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Service Quality, Trust as a Moderating Variable, Security and Perceived Risk of Purchasing Decisions at Shopee

Abstract. Introduction. Consumers should also carefully consider the purchase of a product online, as online buying and selling cannot be separated from the issue of risk. This phenomenon mainly results from the fact that most transactions between sellers and buyers are conducted over the internet, where fraud, lack of privacy, delivery risk, and lack of quality assurance of goods are commonplace.

Purpose. This study aims to obtain empirical evidence by understanding and analyzing the impact of service quality with trust as a moderating variable on purchasing decisions, the impact of service quality on purchasing decisions, the impact of safety on purchasing decisions, and the impact of perceived risk on purchasing decisions at Shopee. This study used a sample of 160 18-year-old male and female residents of South Sumatra who had used the Shopee application-selected using a sampling technique for a specific purpose. The research was analyzed using descriptive statistical methods with data on the frequency of respondents' responses regarding the given variables and Statistical Product and Service Solutions (SPSS).

Results. Results of the study indicating that the trust variable significantly moderates the effect of service quality on purchasing decisions, service quality influences a positive effect on purchasing decisions, and security has a positive effect on purchasing decisions.

Conclusions. Trust significantly moderates the effect of service quality on purchasing decisions at Shopee. Service quality has a significant effect on purchasing decisions at Shopee. Security has a significant effect on purchasing decisions at Shopee. Perceived risk has a significant effect on purchasing decisions at Shopee.

Keywords: service quality; trust; safety; perceived risk; purchase decision.

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Якість обслуговування та довіра, як модеруюча змінна, безпека та передбачуваний ризик рішень при здійсненні покупок у Shopee

Досліджено, що споживачі повинні уважно ставитися до покупок в Інтернеті, оскільки онлайн-купівля та продаж не можуть бути відокремлені від ризику. Це явище головним чином є наслідком того, що більшість транзакцій між продавцями та покупцями здійснюються через Інтернет, де шахрайство, відсутність конфіденційності, ризик доставлення та відсутність гарантії якості товарів є звичним явищем.

Основною метою статті є отримання емпіричних доказів шляхом розуміння та аналізу впливу якості обслуговування з довірою як модеруючою змінною на рішення про покупку, впливу якості обслуговування на рішення про покупку, впливу безпеки на рішення про покупку та впливу передбачуваного ризику на рішення про покупку. У цьому дослідженні використовувалася вибірка зі 160 18-річних чоловіків і жінок, жителів Південної Суматри, які користувалися програмою Shopee, відібраних за допомогою методу вибірки для конкретної мети. Дослідження аналізували за допомогою описових статистичних методів з даними про частоту відповідей респондентів щодо заданих змінних та статистичних продуктів і сервісних рішень (SPSS).

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Результати дослідження вказують на те, що змінна довіри значно пом'якшує вплив якості обслуговування на рішення про покупку, якість обслуговування позитивно впливає на рішення про покупку, а безпека позитивно впливає на рішення про покупку.

Довіра значно пом'якшує вплив якості обслуговування на рішення про покупку в Shopee. Якість послуг має значний вплив на рішення про покупку в Shopee. Безпека має значний вплив на рішення про покупку в Shopee. Уявний ризик має значний вплив на рішення про покупку в Shopee.

Ключові слова: якість обслуговування; довіра; безпека; передбачуваний ризик; рішення про покупку.

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Formulation of the problem. Information and communication technology is developing rapidly in developed and developing nations, including Indonesia. The internet is one of the developing information and communication technologies. The presence of the internet has altered the majority of human activities and ways of life (Dzulkarnain, 2019). One indicator of internet growth in Indonesia is the number of users. The following is data from the Association of Indonesian Internet Service Providers (APJII) regarding the number of internet users in Indonesia.

Analysis of recent research and publications. The quality of service and trust when making purchases on the Internet was carried out by many scientists, including: S. U. N. Aisah [2], A. Y. Alghifari, Tri S. M. Rahayu [3], D. Bajuri [8], C. Dessyaningrum [14].

Formulation of research goals. This study aims to obtain empirical evidence by understanding and analyzing the impact of service quality with trust as a moderating variable on purchasing decisions, the impact of service quality on purchasing decisions, the impact of safety on purchasing decisions, and the impact of perceived risk on purchasing decisions at Shopee. This study used a sample of 160 18-year-old male and female residents of South Sumatra who had used the Shopee application-selected using a sampling technique for a specific purpose. The research was analyzed using descriptive statistical methods with data on the frequency of respondents' responses regarding the given variables and Statistical Product and Service Solutions (SPSS).

Outline of the main research material.

Table 1. Total Population and Internet Users in Indonesia

| Year | Total Population (persons) | Internet Users (persons) | Penetration(%) |
|------|----------------------------|--------------------------|----------------|
| 2017 | 255 500 000 | 110 200 000 | 43,1 |
| 2018 | 258 700 000 | 132 700 000 | 51,3 |
| 2019 | 261 900 000 | 143 260 000 | 54,7 |
| 2020 | 264 160 000 | 171 170 000 | 64,8 |
| 2021 | 266911 000 | 196 700 000 | 73,7 |

Source: created by the author

According to the data above, the number of internet users in Indonesia increased between 2017 and 2021. It is evident from the increasing annual percentage of market penetration. Internet penetration is the proportion of the population that uses the Internet. The conclusion shown in table 1.1 is that the number of internet users in Indonesia is

increasing yearly and is projected to increase in the future. Internet services can be utilized in a variety of fields. Economics is one field that utilizes the Internet (Mitha & Edy, 2018). According to data from the Association of Indonesian Internet Service Providers (APJII), the following is the use of the internet in the economic sector in Indonesia in 2021.



