

# The Influence of e-Commerce Services and Customer Satisfaction Among Young Adults in Klang Valley

Nuraini Abdullah<sup>1</sup>, \*Nur Tasnem Jaaffar<sup>2</sup>, Chaleeda Som Sak<sup>3</sup>, Nur Amani Syahmin Abu Talib<sup>1</sup>

<sup>1</sup>Faculty of Business and Communication, University Malaysia Perlis, Perlis

<sup>2</sup>Faculty of Computer and Mathematical Sciences, Universiti Teknologi MARA, Shah Alam, Selangor

<sup>3</sup>Faculty of Business Management, Universiti Teknologi MARA, Sungai Petani, Kedah

\*Corresponding author's email: [tasnemjaaffar@gmail.com](mailto:tasnemjaaffar@gmail.com)

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## ABSTRACT

This study examines the relationship between e-commerce service quality and customer satisfaction among young adults in Klang Valley, Malaysia. Specifically, it investigates the effects of security, time of delivery, and perceived ease of use on customer satisfaction. A quantitative approach was employed, utilizing a structured questionnaire distributed to 384 respondents. Data analysis was conducted using SPSS, including descriptive statistics, Pearson's correlation, and multiple regression analysis. The findings indicate that perceived ease of use and security significantly influence customer satisfaction, while time of delivery has a relatively minor impact. The study concludes with recommendations for enhancing customer satisfaction through improved service quality in e-commerce platforms.

**Keywords:** *Customer Satisfaction, Security, Time of Delivery, Perceived Ease of Use, E-Commerce*

## 1.0 INTRODUCTION

The rise of e-commerce has revolutionized the way consumers purchase goods and services, transforming it into a dominant trend in modern retail. As online customer expectations continue to evolve, businesses must adopt structured and responsive approaches to remain competitive in the digital marketplace. Customer satisfaction is a crucial factor in the success of e-commerce platforms, influencing consumer loyalty and purchasing behavior (Nisar & Prabhakar, 2017). In today's digital era, the ease and accessibility of online transactions have contributed to the widespread adoption of e-commerce worldwide. Consumers rely on online platforms not only for shopping but also for essential financial transactions, making e-commerce an integral part of daily life. Given this increasing dependence, it is essential to examine the key factors that influence customer satisfaction, including security, website usability, and delivery efficiency.

The Malaysian e-commerce sector has experienced rapid growth, driven by increasing internet penetration and the convenience of smart devices. Approximately 50% of Malaysians, equating to 15.3 million people, engage in online shopping due to the ease of payment, price comparison, and time efficiency it offers (MIDA, 2020). However, despite this growth, challenges persist in meeting customer expectations. Concerns related to security, payment methods, website design, and delivery times remain significant barriers to achieving customer satisfaction (Beyrouthy, 2024). A study by Kim and Ammeter (2018) highlights that young adults make up 75% of e-commerce users and process information from digital platforms five times faster than older generations. During the COVID-19 lockdowns in 2021, 75% of Malaysians accessed e-commerce platforms, with 45% making purchases, a trend that remained consistent in 2022 (Commission Factory, 2023). Nonetheless, issues such as website inaccessibility during peak hours and suboptimal website design continue to affect customer satisfaction. Studies reported that many online shoppers have encountered difficulties accessing e-commerce platforms due to high traffic volumes. Moreover, research on the impact of website design on customer satisfaction is still limited, despite its potential influence on user experience and engagement. Poor website infrastructure and inefficient navigation can lead to operational inefficiencies, particularly during peak shopping hours, further frustrating consumers.

