A Case Study of Factors Influenced Customers Online Shopping in Melaka, Malaysia

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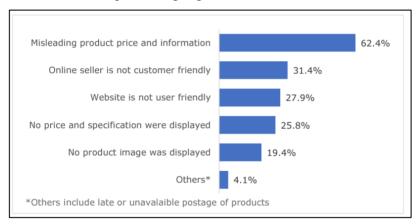
The e-commerce industry in Malaysia has been growing rapidly, leading to a significant increase in online purchasing options available on popular social media platforms like Instagram, Facebook, Tik Tok and Twitter. However, there is a lack of a comprehensive understanding of the psychological factors that influence consumers' online shopping behaviours. Therefore, the main objective of this study is to identify and analyse the factors that impact customers' intention to make online purchases. This study used a convenience sampling method of surveys via online platform to choose a sample of 100 online shoppers based in Melaka. Moreover, this study analyses three specific factors that impact customers' online shopping behaviours, which are perceived benefits, perceived risks and psychological factors. The findings revealed that online shopping by millennials and Gen Zs yielded great product variety satisfaction. The perceived benefits of online shopping provide significant motivations for customers and contribute to fostering a favourable disposition towards online shopping. The psychological factors, which include attitudes, motives, perceptions, emotions, and previous experiences, have a significantly role in determining the behaviour of customers who purchase online. The research will provide recommendations for businesses and policymakers to enhance consumers' online purchasing experiences in Melaka.

Keywords: Online shopping behaviour, perceived benefit, perceived risks, psychological factor.

1. Introduction

Technology development has significantly impacted our lifestyles and everyday existence, with the internet playing a crucial role in modern technology ((De Mooij, 2019; Manzoor et al., 2020). Malaysia has a high internet penetration rate of 96.8%, with 33.03 million internet users as of 2023 (Kemp, 2023). As the percentage of Malaysians with internet access continues to rise, online shopping has become more popular. E-commerce, or electronic commerce, allows businesses to offer products or services without establishing physical retail locations (Turban et al., 2015; Bucko et al., 2018). The internet facilitates reciprocal contact and

immediate engagement between businesses and customers, allowing them to establish relationships and make purchases from the comfort of their homes (Irfan et al., 2019). Online shopping has expanded significantly in recent years, becoming a key aspect of modern consumer behavior. Factors influencing customers' purchasing intention include perceived usefulness, payment options, personal privacy, security, price, quality, access speed, perceived usability, convenience, time, trust, and cost. Understanding these factors is essential for businesses to thrive in e-commerce. This study aims to identify and explore the elements that impact customers' tendency to shop online. The internet has experienced a significant surge in the last decade, leading to a significant expansion of the online realm in Malaysia. From 2022 to 2023, 362,000 individuals engaged in digital consumption, with 90% being digital customers. By 2025, the Malaysian e-commerce sector is predicted to reach 16 billion US dollars. Small and medium-sized enterprises (SMEs) have also established online presences to expand their reach and access a wider market (Hasan et al., 2022). However, the rapid expansion of e-commerce has led to a rising prevalence of customer dissatisfaction, with issues with website usability, inefficient online sellers, and misleading product pricing and information being the main reasons. Online shoppers in Malaysia face increased risks of scams and online payment fraud, with a 63% surge in online fraud cases in 2021 compared to 5.85 thousand in 2020 (Statista, 2022). This financial risk affects customers' online purchase intentions and trust. The Malaysia Domestic Trade and Consumer Affairs Ministry reported a 112.5% increase in complaints in 2020, posing a risk to the digital economy (Nathan, 2021). Online sellers must secure a consumer base to generate revenues and understand customer attitudes towards online purchasing. However, there is a lack of comprehensive knowledge about consumer behavior in the online buying environment. Figure 1 shown reasons for dissatisfaction with the online purchasing experience.



Reasons for dissatisfaction with the online purchasing experience (Source: E-commerce Consumers Survey of MCMC, 2022)

2. Literature Review

This study explores the evolving nature of online shopping behavior, focusing on theoretical frameworks, empirical investigations, and trends, highlighting the importance for businesses

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to understand and adapt to this evolving landscape. The current study will use the Theory of Planned Behaviour (TPB). Conner (2020) states that researchers widely use the Theory of Planned Behaviour (TPB) to comprehensively comprehend, elucidate, and forecast behaviours in many behavioural realms. This theory posits that the primary factor influencing behaviour is the desire to engage in a certain activity (Steinmetz et al., 2016).