Figure 1 – Use of the Internet in the Economic Sector

Source: created by the author

Based on the data above, information is obtained that 32,19% of people use the internet to make purchases online. According to the explanation (Liu & Tsai, 2010), Technological advances from the internet cause changes in consumer lifestyles. The large number of internet users has caused various changes in behavior in Indonesian society (Wijaya & Paramita, 2014). People who use the internet for online selling account for 16.83% of the population. These numbers indicate Indonesians are becoming increasingly receptive to online shopping and selling. The need to shift from purchasing goods in-store to purchasing goods online influences behavior, namely

shopping activities. It suggests that internet users in Indonesia are beginning to engage in e-commerce.

E-commerce is like all purchasing and selling activities conducted via electronic media. Although television and the telephone are also used, the internet is increasingly utilized for e-commerce today (Evans & Mckee, 2010). The growth of e-commerce is supported by the rapid development of consumer-friendly technologies. As shown in Graph 1.1 below, the increasing number of e-commerce users also implies a change in shopping patterns.



Figure 2 – Number of e-commerce users in Indonesia

Source: created by the author

According to (Data.tempo.co, 2022) regarding data on e-commerce users in Indonesia since 2017, e-commerce users have continued to increase until 2022 reaching 166.1 million users. It is predicted that this will continue to increase until 2024. Competition between e-commerce in Indonesia is very tight. A large number of e-commerce competitors causes consumers to have many choices in

determining where to make purchases (Kotler & Armstrong, 2020). This is evident from the numerous competitors Shopee faces, such as Tokopedia, BukaLapak, Lazada, Blibli, and numerous other e-commerce platforms. There are currently four giant competitors competing for supremacy (Dzulkarnain, 2019).



Figure 3 – E-commerce site with the most visits in Indonesia (August 2022)

Source: created by the author

Survey outcomes by (Databoks.katadata, 2022) shows that Shopee is the most visited e-commerce community compared to others. Currently, Shopee is the top-ranked e-commerce platform, and more than 150 million Indonesians are registered users. Shopee is an e-commerce platform that was launched for the first time in Indonesia in 2016. Shopee is a recipient of the top brand awards (Aulia & Syahrani, 2019). In 2021, Shopee will be in first place with a top brand index of 52.9%, and in 2022, that index will increase to 59.2%. This indicates that Shopee will be able to dominate the e-commerce market in 2021 and 2022, surpassing competitors such as Tokopedia and Lazada. Shopee is a commercial electronic site (E-Commerce) that facilitates online buying and selling and is easily accessible via smartphone. (Aisah, 2020). In 2021, Shopee will be in first place with a top brand index of 52.9%, and in 2022, that index will increase to 59.2%. This indicates that Shopee will be able to dominate the e-commerce market in 2021 and 2022, surpassing competitors such as Tokopedia and Lazada. Shopee is a commercial electronic site (E-Commerce) that facilitates online buying and selling and is easily accessible via smartphone (Christy, 2022).

Based on this phenomenon, there are several factors to consider in making online purchasing decisions, including service quality and trust. Understanding the importance of trust in online shopping sites is one of the key factors in buying and selling activities online (Nurhadi & Azis, 2018). To increase consumer trust and loyalty, e-commerce owners must provide quality service, in this

case, namely, the quality of the website and convenience that has a positive impression, thus giving rise to consumer trust in e-commerce (Widianita, 2020). When a company is able to persuade consumers that online business transactions are secure, it will reap positive results, including an increase in consumer purchasing decisions (Masoud, 2020). It can be argued that the trust factor can moderate the quality of service on purchasing decisions in e-commerce (Bajuri, 2022).

According to (Dessyaningrum, 2020) namely, regarding the effect of service quality, price, and product quality, with customer trust as a moderating variable, on purchasing decisions on the Shopee website, the results indicate that trust moderates the effect of service quality on purchasing decisions. It indicates that the trust factor strengthens the impact of service quality on purchasing decisions. It is in line with research (Suseno & Suddin, 2017) in his research shows that customer trust moderates the effect of service quality on purchasing decisions of Elpiji Restuaji Gas customers Surakarta. In line with research on Tokopedia (Bajuri, 2022) there are results from this indication that trust is considered appropriate to be a moderating variable because the trust variable is proven empirically to strengthen the relationship between service quality and purchases. There are differences in the results of research conducted by (Prayitno, 2015).

Based on the above description, the framework for this research can be constructed as follows:

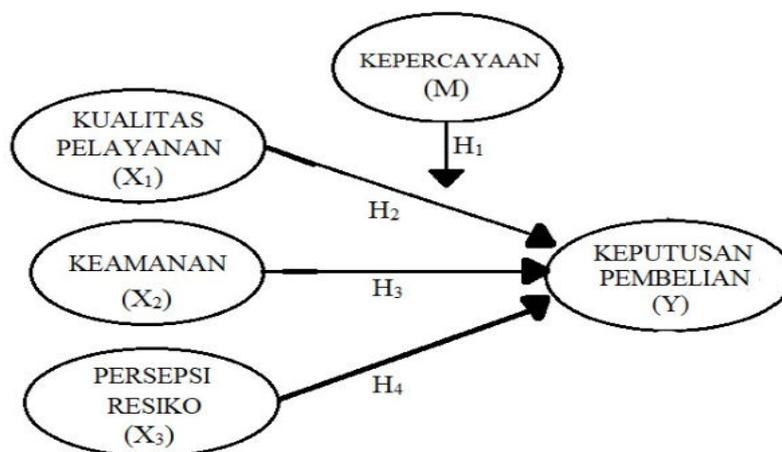


Figure 4 – Framework

Source: created by the author

A hypothesis is a temporary statement based on a theory and framework that can be tested to determine whether it is supported by empirical evidence from a study (Sekaran & Bougie, 2017). For this study, there are four hypotheses to be tested, namely:

