

# Risk Assessment of Online Shopping Behavior

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DOI: <https://dx.doi.org/10.47772/IJRISS.2024.8110097>

Received: 25 June 2024; Accepted: 05 July 2024; Published: 05 December 2024

## ABSTRACT

This study aimed to assess the risk of online shopping behavior among online shoppers. There are one hundred seventy-six (176) respondents in this study, which specifically focuses on the online shoppers of Dapitan City and the Municipality of Polanco. The study employed a quantitative approach and a descriptive type of questionnaire using a 5-point Likert scale in which every descriptor has 4 questions to explore the risk of online shopping behavior. Respondents were selected through convenience sampling, representing online shoppers in the study. The study reveals that young adults, primarily females and college students, who shop monthly on platforms like Shopee for clothing and fashion accessories are influenced by convenience, affordability, and promotional offers. While demographic factors like age, gender, and income do not significantly affect perceptions, sellers should focus on product availability, quality, and secure transactions. Risks like financial risk, website design, product performance risk, delivery risk, trust, and security assess their online shopping behavior. Shoppers would prioritize research, safety measures, and trusted stores. Ensuring security measures and clear communication during transactions is vital to building trust in online shopping, given the significant concern about financial risk. Shoppers and online retailers should improve trust, security, and overall satisfaction in online transactions. Before buying online, check seller reviews and ratings. Sellers would give clear information to avoid unhappy customers. Governments need to teach people about online risks and safe ways to pay. Future studies should follow how online shopping changes and how new technology works to gain a deeper understanding of consumer dynamics in e-commerce.

**Keywords:** Assessing Shopping Behavior, online shopping behavior

## INTRODUCTION

**Online shopping** is one of the e-commerce sectors that continues to grow in the Philippines as a result of the significant advancements in mobile applications, the internet, distinct web developments, and the long-term effects of the COVID-19 pandemic. With just a mouse click, consumers may access both local and foreign products on the World Wide Web, which is why more and more people are using it for their purchasing needs. The concept of shopping at any time and place appeals to customers who are unable to take time out of their hectic schedules to go shopping (Chandra and Sinha, 2013).

**Online shopping behavior** is the process by which customers look for, choose, buy, utilize, and discard goods and services on the Internet. The ease and convenience of discount shopping from the comfort of one's home or place of business is the primary reason why online shopping has become more and more popular over time (Radiant, 2020). The online shopping behavior of the consumer to purchase certain products can be categorized as a component of their cognitive behavior. They also believe that consumers' attitudes toward the use of technology systems and the usefulness of the internet also influence consumer's intentions (Zarrad and Debabi, 2012). The internet was formerly used to share knowledge, but it is now nearly impossible to live without it. The World Wide Web connects everything, whether it's business, social engagement, or shopping.

**Online shoppers** act in unique ways. They differ from one another due to their distinct personalities, traits, values, tastes, and attitudes. Their degree of distinction made it possible for companies to examine how they purchase and use goods and services. The way people shop and make decisions about what to buy has an impact on businesses and how they determine what kinds of things to sell to meet customer requirements and wants and increase profitability. Given the intense rivalry in many industries, having a solid grasp of the purchasing habits of both current and potential customers is considered advantageous when adjusting to the ever-evolving sociodemographic makeup of the market (Quijano and others, 2021). Online shoppers should realize that risk perception directly affects purchase and purchase intent; that is, when consumers perceive high risks, they are less likely to purchase or buy back online.

### **Theoretical/Conceptual Consideration**

This study is anchored on a study of Shahzad (2015) titled "Online Shopping Behavior". The authors presented different risk of online shopping behavior including financial risk, delivery risk, product performance risk, trust and security, and website design.

According to Kornbluth H. (2022), Consumer behaviour theory is the study of how people make decisions when they purchase, helping businesses and marketers capitalize on these behaviours by predicting how and when a consumer will make a purchase. It helps to identify what influences these decisions, as well as highlight strategies to proactively manipulate behaviour. There are shoppers who will only buy online, others who prefer physical stores and yet others who have ongoing subscriptions for regular purchases. Buying habits can also be impacted by where you live, your age, gender, as well as income.

**Financial Risk.** This risk literature has proven how customers' intentions to utilize online purchasing are influenced by financial risk. The uncertainty that clients may experience financial loss as a result of online buying services is captured by this risk. The risk arises from the potential for customers to discover a comparable or identical product for less in another location (Dai et al., 2014), discover that they paid more for the same product and services, or discover that they were overcharged by the online store and required to pay additional handling fees, tax, and delivery costs. In a different recent research, Babar et al. (2014) employed a technology acceptance model to look at the many aspects that affect consumers' intentions to purchase online. The results show that a consumer's attitude toward online buying is negatively impacted by financial risk, with the rationale given as their fear of money loss and security concerns.

