

The Impact of Online Shopping Attributes on Customer Satisfaction and Customer Loyalty in Shopee Philippines: Moderating Effects of Length in E-commerce Experience

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Abstract:

This study determines the impact of online shopping attributes on customer satisfaction and customer loyalty in Shopee Philippines moderated by the effects of length in e-commerce experience. In terms of research methodology, the researcher utilized a descriptive quantitative method to achieve the purpose of the study. The survey questionnaire developed by the researcher was used as the tool to gather primary data from the respondents having a total of 384. The respondents must be 18 years old and above, residing in Calaca City, Batangas, and engage in online shopping specifically from Shopee Philippines. Furthermore, the respondents were determined through systematic random sampling. Further, the study utilized different statistical tools to interpret the data including frequency and percentage, mean, linear regression, mediator and moderator analysis, independent t-test, and one-way ANOVA.

The study revealed that the majority of the online shoppers were female in the range of 18-24 years old who attained a bachelor's degree with a monthly family income of less than P10,957 and with a length of e-commerce experience in Shopee Philippines between 1 year - 3 years. The shopping experiences of the respondents on online shopping attributes in terms of information quality, privacy, security, product variety, and delivery were all good. Moreover, the respondents are satisfied with the online shopping experiences and loyal to Shopee Philippines.

Furthermore, the analysis showed that online shopping attributes in terms of privacy, security, product variety, and delivery significantly affect customer loyalty while information quality does not significantly affect customer loyalty. Customer satisfaction mediates the effect of privacy, product variety, and delivery on customer loyalty. On the other hand, customer satisfaction does not mediate the effect of security on customer loyalty. The length of the e-commerce experience moderates the effect of customer satisfaction on customer loyalty. The researcher proposed a strategic plan for the improvement of online shopping attributes that can increase customer satisfaction and retain customer loyalty.

Keywords: Online Shopping, Customer Satisfaction, Customer Loyalty, E-commerce

I. INTRODUCTION

Online shopping is purchasing products on the internet. It means connecting to the Internet and using the seller's website to select and purchase the product and getting it home delivered. Its increasing popularity is due to the ease with which consumers are ordering any merchandise while sitting at home. It helps the consumers to save their time and skip queues. The whole shopping experience can be called hassle-free (Sunitha, 2018).

In Southeast Asia, e-commerce penetration reached new heights, with platforms like Shopee leading the charge. Despite its significant success, Shopee faces several challenges in certain Southeast Asian countries. One of Shopee's primary challenges is intense competition from other e-commerce giants, as well as new rising players. Lazada continues to be a formidable competitor with its LazMall platform, which attracts major international brands and significant exposure. Tokopedia is also now collaborating

with TikTok Shop after the law of social commerce was created (Affifa, 2024).

As of now, most people have adapted to the digital transformation and embrace online shopping including Calacazens. In relation, Shopee needs to make sure that it can provide an exceptional online shopping experience for customers since the competition in e-commerce is increasing in different locations. The issues must be addressed for the betterment of online transactions as well as to satisfy the customers and retain customer loyalty.

Customer satisfaction is inevitable for online retailers to build loyalty, attract new customers, and increase sales. The satisfaction of customers with their online shopping experience is important as it can affect the profitability of sellers. The satisfaction of shoppers with the website is a crucial aspect of overall satisfaction. Multiple factors impact customer satisfaction with online shopping. It encompasses various aspects of the online shopping experience, such as the ease of use of the website, information availability, product quality, delivery, customer service, pricing etc. (Krishnakumar et al., 2024).

Overlooking or neglecting pain points in e-commerce can cause customer dissatisfaction, negative word-of-mouth, and a potential decline in customer loyalty. Therefore, it is crucial to proactively identify and address issues experienced by online shoppers in online shopping attributes to maintain a positive and thriving business in a highly competitive market.

In connection, this study is anchored to the study of Mofokeng (2021), which examined the moderating effects of e-commerce experience on the relationships between online shopping attributes, customer satisfaction, and loyalty towards web stores with few inherent limitations that need to be revisited in future studies. The data was collected from online customers with a particular focus on measuring perceptions relating to their preferred web stores in South Africa. To enlarge the scope of the research and to cross-validate the results, it would be ideal to adopt a multi-cultural research perspective.

To fill the gap, this study determined the impact of online shopping attributes on customer satisfaction and customer loyalty in Shopee Philippines moderated by the effects of length in e-commerce experience in coordination of online shoppers from Calaca City. This study will also help the physical store sellers to understand the online shopping environment of Shopee Philippines and decide to compete online since their sales were decreasing due to e-commerce existence according to the president of the Calaca public market.

II. OBJECTIVES

This study determined the impact of online shopping attributes on customer satisfaction and customer loyalty in Shopee Philippines moderated by the effects of length in e-commerce experience.

Specifically, this answered the following questions:

1. What is the demographic profile of the respondents in terms of:

- 1.1. age;
- 1.2. sex;
- 1.3. educational attainment;
- 1.4. monthly family income; and

1.5. length of e-commerce experience in Shopee Philippines?

2. How do the respondents assess the online shopping attributes in terms of:

- 2.1. information quality;
- 2.2. privacy;
- 2.3. security;
- 2.4. product variety; and
- 2.5. delivery?

3. How may the level of customer satisfaction be assessed?

4. How may the level of customer loyalty be assessed?

5. Do online shopping attributes significantly affect the customer loyalty of the respondents?

6. Does customer satisfaction mediate the effect of online shopping attributes to customer loyalty?

7. Does the length of the e-commerce experience moderate the effect of customer satisfaction on customer loyalty?

8. Is there a significant difference in the assessment of the respondents when grouped according to profile?

9. Based on the findings, what strategic plan may be proposed?

III. RESEARCH DESIGN

The researcher used descriptive and quantitative methods of research to attain the purpose of the study. Descriptive research design describes what already exist and help uncover new facts and meaning. The descriptive method of research illustrates data and characteristics about the population or phenomenon being studied.

According to Calmorin (2016), descriptive research is important in providing information in which scientific judgement may be based wherein it plays a large part in the development of instruments for the measurements of things wherein the questionnaires, tests, interviews, checklists, scorecards, rating scales, and observation schedules.

Descriptive method looks at features of a population, points out problems that occur within a unit, a population, or an organization, or looks at variations in practices and features between institutions (Siedlecki, 2020).

IV. RESPONDENTS OF THE STUDY

The respondents of the study include 384 individuals aged 18 years old and above from Calaca City, Batangas who engage in online shopping at Shopee Philippines. The online shoppers in Shopee Philippines were chosen as respondents since according to the admin of J&T Express- Calaca, most of Calacazens are purchasing products in Shopee compared to other online selling platforms. The researcher used systematic random sampling which can help to select respondents without bias from an unknown population. Since the population could not be clearly identified, the size of the sample group can be computed by the sample size formula of Cochran. The accepted standard is significant at confidence level at 95% or a significance at 0.05. Hence, the size of the sample group is calculated as following: $n = Z^2 / 4e2$ (Nillakupt, 2015).

In systematic random sampling, the general survey points such as church, minimart, and drugstore were identified first in this study. Then, at least three sub-survey points in each general survey point were determined. Next, the general survey point and sub-survey point were randomly selected. It was followed by picking an interval from one to five. Lastly,

pre-qualifying questions were asked to validate if the people who came in or purchased products at chosen survey points and by order of selected interval were 18 years old and above, residing in Calaca City, Batangas, and engage in online shopping specifically from Shopee Philippines. The enumerators distributed the questionnaires to the qualified respondents.

V. DATA GATHERING INSTRUMENT

The data gathering instrument used to collect data is a survey questionnaire constructed by the researcher. The draft of the questionnaire was drawn based on the researcher’s readings, previous studies, professional literature, published and unpublished thesis relevant to the study, and other online publications. The instrument consists of four parts. The first part deals with the profile of the online shoppers in terms of age, sex, educational attainment, monthly family income, and length of e-commerce experience in Shopee Philippines. The second part pertains to a questionnaire with five items regarding on the online shopping attributes in terms of information quality, privacy, security, product variety, and delivery. The third part and fourth parts consist of ten items regarding on the assessment of customer satisfaction and customer loyalty, respectively.