2.1 Customers' Online Shopping Behaviours

Online shopping is a digital commerce where users use a web browser to quickly buy products or services from sellers on the internet (Mokhtar et al. 2020). Consumer behavior refers to the cognitive, affective, and behavioral processes individuals go through when choosing, buying, using, and disposing of items and services (Priest et al., 2013; Durmaz, 2014). The rise in internet accessibility has led to a new consumer behavior trend, with buyers increasingly prioritizing online purchases. Factors impacting online shopping behaviors include convenience, price, and consumer feedback. Online retailers are available 24/7, and customers have internet access at their workplace and residence. Price is a significant factor in online buying, as customers expect competitive pricing and easy price comparisons. Additionally, online product reviews enhance the accuracy of purchasing decisions and mitigate the risk of making a bad purchase.

However, Malaysian consumers are reluctant to engage in online shopping due to concerns about potential information breaches (Lorano, et al.,2023). Perceived value, confidence in the online store, and risk are also influencing online buying behaviors. Positive reputations of online merchants can reduce customer risk and promote online purchases.

In conclusion, online shopping behavior is influenced by perceived benefits, perceived risks, and psychological factors.

2.2 Perceived Benefits

Pekerti and Briliana (2016) assert that perceived benefits refer to the extent to which e-commerce technology may assist customers throughout the purchasing process, such as facilitating convenient transactions, saving time, and enhancing efficiency, therefore enabling consumers to feel these advantages directly. Arora and Aggarwal (2017) assert that perceived benefit refers to a consumer's view about the degree to which they would experience improvement from engaging in an online transaction with a certain website. Besides, the perceived benefits refer to the subjective value that customers assign to a product or service based on their evaluation of its qualities and its capacity to fulfill their needs and expectations, particularly when compared to similar offerings (Singh & Bhatia, 2020)

2.3 Perceived Risks

Perceived risks refer to the unfavorable consequences experienced by individuals who deviate from their original expectations (Wu et al., 2020). Bhatti and Rehman (2019, cited in Cheng et al., 2022) put out a similar argument suggesting that risk is a subjective assessment or conviction of the potential loss in the pursuit of a desired goal. Perceived risk refers to the extent to which customers demonstrate uncertainty or conflicting feelings about the Products or services within the context of internet buying (Bhatti et al., 2020). According to Tham et al. (2019), the perception of risk impacts the intention to engage in online activities. The perceived risks associated with online purchasing and transactions are considerably greater *Nanotechnology Perceptions* Vol. 20 No. S9 (2024)

than traditional transaction channels. This is primarily due to the absence of face-to-face communication between sellers and customers. Customers are uncertain about whether they will receive the exact product they saw online (Wu et al., 2020). Martin et al. (2015) identified many perceived risks among customers, such as credit card theft, privacy breaches, and concerns about the online purchasing environment. Various forms of perceived hazards might arise for customers while making online transactions (Han & Kim, 2017).

2.4 Psychological Factor

Psychological factors work as driving forces for an individual. The psychological factor consists of four key elements: motivation, perception, learning, and beliefs. (Rani, 2014; Neger & Uddin, 2020, Sharma, 2021). Motivation is an activated internal need state leading to goaldirected behavior to satisfy that need. Accordingly, motives are relatively enduring, strong, and persistent internal stimuli that arouse and direct behavior toward certain goals (Neger & Uddin, 2020, Sharma, 2021). Marketers should determine the underlying purpose that drives customer behaviour. Besides, Perception is the cognitive process by which people consciously choose, arrange, and interpret sensory information in order to construct a meaningful and logically consistent understanding of the world (Sharma, 2021). Learning describes changes in an individual's behavior arising from experience. In every circumstance, customers' perception is conditioned by our prior experience, for it is this which constitutes our preparatory set of expectations and the framework into which we seek to place and organize new stimuli (Neger & Uddin, 2020). Belief is defined as descriptive thought that a person holds about something (Kotler, 2003 cited in Sharma, 2021). From the online business' viewpoint, the belief that a consumer has about a brand is important because it determines his approach towards buying and using it.