Security concerns are among the most pressing challenges in e-commerce, influencing both consumer trust and overall satisfaction. The 2018 e-Commerce Consumers Survey revealed that over 50% of online buyers in Malaysia are concerned about privacy, security, and fraudulent activities when using e-commerce platforms (MCMC, 2018). Specific concerns include credit card fraud, identity theft, loss of banking information, and data privacy breaches, with 63.9% of respondents particularly worried about fraudulent transactions (MCMC, 2018). In addition, customer expectations regarding delivery speed have intensified, with many expecting next-day delivery. A McKinsey survey found that 46% of potential buyers leave their shopping carts because of long delivery times. This is why more than 75% of retail supply chain leaders have made two-day delivery a priority, and more than four in ten are aiming for same-day delivery in 2022 (Burns et al., 2022). The rapid expansion of e-commerce has placed immense pressure on logistics operations, with companies such as J&T, PosLaju Malaysia, and DHL struggling to meet growing consumer demands. Given the importance of fast and reliable delivery, businesses must reassess their inventory management, supply chains, and logistics strategies to enhance customer satisfaction (Roggeveen & Sethuraman, 2020). Ultimately, ensuring a seamless and secure e-commerce experience requires businesses to implement effective strategies that address security concerns, optimize website usability, and improve delivery services.

Given these challenges, this research aims to examine the key factors influencing customer satisfaction among young adults in Klang Valley when using e-commerce platforms. Specifically, this study seeks to assess the levels of security (trust), delivery time, perceived ease of use (website design), and their impact on customer satisfaction. Furthermore, the study will analyze the relationships between these factors and customer satisfaction to understand how they collectively shape consumer experiences. Finally, this research aims to identify the most significant determinants of customer satisfaction, providing insights that can help e-commerce businesses enhance their services and better meet customer expectations. By addressing these objectives, this study contributes to a more profound understanding of consumer behavior in the digital marketplace and offers recommendations for improving the overall e-commerce experience. In conclusion, this research aims to address the following research questions:

1. What are the levels of security (trust), time of delivery, perceived ease of use, and customer satisfaction with e-commerce platforms among young adults in Klang Valley?
2. Is there a relationship between security (trust), time of delivery, perceived ease of use, and customer satisfaction with e-commerce platforms among young adults in Klang Valley?
3. Which factors are most likely to predict customer satisfaction with e-commerce platforms among young adults in Klang Valley?

## **2.0 LITERATURE REVIEW**

### **2.1 CUSTOMER SATISFACTION**

Customer satisfaction in e-commerce is a dynamic and multifaceted concept influenced by various factors, including service quality, website design, pricing, and delivery performance. Oliver (2014) defines customer satisfaction as a consumer's response to how well a service meets their expectations, highlighting its importance as a key performance indicator for online businesses. Several researchers (Zeithaml et al., 2013; Khan et al., 2020) emphasize that customer satisfaction is shaped by both personal and situational factors, with elements such as product return policies and service recovery playing crucial roles in customer retention (Ogunleye, 2013).

Studies suggest that the comparison between expected and actual service experiences determines satisfaction levels (Kotler & Armstrong, 2004; Oliver, 1997), reinforcing the significance of managing consumer expectations. In the competitive e-commerce market, timely delivery is particularly crucial, as delays tend to have a stronger impact on dissatisfaction than on satisfaction (McKnight et al., 2017). Furthermore, research highlights the direct relationship between service quality and customer satisfaction (Ali & Amir, 2020), indicating that businesses must continuously enhance service offerings to maintain market positioning (Chen et al., 2019). Customer satisfaction is also closely linked to how people shop online, since favorable experiences lead to repeat purchases and brand loyalty (Pereira et al., 2016; Pereira et al., 2017). Ultimately, e-commerce success hinges on effectively meeting customer expectations and delivering high-quality service to ensure long-term consumer engagement.

### **2.2 SECURITY**

Security in e-commerce refers to a website's ability to protect sensitive user data from unauthorized access or disclosure (Belanger et al., 2002; Roca et al., 2009). Customers seek confidence through strong security measures due to concerns about their personal data privacy and potential risks associated with online transactions (Peha & Khamitov, 2004). Trust is a crucial aspect of the user experience, encompassing security and privacy, and is defined as users' confidence in a website's ability to ensure a safe and risk-free online experience (Papadomichelaki & Mentzas, 2012).

According to Malhotra and Singh (2007), security is essential in protecting users from fraud and financial loss, particularly when using credit cards or sharing sensitive financial information. The significance of security is further emphasized by Suh and Han (2003), who found that security concerns are a primary issue for online shoppers. Their study established a direct relationship between system security and customer satisfaction, indicating that stronger security measures lead to higher satisfaction. As e-commerce continues to grow, addressing security concerns is imperative for fostering trust, ensuring a safe online shopping environment, and enhancing customer satisfaction.