1. Hypotheses 1 (H1) : Trust significantly moderates the impact of service quality on purchasing decisions at Shopee.

2. Hypotheses 2 (H2) : Service quality has a significant impact on purchasing decisions at Shopee.

3. Hypotheses 3 (H3) : Security has a significant impact on purchasing decisions at Shopee.

4. Hypotheses 4 (H4) : Perceived risk has a significant impact on purchasing decisions at Shopee.

The field of marketing management, which focuses on purchasing decisions, is the focus of the research. Shopee is the organization utilized by researchers in this instance.

Service quality is studied as the first independent variable. The second independent variable is safety, while the third independent variable is perceived risk. This study's moderating variable, trust, is anticipated to exert a unique influence on the association between service quality and Shopee purchase decisions. Last, the purchase decision is the dependent variable in this study.

According to (Kuncoro, 2013) The sample represents a subset of the population. In a study, it is impossible to examine every member of the population; therefore, we form a representative population, which we refer to as the sample (Ferdinand, 2014). Here, the sample was taken using a purposive sampling technique, in which the sample was determined by considering certain criteria according to the research objectives (Sugiyono, 2016). The researcher employs the technique of purposive sampling in the hopes that the sample criteria obtained are truly in accordance with the research to be conducted and based on the research objectives in order to learn more about the relationship between variables. (Widianita, 2020). The sample criteria are:

1. Respondents are men and women over the age of 18 who live in South Sumatra
2. Respondents are consumers who have transacted with the Shopee application at least twice in the past year.

According to (Hill, 1998) states that a sample size between 30-500 is sufficient. The ideal and representative size of the respondent depends on the sum of all the indicators in the variable multiplied by 5 – 10. In this study,

there were 32 question items. The minimum limit for respondents for this study is $(32 \times 5 = 160)$, while the maximum limit is $(32 \times 10 = 320)$; thus, 160 respondents will be taken, which number is considered sufficient to represent the population to be studied because it already meets the minimum sample limit.

Types of data obtained by measuring the value of one or more variables in a sample or population, differentiated into quantitative and qualitative data (Kuncoro, 2013). This study used quantitative data, i.e., data types that can be measured or calculated directly, in the form of numerical information or explanations or in the form of numbers (Sugiyono, 2016). In this study, quantitative data were obtained from questionnaires and Google forms which were distributed and filled in by the sample.

Technical Analysis of Research Instruments to test research instruments first to determine whether the instruments are appropriate. The testing of this research instrument was carried out through validity and reliability tests in the Statistical Product and Service Solutions program (SPSS).

This study's data analysis used the Statistical Package for the Social Sciences (SPSS) program and began with a description of the respondents, including their gender, age, and level of education. 160 individuals who had interacted with the Shopee application served as respondents in this study. A questionnaire was directly distributed to respondents in order to collect data.

Respondents based on gender aspects shown in table 2:

Table 2. Respondents Based on Gender

| Gender | Frequency | Percentage (%) |
|--------|-----------|----------------|
| Male | 98 | 61,25% |
| Female | 62 | 38,75% |
| Total | 160 | 100% |

Source: created by the author

Based on table 2, it is known that 98 (61.25%) of consumer respondents who had transacted with the

shopee application were male and the remaining 62 (38.75%) were female.

Respondents by age can be seen in table 3:

Table 3. Respondents Based on Age

| Age | Frequency | Percentage (%) |
|-------------|-----------|----------------|
| 18 - 20 y.o | 18 | 11,25% |
| 20-30 y.o | 66 | 41,25% |
| 31- 40 y.o | 42 | 26,25% |
| 40 – 50 y.o | 34 | 21,25% |
| Jumlah | 160 | 100% |

Source: created by the author

Based on table 3, it is known that 18 consumer respondents aged 18 to 20 years (11.25%), 66 consumer

respondents aged 20 to 30 years (41.25%), 42 consumer respondents aged 31 to 40 years (26.25%), and 34

consumer respondents aged 40 to 50 years (21.25%) used the Shopee application. In order to shop online through Shopee, consumers must attach an ID's number to their

personal information. In Indonesia, the minimum age for obtaining an ID is 17.

Respondents based on education can be seen in table 4 :

Table 4. Respondents Based on Education

| Education | Frequency | Percentage (%) |
|-----------------|-----------|----------------|
| Doctoral degree | 14 | 8,75% |
| Master degree | 42 | 26,25% |
| Bachelor degree | 46 | 28,75% |
| Diploma | 40 | 25% |
| High School | 18 | 11,25% |
| Total | 160 | 100% |

Source: created by the author

Based on table 4, consumers who have transacted with the shopee application based on education, namely 14 people as Doctoral degree (8.75%), 42 people as Master degree (26.25%), 46 people as Bachelor degree (28.75%),

Diploma 40 people (25%) and High school 18 people (11.25%).