**Delivery Risk.** The unpredictability associated with the process of delivering purchased goods is referred to as delivery risk. This kind of risk includes a number of possible problems with how the product is delivered. These problems might include non- receipt of the goods, product damage during delivery, and delivery delays caused by logistics or the warehouse management system (Almaiah et al., 2022; Ariffin et al., 2018; Zheng et al., 2012). The impact of perceived delivery risk on consumers' inclination to utilize online purchasing has been demonstrated by prior studies (Amirtha et al., 2020). As a result, customers seek out reputable online retailers to lower the delivery risk. The customer feels comfortable and secure while making a purchase from a reputable online merchant since there won't be any issues with unwanted goods delivery. According to Adnan (2014), product delivery has a detrimental effect on consumers' purchasing decisions. Adnan (2014) also advocated for online retailers to offer insurance to customers in the event that a product is not delivered on time. Customers worry about not receiving things in time or delivery delays, which increases the risk of a failed delivery (Yeniçeri & Akin 2013).

**Product Performance Risk.** Particularly in this age, internet shoppers prioritize product quality and favorable pricing. Online stores, in particular, provide lower prices, more options for higher-quality items, and the ability to compare them. Applying the expectation disconfirmation theory, will determine the influence of product quality and factors of its quality intentions of buying off the consumers. Yeniçeri & Akin (2013) argued that product risk is related to the poor performance of a product or brand especially when the performance of a product or brand does not meet the desired expectations. It is due to consumers' inefficiency in assessing the good quality of products or brands in online stores. Furthermore, they explained that the consumer's skills to

assess the product or brand are limited in online site due to non-availability of physical inspection of a product including touching, brand colors, inaccurate information of product features which results in an increase of the product performance risk. Masoud (2013) conducted a study on Jordan's online consumers. This study has aimed to examine the perceived risk (financial, product, time, delivery, and information security) of online purchasing behavior in Jordan. The study results showed that four perceived risks (financial, product, delivery, and information) had negatively affected online purchasing behavior. Moreover, the study indicated that there was no significant effect of time or social risk on online purchasing among Jordanian consumers.

**Trust and security**, according to Ariff et al. (2013) are related to the extent of the protection a website provides and keeps customers' personal information safe. Furthermore, Ariff et al. (2013) mentioned that trust and security had an important and positive effect on consumer's attitudes toward online shopping. Yörük et al. (2011) conducted a study of Turkish and Romanian consumers' online shopping behavior and found that in the online shopping environment, trust, and security factors were the major obstacles for consumers not to shop online. They prefer to go around markets to shop for products through physical inspections, especially Turkey's consumers, are more socialized and enjoy going to bazaars and spending hours in shopping malls. Monuwe et al.'s (2004) research claimed that a breach of consumers' trust leads to a negative attitude toward online shopping. On the other hand, keeping consumers' personal information safe and secure leads to a more positive attitude toward online shopping. Thus, trust is an important psychological factor that affects the intentions of consumers to shop online.

Adnan's (2014) **website design** aimed to investigate the influence of different dimensions of perceived risk, perceived advantages, psychological factors, hedonic motivations, and website design on online shopping behavior. The study distributed 100 questionnaires to online buyers in Pakistan. The research found that perceived advantages and psychological factors had a positive influence on consumers' intentions to shop online, while perceived risk hurt consumers' attitudes toward online shopping. Other factors, like website design and hedonic motivations, had no significant impact on consumers' intentions to shop online. Hassan & Abdullah (2010) tried to determine the influence of independent variables (website design, trust, internet knowledge, and online advertising) on consumers' online shopping behavior. He used a questionnaire survey, which was filled out by online customers, to test the hypothesis. The result of the study indicated four independent (website design, trust, internet knowledge, and online advertising) variables where online shopping had a positive correlation. Furthermore, the research claimed that website quality had a significant impact on online shopping. The research suggested that the design of websites should be easy to use, convenient, time-saving, easy to load, and have simple navigation.

## Objectives of the Study

This study aimed to assess the risks of online shopping behavior among online shoppers in the Municipality of Polanco and Dapitan City and to

1. To present the profile of respondents in terms of age, gender, monthly income, educational attainment, products purchased online, frequency of purchase, and online shopping platform.
2. To present the risks of online shopping behavior in terms of financial risk, delivery risk, product performance risk, trust and security, and website design.
3. To present which risks of online shopping behavior is considered the highest.

## Significance of the Study

The result of this study is deemed beneficial to the different sectors to include the following:

**Future Researchers.** The results of this study would be used as a starting point for a similar investigation among further learners to confirm the accuracy of the findings.

**Government.** The results of this study would help the government strengthen its rules and regulations governing the usage of online transactions.

**Online Purchasers.** This study would provide information to other customers on how they can successfully shop online, especially the online shoppers who served as respondents, and the primary goal of this study.