### **2.3 TIME OF DELIVERY**

According to Hedin et al. (2006), delivery service is one of the most critical factors influencing customer satisfaction, particularly in the context of e-commerce. Vasic et al. (2019) define delivery service as the supplier's ability to deliver the requested product at the desired time and place while maintaining reasonable costs. This definition highlights the dual importance of logistical efficiency and affordability in shaping customer perceptions. Studies by Hondoko (2016) and Ziaullah et al. (2014) further support the positive impact of delivery service quality on online customer satisfaction, emphasizing that a well-executed delivery process can enhance consumer trust and encourage repeat purchases. Delivery service quality is typically assessed based on multiple key factors, including adherence to delivery schedules, accuracy in reaching the designated location, and overall cost efficiency. Among these, delivery precision and timeliness are often cited as major determinants of customer loyalty and satisfaction.

## 2.4 PERCEIVED EASE OF USE

Customers value an easy-to-use online shopping experience that caters to a broad range of users. Studies highlight the critical role of usability and ease of learning in influencing adoption, showing a positive association between platform user-friendliness and purchase behavior (Mpofu et al., 2019). Al-Shukri (2019) emphasizes ease of use as a key criterion in assessing the relationship between online shopping experiences and user interfaces.

Wolfenbarger and Gilly (2003) describe website design as encompassing all aspects of customer interaction, excluding customer service. A well-designed website should feature intuitive navigation, effective information search, seamless order processing, personalization, and diverse product selection (Wolfenbarger & Gilly, 2003; Ranganathan & Grandon, 2002). According to Lee and Lin (2005), trust and personalization are essential in determining the success of e-commerce websites.

Efficiency, defined as the ease of use and accessibility of e-commerce platforms, is crucial since convenience and time-saving drive online transactions (Parasuraman et al., 2005; Santouridis et al., 2012). Yang (2003) highlights that standardized navigation, well-organized interfaces, fast loading times, and seamless transaction processes enhance user experience. In the virtual e-commerce environment, the website serves as the primary point of contact for customers, shaping their perception of the business and influencing trust in online transactions (Yang & Jun, 2002).

Website quality plays a significant role in e-commerce success, with factors such as usability, reliability, accessibility, and overall user-friendliness contributing to customer perceptions of a platform's performance (Kuo et al., 2011). Information quality, which reflects the value of website content, is another critical component, influenced by completeness, accuracy, usefulness, timeliness, and presentation (Bharati et al., 2014). A comprehensive website should integrate transactional, customer service, and informational content to enhance user engagement (Cox & Koelzer, 2004). By prioritizing accessibility, visual appeal, and an engaging user experience, well-designed websites contribute significantly to customer trust, satisfaction, and overall success in e-commerce (Díaz & Koutra, 2013).

## 2.5 UNDERPINNING THEORY

The SERVQUAL model, developed by Parasuraman et al. (1985) and later refined by Huang et al. (2015), is a widely used framework for measuring and managing service quality. Initially identifying ten service quality dimensions, the model was later streamlined into five key factors: reliability, assurance, tangibles, empathy, and responsiveness. It evaluates service quality by comparing customer expectations with their perceptions of actual service received, where a larger gap between the two indicates lower service quality. Research by Huang et al. (2019) highlights that these gaps, known as SERVQUAL gaps, often result from organizational shortcomings, leading to poor customer satisfaction.

In the context of e-commerce, service quality and customer satisfaction are influenced by three primary factors: tangibles, empathy, and assurance (Zeithaml et al., 1988). The SERVQUAL model has been extensively applied in marketing, hospitality, and economics to assess and enhance service quality. Several studies emphasize the strong relationship between service quality and customer satisfaction, with higher service quality directly leading to improved customer satisfaction (Jun & Cai, 2010). This model remains a fundamental tool for businesses seeking to optimize their service delivery and customer experience.