Respondents by occupation can be seen in Table 5 :

Table 5. Respondents by Occupation

| Occupation | Frequency | Percentage (%) |
|------------------------|-----------|----------------|
| BUMN/Private employees | 30 | 18,75% |
| Civil Servant | 30 | 18,75% |
| Entrepreneur | 20 | 12,50% |
| Student | 50 | 31,25% |
| Housewife | 20 | 12,50% |
| Other | 10 | 6,25% |
| Total | 160 | 100% |

Source: created by the author

Based on table 5, it is known that BUMN/Private Employees account for 30 people (18.75%), Civil Servant account for 30 people (18.75%), Entrepreneurs account for 20 people (12.50%), Students account for 50 people (31.25%), and Housewives account for 20 people (12.50%).

Item analysis is used to determine the validity of each item by correlating the score of each item with the total score, which is the sum of each item's score. For a questionnaire to be considered valid, the Corrected Item-Total Correlation must have a minimum value of 0.3, as shown in Table 6.

A validity test was conducted to determine the association between each item's score and the total score.

Table 6. Validity Test Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|----------------------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| Trust (M) | | | | |
| M1 | 137.6313 | 156.536 | .533 | .958 |
| M2 | 137.3313 | 161.770 | .414 | .958 |
| M3 | 136.7688 | 150.858 | .775 | .956 |
| M4 | 136.6063 | 154.857 | .682 | .956 |
| M5 | 137.0813 | 160.490 | .460 | .958 |
| M6 | 136.5688 | 156.373 | .656 | .957 |
| Service Quality (X1) | | | | |

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|-----------------------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| X11 | 137.7313 | 156.852 | .790 | .956 |
| X12 | 136.5750 | 159.064 | .478 | .958 |
| X13 | 136.6875 | 155.612 | .693 | .956 |
| X14 | 137.0438 | 162.407 | .385 | .958 |
| X15 | 137.2438 | 162.085 | .455 | .958 |
| X16 | 136.5500 | 159.306 | .564 | .957 |
| X17 | 137.4375 | 156.109 | .723 | .956 |
| X18 | 136.5438 | 158.979 | .592 | .957 |
| X19 | 137.5375 | 157.659 | .698 | .956 |
| X110 | 137.7563 | 156.965 | .746 | .956 |
| X111 | 137.5938 | 158.205 | .654 | .957 |
| Safety (X2) | | | | |
| X21 | 137.5875 | 158.420 | .638 | .957 |
| X22 | 136.6688 | 156.399 | .718 | .956 |
| X23 | 136.7188 | 155.964 | .611 | .957 |
| X24 | 136.7063 | 157.291 | .584 | .957 |
| X25 | 137.1375 | 156.157 | .474 | .959 |
| Perceived Risk (X3) | | | | |
| X31 | 136.6688 | 154.361 | .866 | .955 |
| X32 | 136.6750 | 154.409 | .862 | .955 |
| X33 | 137.7563 | 156.060 | .817 | .956 |
| X34 | 136.9313 | 159.435 | .558 | .957 |
| X35 | 137.1000 | 160.481 | .463 | .958 |
| X36 | 136.6688 | 154.361 | .866 | .955 |
| Purchase decision (Y) | | | | |
| Y1 | 137.5625 | 159.166 | .465 | .958 |
| Y2 | 137.3188 | 161.803 | .434 | .958 |
| Y3 | 136.6625 | 154.565 | .851 | .955 |
| Y4 | 136.7563 | 151.770 | .775 | .956 |
| Y5 | 136.5500 | 157.721 | .604 | .957 |
| Y6 | 137.0313 | 162.685 | .392 | .958 |

Source: created by the author

Based on table 6, the validity test of 160 respondents with a Corrected Item-Total Correlation value of > 0.30 for all question items (items) on the service quality variable, trust as a moderating variable, security, risk perception, and purchasing decisions indicates that the generated data can be further analyzed.

Reliability is an indicator of a measuring instrument's degree of dependability. Using Cronbach's alpha statistical techniques, reliability testing was conducted. As shown in Table 7, an instrument is considered reliable if its value of $\alpha > 0.60$.

Table 7. Reliability Test Item-Total Statistics

| Variabel | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|-------------------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| Trust | 16.6826 | 2.452 | .656 | .906 |
| Service Quality | 16.8397 | 2.649 | .815 | .874 |
| Safety | 16.6482 | 2.403 | .770 | .877 |
| Perceived Risk | 16.6529 | 2.363 | .798 | .871 |
| Purchase decision | 16.6644 | 2.525 | .788 | .874 |

Source: created by the author

Based on table 7, it shows that the reliability test with Cronbach's Alpha value > 0.60 for all questions (items) on all variables is reliable.

Table 8. **Multicollinearity Test**

| Model | CollinearityStatistics | |
|----------------------|------------------------|-------|
| | Tolerance | VIF |
| Service Quality (X1) | 0.310 | 3.227 |
| Safety (X2) | 0.403 | 2.484 |
| Perceived Risk (X3) | 0.512 | 1.954 |

Source: created by the author

Based on Table 8:

a) Service Quality (X1) tolerance value 0.310 > calculated tolerance value 0.10 and VIF value 3.227 < calculated VIF value 10.00, then there is no multicollinearity between independent variables.

b) Safety (X2) tolerance value 0.403 > calculated tolerance value 0.10 and VIF value 1.954 < calculated VIF

value 10.00, then there is no multicollinearity between independent variables.

c) Perceived Risk (X3) tolerance value 0.512 > calculated tolerance value 0.10 and VIF value 2.484 < calculated VIF value 10.00, then there is no multicollinearity between independent variables.