**Online sellers.** The results of this study would help sellers on the internet to improve their products and services to produce transactions that are easy and satisfying. The findings of this research will also be helpful to anybody who wants to start a business and assess the risks and benefits, particularly in online selling.

## LITERATURE REVIEW

**Online shopping** is growing in popularity for a variety of reasons. Many rely on it for hassle-free, easy access to anything. One of the most useful tools that has gained popularity is online shopping, which enables customers to purchase things from a vendor by using the internet. Full service and lower costs have resulted from customers being able to make purchases online without having to leave their homes or exert themselves. Cash on delivery is likewise used (Delelis, 2019).

According to (Quijano et al., 2021) As customers transfer their **online shopping behavior** to online platforms, their purchasing and consumption habits have shifted as well. Their choice of shopping application, for example, was impacted by a variety of criteria, such as the advertising techniques used by online shopping application firms, the quality of products sold, and the sort of service provided by their logistical partners. Consumers' purchasing behavior varies depending on the quantity of things purchased as well as the perceived quality of the products.

**Online shoppers** should realize that risk perception directly affects purchase and purchase intent; that is, when consumers perceive high risks, they are less likely to purchase or buy back online. The risk may be real as long as it is perceived; it will influence the consumer's buying behavior. Thus, the study must constantly check the consumer's perceived risk of online shopping to monitor its degree of impact on consumers' online attitudes and shopping behavior and to avoid disharmony after they execute purchases (Hassan, Kunz, Pearson, & Mohamed, 2006). Therefore, the perceived risk of consumers should be continuously researched so that it can be actively managed and decreased, thus helping to increase online shopping.

According to (Lissitsa & Kol, 2016) **age** is the digital nativity of Millennials has been associated with an elevated comfort level when navigating e-commerce websites and mobile applications, making them more likely to embrace online shopping as a preferred mode of consumption. This generational variance in shopping behavior emphasizes the paramount role that the age factor plays in shaping consumer preferences and decisions.

**Gender** differences in online shopping behavior have been a subject of inquiry in existing literature. Zhang et al. explore the nuanced role of social presence, examining how it influences customer participation and trust-building processes. A noteworthy aspect of their investigation involves an examination of potential gender differences in the impact of social presence on online shopping behaviors, shedding light on how men and women may respond differently to social commerce tools.

**Income** level is a critical factor in determining online shopping behavior. In their seminal study presented at the Australian and New Zealand Marketing Academy Conference in 2016, Huang and Oppewal conducted a comprehensive investigation into consumer preferences for online shopping, providing valuable insights into the nuanced factors that influence the choice between online and conventional retailers (Huang & Oppewal, 2016).

**Educational attainment** has been consistently linked with online consumer behavior in existing literature. The examination of correlations between impulsive buying and educational level indicates that education does not exert a significant impact on impulse buying. This finding aligns with the results obtained by Sharma and Kaur (2015), who conducted a Chi-squared test revealing a lack of a substantial relationship between education and impulsive buying behavior.

According to Delafrooz et al. (2010) **product purchased** online stated that a report presents the outlook of the internet and e-commerce industries in Malaysia, demonstrating the future market development from 2008 to 2012. The study found that just 9.3% of internet users had made product purchases online in the three months prior. This growth in unique internet users in Malaysia will raise awareness of e-commerce and pique people's interest in online shopping. Bucko et al. (2018) found that pricing is one of the most significant considerations for Internet consumers. This may be the reason for the prevalent belief that buying products online is less expensive than doing business in person due to fewer labor and overhead costs.

According to Sakarya et al. (2014) **frequency of purchase** state that demographics affect attitudes toward online purchases, channels, and shopping orientations, which in turn affect buying decisions for online shopping as well as frequency of purchase. Kinley et al. (2010) found that shopping enthusiasts, those who most strongly embraced recreational shopping as a part of their identity, went shopping more frequently than other shoppers. Consumers who see shopping as fun (hedonic) had a higher purchase frequency and were more likely to make unplanned purchases than the utilitarian shopper, who purchases less often and is unlikely to continue shopping once they find what they need.

Huang et al. (2018) found that the increasing number of **online shopping platforms** has provided users with more options for their shopping needs. Users can now browse different platforms to find the products they desire, taking into account various factors such as price, service, and sales. However, previous studies have focused on analyzing user behavior within single e-commerce platforms due to limited data availability. It remains unclear whether users will transition between different shopping platforms and the reasons and methods behind such transitions.

Yang and Wu (2019) delve into the psychological ramifications of economic downturns, specifically examining their impact on consumer **financial risk** aversion. Adopting a comprehensive approach, the research seeks to unravel the intricate dynamics that characterize how economic instability shapes individuals' attitudes toward financial risks within the context of purchasing decisions. Through a nuanced exploration of the psychological underpinnings, the study aims to contribute valuable insights into the multifaceted factors influencing consumer behaviors during periods of economic uncertainty.

