable when shopping with Shopee Apps. Efforts that can be made to find out about this are by providing a statement in the form of a questionnaire that can be displayed on the initial page of opening the application, which can be filled directly by the user, so that the manager can find out and maintain and even improve things that can provide shopping convenience for Shopee Apps users. In addition, Shopee Apps managers can also provide Shopee Games features that can provide user benefits in the form of coins that can be used for shopping. Another effort that has been made by Shoppe is to offer interactive shopping methods through monthly events on twin dates. Both of these things can be maintained so that users can still feel happy in using Shopee Apps to meet their needs. Furthermore, related to the behavioral intention variable, the results of the study explain that it is important for Shopee Apps managers to be able to provide satisfaction for Shopee Apps users in meeting their needs. One of the steps is to improve service quality through environment quality, delivery quality, and outcome quality. In addition, it is important for Shopee Apps managers to be able to provide a pleasant shopping experience to users, one of which can be done through improving service quality. The results also explain that users can provide long-term benefits to Shopee Apps managers, but with the condition that consumers can feel satisfaction in shopping using Shopee Apps. Therefore, it is important for managers to know every need of Shopee Apps users, so that they can prepare these various needs and provide better satisfaction to Shopee Apps users.

### **CONCLUSION AND RECOMMENDATION**

This research was conducted with the aim of explaining the effect of the e-service quality variables consisting of environment quality, delivery quality, and outcome quality on customer satisfaction and behavioral intention, as well as explaining the mediating role of customer satisfaction on the influence of environment quality, delivery quality, and outcome quality on behavioral intention to Shopee Apps users in Surabaya. Based on the research objectives, the hypotheses proposed in this study amounted to 10 hypotheses. The results of data processing and analysis that have been carried out show that of the 10 proposed hypotheses all can be accepted. Referring to the research results, it is known that e-service quality which consists of environment quality, delivery quality, and outcome quality is an important factor that can determine customer satisfaction and behavioral intention of Shopee Apps users in Surabaya. The results also show that there is a mediating role for customer satisfaction on the influence of environment quality, delivery quality, and outcome quality on the behavioral intention of Shopee Apps users in Surabaya.

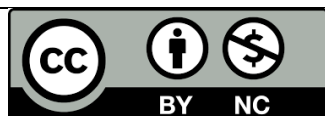
Efforts that can be made by Shopee Apps managers to increase customer satisfaction and behavioral intention of Shopee Apps users in Surabaya are to improve aspects of delivery quality. The delivery quality aspect itself is related to the technical

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capabilities of Shopee Apps in providing fulfillment of the shopping needs of apps users. Therefore, the effort that can be done is to add a user location detection feature to be able to offer the product that the user wants according to the nearest location, maintain the available payment transaction options, and carry out regular updates and maintenance to maintain apps reliability and make apps storage efficiency so that can be used by various groups of people.

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