2.5 Perceived Benefit and Customer's Online Shopping Behaviours

The perception of advantages in online purchasing is crucial for understanding consumer decision-making. Efficiency and convenience are key factors influencing customers' perceptions of online buying (Suhardi and Taufik, 2018). The full-service competency of online shops increases perceived value, making customers feel like beneficiaries (Wen et al., 2020). However, if certain technologies are difficult to use, customers may perceive them as ineffective, impacting their trust and intentions. Convenience significantly influences purchase choices (Dos-Santos et al., 2021). Timesaving is a significant benefit of online shopping, as it reduces the time required for purchases and eliminates long queues at payment counters (Jati, et al., 2020). Consumers also benefit from a user-friendly experience with simple electronic payment methods, robust online security measures, privacy assurances, and a wide range of payment and delivery options. Online consumers consider online purchasing user-friendly if it provides sufficient product information, facilitates product comparison, and offers a diverse communication platform (Appiah-Nimo et al., 2019). Lim et al. (2016) found that perceived usefulness positively influences online buying behavior among university students aged 18 to 34. Triandewo and Sagy (2021) found that web quality directly influences perceived benefits, affecting attitudes towards online purchasing. Larano et al. (2023) found that millennial and Gen Z customers prefer online shopping for cost, convenience, and product selection. Pal and Kumari (2023) found that respondents predominantly engage in online shopping for convenience, security, and lower prices compared to physical shopping. These perceived benefits drive customers to make purchases online, fostering a favorable disposition towards online shopping. The advantages of online shopping, such as the ability to purchase items and services at any time and location, contribute to a positive perception of a platform.

H1: There is a significant positive relationship between perceived benefits and customers' online shopping behaviors.

2.6 Perceived Risks and Customer's Online Shopping Behaviors

Perceived risks significantly influence consumers' online buying behaviors, as they involve uncertainties and worries associated with online shopping. Research shows an inverse relationship between perceived risk and transaction likelihood, and a strong connection between perceived risk and trust (Wu, et al., 2020). High confidence and low risk in online shopping platforms increase purchase choices. However, perceived risk may increase due to lack of evaluation, such as touch, sight, and physical sensation (Park et al., 2018). Positive behaviors from e-retailers, such as relevant information and well-crafted websites, reduce perceived danger (Ventre & Kolbe, 2020). Online purchasing is primarily influenced by financial risk, as consumers fear potential financial losses if items don't meet expectations or function as advertised (Aboobucker 2019; Folarin & Ogundare, 2016). They are more likely to purchase from familiar companies to prevent financial loss (Hong et al., 2019). Consumers also have concerns about internet safety and security, particularly when using credit cards and sharing personal information (Tham et al., 2019). Financial risks can lead to unwanted perceptions and altered customer behavior. Internet businesses often have less rigorous verification processes and unclear policies, and consumers rely on trustworthy sources to assess perceived risk (Haider & Nasir, 2016). However, the lack of a practical strategy to address risk concerns may hinder consumers' intent to purchase online (Tandon et al., 2018; Aboobucker, 2019).

H2: There is a significant negative relationship between perceived risks and customers' online shopping behaviors.

2.7 Psychological Factors and Customer's Online Shopping Behaviour

Gita et al. (2020) emphasized that psychological variables significantly impact customer purchasing decisions, either positively or negatively. Psychological variables like attitude, motivation, perception, personality, and perceived value significantly influence customer purchasing decisions, especially in online purchasing (Singh et al., 2019). Research shows a correlation between these factors and internet buying behavior, potentially leading to self-esteem loss. Martínez-López et al. (2015) found that psychological variables directly impact internet purchasing behavior. Azam (2015) identified perception-based and experience-based factors as primary criteria for e-trust and online buying. Perception, along with goals, motivation, learning, personality characteristics, memory, and knowledge, is crucial for consumer response to marketing adversity. Nawi et al. (2022) found that respondents are more likely to make an online purchase when they perceive a product as useful and when their previous buying habits strongly influence their intention.

H3: There is a significant positive relationship between psychological factors and customers' online shopping behaviors.

2.8 Research Framework

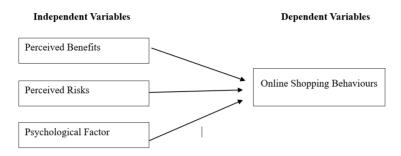


Figure 2: Research Framework

The relationship between independent variables and dependent variable are shown Figure 2. The independent variables are perceived benefit, perceived risks, and psychological factor. Moreover, the dependent variable is online shopping behaviour in Malaysia. The section is a review of relevant literature, discussing previous studies on similar topics, underpinning theories and construction of conceptual frameworks.