**Delivery risk** involves concerns about the timely and safe delivery of products. Wang and Chen (2016) conducted a comprehensive investigation into the nuanced impact of delivery risks on consumer behavior within the realm of e-commerce. The study specifically delved into how heightened perceptions of delivery risks influence consumers' decisions when engaging in online purchases. Research revealed a substantial correlation between elevated perceptions of delivery risks and increased hesitation among consumers in making online purchases. As consumers become more conscious of potential risks associated with the delivery process, such as late deliveries, damaged goods, or other uncertainties, their willingness to proceed with online transactions is notably affected.

Hess, Ganesan, and Klein's (2017) research explores the strategic role of return policies in mitigating concerns related to **product performance risk** within the context of online shopping. Their study sheds light on the significance of these policies as risk-reduction mechanisms for consumers. Return policies, as discussed by the authors, serve as a pivotal component of e-commerce that bolsters consumer confidence by providing a safety net for those apprehensive about product performance. Educated consumers, in particular, are often keenly aware of the potential risks associated with online purchases and are inclined to critically evaluate the presence and terms of return policies when making buying decisions.

**Trust and security** are fundamental concerns in the online shopping context. Park and Choi (2018) emphasize the pivotal importance of robust trust and security features in e-commerce, highlighting their crucial role in instilling confidence and assurance among consumers. The research findings underscore that the implementation of effective security measures goes beyond mere technical functionalities; it actively influences the perceptions and behaviors of online shoppers. By ensuring a secure online environment, e-commerce platforms can shape the way consumers perceive trust and security in the digital realm.

Smith and Rupp (2013) **website design** will offer a comprehensive analysis of the strategic deployment of multimedia elements in the realm of online retail and their far-reaching effects on user engagement and retention. This research delves into the influence of visuals, videos, and interactive content on user behavior, elucidating their contributions to creating a more immersive and interactive shopping environment. By uncovering how multimedia elements impact user engagement, Smith and Rupp furnish e-commerce businesses with invaluable insights to guide the development of compelling and user-centric online retail experiences.

## METHOD USED

The study utilized the quantitative approach of research, where the collection of data is done by means of questionnaires. This study is a descriptive type of research. The questionnaire that is used in this study is a 5-point Likert scale in which every descriptor has 4 questions. Convenience sampling was used in choosing the respondents of the study to assess the risk of online shopping behavior among online shoppers in the Municipality of Polanco and Dapitan City.

## RESULTS AND DISCUSSION

This chapter provides the researcher's analysis and interpretation of the result of the gathered data using a questionnaire from one hundred seventy-six (176) online shoppers in the Municipality of Polanco and Dapitan City. The responses of the above respondents were treated statistically according to their profiles. The data were presented in a clear and concise form, most of which used tables.

### Problem 1

Table 2 Demographic Profile of the Respondents in terms of Age

Age	Frequency (f)	Percent (%)
18 – 20 years old	37	21.0
21 – 25 years old	76	43.2
26 – 30 years old	27	15.3
31 – 40 years old	22	12.5
41 – 50 years old	14	8.0
<b>Total</b>	<b>176</b>	<b>100.0</b>

As presented in the table, a total of 76, or 43.2 percent, of the respondents were in the age bracket of 21 to 25 years old. It can be seen further that 37, or 21.0 percent, of them are within the age range of 18 to 20 years old; 27, or 15.3 percent, of them are within the age range of 26 to 30 years old; 22, or 12.5 percent, of them are within the age ranges of 31 to 40 years old; and 14, or 8.0 percent, of them are within the age ranges of 41 to 50 years old.

This implies that most of the respondents are within the age range of 21 to 25 years old. They are also called young adults who love to shop online. In online shopping, the majority offers affordable prices with promotions, discounts, cash backs, and free delivery, which are suitable for young shoppers. It is also convenient, easy to use, and saves effort and money.

According to Pasquale E. Rummo et al. (2022), in online shopping, there is a greater likelihood of engagement between younger adults (21 – 25 years) and their older counterparts, with the former exhibiting a higher likelihood of engagement driven by factors such as convenience, digital interfaces, and sensitivity to lower prices.

Table 3 Demographic Profile of the Respondents in terms of Gender

Gender	Frequency (f)	Percent (%)
Male	52	29.5
Female	108	61.4
Lesbian	3	1.7
Gay	6	3.4
Bisexual	7	4.0
<b>Total</b>	<b>176</b>	<b>100.0</b>

In terms of gender, a total of 108, or 61.4 percent, of the respondents were female. It can be deduced that 52 or 29.5 percent of them are male; 7 or 4.0 percent of them are lesbian; and 6 or 3.4 percent of them are gay.

This implies that the majority of the respondents belong to the female category, while some of them belong to the male, lesbian, gay, and bisexual categories. This is because women love to purchase clothing, shoes, bags, and fashion accessories to make them more presentable. It also makes them fulfilled, boosts confidence, or is imperative for self-esteem; they also enjoy the convenience of browsing and buying from home, especially for fashion and beauty products.