Table 9. **Heteroscedasticity Test**

| Coefficients ^a | | | | | | |
|---------------------------|-----------------|-----------------------------|------------|---------------------------|--------|-------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0,055 | 0,269 | | 0,205 | 0,838 |
| | Service Quality | 0,006 | 0,119 | 0,008 | 0,053 | 0,958 |
| | Safety | -0,018 | 0,081 | -0,028 | -0,225 | 0,822 |
| | Perceived Risk | 0,000 | 0,067 | 0,001 | 0,006 | 0,996 |

a, Dependent Variable: ABS_Res

Source: created by the author

Based on table 9 with the Glejser test showing the significance value between independent variables with an

absolute residual > 0.05, there is no heteroscedasticity problem.

Table 10. **Normality Test**

| One-Sample Kolmogorov-Smirnov Test | | |
|------------------------------------|----------------|-------------------------|
| | | Unstandardized Residual |
| N | | 160 |
| Normal Parameters ^{a,b} | Mean | .0003231 |
| | Std. Deviation | .31664859 |
| Most Extreme Differences | Absolute | .061 |
| | Positive | .059 |
| | Negative | -.061 |
| Kolmogorov-Smirnov Z | | .775 |
| Asymp. Sig. (2-tailed) | | .585 |
| a. Test distribution is Normal. | | |
| b. Calculated from data. | | |

Source: created by the author

Based on table 11 the significance value of Asymp, Sig is 0.585 > 0.05, then based on the Kolmogorov-Smirnov normality test. The data is normally distributed, thus the

normality requirements in the regression model have been fulfilled.

Table 11. Moderation Test X1, M, X1*M against Y

| Model | | Coefficients ^a | | | | |
|-------|----------------------------|-----------------------------|------------|---------------------------|-------|------|
| | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 1.234 | .262 | | 4.713 | .000 |
| | Service Quality | .025 | .070 | .022 | .356 | .722 |
| | Trust | .551 | .073 | .621 | 7.536 | .000 |
| | Service Quality with Trust | .031 | .011 | .263 | 2.695 | .008 |

a. Dependent Variable: Purchase decision

Source: created by the author

According to the results of testing the service quality variable (X1) with the moderating variable Trust (M), service quality has a positive and statistically significant impact on purchasing decisions (Y). This is evident from

the t-statistic of 2.69 with a significance 0.008 (< 0.05). Trust variable significantly moderates the effect of service quality on purchasing decisions at Shopee, Hypothesis 1 (H1) is accepted.

Table 12. Regression Analysis Results Coefficients

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-----------------|------|-----------------------------|------------|---------------------------|-------|------|
| | | B | Std. Error | Beta | | |
| | | 1 | (Constant) | 1.128 | | |
| Service Quality | .295 | | .119 | .257 | 2.477 | .014 |
| Safety | .289 | | .081 | .325 | 3.564 | .000 |
| Perceived Risk | .160 | | .067 | .193 | 2.386 | .018 |

Source: created by the author

The results in Table 12 can be used as a reference for compiling the regression equation for each hypothesis. In this study, the Beta value in the Standardized Coefficients column was used as the value of the variable regression coefficient. It is because the function of this regression equation is to determine the influence exerted by the independent variable on the dependent but only applies at that time with the sample. The first equation involving Service Quality (X₁) and Purchase Decision (Y) is stated as follows :

$$Y = 1,128 + 0,295 X_1 + e \quad (1)$$

The constant value of 1.128 suggests that if the value of X₁ is 0, the Purchase Decision has a value of 1.128. It shows that the Purchase Decision will continue to exist despite the absence of Service Quality in the donation decision.

Consequently, the regression coefficient X₁ equals 0.295%. For every addition of 1 X₁ value, the value of the Purchase Decision increases by 0.295, so an increase in Service Quality on e-commerce sites will also increase the respondent's purchasing decision. Following is the second equation involving Safety (X₂) and Purchase Decision (Y):

$$Y = 1,128 + 0,289 X_2 + e \quad (2)$$

The constant value in the equation is 1.128, which means that if the value of X₂ is 0, the Purchase Decision has a value of 1.128. This value indicates that the respondent's purchase decision will be made regardless of the influence of the security dimensions used in this study.

Consequently, the regression coefficient X₂ is 0.289%. This means that for each addition of 1 X₂ value, the value of the Purchase Decision increases by 0.289, indicating that an increase in Security on e-commerce sites will also increase the respondent's purchasing decision. Following is the third equation involving Perceived Risk (X₃) and Purchase Decision (Y):

$$Y = 1,128 + 0,160 X_3 + e \quad (3)$$

The constant value in the equation shows 1.128, which means that if the value of X₃ is 0, then the value of the Purchase Decision is 1.128. This value indicates that the respondent will still make the purchase decision even though it is not influenced by the perceived risk with the dimensions used in this study.

Then, the value of the regression coefficient X₃ is 0.160. It means that for every addition of 1 X₃ value, the value of the Purchase Decision increases by 0.160, so the increased Risk Perception on e-commerce sites will further increase the respondent's purchasing decision.

The following is a table of the regression coefficients used as the basis for the partial test,

Tabel 13. Coefficients^a

| Model | t | Sig. | Information |
|-----------------|-------|------|-------------|
| (Constant) | 4.184 | .000 | Significant |
| Service Quality | 2.477 | .014 | Significant |
| Safety | 3.564 | .000 | Significant |
| Perceived Risk | 2.386 | .018 | Significant |

Source: created by the author

Ttable depends on the probability α and degree of freedom (df), where $df = \text{number of samples} - \text{number of variables}$, so we get $df = 160 - 4 = 156$. Thus, if we use $\alpha = 5\%$, we get $t_{table}(\alpha, df) = t(0.05, 156) = 1.65468$.