The survey questionnaire was validated by the thesis adviser, grammarian, and 4 panelists including the chairman, statistician, and industry experts. Upon the approval of the questionnaire, the researcher proceeded to carry out the dry run and then test the reliability. The pre-survey was conducted in Taal, Batangas in cooperation with 30 respondents who were chosen systematically. The tally of dry was given to the statistician for the reliability testing which was measured through Cronbach’s Alpha.

The reliability of each variable in the questionnaire is presented in Table 1.

Table 1
Reliability

Variables	Number of Items	Cronbach’s Alpha	Verbal Interpretation
Information Quality	5	0.841	Good
Privacy	5	0.840	Good
Security	5	0.872	Good
Product Variety	5	0.814	Good
Delivery	5	0.784	Acceptable
Customer Satisfaction	10	0.934	Excellent
Customer Loyalty	10	0.938	Excellent

The actual survey was conducted in Calaca City, Batangas which utilized printed survey questionnaires administered to the respondents of the study. During the actual survey, the researcher hired two enumerators and told them to explain items not clear to the respondents.

For scoring, Likert-type 4-point scale was utilized to gather respondents’ opinion and knowledge related to the topic where 4 is the highest and 1 is the lowest, as shown in

Table 2
The Fourth-point Description of Likert Scale Response

Rate	Scale	Verbal Interpretation		
		Online Shopping Attributes	Customer Satisfaction	Customer Loyalty
4	3.50 – 4.00	Very Good	Highly Satisfied	Very Loyal
3	2.50 – 3.49	Good	Satisfied	Loyal
2	1.50 – 2.49	Poor	Moderately Satisfied	Moderately Loyal
1	1.00 – 1.49	Very Poor	Not Satisfied	Not Loyal

Table 2.

VI. DATA GATHERING PROCEDURE

The researcher conducted the actual survey in Calaca City, Batangas, wherein the respondents were chosen systematically. In systematic random sampling, the researcher and enumerators identified first the general survey points such as church, minimart, and drugstore. Then, at least three sub-survey points in each general survey point were determined. The sub-survey points for the church were Archdiocesan Shrine and Parish of St. Raphael the Archangel, Iglesia ni Cristo, and The Church of Jesus Christ of Latter. For Minimart, the sub-survey points were BCC Minimart, Robinsons Easymart, and Alfamart – Poblacion 4. Moreover, the sub-survey points for drugstore were J. Atienza Drug Store, Panaligan Pharmacy, and Alamag Drugstore. Next, the general survey point and sub-survey point were randomly selected by the researcher or enumerators. It was followed by picking an interval from one to five. Then, pre-qualifying questions were asked to validate if the people who came in or purchased products at chosen survey points and by order of selected interval are 18 years old and above, residing in Calaca City, Batangas, and engage in online shopping specifically from Shopee Philippines. Some people did not qualify as the respondents to this study. The researcher and enumerators strictly followed the interval until 384 respondents were achieved. The qualified respondents were assisted by the researcher and enumerators in answering the questionnaire.

After the actual survey, all the information was summed up and tallied which served as the basis of analysis and interpretation to assess the impact of online shopping attributes on customer satisfaction and customer loyalty in Shopee Philippines moderated by the effects of length in e-commerce experience. Lastly, the researcher sent the tallied data to the statistician to apply the statistical treatment needed for the study.

VII. STATISTICAL TREATMENT

The data gathered were interpreted and analyzed through Frequency and Percentage, Mean, Liner Regression, Mediator and Moderator Analysis, Independent t-Test, and One-way ANOVA.

VIII. RESULTS AND DISCUSSIONS

Table 3 shows the frequency and percentage distribution of the respondents in terms of age.

Table 3
Distribution of Respondents by Age

Age	Frequency	Percentage
18-24 years old	166	43.23
25-34 years old	110	28.65
35-44 years old	64	16.67
45-54 years old	27	7.03
55 years old and above	17	4.43
Total	384	100

The result revealed that 166 out of 384 respondents were in the range of 18-24 years old which was equivalent to 43.23% of total respondents.

This means that most of the online shoppers in Shopee Philippines from Calaca City are Generation Z. The

result is expected since Generation Z is tech-savvy compared to other generations.

As stated by Petrock (2021), Generation Z is the first generation to have 24/7 access to the internet, connected devices, and social media. This is supported by Kemp (2021), the average time spent by Filipinos using the Internet is 10 hours and 56 minutes when they can encounter different electronic product/s and information about them, as well as tempting advertisements persuading to purchase a product from Shopee wherein mostly from Generation Z with the age bracket of 18-24 years old purchased a product online.

In the study of Bauboniené et al, (2015), the 18-24 year age group of consumers more frequently have a preference towards online stores due to a superior assortment of products.

Table 4 presents the frequency and percentage distribution of the respondents in terms of sex.

Table 4
Distribution of Respondents by Sex

Sex	Frequency	Percentage
Male	130	33.85
Female	254	66.15
Total	384	100

It can be seen in the table, that the majority of the respondents were female with higher frequency of 254 or 66.15% compared to male which obtained the frequency of 130 or 33.85% of the total respondents.

This indicates that more females came in or brought products in the public places where the survey was conducted. Additionally, females are more engaged in shopping online than males.

According to Firstinsights (2018), female frequently shopping online as male consumers tend to prefer shopping in brick-and-mortar retail locations. Moreover, male consumers are also less likely to embrace technology disruptors as well as like to see and touch the items prior to purchase more than female shopping counterparts. This is supported by Fullestop (2015) which is not surprising that women are more engaged in using the shopping applications for deal sites. Females are more active in using online shopping applications which is about 46% where the men only make up 34% of internet user who are active with online shopping applications.

Table 5 shows the frequency and percentage distribution of the respondents in terms of educational attainment.

Table 5
Distribution of Respondents by Educational Attainment

Educational Attainment	Frequency	Percentage
Elementary	11	2.86
Junior High School	107	27.86
Senior High School	111	28.91
Bachelors Degree	152	39.58
Masters Degree	3	0.78
Total	384	100

Based on the result, there were 152 online shoppers in Shopee Philippines from Calaca City who attained bachelor's degrees which was equivalent to 39.58% of the total respondents.

Since the City Government of Calaca aimed to give financial assistance for Calacazens in terms of education, most of the respondents who passed by or brought products in the public places where the survey has been conducted attained bachelor's degree who can easily adapt in technology

advancement and knowledgeable in utilizing online applications like Shopee Philippines.

As mentioned by Ragnedda et al. (2020), those with higher education tend to have better access and understanding on digital applications due to more extensive exposure to technology in their academic lives. On the other hand, the attainment of education has also been considered a crucial indicator to determine consumers' intentions to adopt new technology. It has been found that less educated people have less elegant cognitive skills that may restrict their capability to learn new technology (Ali et al., 2021).

Table 6 presents the frequency and percentage distribution of the respondents in terms of monthly family income.

Table 6
Distribution of Respondents by Monthly Family Income

Monthly Income	Frequency	Percentage
Less than P10,957	204	53.13
Between P10,957- P21,194	118	30.73
Between P21194- P43,828	61	15.89
Between P43,828- P76,669	1	0.26
Total	384	100

As observed in the table, there were 204 out of 384 respondents or 53.13% of the total respondents earned or have monthly family income less than P10,957.

Even though Calaca is a first-class City, the majority of the respondents have monthly family income of less than P10,957 which classified as poor by Philippine Institute for Development Studies (PIDS). This means that Shopee Philippines is an online shop that accessible for anyone regardless of income since some of the products are offered in low-cost. With this, low income earner can purchase in the online shop.

According to Ezenyilimba et al., (2018), companies really consider the income level of their target market when they develop pricing strategies for their products. The salary or income level, is an example of a demographic segmentation that companies use when they prepare to introduce a new product to the market. Income determines what an online shopper buys at a given time. It describes the quantity of money individual receives at a given time period, say monthly. Income has been an old determinant of online shopping. There is also an assumption that at different income levels customer has different tastes, desires and needs for goods and different attitudes towards price, services and store facilities or atmosphere, in addition to different abilities to buy. Based on their different taste and desire, consumers with high income seem to increase their purchasing power and see less risk in embracing online shopping than those with low income. However, there are contradictory empirical evidences concerning the effect of income on online behaviour; some researchers found that income of consumers significantly affect online behaviour, while others found otherwise.

Table 7 shows the frequency and percentage distribution of the respondents in terms of length of e-commerce experience in Shopee Philippines.