This study integrates SERVQUAL with the Comparison Level Theory, incorporating four independent variables and one dependent variable to create a comprehensive framework for understanding customer satisfaction in service quality research. By synthesizing these theories, the study aims to provide deeper insights into the factors that shape customer perceptions and expectations, ultimately helping businesses address service quality gaps and enhance overall satisfaction.

## 2.6 SUMMARY AND MOTIVATIONS

In conclusion, this literature review highlights the key determinants of customer satisfaction in e-commerce, focusing on the SERVQUAL model and its relevance to online transactions. Customer satisfaction is a complex construct shaped by service quality, security, time of delivery, and perceived ease of use. The SERVQUAL model remains a vital theoretical foundation for assessing service quality and its impact on customer expectations. Security concerns play a critical role in shaping trust, as stronger security measures enhance customer confidence and satisfaction. The timeliness and efficiency of delivery services are also key determinants, as delays negatively impact consumer perceptions. Additionally, an intuitive and user-friendly website significantly improves customer satisfaction by facilitating seamless navigation and transactions. By integrating these factors, businesses can optimize their service offerings, enhance consumer trust, and foster long-term customer loyalty in the competitive e-commerce landscape.

Despite extensive research on customer satisfaction in e-commerce, there remain significant gaps in understanding how these factors influence young adults in Klang Valley, Malaysia. Many existing studies focus on broader consumer demographics without specifically addressing the preferences and expectations of this younger segment, which represents a growing and influential portion of online shoppers. Moreover, while prior research has explored the importance of service quality, security, delivery time, and perceived ease of use, few studies have systematically analyzed the combined effects of these factors on customer satisfaction within a localized context. This gap underscores the need for a comprehensive investigation into how these key variables interact to shape consumer experiences in the Malaysian e-commerce landscape.

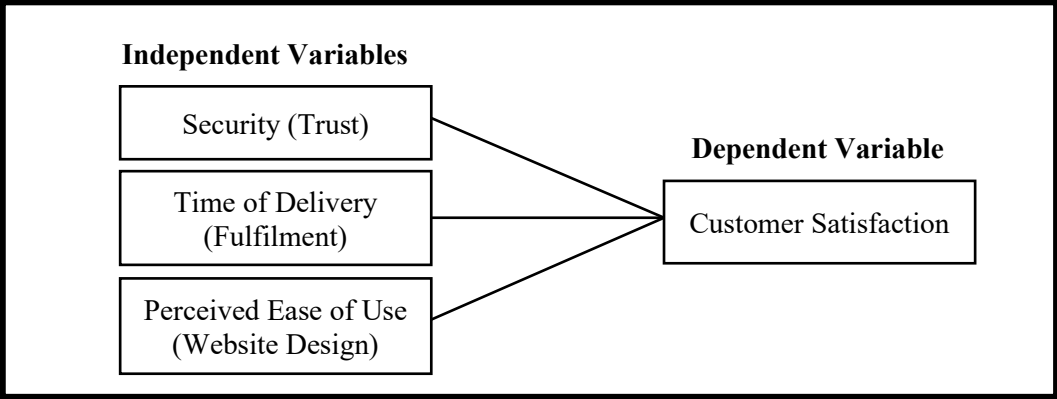
Given these challenges, this research aims to examine the key factors influencing customer satisfaction among young adults in Klang Valley when using e-commerce platforms. Specifically, this study seeks to assess the levels of security (trust), delivery time, and perceived ease of use (website design) and their impact on customer satisfaction. Furthermore, the study will analyze the relationships between these factors and customer satisfaction to understand how they collectively shape consumer experiences. Finally, this research aims to identify the most significant determinants of customer satisfaction, providing insights that can help e-commerce businesses enhance their services and better meet customer expectations. By addressing these research gaps, the study will contribute valuable knowledge to both academia and industry, offering practical recommendations to improve service quality and customer experience in the Malaysian e-commerce sector.

## 2.7 CONCEPTUAL FRAMEWORK

As presented earlier, this study employed three predictors—security, time of delivery, and perceived ease of use—as factors influencing customer satisfaction with e-commerce among young adults in Klang Valley. The SERVQUAL model, initially formulated by Parasuraman et al. (1988), comprises five crucial dimensions: tangibles (the physical presence and appearance of service personnel), reliability (consistency in service performance), responsiveness (timeliness in service delivery), assurance (behaviors that instill consumer trust and confidence), and empathy (understanding and addressing customers' individual needs).