Results of testing the regression coefficient value of the interaction between service quality and trust in purchasing decisions at Shopee is positive, so it can be concluded that the Trust variable significantly moderates the effect of service quality on purchasing decisions at Shopee, Hypothesis 1 (H1) is accepted.

The higher the level of service quality provided by Shopee will increase consumer confidence, thereby increasing consumer purchasing decisions at Shopee, and the lower the level of service quality provided by Shopee will decrease consumer trust, thereby decreasing consumer purchasing decisions at Shopee.

The results of this study support research that has been conducted by (Dessyaningrum, 2020), (Suseno & Suddin, 2017), (Bajuri, 2022), (Masoud, 2020) The results of their research also show that trust can moderate the effect of service quality on consumer purchasing decisions online. The higher the level of service quality will increase the level of consumer confidence in online purchases; conversely the lower the level of service quality will reduce the level of consumer trust in online purchases.

The results of testing the hypothesis in this study which states that service quality has a positive effect on purchasing decisions at Shopee, the results of the analysis show that Hypothesis 2 (H2) is accepted.

The magnitude of the influence caused by the service quality factor shows that currently, most consumers are starting to make demands for information about products provided to consumers. In this case, the service quality is in the form of an application display, an attractive form of application display can also influence consumers to make purchases on e-commerce. Consumers also demand to be given a response when serving the questions raised by consumers. By knowing this, e-commerce can improve the service quality to consumers so that it can create consumer purchasing decisions. It can be concluded that good service quality factors will increase purchasing decisions through e-commerce.

The results of this study support research that has been conducted by (Fatimah & Nurtantiono, 2022), (Fahrevi & Satrio, 2022), (Fatimah & Nurtantiono, 2022)

and (Fajrin & Gunadi, 2022) which shows that the service quality variable significantly influences purchasing decisions.

The results of testing the hypothesis in this study which states that security has a positive effect on purchasing decisions at shopee, the results of the analysis show that Hypothesis 3 (H3) is accepted.

The magnitude of the influence caused by the security factor shows that with sufficient technical capacity, it will guarantee that hackers will not change personal information sent by consumers. In contrast, consumers will only make purchases with security guarantees. Because without adequate security guarantees, it will cause concern for consumers, which will ultimately prevent them from making purchases. Moreover, vice versa when e-commerce can improve safety and provide guarantees to consumers, consumer trust in shopping will also increase. Consumers assume that the store has a policy of keeping personal data confidential and will not misuse it. Shopee has a clear privacy policy and guarantees the security of transactions on social networking websites. It can be concluded that a high safety factor will increase purchasing decisions at Shopee.

The results of this study support research that has been conducted by (Basalamah & Naufal, 2022), (Putri, 2021), (Agustiningrum & Andjarwati, 2021), (Puanda & Rahmidani, 2021), (Ilmiyah & Krishernawan, 2020) which shows that the safety variable significantly influences purchasing decisions.

The results of testing the hypothesis in this study, which states that perceived risk has a positive impact on purchasing decisions, the results of the analysis show that Hypothesis 4 (H4) is accepted.

Based on the respondents' responses, it is known that most respondents stated that they would still think about the various risks that would occur. The main reason is that purchases through e-commerce give consumers a feeling of fear, where when consumers make purchases for the first time and are satisfied, repeat purchases will occur. When consumers make repeat purchases, and they are still satisfied and do not find significant problems for them, the perception of risk will disappear, and ultimately trust will be formed. Understanding the perception of risk is needed, especially when making online purchases. This purchase is unlike the buying process in a store that is

directly face-to-face between the seller and the buyer. So that consumers are required to be more prepared for the consequences that consumers cannot anticipate with a definite estimate. It can be concluded that understanding perceived risk will be able to influence purchasing decisions through e-commerce.

The results of this study support research that has been conducted by (Suresh & Shashikala, 2011), (Rahmadhana & Ekowati, 2022), (Alghifari & Rahayu, 2021), (Makhdom & Aminah, 2022) which shows that the perceived risk variable significantly influences purchasing decisions.

Statistical research tests show a significant influence of Service Quality, Safety, and Perceived Risk on the Purchase Decision of respondents on the Shopee platform. The existence of good service quality and safety guarantees in such a way can foster purchasing decisions, coupled with a good consumer experience on the first purchase that will reduce the perceived risk when subsequent purchases. The influence caused by the service quality factor shows that most consumers currently demand attention when transacting. High security certainly influences consumers to make purchases through social networks. Even though consumers already feel safe and know e-commerce well, it is still being determined that consumers will buy in e-commerce. It can happen because the services quality

provided is lacking, which makes consumers hesitate to make purchases on e-commerce.

The results of this study support research that has been conducted by (Sari & Fermayani, 2020), (Baskara & Hariyadi, 2020), (Nawang Sari & Pramesti, 2019), (Asrizal & Indrayani, 2020) which shows that the variable Service Quality, Safety and Perceived Risk significantly influence purchasing decisions.

Conclusion. Based on the analysis results in Chapter IV, several conclusions can be drawn as follows: 1. Trust significantly moderates the effect of service quality on purchasing decisions at Shopee. 2. Service quality has a significant effect on purchasing decisions at Shopee. 3. Safety has a significant effect on purchasing decisions at Shopee. 4. Perceived risk has a significant effect on purchasing decisions at Shopee.