Table 7
Distribution of Respondents by Length of E-commerce Experience in Shopee Philippines

Length of e-Commerce Experience in Shopee Philippines	Frequency	Percentage
At 6 months	79	20.57
Between 6 months- 1 year	119	30.99
Between 1 year- 3 years	123	32.03
Between 3 years - 5 years	29	7.55
5 years above	34	8.85
Total	384	100

The result revealed that 123 respondents or 32.03% of the total respondents have experienced of purchasing products in Shopee Philippines between 1 year- 3 years.

Most of the respondents have neither short nor long e-commerce experience in Shopee Philippines since they just started to utilize online shopping platform during Covid-19 pandemic as the government implemented travel restriction to avoid the rapid transmissions of virus from human-to-human. Shopee offers shipping discounts which can lessen shopping expenses and there are lot of products available in the selling platform that are not available in Calaca public market. With this, people from Calaca tend to purchase in Shopee frequently.

According to Visa Inc. (2021), the pandemic has resulted in new consumer behaviors emerging in the Philippines, where more Filipinos are starting to go on digital commerce platforms and make cashless payments. Further, a large user base who started ordering home delivery, likely due to lockdowns or movement restriction order in the country during the pandemic.

On the other hand, experience in years plays an important role in online shopping and impacts directly how the benefits and the risks of shopping online are perceived by the consumers. Customers learn from their online shopping experience and product use. Customers who have experienced online shopping are more familiar with e-commerce and the youngest shoppers should be more confident to shop online as they are accustomed to the online environment. More experienced customers with online shopping tend to purchase more online (Bramillari et al. 2021).

Table 8 presents the assessment of the respondents on online shopping attribute in terms of information quality.

Table 8
Assessment on Online Shopping Attribute in Terms of Information Quality

Information Quality	Mean	Interpretation
1. The online shop provides me with up-to-date product information.	3.44	Good
2. The online shop includes essential product details, such as specifications and descriptions, without any missing information on my preferred product.	3.34	Good
3. The online shop shows me consistent information about the products or services across all platforms, including the website and mobile app.	3.36	Good
4. The online shop provides me the service information such as FAQs, promotional details, and shop guarantees about the products.	3.39	Good
5. The online shop provides me the product information that can be easily understood and helps me make informed purchasing decisions.	3.36	Good
Composite Mean	3.38	Good

As evident in the table, the online shopping attribute in terms of information quality got a composite mean of 3.38 which was verbally interpreted as good. This indicates that Shopee provides information quality about the products which can increase customer satisfaction and retain customer loyalty.

The study revealed that the online shop provides up-to-date product information which ranked first with a mean of 3.44. Additionally, the respondents assessed that the online shop provides service information such as FAQs, promotional details, and shop guarantees about the products ranked second with a mean of 3.39. The online shop shows consistent information about the products or services across all platforms, including the website and mobile app as well as provides the product information that can be easily understood and helps make informed purchasing decisions tied in third rank with a mean of 3.36. Last in the rank was the online shop includes essential product details, such as specifications and descriptions, without any missing information on preferred product with a mean of 3.34. All of the statements for information quality were verbally interpreted as good by the respondents.

Table 9 shows the assessment of the respondents on online shopping attributes in terms of privacy.

Table 9
Assessment on Online Shopping Attribute in Terms of Privacy

Privacy	Mean	Interpretation
1. The online shop only collects the personal information necessary for the transaction to be completed.	3.29	Good
2. The online shop asks me to give consent before sharing personal information with third parties or authorized service providers.	3.29	Good
3. The online shopper can withdraw consent, and request access to or modify information that has been provided in an online shop.	3.27	Good
4. The online shop notifies me if there are amendments to the privacy policy of the platform.	3.33	Good
5. The online shop clearly explains how it uses "cookies". Cookies are identifiers that are stored on the computer or mobile device that record data about the computer or device, how and when the Services or Platform are used or visited, by how many people, and other activity within the Platform.	3.23	Good
Composite Mean	3.28	Good

It can be seen in the table, that the online shopping attribute in terms of privacy resulted with a composite mean of 3.28 which was verbally interpreted as good. This indicates that Shopee is concerned with the privacy of the personal information of the customers which can increase customer satisfaction and retain customer loyalty.

The online shop notifies the online shoppers if there are amendments to the privacy policy of the platform which ranked first with a mean of 3.33. The online shop only collects the personal

Table 11
Assessment on Online Shopping Attribute in Terms of Product Variety

Product Variety	Mean	Interpretation
1. The variety of products available in the online shop meets my individual preferences and needs.	3.31	Good
2. The online shop offers a variety of products not easily found elsewhere.	3.29	Good
3. I tend to shop more frequently in this online shop since it offers a wide variety of products.	3.30	Good
4. A wide variety of products on in this online shop helps me discover new brands and products.	3.40	Good
5. The availability of a diverse range of products in this online shop simplifies my decision-making process when shopping online.	3.32	Good
Composite Mean	3.32	Good

information necessary for the transaction to be completed and the online shop asks to give consent before sharing personal information with third parties or authorized service providers tied in second rank with a mean of 3.29. The study revealed that the online shopper can withdraw consent, and request access to or modify information that has been provided in an online shop which ranked third with a mean of 3.27. Last in rank with the lowest mean of 3.23 was the online shop clearly explains how it uses "cookies". Cookies are identifiers that are stored on the computer or mobile device that record data about the computer or device, how and when the Services or Platform are used or visited, by how many people, and other activity within the Platform. All of the statements for privacy were verbally interpreted as good by the respondents.

Table 10 shows the assessment of the respondents on online shopping attributes in terms of security.

Table 10
Assessment on Online Shopping Attribute in Terms of Security

Security	Mean	Interpretation
1. The online shop informs me that it uses encryption technology to ensure that sensitive data remains safe during online transactions. Encryption is the process of protecting information or data by using mathematical models to scramble it in such a way that only the parties who have the key to unscramble it can access it.	3.28	Good
2. The online shop has payment security measures to protect my financial information during transactions.	3.42	Good
3. The online shop has authentication mechanisms (such as multi-factor authentication) to prevent my account from unauthorized access.	3.35	Good
4. The online shop provides security tips and resources to help me understand and practice safe online behaviors, such as creating strong passwords and avoiding phishing attempts.	3.34	Good
5. The online shop recommends Shopee Supported Payment Methods for my safe transactions in the application or website.	3.38	Good
Composite Mean	3.36	Good

As observed in the table, the study revealed that the online shopping attribute in terms of security got a composite mean of 3.36 which was verbally interpreted as good. This indicates that Shopee is concerned with the security of the personal account and financial information during transactions of the customers which can increase customer satisfaction and retain customer loyalty.

The respondents revealed that the online shop has payment security measures to protect financial information during transactions which ranked first with a mean of 3.42. Then, the online shop recommends Shopee Supported Payment Methods for safe transactions in the application or website ranked second with a mean of 3.38. The third in rank was the online shop has authentication mechanisms (such as multi-factor authentication) to prevent the account from unauthorized access with a mean of 3.35. Moreover, the online shop provides security tips and resources to help understand and practice safe online behaviors, such as creating strong passwords and avoiding phishing attempts with a mean of 3.24. Last in the rank was the online shop informed the respondents that it uses encryption technology to ensure that sensitive data remains safe during online transactions with a mean of 3.28. All of the statements for security were verbally interpreted as good by the respondents.

Table 11 presents the assessment of the respondents on online shopping attribute in terms of product variety.

The table showed that the online shopping attribute in terms of product variety got a composite mean of 3.32 which was verbally interpreted as good. This indicates that Shopee offers wide variety of products to meet the consumers' needs and preferences which can increase customer satisfaction and retain customer loyalty.

The study revealed that a wide variety of products on the online shop helps the online shopper to discover new brands and products which ranked first with a mean of 3.40. Second in rank was the availability of a diverse range of products in the online shop simplifies the decision-making process of the respondents when shopping online with a mean of 3.32. Furthermore, the variety of products available in the online shop meets individual preferences and needs which ranked third with a mean of 3.31. Fourth in rank was the respondents tend to shop more frequently in the online shop since it offers a wide variety of products with a mean of 3.30. Last in rank with a lowest mean of 3.29 was the online shop offers a variety of products not easily found elsewhere. All of the statements for product variety were verbally interpreted as good by the respondents.

Table 12 presents the assessment of the respondents on online shopping attributes in terms of delivery.