In the context of online services, this manuscript proposes a modification to the SERVQUAL model, adapting its dimensions to the digital environment. The revised model identifies five key factors contributing to overall e-service quality: website design, reliability, responsiveness, trust, and personalization.

The relationship between the dependent and independent variables is illustrated in the research conceptual framework, which also outlines the hypothesized relationships. As shown in Figure 1, customer satisfaction serves as the dependent variable, while security (trust), time of delivery (fulfilment), and perceived ease of use (website design) function as the independent variables. The framework suggests that these three factors influence customer satisfaction. Specifically, variations in security, time of delivery, and perceived ease of use are expected to impact customer satisfaction, thereby establishing a relationship between the independent and dependent variables.



**Figure 1: Conceptual Framework**

Therefore, based on the literature review and the conceptual framework, the following hypotheses are proposed for this research:

- H1: Security (trust) has a positive relationship with customer satisfaction towards e-commerce platforms among young adults in Klang Valley.
- H2: Time of delivery has a positive relationship with customer satisfaction towards e-commerce platforms among young adults in Klang Valley.
- H3: Perceived ease of use has a positive relationship with customer satisfaction towards e-commerce platforms among young adults in Klang Valley.
- H4: Security (trust) significantly predicts customer satisfaction towards e-commerce platforms among young adults in Klang Valley.
- H5: Time of delivery significantly predicts customer satisfaction towards e-commerce platforms among young adults in Klang Valley.
- H6: Perceived ease of use significantly predicts customer satisfaction towards e-commerce platforms among young adults in Klang Valley.

**3.0 METHODOLOGY**

This study employs a quantitative analysis to investigate the relationship between e-commerce service quality and customer satisfaction among young adults in Klang Valley. Data was collected through questionnaire surveys, where respondents shared their experiences and opinions regarding e-commerce services. The study examines three key independent variables—security, delivery time, and perceived ease of use—and their impact on the dependent variable, customer satisfaction. Responses were measured on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), with neutral options at the midpoint. The target population consists of young adults aged 15–35 years, selected using convenience sampling. A sample size of 384 respondents was determined based on the Krejcie and Morgan (1970) method, ensuring sufficient data for statistical analysis. Before conducting the actual survey, a pilot test was performed to refine the questionnaire and improve data collection processes. The final survey was randomly distributed to 384 young adults in Klang Valley, and all responses were successfully gathered. The collected data was analyzed using the Statistical Package for the Social Sciences (SPSS) software. The analysis included descriptive statistics, correlation analysis, and multiple regression analysis to examine the relationships between variables.

**3.1 RELIABILITY ANALYSIS**

Table 1 presents the structure of the questionnaire set, while Table 2 displays the reliability analysis of the questionnaire items. Reliability refers to when a measurement instrument consistently produces the same results when applied repeatedly under the same conditions. A reliable measurement is relatively free from errors, inconsistencies, or random fluctuations. Based on Table 2, the Cronbach’s Alpha values for each variable are reported to be higher than 0.8, indicating a good level of internal consistency and reliability for the variable scales.

**Table 1: Structure of Questionnaire Set**

Section	Measurement	Total items	Authors & Sources
A	Demographics	7	-
B	Customer Satisfaction	5	Fornell (1992)
C	Security	5	Blun (2016) and Holloway and Beatty (2008)
D	Time of Delivery	5	Blun (2016) and Holloway and Beatty (2008)
E	Perceived Ease of Use	5	Blun (2016) and Holloway and Beatty (2008)

**Table 2: Reliability Test Analysis**

Variables	No. of Item	Cronbach's Alpha
Customer Satisfaction	5	0.886
Security	5	0.869
Time of Delivery	5	0.877
Perceived Ease of Use	5	0.870

### 3.2 CONTENT VALIDITY

Content validity plays a crucial role in ensuring that a measurement tool effectively captures the essential dimensions and meanings related to the research topic. In this study, content validity was established through expert consultation and evaluation. A panel of subject matter experts, who possess extensive knowledge in the field, carefully reviewed the questionnaire to ensure that it accurately reflected the key concepts being investigated. Their insights were invaluable in refining the questionnaire items, ensuring clarity, relevance, and comprehensive coverage of the research variables. To further enhance the validity of the study, the questionnaire was adapted from previous research, incorporating established measures that have been tested in prior studies. This approach not only improves the robustness of the instrument but also aligns it with existing literature.