Meyers-Levy and Loken's (2015) exploration of **gender** differences in decision-making styles within the context of online shopping reveals a fascinating aspect of consumer behavior. Their findings emphasize that women tend to approach online purchasing with a penchant for thorough information processing. They carefully weigh a multitude of product attributes and alternatives, meticulously considering various factors in their decision-making process.

Table 4 Demographic Profile of the Respondents in terms of Monthly Income

Monthly Income	Frequency (f)	Percent (%)
P3,500 - P5, 000	87	49.4
P6, 000 - P10,000	40	22.7
P11,000 - P15,000	9	5.1
P16,000 - P25,000	14	8.0
P26,000 - P35,000	18	10.2
P36,000 - P45,000	8	4.5
<b>Total</b>	<b>176</b>	<b>100.0</b>

In terms of monthly income, a total of 87, or 49.4 percent, of the respondents belonged to P3, 500 to P5, 000; 40, or 22.7 percent, belonged to P6, 000 to P10, 000; 18 or 10.2 percent belonged to P26,000 to P35, 000; 14 or 8.0 percent belonged to P16, 000 to P25, 000; 9 or 5.1 percent belonged to P11, 000 to P15,000; and 8 or 4.5 percent belonged to P36,000 to P45,000.

It can be implied that P3,500 to P5,000 monthly income is the majority of the respondents since some of them are employees, and they are the highest purchasers due to having enough income, which suggests that gainful employment positively correlates with purchasing power. It implies that when people have steady income from employment, they are more likely to spend on goods and services, contributing to economic growth and stability.

An in-depth investigation into the online grocery shopping behaviors and attitudes of low-income adults was conducted. The study revealed that slightly over half of participants with lower incomes engaged in online grocery shopping within the past 12 months, indicating a significant increase compared to pre-pandemic

estimates. Higher income causes internet users to perceive lower implicit risks in undertaking online purchases, which thereby affects their demand for internet products and services. (Hernandez et al., 2018)

Table 5 Demographic Profile of the Respondents in terms of Educational Attainment

<b>Educational Attainment</b>	<b>Frequency (f)</b>	<b>Percent (%)</b>
Elementary Level	1	0.6
Elementary Graduate	1	0.6
High School Level	11	6.3
High School Graduate	18	10.2
College Level	87	49.4
College Graduate	43	24.4
Master's Degree Holder	14	8.0
Doctorate	1	0.6
<b>Total</b>	<b>176</b>	<b>100.0</b>

In terms of educational attainment, a total of 87, or 49.4 percent, of the respondents belonged to the college level; 43, or 24.4 percent, belonged to the college graduate; 18 or 10.2 percent of the respondents belonged to the high school graduate; 14 or 8.0 percent of the respondents belonged to the master's degree holder; 11 or 6.3 percent of the respondents belonged to the high school level; and 1 or 0.6 of the respondents belonged to the elementary level, elementary graduate, and doctorate.

It can imply that most online shoppers are college-level since the majority of the respondents are employees. This is because they are comfortable with technology, have more money, and are good at finding what they want. Also, they're busy, so shopping online is convenient for them. Their education, skills, and lifestyle make them the biggest online shoppers.

The study by Smith and Johnson states that education plays a role in shaping various aspects of consumer decision-making within the marketplace, encompassing preferences, cognitive processes, and product choices. Through rigorous analysis, the findings of the study unveiled a substantial correlation between higher levels of education and the propensity for more informed, deliberate purchasing decisions.

Table 6 Demographic Profile of the Respondents in terms of Product Purchased Online

<b>Product Purchase Online</b>	<b>Frequency (f)</b>	<b>Percent (%)</b>
Clothing and Fashion Accessories	115	65.3
Beauty and Personal Care Products	27	15.3
Electronic and Gadgets	9	5.1
Home Appliances and Furniture	10	5.7
Grocery and Food Items	6	3.4
Fitness Equipment and Sporting Goods	6	3.4
Toys and Games	3	1.7
<b>Total</b>	<b>176</b>	<b>100.0</b>

In terms of product purchase online, 115 or 65.3 percent of the respondents belonged to clothing and fashion; 27 or 15.3 percent of the respondents belonged to accessories, beauty, and personal care products; 10 or 5.7 percent of the respondents belonged to home appliances and furniture; 9 or 5.1 percent of the respondents belonged to electronics and gadgets; 6 or 3.4 percent of the respondents belonged to grocery and food items and fitness equipment and sporting goods; and 3 or 1.7 percent of the respondents belonged to toys and games.

It can be implied that clothing and fashion are popular in online shopping because the majority of the respondents are female, female customers are the big market, and there is a high fashion trend. The female



clothing market has a higher growth rate than the male clothing market because most women are fascinated by costumes and emotional outfits.