Table 12
Assessment on Online Shopping Attribute in Terms of Delivery

Delivery	Mean	Interpretation
1. My orders are delivered within the specified period.	3.45	Good
2. The online shop provides me with tracking features and regular updates on the delivery status of my order.	3.42	Good
3. I always receive the product in good condition.	3.27	Good
4. The delivery fees charged by the online shop are reasonable.	3.25	Good
5. The online shop offers shipping discounts to me.	3.43	Good
Composite Mean	3.37	Good

As shown in the table, the online shopping attribute in terms of delivery resulted with a composite mean of 3.37 which was verbally interpreted as good. This indicates that Shopee fulfills the order the customer which can increase customer satisfaction and retain customer loyalty.

First in rank was the orders of the online shoppers were delivered within the specified period with a mean of 3.45. The online shop offers shipping discounts to the respondents which ranked second with a mean of 3.43. Additionally, the online shop provides the respondents with tracking features and regularly update on the delivery status of their order which third in rank with a mean of 3.42. Moreover, the respondents always receive the product in good condition ranked fourth with a mean of 3.27. Last in rank was the delivery fees charged by the online shop are reasonable with a lowest mean of 3.25. All of the statements for delivery were verbally interpreted as good by the respondents.

Table 13 shows the results of the assessment on the level of customer satisfaction of the respondents.

The table showed that the level of customer satisfaction got a composite mean of 3.36 which was verbally

Table 13
Assessment on the Level of Customer Satisfaction

Customer Satisfaction	Mean	Interpretation
1. I am satisfied with the purchases in this online shop.	3.39	Satisfied
2. I am happy with my decision to use this online shop.	3.43	Satisfied
3. I am content with the level of services of this online shop.	3.35	Satisfied
4. I am satisfied with the features and the layout of the online shop.	3.33	Satisfied
5. I am pleased with the experience of purchasing products from this online shop.	3.31	Satisfied
6. I feel valued as a customer when the online shop asks for my feedback on my ordered products and gives reward points/coins.	3.38	Satisfied
7. I feel satisfied as I am getting a fair deal when I purchase in this online shop.	3.36	Satisfied
8. I am happy that this online shop genuinely cares about resolving customer problems.	3.35	Satisfied
9. I am satisfied with this online shop since it is well-organized and always functions systematically.	3.32	Satisfied
10. I am happy that purchasing with this online shop is more convenient compared to a traditional shopping store.	3.41	Satisfied
Composite Mean	3.36	Satisfied

interpreted as satisfied. This indicates that the respondents are satisfied with the online shopping experiences in Shopee Philippines.

The top three items with the highest mean are: the respondents are happy with their decision to use this online shop, specifically Shopee Philippines, the respondents are also happy that purchasing in this online shop is more convenient compared to a traditional shopping store, and the respondents are satisfied with the purchases in this online shop with a mean of 3.43, 3.41, and 3.39, respectively which are verbally interpreted as satisfied.

On the other hand, the top three items with the lowest mean are: the respondents are satisfied with the features and the layout of this online shop, specifically Shopee Philippines, the respondents are satisfied with the online shop since it is well-organized and always functions systematically, and the respondents are pleased with the experience of purchasing products from this online shop, with a mean of 3.33, 3.32, and 3.31, respectively which are verbally interpreted as satisfied.

Table 14 shows the results of assessment on the level of customer loyalty of the respondents.

Table 14
Assessment on the Level of Customer Loyalty

Customer Loyalty	Mean	Interpretation
1. I will make repeat purchases in this online shop.	3.39	Loyal
2. I encourage my family, friends, and relatives to purchase from this online shop.	3.36	Loyal
3. I prefer to buy in this online shop over its competitors, even at a higher price.	3.14	Loyal
4. I say positive things about this online shop to others.	3.26	Loyal
5. I recommend this online shop to someone who seeks my e-commerce advice.	3.26	Loyal
6. I am emotionally attached to this online shop as I engage with its social media accounts by liking, sharing, commenting, or participating in discussions about the product.	3.16	Loyal
8. I forgive minor issues with this online shop and have no intention to switch with its competitors due to small inconveniences.	3.18	Loyal
9. I consider this online shop to be my first choice when I need to make a purchase.	3.20	Loyal
10. I am willing to try and acquire new products and services launched by this online shop.	3.35	Loyal
Composite Mean	3.25	Loyal

The study revealed that the level of customer loyalty got a composite mean of 3.25 which was verbally interpreted as loyal. This means that the respondents are loyal in Shopee Philippines and will make repeat purchases in the online shop.

The top three items with highest mean are: the respondents will make repeat purchases in the online shop, specifically Shopee Philippines, the respondents encourage their family, friends, and relatives to purchase from this online shop, and the respondents are willing to try and acquire new products and services launched by the online shop with a mean of 3.39, 3.36, and 3.35, respectively which are verbally interpreted as loyal.

On the other hand, the top three items with lowest mean are: the respondents forgive minor issues with this online shop, specifically Shopee Philippines and have no intention to switch with its competitors due to small inconveniences, the respondents are emotionally attached to the online shop as they engaged with Shopee's social media accounts by liking, sharing, commenting, or participating in discussions about the product, and the respondents prefer to buy in the online shop over its competitors, even at a higher price with a mean of 3.18, 3.16, and 3.14 which are verbally interpreted as loyal.

Table 15 shows the results of significant effect of online shopping attributes in customer loyalty.

Table 15
Significant Effect of Online Shopping Attributes to Customer Loyalty

Customer Loyalty	B	Std. Error	t-value	p-value	Decision on H ₀	Interpretation
Constant	0.249	0.126	1.972	0.049	Reject	Significant
Information Quality	-0.020	0.047	-0.433	0.665	Failed to Reject	No Significant Effect
Privacy	0.160	0.048	3.363	<0.001	Reject	Significant Effect
Security	0.142	0.049	2.914	0.004	Reject	Significant Effect
Product Variety	0.258	0.040	6.462	<0.001	Reject	Significant Effect
Delivery	0.361	0.037	9.852	<0.001	Reject	Significant Effect

Model Summary: R = 0.787; R² = 0.619
 Regression Model: F = 122.876 p = <0.001

It can be seen in the table, that privacy, security, product variety, and delivery significantly affect customer loyalty with a p-value of <0.001, 0.004, <0.001, and <0.001, respectively. Therefore, the null hypothesis is rejected since the p-value is less than the significance level of 0.05. On the other hand, the null hypothesis is failed to reject in information quality since its p-value of 0.665 is greater than the significance level of 0.05. This indicates that information quality does not significantly affect customer loyalty.

The R-squared value of 0.619 indicates that the proportion of the variance of the dependent variable is explained by the independent variables and online shopping attributes can only explain 61.9% of the variance of customer loyalty. The F-value of the regression model is 122.876 which corresponds to a p-value of <0.001.

The result revealed that privacy, security, product variety, and delivery are online shopping attributes that make the respondents loyal in Shopee Philippines. Shopee notifies the customers if there are amendments to the privacy policy of the platform which indicates that it takes its responsibilities under applicable privacy laws and regulations seriously as well as committed in respecting the privacy rights and concerns of all the users of the facility, then provides

preventive measure to secure the safety of the financial information of the customers from financial breaches. A well-communicated privacy policy and educating the user for safe transactions makes the customers loyal. Moreover, Shopee offers wide variety of products that meet the needs and preferences of customers as well as the orders are delivered within the specified period, encouraging the customers for repeat purchases.

The result is similar to the study by Nugraha (2023) that privacy, security, and product diversity positively affect customer loyalty which means that those online shopping attributes can increase customer loyalty if improved. However, delivery does not have a positive effect on customer loyalty in his study which is in contrast in this study. The respondents felt that the delivery provided by Bukalapak was not on time or late, and the condition of the goods sent to consumers was not packaged well, so they did not gain consumer loyalty.

On the other hand, information quality is an online shopping attribute that does not make the respondents loyal in Shopee Philippines. With this, information quality was excluded in the mediation analysis whether customer satisfaction mediates the effect of online shopping attributes on customer loyalty. Some of the customers felt disappointed as information quality provided by the Shopee did not match with the details posted in the online shop which not gain customer loyalty since they just wasted money.