3. Methodology

This study employed quantitative research approach where a total of 100respondents were collected using questionnaire from online shoppers in Melaka using simple random sampling technique. The collected data were analysed using SPSS (Version 27) statistical software for relevant tests. The purpose of this study is to analyse and measure the main results after interpretation, such as descriptive analysis, correlation analysis, regression analysis, etc., to determine the relationship between dependent variables and independent variables.

4. Findings and Discussion

4.1 Reliability Test

Table 1 Reliability Test for Each Variable

Variables	N	Item	Cronbach Alpha
Online shopping behavior	100	4	0.986
Perceived benefits	100	8	0.942
Perceived risks	100	5	0.965
Psychological factors	100	9	0.931

As shown in Table 1, reliability tests were carried out for each variable. The results showed that the Cronbach's Alpha value of all variable where online shopping behaviour is 0.986, perceived benefits is 0.942, perceived risks is 0.965, psychological factors is 0.931. Hair et al. (2010) points out that while a value of 0.70 is generally considered an acceptable value, a value greater than 0.70 is considered reliable. Table 2 reveals that Cronbach's Alpha value of all the variable is 0.804, which proves that these variables have good internal consistency, because when Cronbach's Alpha is greater than 0.70, it is considered reliable (Tavakol & Dennick.

2011).

4.2 Normality Test

The normality test command performs a hypothesis test to check if the observations follow a normal distribution (Laerd Statistics, n.d.). From the normality tests conducted, there are no missing responses, and out of the 100 responses, all the responses are valid results.

Table	2	Norma	litx,	Test
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Variables	N	Skewness	Kurtosis	Distribution
Online Shopping Behaviours	100	-0.739	-0.858	Normal
Perceived Benefits	100	-1.135	-0.129	Normal
Perceived Risks	100	0.319	-1.515	Normal
Psychological Factors	100	-0.642	-1.096	Normal

Based on the data in Table 2, the skewness and kurtosis for variables of online shopping behaviours, perceived benefits and psychological factors are negative. This indicates a left-skewed and normal distribution. Meanwhile, the skewness value for perceived risks is positive, suggesting that the distribution is slightly skewed to the right. A negative kurtosis value indicates that the distribution has thinner tails than a normal distribution. Notwithstanding these deviations, the absolute skewness and kurtosis values are negligible, which suggests that the distribution of perceived risks approaches a normal distribution. In overall, the data were distributed generally for all variables.

4.3 Descriptive Analysis

Descriptive analysis, also known as descriptive statistics. It is the process of using statistical techniques to describe or summarize a set of data (Bush, 2020). Descriptive analysis requires the demographic information of the respondents. These are discussed further in this section. In addition, therefore, there are 100 respondents who are analysed and assigned who are living and working within the Melaka. Based on the descriptive statistics, the results showed that all respondents were considered valid in terms of demographics.

Table 3 Demographics Analysis

Dimension		Frequency	Percentage (%)
Gender	Male	57	57
Gender	Female	43	43
	15-20 Years Old	1	1
Age	20-25 Years Old	71	71
	25-30 Years Old	28	28
	Single	93	93
Marital Status	Married	6	6
	Others	1	1
	SPM	5	5
Education Level	STPM/Diploma	5	5
	Degree and above	90	90

The data is subjected to gender-based analysis. Male respondents recorded the majority of participation in this study, 57 (57%), whereas female respondents were 43 (43%). In terms of age distribution, it is notable that around 71 respondents, accounting for 71% of the total sample, are within the age range of 20 to 25 years old. This particular age group is the largest segment of respondents in the study. The group of respondents aged 25 to 30, constituting 28%

of the total respondents, ranked second highest. In this research, it was observed that 1 individual, fell into the age group of 15 to 20 years old. Regarding marital status, 93 out of 100 were singles, while 6 respondents identified as married. The rest of the 1% of members chose the "other" option because their statuses may include divorced, separated, widowed, or widowed. Furthermore, among the 100 participants, 90 (90%) possess a degree and above as their highest level of education. Besides, 5 (5%) respondents hold SPM and STPM/Diploma as their education level respectively. This breakdown highlights the varied educational backgrounds of the people surveyed, with many having bachelor's degrees. The comprehensive demographic information obtained via the questionnaire is presented in Table 3.