The study by Rittiboonchai et al. (2018) stated that clothing and apparel are two of the four factors that humans use in everyday life. It is helpful in preventing cold and heat and protecting against external dangers. Clothing and apparel also enhance the personality, indicating the user's taste, image, and social status. Nowadays, the clothes have been developed in both quality and style and are available according to the needs of the users.

Table 7 Demographic Profile of the Respondents in terms of Frequency of Purchase

Frequency of Purchase	Frequency (f)	Percent (%)
Weekly	24	13.6
Twice a week	16	9.1
Monthly	76	43.2
Twice a month	45	25.6
Annually	6	3.4
Twice a year	9	5.1
<b>Total</b>	<b>176</b>	<b>100.0</b>

In terms of frequency in purchasing online, it can be gleaned that a total of 76, or 43.2 percent, of the respondents who purchase their needs online do so monthly. Further, 45 or 25.6 percent of them purchase online twice a month; 24 or 13.6 percent of them purchase online weekly; 16 or 9.1 percent have a frequency of purchasing online twice a week; and 9 or 5.1 percent purchase online twice a year. It can be seen that six, or 3.4 percent, of them purchase online annually.

This implies that the majority of respondents will make monthly purchases through online shopping. Considering that the majority of the buyers are employees who can easily afford their needs and wants since they have an income monthly, the volume of their purchases depends on their income.

The study by Riguerra and Noroña (2021) stated that Filipinos are among the world's most avid internet users, logging on for an average of ten hours daily. This is one of the reasons why the Philippines saw the biggest growth in shopping applications in Southeast Asia, with a 53 percent increase during the epidemic.

Table 8 Demographic Profile of the Respondents in terms of Online Shopping Platform

Platform	Frequency (f)	Percent (%)
Shopee	84	47.7
Shein	9	5.1
Facebook Marketplace	4	2.3
Lazada	9	5.1
Tiktok Shop	70	39.8
<b>Total</b>	<b>176</b>	<b>100.0</b>

In terms of online shopping platforms, 84 or 47.7 percent of respondents bought from Shopee, 70 or 39.8 percent fromTiktok, 9 or 5.1 percent from Shein and Lazada, and 4 or 2.3 percent from Facebook Marketplace.

This implies that Shopee is the majority platform among them since this platform is commonly used among online shoppers. Shopee is commonly used by online shoppers because it offers a wide range of products, competitive pricing, a user-friendly interface, secure payment options, customer and seller reviews, fast delivery, and a guarantee for certain purchases. Shopee is a trusted and convenient platform for online shopping.

According to research conducted by Wong et al. (2024), Shopee, a well-known e-commerce site owned by the Sea Group, claims to have its headquarters in Singapore. In 2015, it started as a startup and made its debut in Singapore. This steady expansion demonstrates Shopee's capacity to seize and hold a sizeable market share in the face of escalating competition in the e-commerce industry.

**Problem 2**

Table 9 Respondents rating the risk of online shopping behavior in terms of financial risks

Financial Risk	Mean	Description
1. Prioritize security measures to protect finances while shopping online.	4.68	Strongly Agree
2. Consider product reviews and seller reputations can reduce the risk of financial loss when shopping online.	4.65	Strongly Agree
3. Consider the budget for extra expenses in online purchases.	4.52	Strongly Agree
4. Might purchase the same merchandise product at a lower price from somewhere else (e.g., store)	4.39	Strongly Agree
<b>Average Weighted Mean</b>	<b>4.56</b>	<b>Strongly Agree</b>

Note: 1.00 – 1.80 – Strongly Disagree: 1.81 – 2.60 – Disagree: 2.61 – 3.40 – Neutral: 3.41 – 4.20 – Agree: 4.21 – 5.00 – Strongly Agree

Table 9 reveals the risk of online shopping behavior in terms of financial risks. The respondents strongly agreed with all statements on the risk of online shopping behavior in terms of financial risks, with an overall mean value of 4.56. With the highest mean of 4.68 from prioritizing security measures to protect finances while shopping online, this emphasizes security measures as crucial for safeguarding financial transactions during online shopping. By considering product reviews and seller reputations, shoppers can make more informed decisions and avoid purchasing low-quality or fraudulent products online. Respondents consistently expressed strong agreement across all statements, indicating a shared recognition of the importance of prioritizing security measures during online transactions. Moreover, the emphasis on considering product reviews and seller reputations highlights the significance of trust and reliability in mitigating the risk of financial loss and ensuring a positive shopping experience in the digital marketplace.

Lian and Yen (2014) introduce financial risk as a valuable insight into consumer behavior in the e-commerce domain. Their research focused on the significant role of financial risk perception in shaping the frequency of online shopping activities. They found that consumers who engage in frequent online shopping tend to perceive lower financial risks in comparison to infrequent online shoppers. The study reveals that financial risk perception significantly influences consumer participation in online shopping, revealing the motivations and behaviors of various online shoppers.