This result is in contrast with the previous studies of (Nugraha, 2023) and (Mofokeng, 2021), that information quality is a significant determinant of customer loyalty on online shopping. It was mentioned in the previous studies, that information quality will increase customer loyalty if it is improved. This is similar to the study of Putri et al., (2023) that information quality had a positive and significant influence on online loyalty.

Table 16 shows the effect of online shopping attributes on customer satisfaction.

Mediation Analysis:

(a) Independent to Mediator

Table 16
Effect of Online Shopping Attributes to Customer Satisfaction

Consumer Satisfaction	B	Std. Error	t-value	p-value	Decision on H ₀	Interpretation
Constant	0.394	0.127	3.108	0.002	Reject	Significant
Privacy	0.144	0.045	3.179	0.002	Reject	Significant Effect
Security	0.063	0.047	1.353	0.177	Failed to Reject	No Significant Effect
Product Variety	0.279	0.041	6.863	<0.001	Reject	Significant Effect
Delivery	0.403	0.037	10.978	<0.001	Reject	Significant Effect

Model Summary: R = 0.781; R² = 0.610
Regression Model: F = 148.061 p = <0.001

It is revealed in the table that security does not significantly affect customer satisfaction with a p-value of 0.177 which is greater than the significance level of 0.05, thus failed to reject the null hypothesis. On the other hand, privacy, product variety, and delivery significantly affect customer satisfaction with a p-value of 0.002, <0.001, and <0.001, respectively which are less than the significance level of 0.05, thus reject the null hypothesis.

The R-squared value of 0.610 indicates that the proportion of the variance of the dependent variable is explained by the independent variables and online shopping attributes can only explain 61% of the variance of customer satisfaction. The F-value of the regression model is 148.061 which corresponds to a p-value of <0.001 which indicates that the overall model is statistically significant.

The result revealed that security is an online shopping attribute that does not create customer satisfaction in Shopee Philippines. Shopee uses encryption technology to ensure that sensitive data remains safe during online transactions, however some customers are not familiar with encryption since Shopee did not show any sample on how the data is encrypted. In online shopping, security breaches, such as data theft or fraud, can cause customers to immediately lose trust in the platform. Even if the customers are otherwise satisfied with their shopping experience, perceived insecurity may lead them to avoid the platform in the future.

In addition to the result, privacy, product variety, and delivery are online shopping attributes that make the respondents satisfied in Shopee Philippines. Shopee did not take advantage the confidential personal information of customers since it follows data privacy regulations. Additionally, purchasing in online shop is more convenient compared to a traditional shopping store and the customers may receive shipping vouchers which lessen the delivery fee of the products made them satisfied.

(b) Mediator to Dependent

Table 17 shows the effect of customer satisfaction to customer loyalty.

Table 17
Effect of Customer Satisfaction to Customer Loyalty

Customer Loyalty	B	Std. Error	t-value	p-value	Decision on H ₀	Interpretation
Constant	0.706	0.111	6.358	<0.001	Reject	Significant
Customer Satisfaction	0.758	0.033	23.076	<0.001	Reject	Significant Effect

Model Summary: R = 0.763; R² = 0.582
Regression Model: F = 532.522 p = <0.001

Table 17 shows the effect of customer satisfaction to customer loyalty.

As evident in the table, the customer satisfaction significantly affect customer loyalty with a p-value of <0.001 which is less than the significance level of 0.05, thus reject the null hypothesis. The coefficient of customer satisfaction is 0.758 and the t-value associated with this coefficient is 23.076.

The R-squared value of 0.582 indicates that the proportion of the variance of the dependent variable is explained by the independent variables and online shopping attributes can only explain 58.2% of the variance of customer satisfaction. The F-value of the regression model is 532.522 which corresponds to a p-value of <0.001 which indicates that the overall model is statistically significant.

The customer satisfaction creates customer loyalty in Shopee Philippines based on the assessment of the respondents. This indicates that if the online shoppers are satisfied with their experiences on online shopping attributes in Shopee Philippines, they will not find another online selling platform that can meet their needs and preferences. With this, they tend to make repeat purchases in the online shop which lead to customer loyalty.

Table 18 discusses whether customer satisfaction significantly affect the relationship between online shopping attributes and customer loyalty.

Table 18
Mediating Effect of Online Shopping Attributes on Customer Satisfaction to Customer Loyalty

Customer Loyalty	B	Std. Error	t-value	p-value	Decision on H ₀	Interpretation
Constant	0.088	0.116	1.759	0.045	Reject	Significant
Customer Satisfaction	0.385	0.046	8.294	<0.001	Reject	Significant Effect
Privacy	0.097	0.041	2.341	0.020	Reject	Significant Effect
Security	0.110	0.042	2.614	0.009	Reject	Significant Effect
Product Variety	0.150	0.039	3.853	<0.001	Reject	Significant Effect
Delivery	0.203	0.038	5.331	<0.001	Reject	Significant Effect

Model Summary: R = 0.823; R² = 0.678
Regression Model: F = 158.881; p = <0.001

As evident in the table, customer satisfaction significantly affect the relationship between shopping attributes in terms of privacy, security, product variety and delivery to customer loyalty with a p-value of <0.001, 0.020, 0.009, <0.001, <0.001, respectively which is less than the significance level of 0.05, thus reject the null hypothesis.

The R-squared value of 0.678 indicates that the proportion of the variance of the dependent variable is explained by the independent variables and online shopping attributes and customer satisfaction can only explain 67.8% of the variance of customer loyalty. The F-value of the regression model is 158.881 which corresponds to a p-value of <0.001 which indicates that the overall model is statistically significant.

Customer satisfaction was found to mediate the effects of privacy, product variety, and delivery to customer loyalty as these attributes had significant effects on both customer satisfaction and customer loyalty. This indicates that if customers are satisfied with privacy, product variety, and delivery, then it will lead to loyalty. However, customer satisfaction does not mediate the effect of security on customer loyalty as security does not significantly affect customer satisfaction. Shopee did not take advantage the confidential personal information of customers since it followed data privacy regulations which satisfied the customers and led to loyalty. Additionally, purchasing in an online shop is more convenient compared to a traditional shopping store and the customers may receive shipping voucher which lessen the delivery fee of the products which makes them satisfied that led to repeat purchases in Shopee.

Table 19 shows the moderation of length of e-commerce experience on the relationship between customer satisfaction and customer loyalty.

Table 19
Moderating Effect of Length of E-Commerce Experience on Customer Satisfaction to Customer Loyalty

Customer Loyalty	B	Std. Error	t-value	p-value	Decision on H ₀	Interpretation
Constant	-0.001	0.050	-0.012	0.990	Failed to Reject	Not Significant
Length of e-Commerce Experience in Shopee Philippines * Customer Satisfaction	0.204	0.053	3.890	<0.001	Reject	Significant Effect

Model Summary: R = 0.195; R² = 0.018
Regression Model: F = 15.129 p = <0.001

As shown in the table, customer satisfaction significantly affect customer loyalty when length of e-commerce experience moderates with a p-value of <0.001 which is less than the significance level of 0.05, thus reject the

null hypothesis. The coefficient of customer satisfaction is 0.204, and the t-value associated with this coefficient is 3.890.

The R-squared value of 0.018 indicates that the proportion of the variance of the dependent variable is explained by the independent variables and length of e-commerce experience as well as customer satisfaction can only explain 18% of the variance of customer loyalty. The F-value of the regression model is 15.129 which corresponds to a p-value of <0.001 which indicates that the overall model is statistically significant.

The result indicates that length of e-commerce experience weakens the effect of customer satisfaction to customer loyalty. As customers gain more experience in e-commerce, their expectations evolve. Novice shoppers may feel satisfied with basic functionalities such as secured personal and financial information, wide variety of products, timely delivery or accurate product descriptions. However, the experienced customers are interacted with multiple online selling platforms that develop higher standards. They expect advanced features such as personalized recommendations, seamless returns, and superior customer service. While a platform may meet their expectations and result in satisfaction, this alone may not be sufficient to foster loyalty. Experienced customers are less likely to remain committed to a platform unless it consistently exceeds their heightened expectations.