Table 4 Respondent's Online Shopping Experiences

Dimension		Frequency	Percentage (%)
Have you made an online	Yes	100	100
purchase before?	No	0	0
	Lazada	5	5
	TikTok Shop	28	28
	Shopee	42	42
	Shein	16	16
Prefer Online Platform	Zalora	3	3
	Official website	2	2
	Carousell	1	1
	Lelong	1	1
	Instagram	2	2
	Daily	2	2
Engagement of Online Champing	Weekly	18	18
Frequency of Online Shopping	Monthly	65	65
	Annually	15	15

Based on the data shown in table 4, it is evident that every respondent has participated in online shopping at some stage, with a 100% indication of having made an online purchase before. The respondents exhibit varying preferences for online platforms, with Shopee (42%) emerging as the most favoured option, followed by TikTok Shop (28%) and Shein (16%). Additionally, lesser but significant portions of preference are allocated to other marketplaces such as Lazada, Zalora, and official websites.

Regarding the frequency of online shopping, most respondents engage in online shopping on a monthly (65%) basis, followed by weekly (18%) and yearly (15%) intervals. Only a minority of people shop daily. This implies that online buying is common for most participants, demonstrating a strong sense of ease and dependence on online platforms for their purchasing requirements.

4.4 Pearson Correlation

Table 6 shows that the value of all variables obtained are less than 0.05 which indicated that there is a significant relationship between each independent variables (confidentiality, processing integrity, availability, and security) and dependent variable (Cloud Auditing System).

Table 5 Pearson Correlation Findings

Table 5 Pearson Correlation Findings						
		Consumers'	Perceived	Perceived	Psychological	
		Online	Benefits	Risks	Factors	
		Shopping				
		Behaviours				
Perceived	Pearson	.815**	1			
Benefits	Correlation					
	Sig.	.000				
	(2-tailed)					
	N	100	100			
Perceived Risks	Pearson	557**	544**	1		
	Correlation					
	Sig.	.000	.000			
	(2-tailed)					
	N	100	100	100		
Psychological	Pearson	.096	.015	421**	1	
Factors	Correlation					
	Sig.	.340	.880	.000		
	(2-tailed)					
	N	100	100	100	100	

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Table 5 affirms that a statistically significant positive association exists between perceived benefits and consumer's online shopping behaviours. The statistical analysis reveals a significant relationship with a p-value of 0.000 (p < 0.05) and a strong positive correlation coefficient (r = 0.815). Therefore, the hypothesis has been accepted. Furthermore, a statistically significant negative association between perceived risks and consumer's online shopping behaviours. This statistical analysis reveals a significant relationship with a p-value of 0.000 (p < 0.05) and a strong negative correlation coefficient (r = 0.-0.557). Therefore, the hypothesis has been accepted. However, to the findings shown in Table 5, no statistical association was found between psychological factors and consumer's online shopping behaviours where the p-value is above 0.05 (0.340). Therefore, the hypothesis is not accepted.

4.5 Multiple Regression Analysis

4.5.1 Model Summary

Table 6 Model Summary

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					Change Statis	stics	_	_		
			Adjusted	RStd. Error of	R Square				Sig.	F
Model	R	R Square	Square	the Estimate	Change	F Change	df1	df2	Change	
1	.826a	.682	.672	.791	.682	68.698	3	96	.000	

a. Predictors: (Constant), Psychological Factors, Perceived Benefits, Perceived Risks

Regression analysis is a statistical method used to examine the relationship between independent factors and job performance. It allows for identifying the independent variables that impact job performance most while facilitating the testing of hypotheses. According to the data in Table 6, a mere 68.2% of the variance in job performance can be attributed to the independent variables: perceived benefits, perceived risks and psychological factors.

4.5.2 Multiple Regression Coefficients

Table 8 Coefficients

				Standardized			
		Unstandard	ized Coefficients	Coefficients			
Model		В	Std. Error	Beta	t	Sig.	
1	(Constant)	.364	.665		.547	.586	
	Perceived Benefits	.878	.085	.734	10.270	.000	
	Perceived Risks	139	.074	148	-1.876	.034	
	Psychological Factors	.028	.079	.023	.348	.729	

a. Dependent Variable: Consumers' Online Shopping Behaviours

Table 8 illustrates the results of multiple regression and the influence of perceived benefits, perceived risks and psychological factors on consumers' online shopping behaviours. As illustrated in Table 4.8, the three variables examined in this study, namely perceived benefits (β =0.878, p= 0.001), perceived risks (β =-0.139, p= 0.034), and psychological factors (β =0.028, p= 0.729). The study results show that perceived benefits positively correlate with online shopping behaviours. Meanwhile, the perceived risks have a negative relationship with online shopping behaviours. Besides, psychological factors do not significantly correlate with online shopping behaviours. Among the three variables, the perceived benefit is a stronger predictor of job consumers' online shopping behaviours.