Table 10 Respondents rating the risk of online shopping behavior in terms of delivery risks

Delivery Risk	Mean	Description
1. Find online shopping experiences enjoyable despite potential delivery risks.	4.03	Agree
2. Might receive damaged products ordered online during delivery.	3.92	Agree
3. The delivery date may not be followed due to logistics or warehouse management systems.	4.17	Agree
4. Lowering the possibility of non-receipt when ordering online by selecting trackable delivery and learning about seller conditions.	3.89	Agree
<b>Average Weighted Mean</b>	<b>4.00</b>	<b>Agree</b>

Note: 1.00 – 1.80 – Strongly Disagree: 1.81 – 2.60 – Disagree: 2.61 – 3.40 – Neutral: 3.41 – 4.20 – Agree: 4.21 – 5.00 – Strongly Agree

Table 10 presents the risk of online shopping behavior in terms of delivery risks. As shown in the table, the respondents agreed with all statements under the risk of online shopping behaviors in terms of delivery risks, with a total mean value of 4.00. Gaining the highest weighted mean of 4.17, respondents highly consider delivery dates not being followed due to the logistics of warehouse management systems as the main issue under delivery risks. On the other hand, despite the potential delivery risks, respondents rated their online shopping experiences as enjoyable, with a mean score of 4.03.

Despite the presence of delivery concerns, such as potential delays or logistical issues, the overall satisfaction derived from online shopping experiences remains largely unaffected. This indicates that while delivery issues may pose challenges, they do not substantially diminish the overall enjoyment and fulfillment associated with the online shopping process. Thus, consumers continue to find value and satisfaction in the convenience, variety, and accessibility offered by online shopping platforms, despite occasional delivery-related concerns.

In spite of the potential delivery risks, such as delays or logistical challenges, the convenience and enjoyment of shopping online from home remain largely unaffected. Shahzad (2015) highlights the continued growth and popularity of the online shopping business, driven by factors such as convenience, ease of use, cost-effectiveness, time savings, and the availability of a wide range of products and brands with fast delivery.

Table 11 Respondents rating the risk of online shopping behavior in terms of product performance risks

<b>Product Performance Risk</b>	<b>Mean</b>	<b>Description</b>
1. The quality of products purchased online consistently meets expectations.	3.89	Agree
2. Experiences with online shopping give excellent value in terms of the product's quality and price.	4.02	Agree
3. It's simple to locate reliable product information online and use it to guide the items purchased in online shops.	4.07	Agree
4. The reliability of online platforms to provide accurate product information makes the shopping experience efficient and reliable.	4.16	Agree
<b>Average Weighted Mean</b>	<b>4.04</b>	<b>Agree</b>

Note: 1.00 – 1.80 – Strongly Disagree: 1.81 – 2.60 – Disagree: 2.61 – 3.40 – Neutral: 3.41 – 4.20 – Agree: 4.21 – 5.00 – Strongly Agree

Table 11 provides the risk of online shopping behavior in terms of product performance risks. The respondents agreed with statements, reaching an overall mean value of 4.04 for the risk of online shopping behavior in terms of product performance risks. With the highest mean of 4.16, the respondents all agreed that the reliability of online platforms, which provide accurate product information, makes the shopping experience efficient and reliable. Following this, it is revealed that it's simple to locate reliable product information online and use it to guide the items purchased in online shops, reaching a 4.07 weighted mean.

The reliability of online platforms in providing accurate product information enhances the efficiency and reliability of the shopping experience. With the abundance of reliable product information available online, shoppers can easily locate and utilize it to guide their purchasing decisions in online shops. This accessibility to trustworthy product details contributes to a streamlined and informed shopping process, empowering consumers to make confident choices while going through the digital marketplace.

The ease of finding product information online, as highlighted by Moshref et al. (2012), facilitates round-the-clock access to diverse products and information. This accessibility empowers consumers to conduct thorough research and make informed purchasing decisions at any time, contributing to a seamless and efficient online shopping experience. The availability of comprehensive product details online enhances the reliability and convenience of digital platforms, enabling shoppers to confidently navigate and select items that best meet their needs and preferences.

Table 12 Respondents rating the risk of online shopping behavior in terms of trust and security

Trust and Security	Mean	Description
1. Feels that credit card details may be compromised and misused while shopping online.	3.26	Neutral
2. Might get overcharged when shopping online, as the retailer has the credit card information.	3.14	Neutral
3. Feels that personal information given to the retailer when shopping online may be compromised by a third party.	3.24	Neutral
4. Shopping online is risky because of the lack of strict cyber laws in place to punish fraudsters and hackers.	3.72	Agree
<b>Average Weighted Mean</b>	<b>3.34</b>	<b>Neutral</b>

Note: 1.00 – 1.80 – Strongly Disagree: 1.81 – 2.60 – Disagree: 2.61 – 3.40 – Neutral: 3.41 – 4.20 – Agree: 4.21 – 5.00 – Strongly Agree

Table 12 gives the risk of online shopping behavior in terms of trust and security. Most of the respondents rated neutral on the statements for the risk of online shopping behavior in terms of trust and security, gaining 3.34 as the average mean value. Shopping online is risky because of the lack of strict cyberlaws in place to punish fraudsters, and hackers gained the highest weighted mean of 3.72, being the only statement rated as agreeable.