Table 20 shows the results of One-Way ANOVA to determine the differences in the assessment of the respondents

Table 20
Differences on the Assessment of the Respondents when Grouped According to Age

Variables	Age	Mean	Computed f-value	p-value	Decision on H ₀	Interpretation
Information Quality	18-24 years old	3.42	1.411	0.230	Failed to Reject	Not Significant
	25-34 years old	3.33				
	35-44 years old	3.36				
	45-54 years old	3.33				
	55 years old and above	3.49				
Privacy	18-24 years old	3.27	0.403	0.806	Failed to Reject	Not Significant
	25-34 years old	3.27				
	35-44 years old	3.28				
	45-54 years old	3.36				
	55 years old and above	3.35				
Security	18-24 years old	3.34	1.202	0.309	Failed to Reject	Not Significant
	25-34 years old	3.31				
	35-44 years old	3.41				
	45-54 years old	3.48				
	55 years old and above	3.34				
Product Variety	18-24 years old	3.32	0.159	0.959	Failed to Reject	Not Significant
	25-34 years old	3.31				

towards online shopping attributes, customer satisfaction, and customer loyalty when grouped according to age.

As evident in the table, there is no significant difference in the assessment of the respondents towards online shopping attributes, customer satisfaction, and customer

	Age Group	Mean				
Delivery	35-44 years old	3.32	1.545	0.188	Failed to Reject	Not Significant
	45-54 years old	3.34				
	55 years old and above	3.39				
	18-24 years old	3.42				
	25-34 years old	3.33				
Customer Satisfaction	35-44 years old	3.32	0.403	0.806	Failed to Reject	Not Significant
	45-54 years old	3.41				
	55 years old and above	3.25				
	18-24 years old	3.38				
	25-34 years old	3.35				
Customer Loyalty	35-44 years old	3.32	1.287	0.275	Failed to Reject	Not Significant
	45-54 years old	3.35				
	55 years old and above	3.40				
	18-24 years old	3.27				
	25-34 years old	3.19				

loyalty when grouped according to age, thus accepting the null hypothesis. In terms of online shopping attributes which comprise of information quality, privacy, security, product variety, and delivery show a p-value of 0.230, 0.806, 0.309, 0.959, and 0.188, respectively. Furthermore, customer satisfaction and customer loyalty show a p-value of 0.806 and 0.275, respectively.

This means that customers of all age groups have similar views and experiences regarding online shopping attributes, customer satisfaction, and loyalty. One primary reason for these shared perspectives is the widespread adoption of digital technology. In the Philippines, the increasing availability of affordable smartphones, internet connectivity, and user-friendly apps like Shopee has made online shopping accessible to people of all ages. Regardless of age, consumers want to feel secure when sharing personal information and paying for purchases via online, deserve to know accurate product information, appreciate having a wide range of products to choose from, and expect timely and reliable deliveries. Consumers in all ages are expecting an online exceptional experience that will make them satisfied and loyal to the online shop.

Table 21 shows the results of independent t-test to determine the differences in the assessment of the respondents towards online shopping attributes, customer satisfaction, and customer loyalty when grouped according to sex.

Table 21
Differences on the Assessment of the Respondents when Grouped According to Sex

Variables	Sex	Mean	Computed t-value	p-value	Decision on H ₀	Interpretation
Information Quality	Male	3.38	0.190	0.850	Failed to Reject	Not Significant
	Female	3.38				

Variables	Sex	Mean	Computed f-value	p-value	Decision on H ₀	Interpretation
Privacy	Male	3.28	0.115	0.909	Failed to Reject	Not Significant
	Female	3.28				
Security	Male	3.38	0.727	0.468	Failed to Reject	Not Significant
	Female	3.34				
Product Variety	Male	3.28	-1.792	0.074	Failed to Reject	Not Significant
	Female	3.35				
Delivery	Male	3.33	-1.087	0.278	Failed to Reject	Not Significant
	Female	3.38				
Customer Satisfaction	Male	3.29	-2.497	0.013	Reject	Significant
	Female	3.40				
Customer Loyalty	Male	3.27	0.575	0.566	Failed to Reject	Not Significant
	Female	3.25				

As shown in the table, there is no significant difference in the assessment of the respondents towards online shopping attributes, and customer loyalty when grouped according to sex, thus accepting the null hypothesis. The online shopping attributes which comprises of information quality, privacy, security, product variety, and delivery show a p-value of 0.850, 0.909, 0.468, 0.074, and 0.278, respectively while customer loyalty shows a p-value of 0.566. On the other hand, there is significant difference in the assessment of the respondents towards customer satisfaction with a p-value of 0.013 which led to reject the null hypothesis where females had higher mean score than males of 3.40 and 3.29, respectively.

The lack of a significant difference in the assessment of respondents towards online shopping attributes such as information quality, privacy, security, product variety, delivery, and customer loyalty suggests that these factors are universally important to all shoppers, regardless of sex. These attributes cater to fundamental needs, such as accurate product details, safe personal information, secure financial transactions, diverse options, and reliable deliveries which are valued equally by men and women that made them loyal in the online shop. However, the significant difference in customer satisfaction when grouped by sex indicates that men and women may have varying expectations or experiences that influence how satisfied they feel overall. It can be concluded that females are more satisfied than males since they are more engage in online shopping.

Table 22 shows the results of One-Way ANOVA to determine the differences in the assessment of the respondents towards online shopping attributes, customer satisfaction, and customer loyalty when grouped according to educational attainment.

Table 22
Differences on the Assessment of the Respondents when Grouped According to Educational Attainment

Variables	Educational Attainment	Mean	Computed f-value	p-value	Decision on H ₀	Interpretation
Information Quality	Elementary	3.29	0.631	0.641	Failed to Reject	Not Significant
	Junior High School	3.41				
	Senior High School	3.38				
	Bachelors Degree	3.36				
	Masters Degree	3.60				
Privacy	Elementary	3.40	1.184	0.317	Failed to Reject	Not Significant
	Junior High School	3.32				
	Senior High School	3.26				
	Bachelors Degree	3.25				
	Masters Degree	3.60				

Security	Elementary	3.53	1.851	0.118	Failed to Reject	Not Significant
	Junior High School	3.42				
	Senior High School	3.33				
	Bachelors Degree	3.31				
	Masters Degree	3.47				
Product Variety	Elementary	3.64	3.958	0.004	Reject	Significant
	Junior High School	3.37				
	Senior High School	3.34				
	Bachelors Degree	3.25				
	Masters Degree	3.53				
Delivery	Elementary	3.75	5.605	<.001	Reject	Significant
	Junior High School	3.43				
	Senior High School	3.41				
	Bachelors Degree	3.26				
	Masters Degree	3.47				
Customer Satisfaction	Elementary	3.57	6.374	<.001	Reject	Significant
	Junior High School	3.47				
	Senior High School	3.37				
	Bachelors Degree	3.26				
	Masters Degree	3.70				
Customer Loyalty	Elementary	3.51	4.888	<.001	Reject	Significant
	Junior High School	3.26				
	Senior High School	3.34				
	Bachelors Degree	3.17				
	Masters Degree	3.40				

As shown in the table, there is no significant difference in the assessment of the respondents towards online shopping attributes in terms of information quality, privacy and security when grouped according to educational attainment with a p-value of 0.641, 0.317, and 0.118, respectively, thus failed to reject the null hypothesis. However, there is significant difference in product variety with a p-value of 0.004 while in terms of delivery, customer satisfaction, and customer loyalty with a p-value of <.001, when grouped according to educational attainment which led not to accept the null hypothesis.

The lack of a significant difference in the assessment of respondents towards information quality, privacy, and security based on educational attainment suggests that these attributes are universally important and perceived similarly across all educational levels. Accurate information, secure transactions, and data privacy are fundamental expectations that resonate with all users, regardless of their educational background, as they are essential for building trust and ensuring a safe shopping experience.

However, the significant differences in assessments of product variety, delivery, customer satisfaction, and loyalty indicate that individuals with different educational attainments may have varying expectations, preferences, or experiences in these areas. Online shoppers with lower educational attainment might focus on affordability or accessibility and shape their views on these aspects. This could be attributed to simpler expectations that they may find even a modest range of options satisfactory. The limited exposure to alternative

platforms of online shoppers with lower educational attainment might reduce their tendency to compare offerings which made them more content with the available selection. In addition, their expectations may revolve around receiving products without complications wherein the platforms are adept at delivering. Moreover, lower educational attainment demonstrated the highest loyalty scores due to fewer comparisons or lower exposure to alternative platforms. The trust built through consistent experiences might also solidify their loyalty. On the other hand, the customers with higher educational levels provided the highest satisfaction ratings which indicates that the platform meets their advanced expectations.