4.6 Hypothesis Results

Table 9 Hypothesis Results

	Hypothesis	Significant	Beta	Results
		Value	Value	
H1	There is a significant positive relationship between perceived	0.000	0.878	supported
	benefits and customers' online shopping behaviours.			
H2	There is a significant negative relationship between perceived	0.034	-0.139	supported
	risks and customers' online shopping behaviours.			
Н3	There is no significant relationship between psychological factors	0.729	0.028	rejected
	and customers' online shopping behaviours.			

According to the table 10, H1 and H2 are accepted because the significant value is less than 0.05.

5. Conclusion

The correlation and multiple regression analyses yielded significant findings about the association between perceived benefits and online shopping behaviours. A solid positive connection (r = 0.815) existed between individuals' perception of benefits and their online purchasing behaviours. As the perceived benefits of online shopping rise, customers' participation likewise increases. The correlation, which is statistically significant at a p < 0.01, supports first hypothesis. Similarly, multiple regression results found that perceived advantages strongly predicted online buying behaviours, with a substantial positive regression coefficient ($\beta = 0.878$, p < 0.001). This suggests that the perceived advantages have a significant and favourable influence on customers' participation in online buying. This study's results aligned with the output of prior studies. Suhardi and Taufik (2018) found that customers' impression of online buying is mainly influenced by efficiency and convenience.

The ease of online shopping significantly influences consumers' purchase choices (Dos-Santos et al., 2021). Besides, Eneizan et al. (2020) assert that the perception of ease of use might, directly and indirectly, impact consumers' propensity to utilize online purchasing. In their study. Wen et al. (2020) found that the full-service competency of online shops helps increase customers' perceived value, making them feel like beneficiaries. Online shoppers are often influenced by their perceived advantages. Consumers' perceived or anticipated gains from online buying activities are what these perks allude to. Insight into these perceived advantages may assist organisations in customising their tactics to fulfill customer wants and preferences. The ease or convenience of internet buying is often cited as the perceived benefits. No matter the time of day or night, consumers love shopping online without leaving the house. Online shopping already has a high level of convenience because it saves time compared to going to physical shops, finding parking, and standing in a queue. Therefore, people prefer to purchase online since it saves them time and makes their shopping experience easier. Furthermore, people also like Internet shopping because of the variety of items various brands and merchants offer. The breadth and depth of online marketplaces enable shoppers to discover items that perfectly suit their tastes by perusing a world of alternatives. The opportunity to readily compare items and find new brands increases customer happiness and motivates them to buy again. The consumers view Internet retailers as providing more affordable prices and regular sales than brick-and-mortar establishments. One factor that impacts shopping choices is the opportunity to compare costs across numerous online merchants and get unique promos and offers. In addition, customers are more likely to buy online because of the confidence and trust they feel when they see prices shown clearly. In conclusion, the perceived benefits substantially impact consumers' online buying behaviours, preferences, and buying choices. Consumers are drawn to and stay in the digital marketplace due to the many benefits of online buying, including convenience, variety, competitive price, accessibility, personalisation, and social impact. In today's cut-throat internet market, success comes to companies who comprehend and take advantage of these perceived advantages.