Most respondents rated neutral on trust and security, indicating uncertainty or a lack of strong opinions on the topic. However, the high average mean value suggests that these factors are perceived as moderately important in influencing online shopping behavior. The statement about the lack of strict cyberlaws receiving the highest weighted mean indicates a prevalent concern about the risks associated with online shopping, particularly regarding fraud and hacking.

Bashier et al. (2015) highlight the prevalence of scams targeting individuals both online and through mobile applications, contributing to heightened suspicion surrounding these platforms. The victims of scams both online and on mobile applications, so it's understandable why they look suspiciously at such an activity. This shows the importance of addressing trust and security concerns to mitigate the risks associated with digital commerce.

Table 13 Respondents rating the risk of online shopping behavior in terms of website design

Website Design	Mean	Description
1. Buy from online stores if the navigation flow is user-friendly.	4.20	Agree
2. Buy from online stores only if they are visually appealing and have a well-organized appearance.	4.23	Strongly Agree
3. Buy from online stores only if the site content is easy to understand and the information provided is relevant.	4.34	Strongly Agree
4. Buy from online stores only if they have an easy and error-free ordering and transaction procedure.	4.20	Agree
<b>Average Weighted Mean</b>	<b>4.24</b>	<b>Strongly Agree</b>

Note: 1.00 – 1.80 – Strongly Disagree: 1.81 – 2.60 – Disagree: 2.61 – 3.40 – Neutral: 3.41 – 4.20 – Agree: 4.21 – 5.00 – Strongly Agree

Table 13 represents the risk of online shopping behavior in terms of website design. As shown in the table, the respondents agreed with all of the statements on the risk of online shopping behavior in terms of website

design, with an overall mean value of 4.24. The highest mean is 4.34, in which they buy from online stores only if the site content is easy for them to understand and the information provided is relevant. Followed by the respondents who buy from online stores only if they are visually appealing and have a well-organized appearance with a mean of 4.23, and they buy from online stores only if they have an easy and error-free ordering and transaction procedure, and they buy from online stores only if the navigation flow is user-friendly with both having a mean of 4.20.

It can be inferred that the respondents agreed that they would purchase a product online if the site's content was simple to comprehend and the information was pertinent. In addition, respondents concurred that online retailers should have a simple and error-free ordering process. Additionally, online shoppers benefit from online stores that are aesthetically pleasing, well-stocked, and organized.

The study by Iqbal et al. (2012) stresses that computer features must also be focused on while designing websites so it's easier for consumers to understand the layout, to navigate, to search for information online, and to reduce the irritation that consumers face while browsing online. The respondents also preferred a user-friendly web interface while shopping online. Moreover, the internet designers should focus on adding human features like appealing visuals and graphics, 3d virtual models to attract consumers to their website and to encourage them to make an online purchase.

### Problem 3

Table 14 Ranking of Risk in Online Shopping Behavior

Risks	Overall Mean	Description	Rank
Financial Risk	4.56	Strongly Agree	1st
Delivery Risk	4.00	Agree	4th
Product Performance Risk	4.04	Agree	3rd
Trust and Security	3.34	Neutral	5th
Website Design	4.24	Strongly Agree	2nd

Table 14 represents the highest risk of online shopping behavior. The risk are rated using the Likert-Scale and ranking category. It can be seen that among the risk, financial risk ranks first with an average weighted mean value of 4.56; website design ranks second with an average weighted mean value of 4.24; the rank third is the product performance risks with an average weighted mean value of 4.04; the rank fourth is the delivery risk with an average weighted mean of 4.00 and trust and security with an average weighted mean value of 3.34 ranks fifth.

It can be implied that financial risk is the highest risk of online shopping behavior of the respondents. Considering that buyers prioritize their security measures to protect their financial transactions when shopping online. Moreover, product reviews and seller reputations can lower the risk of financial losses. Therefore, mitigating financial risks is crucial to fostering trust and encouraging online shopping. By mitigating financial risks and enhancing the overall safety and reliability of online transactions, e-commerce businesses can cultivate a conducive environment for sustainable growth and long-term success in the digital marketplace.

Babar et al. (2014) employed a technology acceptance model to look at the many aspects that affect consumers' intentions to purchase online. The usefulness, usability, financial risk, and attitude toward internet purchasing have all been examined in this study. The results show that a consumer's attitude toward online buying is negatively impacted by financial risk, with the rationale given as their fear of money loss and security concerns.

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