Table 23 shows the results of One-way ANOVA to determine the differences in the assessment of the respondents towards online shopping attributes, customer satisfaction, and customer loyalty when grouped according to monthly family income.

Table 23
Differences on the Assessment of the Respondents when Grouped According to Monthly Family Income

Variables	Monthly Income	Mean	Computed f-value	p-value	Decision on H ₀	Interpretation
Information Quality	Less than P10,957	3.38	1.662	0.175	Failed to Reject	Not Significant
	Between P10,957-P21,194	3.43				
	Between P21194-P43,828	3.30				
	Between P43,828-P76,669	3.00				
	Less than P10,957	3.30				
Privacy	Between P10,957-P21,194	3.32	5.485	0.001	Reject	Significant
	Between P21194-P43,828	3.14				
	Between P43,828-P76,669	2.20				
	Less than P10,957	3.39				
	Between P10,957-P21,194	3.37				
Security	Between P21194-P43,828	3.23	4.366	0.005	Reject	Significant
	Between P43,828-P76,669	2.40				
	Less than P10,957	3.38				
	Between P10,957-P21,194	3.22				
Product Variety	Between P21194-P43,828	3.33	5.167	0.002	Reject	Significant
	Between P43,828-P76,669	2.80				
	Less than P10,957	3.43				
	Between P10,957-P21,194	3.33				
Delivery	Between P21194-P43,828	3.24	5.678	<.001	Reject	Significant
	Between P43,828-P76,669	2.40				
	Less than P10,957	3.39				
	Between P10,957-P21,194	3.36				
Customer Satisfaction	Between P21194-P43,828	3.26	2.287	0.078	Failed to Reject	Not Significant
	Between P43,828-P76,669	2.90				
	Less than P10,957	3.32				
	Between P10,957-P21,194	3.23				
Customer Loyalty	Between P21194-P43,828	3.10	5.815	<.001	Reject	Significant
	Between P43,828-P76,669	3.00				
	Less than P10,957	3.32				
	Between P10,957-P21,194	3.23				

As shown in the table, there is no significant difference in the assessment of the respondents towards information quality and customer satisfaction when grouped according to monthly family income with a p-value of 0.175 and 0.078, respectively thus accepting the null hypothesis. On the other hand, there is a significant difference in the assessment of the respondents in terms of privacy, security, product variety, delivery, and customer loyalty with a p-value of 0.001, 0.005, 0.002, <.001, and <.001, respectively which led to reject the null hypothesis.

The lack of a significant difference in the assessment of respondents towards information quality and customer satisfaction across different monthly family income levels suggests that these factors are universally valued and perceived similarly by all income groups. The accurate and reliable product information is a standard expectation for all shoppers, regardless of income, as it ensures informed purchasing decisions. Similarly, customer satisfaction is influenced by the overall shopping experience, which includes factors that appeal to all users, such as ease of use, trustworthiness, and convenience.

On the other hand, the significant differences in the assessment of privacy, security, product variety, delivery, and customer loyalty indicate that these attributes are perceived differently based on income levels. Lower-income groups may prioritize fundamental aspects like privacy, security, affordable product variety, and reliable delivery due to limited resources and heightened vulnerability to risks which may impact customer loyalty. Conversely, higher-income groups might have higher expectations for advanced features, reducing the importance of basic attributes. These variations indicate that e-commerce platforms must tailor their strategies to address the distinct needs of different income segments which may impact customer loyalty.

Table 24 shows the results of One-way ANOVA to determine the differences in the assessment of the respondents towards online shopping attributes, customer satisfaction, and customer loyalty when grouped according to length of e-commerce experience in Shopee Philippines.

Table 24
Differences on the Assessment of the Respondents when Grouped According to Length of E-commerce Experience in Shopee Philippines

Variables	Length of e-Commerce Experience in Shopee Philippines	Mean	Computed f-value	p-value	Decision on H ₀	Interpretation
Information Quality	At 6 months	3.38	1.726	0.143	Failed to Reject	Not Significant
	Between 6 months- 1 year	3.36				
	Between 1 year- 3 years	3.34				
	Between 3 years - 5 years	3.42				
	5 years above	3.54				
Privacy	At 6 months	3.23	0.964	0.427	Failed to Reject	Not Significant
	Between 6 months- 1 year	3.29				
	Between 1 year- 3 years	3.26				
	Between 3 years - 5 years	3.32				
	5 years above	3.38				
Security	At 6 months	3.35	2.441	0.046	Reject	Significant
	Between 6 months- 1 year	3.39				
	Between 1 year- 3 years	3.27				
	Between 3 years - 5 years	3.43				
	5 years above	3.47				
	At 6 months	3.27	3.403	0.009	Reject	Significant

Product Variety	Between 6 months- 1 year	3.34	2.248	0.063	Failed to Reject	Not Significant
	Between 1 year- 3 years	3.30				
	Between 3 years - 5 years	3.28				
	5 years above	3.54				
Delivery	At 6 months	3.36	1.544	0.189	Failed to Reject	Not Significant
	Between 6 months- 1 year	3.42				
	Between 1 year- 3 years	3.29				
	Between 3 years - 5 years	3.37				
Customer Satisfaction	At 6 months	3.37	0.564	0.689	Failed to Reject	Not Significant
	Between 6 months- 1 year	3.37				
	Between 1 year- 3 years	3.34				
	Between 3 years - 5 years	3.31				
Customer Loyalty	At 6 months	3.28	1.544	0.189	Failed to Reject	Not Significant
	Between 6 months- 1 year	3.29				
	Between 1 year- 3 years	3.20				
	Between 3 years - 5 years	3.21				
	5 years above	3.34				

As revealed in the table, there is no significant difference in the assessment of the respondents towards information quality, privacy, delivery, customer satisfaction, and customer loyalty when grouped according to length of e-commerce experience in Shopee Philippines with a p-value of 0.143, 0.427, 0.063, 0.689, and 0.189, respectively thus failed to the null hypothesis. However, there is significant difference in the assessment of the respondents in terms of security, and product variety with a p-value of 0.046, and 0.009, respectively which led not to accept the null hypothesis.

The lack of a significant difference in the assessment of respondents towards information quality, privacy, delivery, customer satisfaction, and customer loyalty across different lengths of e-commerce experience in Shopee Philippines suggests that these attributes are consistently valued by users regardless of how long they have been shopping on the platform. The accurate information, secure privacy, reliable delivery, and overall satisfaction are fundamental aspects that are universally appreciated by both new and experienced users. Additionally, loyalty resulted from combination of these factors, making it similarly rated across all experience levels.

However, the significant differences in the assessment of security and product variety indicate that users with varying lengths of e-commerce experience may perceive these attributes differently. Newer users may be more cautious about security, as they are still building trust in the platform, while experienced users, having developed confidence in Shopee's security measures over time. Similarly, product variety may be perceived differently depending on how long users have explored the platform. Experienced users might have higher expectations for diverse product offerings, having been exposed to more sellers and categories, whereas newer users might be more easily satisfied with the initial options they encounter.

IX. PROPOSED OUTPUT

The strategic plan is recommended for Shopee to improve the online shopping attributes that affect customer satisfaction and customer loyalty. The online shopping

attributes in terms of privacy, security, product variety, and delivery significantly affect customer loyalty while customer satisfaction mediates the effect of privacy, product variety, and delivery on customer loyalty. This study provided strategies for the statements with the lowest mean because these represent the weakest link in customer experience from online shopping attributes. In today's digital landscape, businesses operate in a highly competitive market wherein understanding how to deliver an exceptional online customer experience can serve as a key differentiator, allowing businesses to stand out from competitors to attract, satisfy, and retain loyal customers. The moderation of the length of e-commerce experience weakens the effect of customer satisfaction to customer loyalty as customers gain more experience in e-commerce and their expectations evolve.

S.H.O.P.E.E. Strategic Plan

Shopee Philippines provides an easy, secure, fast, and enjoyable online shopping experience for millions of consumers across the country, with a wide product assortment supported by integrated payments and seamless fulfillment. Since 2015 launch, Shopee empowered Filipinos in the evolving digital economy (Global Employee Engagement Study, 2021).

Vision Statement

To be the leading online shopping platform that provides Secured transactions with **High** privacy standards and **Optimize** product options with **Proportional** delivery fee for **Exceptional** e-commerce **Experience**.