Based on the research results, several suggestions can be given for this research: 1. To improve purchasing decisions, e-commerce companies must pay attention to several factors, namely service quality, trust, and security. The importance of trust in online shopping sites is one of the key factors in conducting buying and selling activities online. 2. The perceived risk variable has the lowest direct influence on purchasing decisions compared to service quality and security. It is suggested that e-commerce companies can pay special attention to risk perception in online shopping.

References:

1. Agustiningrum, D., & Andjarwati, A. L. (2021). Pengaruh Kepercayaan, Kemudahan, Dan Keamanan Terhadap Keputusan Pembelian Di Marketplace. *Jurnal Ilmu Manajemen*, 9(3), 896–906.
2. Aisah, S. U. N. (2020). *Faktor-Faktor Yang Mempengaruhi Keputusan Pembelian Secara Onlinedi Shopee Dalam Perspektif Ekonomi Islam (Studi Pada Mahasiswa Angkatan 2016 Fakultas Ekonomi Dan Bisnis Islam Universitas Islam Negeri Raden Intan Lampung)* [in English].
3. Alghifari, A. Y., & Rahayu, Tri S. M. (2021). Pengaruh Diskon, Kualitas Website, Persepsi Risiko Dan Kepercayaan Terhadap Keputusan Pembelian Pada Online Shop Shopee: Studi Pada Mahasiswa Universitas Muhammadiyah Purwokerto. *Derivatif : Jurnal Manajemen*, 15(2), 223-236 [in English].
4. Apjii.Or.Id. (2021a). Laporan Survei Internet Apjii 2017 – 2021[in English].
5. Apjii.Or.Id. (2021b). Pemanfaatan Internet Dalam Bidang Ekonomi [in English].
6. Asrizal, & Indrayani, T. I. (2020). Pembelian Secara Online (Survei Terhadap Pengguna Situs Website Www.Lazada.Co.Id Kota Padang). *Menara Ekonomi*, Vi(1), 12–18 [in English].
7. Aulia, G., Husnurrofiq, & Syahrani. (2019). *Faktor-Faktor Yang Mempengaruhi Keputusan Pembelian Online Melalui Aplikasi Shopee (Studi Kasus Pada Mahasiswa Fakultas Ekonomi Uniska Banjarmasin)*. 1–11 [in English].
8. Bajuri, D. (2022). Analisis Kualitas Pelayanan Terhadap Keputusan Pembelian Dan Kepercayaan Sebagai Variabel Moderating Di Tokopedia. *Jurnal Kebijakan & Pelayanan Publik*, 8(2), 1–9 [in English].
9. Basalamah, M. R., & Naufal, A. (2022). Pengaruh Kepercayaan, Keamanan Dan Kualitas Pelayanan Terhadap Keputusan Pembelian Di Shopee (Studi Kasus Pada Mahasiswa Fakultas Ekonomi Dan Bisnis Universitas Islam Malang). *E – Jurnal Riset Manajemen*, 9–26 [in English].
10. Baskara, I. P., & Hariyadi, G. T. (2020). Keputusan Pembelian Melalui Situs Jejaring Sosial (Social Networking Websites) (Studi Pada Mahasiswa Di Kota Semarang). *Core*, 1–15 [in English].
11. Christy, F. E. (2022). Prediksi Angka Pengguna E-Commerce Di Indonesia 2024 [in English].
12. Data.Tempo.Co. (2022). Prediksi Angka Pengguna E-Commerce Di Indonesia 2024 [in English].
13. Databoks.Katadata. (2022). Situs E-Commerce Dengan Kunjungan Terbanyak Di Indonesia (Agustus 2022) [in English].
14. Dessyaningrum, C. (2020). Pengaruh Kualitas Pelayanan, Harga, Dan Kualitas Produk Dengan Kepercayaan Pelanggan Sebagai Variabel Moderasi Terhadap Keputusan Pembelian Online Situs Shopee. *Jurnal Tepak Manajemen Bisnis*, Xii(3), 439–459 [in English].
15. Dzulkarnain, I. (2019). *Pengaruh Fitur Online Customer Review Terhadap Keputusan Pembelian Produk Pada Marketplace Shopee*. Universitas Jember [in English].
16. Evans, D., & Mckee, J. (2010). *Social Media Marketing The Next Generation Of Business Engagement* (1st Ed.). Canada : Wiley Publishing, Inc [in English].
17. Fahrevi, S. R., & Satrio, B. (2022). Pengaruh Harga, Promosi, Dan Kualitas Pelayanan Terhadap Keputusan Pembelian Online Di Shopee.Co.Id. *Jurnal Ilmu Dan Riset Manajemen*, 1–15 [in English].
18. Fajrin, L., & Gunadi, W. (2022). Pengaruh Kepercayaan Konsumen Dan Kualitas Pelayanan Terhadap Keputusan Pembelian Online Pada Pengguna Shopee Di Daerah Jakarta Timur. *Jimen Jurnal Inovatif Mahasiswa Manajemen*, 2(3), 222–233 [in English].