The correlation and multiple regression analyses yielded significant findings about the association between perceived risks and online shopping behaviours. A solid negative connection (r = -0.557) existed between individuals' perception of risks and their online purchasing behaviours. As perceived risks rise, customers' participation in online buying declines. The correlation, statistically significant at a p < 0.01, supports the second hypothesis. Similarly, multiple regression results found that perceived risks strongly predicted online buying behaviours, with a substantial negative regression coefficient ($\beta = -0.139$, p < 0.034). This suggests that the perceived risks significantly and negatively influence customers' participation in online shopping. This study's results aligned with the output of prior studies. For example, Xia and Chaipoopirutana (2020) emphasized that perceived risk plays a vital role online, as customers engage with internet-based enterprises more unpredictably than traditional firms. According to Revathy and Jagadeesan (2020), there is an inverse relationship between the perceived risk by consumers and the likelihood of a commercial transaction. Besides, Wu, et al (2020), stated that there is a strong connection between perceived risk and trust. If customers have high confidence and perceive low risk in an online shopping platform, they are more likely to choose that platform for their purchases. The perceived risks of internet buying impact consumer behaviours, despite the many advantages, such accessibility and convenience, that it provides. In online transactions, "risks" are the unknowns and the bad things that could happen. In order to address customer concerns and establish confidence in the online marketplace, organisations must clearly understand these perceived risks. The safety of their financial and personal data is a significant issue for online purchases. Online shoppers are understandably wary about giving out personal information due to concerns about data breaches, identity theft, and hackers gaining access to their accounts. Besides, the privacy ramifications of providing personal information to Internet businesses are another consumer issue. They worry that third parties may use or sell their data without their knowledge or authorization, which might result in unsolicited messages or invasions of privacy. Furthermore, uncertainty about the quality and legitimacy of items is another potential danger of internet purchasing. When buying from unknown or unreliable vendors, consumers naturally fear that they could get low-quality or counterfeit items. When purchasing online, consumers implement a range of risk mitigation strategies in order to alleviate their concerns. Potential approaches could include researching seller reputation, reviewing product evaluations, and selecting secure payment methods or reputable third-party payment processors. Building and sustaining a solid image for online merchants is crucial, especially in light of the perceived hazards connected with online buying. This includes the brand's trustworthiness. To address consumer concerns and stand out in the competitive online marketplace, brands should prioritise transparency, security, and customer service.

In conclusion, consumers' attitudes and decision-making are significantly impacted by the perceived risks associated with online purchasing. In order to establish trust and confidence in the online marketplace, businesses need to acknowledge and resolve customer concerns around privacy, security, product quality, delivery, and return policies. To improve the online shopping experience and build long-term connections with consumers, online businesses should prioritise consumer safety and develop tactics to reduce perceived risks.

The correlation and multiple regression analysis show no significant association between psychological factors and consumers' online shopping behaviours, p > 0.05. This implies that psychological considerations may not directly impact customers' engagement in online purchasing. The results did not support the third hypothesis. This study result opposed the findings of Gita et al. (2020), who emphasized that psychological variables significantly impact customer purchasing decisions, either positively or negatively. The non-significant influence of psychological elements emphasises the need for firms to prioritise addressing concrete advantages and risks to drive customers' online buying behaviours successfully. In other circumstances, consumers' attitudes and beliefs could influence their behaviour. However, regarding online buying, the results show that real-world advantages and disadvantages matter more. Factors including ease of use, product quality, security, and dependability have a more immediate and quantifiable impact on customers' decision-making processes. Therefore, businesses should focus on understanding and resolving them.

5.1 Implication of the Study

The study's practical implications provide concrete information that firms and marketers can use to improve their online shopping platforms and tactics. First, marketers may use the discoveries to create more efficient marketing strategies to improve perceived advantages and mitigate perceived risks linked to online shopping. Emphasising the advantages of online shopping, such as ease, a wide range of options, and cost-effectiveness, while also addressing

concerns about hazards such as security, privacy, and product quality, may benefit customer attitudes and intents.

Second, identifying the precise elements that contribute to perceived risks may assist firms in developing strategies to reduce or eliminate these risks. This may include bolstering website security, implementing explicit and transparent rules, giving guarantees and warranties, and upgrading the buying experience to cultivate customer trust and confidence.

Third, understanding the psychological elements that may not directly impact behaviour but nevertheless contribute to influencing attitudes may provide valuable information for designing user experience strategies. Developing digital platforms that cater to psychological requirements, such as trust, pleasure, and fulfilment, may boost user involvement and eventually impact purchase choices.

By imparting knowledge to customers on the advantages of online purchasing and offering guidance on minimising potential risks, they may be empowered to make well-informed choices. This may include offering instructional materials, frequently asked questions (FAQs), customer evaluations, and testimonials to address prevalent issues and misunderstandings.

The study's findings emphasize the significance of considering both cognitive and emotional elements when analyzing and influencing online buying behaviours in accordance with the principles of the Theory of Planned Behaviour. Businesses may enhance their strategic alignment with customer requirements and preferences in the online buying environment by considering perceived rewards, perceived dangers, and psychological aspects.

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