Mission Statement

Shopee is committed in delivering a seamless online shopping journey by ensuring the highest level of security for transactions and safeguarding customer privacy. Additionally, Shopee aims to provide an extensive and carefully selected range of products tailored to diverse needs, paired with transparent and fair delivery fees. Through innovation and customer-centric practices, Shopee strive to create an exceptional experience that fosters satisfaction, and loyalty among customers.

Key Goals and Strategies, Performance Metric, as well as Review and Evaluation

1. Privacy

Findings: The study revealed that the statement with the lowest mean is the online shop clearly explains how it uses "cookies". Cookies are identifiers that are stored on the computer or mobile device that record data about the computer or device, how, and when the Services or Platform are used or visited, by how many people, and other activity within the Platform.

Strategy: Shopee may implement a user-friendly "cookie consent banner" with links to detailed explanations of how cookies are used and their benefits for the user (e.g., improving shopping experiences, saving preferences). The user may accept, reject, or manage preference cookies. Ensure that the banner is user-friendly and compliant with privacy regulations. Moreover, use non-technical language to ensure clarity and accessibility for all users.

Objective: To better inform the users that their personal information and their activities are being tracked for the improvement of services if they accept the cookies. Then, they may not be able to use the full functionality of services if they reject the cookies.

Persons Involved: Teams from different departments of Shopee: Legal and Compliance, Design, Engineering and Technology, Business Intelligence and Data Analytics

Performance Metric:

- Determine the percentage of users who accept cookies after the implementation of the consent banner.
- Monitor the number of complaints or queries related to cookie usage or privacy.

Expected Outcome: The online shopper will be better equipped to understand the benefits and consequences of accepting or rejecting cookies. This will enhance satisfaction and promote loyalty since users are most likely to trust the platform as it provides transparency on how private data are properly utilized.

Review and Evaluation: Regularly gather feedback on the cookie consent process to identify areas for improvement.

2. Security

Findings: The study revealed that the statement with the lowest mean is the online shop informs the respondents that it uses encryption technology to ensure that sensitive data remains safe during online transactions. Encryption is the process of protecting information or data by using mathematical models to scramble it in such a way that only the parties who have the key to unscramble it can access it.

Strategy: Create infographics, videos, or FAQs to make encryption concepts easy to understand. Display security assurance messages at critical touchpoints, such as during account creation, login, and payment checkout (e.g., "Your transaction is encrypted for safety").

Objective: To build confidence in Shopee's commitment to data security by showcasing encryption technologies.

Persons Involved: Teams from different departments of Shopee: Legal and Compliance, Design, Engineering and Technology, Business Intelligence and Data Analytics

Performance Metric:

- Measure user confidence in Shopee's data security practices through feedback forms.
- Track the number of user complaints or queries regarding data security and encryption.

Expected Outcome: The online shopper may feel secure since Shopee has a higher sense of security and transparent communication regarding encryption. Additionally, this data security will result in greater trust in the platform that will encourage more repeat purchases since the online shoppers are aware that their personal and financial information can only be accessed by a limited number of persons who have special access rights to the system.

Review and Evaluation: Regularly gather feedback to gauge user confidence in Shopee's encryption technologies and overall sense of data security. Additionally, conduct regular audits of Shopee's encryption protocols and system security measures.

3. Product Variety

Findings: The study revealed that the statement with the lowest mean is the online shop offers a variety of products not easily found elsewhere.

Strategy: Partner with niche and specialty sellers to introduce unique products that are not easily available on other online selling platforms. Furthermore, partner with sellers who offer customizable or made-to-order products which are appealing to customers seeking personalized items. Then, monitor trends

and competitor offerings to stay ahead in niche product availability.

Objective: To differentiate Shopee from competitors by offering a distinct product range not easily found elsewhere. Address customer demand for unique products to improve satisfaction and foster repeat visits and purchases.

Persons Involved: Marketing and Finance Department of Shopee

Performance Metric:

- Number of new unique products or niche categories added to the platform.
- Number of niche and specialty sellers onboarded.
- Increase in sales revenue from niche and customizable products.

Expected Outcome: Shopee will establish itself as a platform for unique and hard-to-find products to constantly meet the needs and preferences of online shoppers. The unique product offerings will encourage repeat visits and purchases from online shoppers.

Review and Evaluation: Shopee needs to ensure quality control and maintain a balance between unique offerings and popular products. It will also be crucial to monitor the operational feasibility of fulfilling orders for custom or specialized products.

4. Delivery

Findings: The study revealed that the statement with the lowest mean is the delivery fees charged by the online shop are reasonable.

Strategy: Collaborate with logistics partners to negotiate lower shipping costs. Then, provide cost breakdowns of delivery fees including the fees per distance, and package weight.

Objective: To ensure delivery fees are perceived as fair and aligned with the value of service.

Persons Involved: Teams from different departments of Shopee: Marketing, Finance, Authorized Sellers, and Logistic Partners

Performance Metric

- Shipping Cost per Order
- On-Time Delivery Rate (Lower delivery costs should not compromise the timely delivery of goods.)

Expected Outcome: This may reduce cart abandonment rates since lower and transparent delivery fees may satisfy the online shoppers and they are more likely to shop repeatedly. Moreover, an affordable delivery fee will attract new users.

Review and Evaluation: Implement regular surveys and track delivery fee-related complaints to understand if any specific customer segments remain dissatisfied.

X. CONCLUSIONS

Based on the findings of the study, the following conclusions were found and identified:

1. Majority of the respondents were female in the range of 18-24 years old who attained a bachelor's degree with a monthly family income of less than P10,957 and with a length of e-commerce experience in Shopee Philippines between 1 year - 3 years.
2. The shopping experiences of the respondents on online shopping attributes in terms of information quality, privacy, security, product variety, and delivery were verbally interpreted as good.

3. The respondents are satisfied with the shopping experiences in Shopee Philippines.
4. The respondents are loyal to Shopee Philippines.
5. The online shopping attributes in terms of privacy, security, product variety, and delivery significantly affect customer loyalty while information quality does not significantly affect customer loyalty.
6. Customer satisfaction mediates the effect of privacy, product variety, and delivery to customer loyalty. On the other hand, customer satisfaction does not mediate the effect of security to customer loyalty.
7. The length of e-commerce experience moderates the effect of customer satisfaction on customer loyalty.
8. There is no significant difference in the assessment of the respondents towards online shopping attributes, customer satisfaction, and customer loyalty when grouped according to age. On the other hand, there is no significant difference in the assessment of the respondents towards online shopping attributes, as well as customer loyalty while there is a significant difference in the assessment of the respondents towards customer satisfaction when grouped according to sex. Furthermore, there is no significant difference in the assessment of the respondents towards online shopping attributes in terms of information quality, privacy and security while there is significant difference in product variety delivery, customer satisfaction and customer loyalty when grouped according to educational attainment. Additionally, there is no significant difference in the assessment of the respondents towards information quality and customer satisfaction while there is significant difference in the assessment of the respondents in terms of privacy, security, product variety, delivery, and customer loyalty when grouped according to monthly family income. Lastly, there is no significant difference in the assessment of the respondents towards information quality, privacy, delivery, customer satisfaction, and customer loyalty while there is significant difference in the assessment of the respondents in terms of security, and product variety when grouped according to length of e-commerce experience in Shopee Philippines.
9. The proposed output is the strategic plan.

XI. RECOMMENDATION

The following recommendations are hereby offered:

1. Shopee may continue to sell affordable products that are suitable for all ages, catering to both men and women and can be delivered nationwide.
2. The Shopee company may conduct a quality audit to ensure that the specifications and descriptions of the product match to the actual product to be received by the customer.
3. It is recommended to categorize the product properly to avoid redundancy that leads to confusion while comparing the prices within the platform.
4. Shopee should investigate and penalize the persons involved in the mishandling of products and poor service in terms of delivery since some customers received defective items.

5. The developer may consider maintaining the smooth functionality of Shopee application and website for an exceptional online shopping experience, especially during double-double sales.
6. Keep customer engagement in different social media accounts by answering the concerns raised by the customer to build harmonious relationships.
7. Shopee is encouraged to enlighten the customers regarding "Lowest Price Guaranteed" so they will not switch with the competitors.
8. The proposed strategic plan may be applied by other online selling platforms, especially those new rising players.
9. Future studies related to the topic may be conducted in other locations.

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