19. Fatimah, H. N., & Nurtantiono, A. (2022). Pengaruh Citra Merek , Promosi , Harga , Dan Kualitas Pelayanan Terhadap Keputusan Pembelian (Pengguna Aplikasi Shopee). *Jurnal Sinar Manajemen*, 09(01), 106–113 [in English].
20. Ferdinand, A. (2014). *Metode Penelitian Manajemen* (5th Ed.). Semarang : Badan Penerbit Universitas Diponegoro.
21. Hill, R. (1998). What Sample Size Is "Enough " In Internet Survey Research ? *Interpersonal Computing And Technology: An Electronic Journal For The 21st Century*, 6(3), 1–10 [in English].
22. Ilmiah, K., & Krishernawan, I. (2020). Pengaruh Ulasan Produk, Kemudahan, Kepercayaan, Dan Harga Terhadap Keputusan Pembelian Pada Marketplace Shopee Di Mojokerto. *Maker: Jurnal Manajemen*, 6(1), 31–42 [in English].
23. Kotler, P., & Armstrong, G. (2020). *Principles Of Marketing, Global Edition, 18th Edition* (18th Ed.). Pearson [in English].
24. Kuncoro, M. (2013). *Metode Riset Untuk Bisnis Dan Ekonomi Bagaimana Meneliti Dan Menulis Tesis?* (4th Ed.). Jakarta : Erlangga [in English].
25. Liu, C.-H., & Tsai, W.-S. (2010). The Effects Of Service Quality And Lifestyle On Consumer Choice Of Channel Types: The Health Food Industry As An Example. *African Journal Of Business Management*, 4(6), 1023–1039 [in English].
26. Makhдум, M. F., & Aminah, S. (2022). Pengaruh Kepercayaan Dan Persepsi Resiko Terhadap Keputusan Pembelian Shopee Di Sampang. *Jurnal Ilmiah Universitas Batanghari Jambi*, 22(2), 803–807. <https://doi.org/10.33087/jiubj.v22i2.1898> [in English].
27. Masoud, E. (2020). The Effect Of Perceived Risk On Online Shopping In Jordan The Effect Of Perceived Risk On Online Shopping In Jordan. *European Journal Of Business And Management*, 5(6), 76–87. <https://doi.org/2222-1905> [in English].
28. Mitha, F., & Edy, Y. (2018). Pengaruh Online Consumer Review Oleh Beauty Vlogger Terhadap Keputusan Pembelian. *Jurnal Administrasi Bisnis*, 58(1), 1–9 [in English].
29. Nawangsari, S., & Pramesti, W. N. (2019). Pengaruh Kepercayaan, Kualitas Layanan, Dan Keamanan Terhadap Keputusan Pembelian (Studi Kasus Pada Tokopedia.Com). *Jurnal Manajemen Bisnis Indonesia*, 4(3), 385–394 [in English].
30. Nurhadi, & Azis, A. (2018). Pengaruh Kualitas Pelayanan Terhadap Kepercayaan Dan Kesetiaan Konsumen. *Jurnal Economia*, 14(1), 89–98 [in English].
31. Prayitno, D. (2015). Pengaruh Kualitas Pelayanan Dan Reputasi Perusahaan Terhadap Keputusan Konsumen Dengan Kepercayaan Sebagai Variabel Moderasi. *Jurnal Ekonomi Dan Kewirausahaan*, 15(03), 321–328 [in English].
32. Puanda, F., & Rahmidani, R. (2021). Pengaruh Kepercayaan Dan Keamanan Terhadap Keputusan Pembelian Online Melalui Aplikasi Shopee. *Journal Ecogen*, 4(3), 367–379 [in English].
33. Putri, G. P. (2021). Pengaruh Keamanan Dan Kemudahan Terhadap Keputusan Pembelian Dengan Minat Beli Sebagai Variabel Intervening Pada Pembelian Di Shopee. *Jurnal Manajemen, Ekonomi, Keuangan Dan Akuntansi (Meka)*, 2(1), 28–32 [in English].
34. Rahmadhana, R., & Ekowati, S. (2022). Pengaruh Kepercayaan Dan Persepsi Risiko Terhadap Keputusan Pembelian Secara Online Pada Konsumen Shopee Di Kota Bengkulu. *Jurnal Ekombis Review – Jurnal Ilmiah Ekonomi Dan Bisnis*, 10(2), 629–636[in English].
35. Sari, G. I., & Fermayani, R. (2020). Analisis Pengaruh Kepercayaan, Keamanan, Kualitas Pelayanan, Kualitas Produk, Dan Persepsi Risiko Terhadap Keputusan Pembelian Melalui Situs Jejaring Sosial (Studi Kasus Pada Mahasiswa Di Kota Padang). *Menara Ekonomi*, VI(2), 1–11 [in English].
36. Sekaran, U., & Bougie, R. (2017). *Metode Penelitian Untuk Bisnis* (6th Ed.). Jakarta: Salemba Empat [in English].
37. Sugiyono. (2016). *Metode Penelitian Kuantitatif, Kualitatif Dan R&D* (1st Ed.). Bandung: Alfabeta Bandung [in English].
38. Suresh, A. M., & Shashikala, R. (2011). Identifying Factors Of Consumer Perceived Risk Towards Online Shopping In India. *International Conference On Information And Financial Engineering*, 12(3), 336–341 [in English].
39. Suseno, Y. D., & Suddin, A. (2017). Analisis Pengaruh Kualitas Pelayanan, Kualitas Produk, Komitmen Pelanggan Terhadap Keputusan Pembelian Dengan Kepercayaan Pelanggan Sebagai Variabel Moderasi (Survei Tentang Ud Gas Elpiji Restuaji Surakarta). *Eksplorasi*, Xxix(2), 149–165.
40. Widianita, K. A. (2020). Faktor-Faktor Yang Menentukan Keputusan Pembelian Secara Online Di Shopee. *Jurnal Manajemen Indonesia*, 5(2) [in English].
41. Wijaya, T., & Paramita, L. (2014). Pengaruh Electronic Word Of Mouth (Ewom) Terhadap Keputusan Pembelian Kamera Dslr. *Seminar Nasional Dan Call For Paper (Sancall 2014): Research Methods And Organizational Studies*, 1(9), 12–19 [in English].