Before distributing the questionnaire to the intended respondents, an additional validation step was undertaken to confirm its applicability. The questionnaire was thoroughly reviewed by an expert from Universiti Malaysia Perlis (UniMAP), who assessed its consistency with the study objectives and ensured that all items were appropriate and relevant to the research context. This review process guaranteed that the instrument effectively captured the breadth and depth of the concepts being measured. Following this validation, the questionnaire was finalized and distributed to respondents. By integrating expert feedback and seeking academic validation, this study strengthens its content validity, leading to more accurate and reliable research findings. This meticulous approach ensures that the data collected is meaningful and reflective of the research objectives, ultimately enhancing the credibility and impact of the study.

### 4.0 RESULTS

Table 3 presents the frequency analysis of the 384 respondents based on categories of age, gender, race, level of education, occupation, monthly income, and favourite e-commerce platforms. The results show that most of the respondents are Malay female young adults working in the private sector, holding a bachelor's degree, earning a salary of less than RM1,000, and primarily using Shopee for online shopping.

**Table 3: Frequency Analysis**

Variables	Category	Frequency (N)	Percentage (%)
Age	15-20	57	14.8
	21-24	163	42.4
	25-30	98	25.5
	31-35	66	17.2
Gender	Male	183	47.7
	Female	201	52.3

Races	Malay	237	61.7
	Chinese	87	22.7
	Indian	60	15.6
Level of Education	PT3/SPM	84	21.9
	STPM/Matriculation/Diploma/TVET	113	29.4
	Bachelor's Degree	159	41.4
	Master	24	6.3
	PhD	4	1
Occupation	Private Sector	142	37
	Self-Employed	49	12.8
	Student	113	34.6
	Government Servant	60	15.6
Monthly Income	Less than RM1,000	126	32.8
	RM1,001-RM1,500	48	12.5
	RM1,501-RM2,000	101	26.3
	More than RM2,500	109	28.4
Favourite E-commerce platform	Shopee	303	78.9
	Lazada	190	49.5
	eBay	49	12.8
	Mudah	68	17.7
	Carousell	102	26.6

#### 4.1 DESCRIPTIVE ANALYSIS

Table 4 presents the mean and standard deviation for each variable item. The results indicate that, on average, respondents have a relatively high perception of e-commerce service quality, a moderately high perception of security service quality, a moderately high perception of delivery time service quality, and a moderately high perception of ease of use. The relatively low standard deviation suggests a moderate level of variability in responses, indicating that the responses are generally close to the mean. This implies that there is no significant variation in customer satisfaction, perception of security, perception of delivery time, and perception of ease of use within the sample.

**Table 4: Mean and Standard Deviation of The Items**

Items	Mean	Standard Deviation
<b>CUSTOMER SATISFACTION (DV)</b>		
(A1) The online shop always meets my needs	4.68	.558
(A2) I am happy with the standards by which this online shop is operating	4.65	.578
(A3) I encourage friends and others to purchase goods from this online shop	4.59	.580
(A4) I am satisfied with this online shop	4.63	.560
(A5) I will re-visit this online shop in the future	4.59	.581
<b>SECURITY (IV1)</b>		
(B1) I feel safe in my transactions with the online shop	4.45	.640
(B2) The online shop has adequate security features	4.50	.609
(B3) This site protects information about my credit card	4.46	.629
(B4) I trust the website administrators will not misuse my personal information	4.53	.616
(B5) I am generally very satisfied with the handling of private information	4.62	.561
<b>TIME OF DELIVERY (IV2)</b>		
(C1) The product is delivered by the time promised by the company	4.63	.594
(C2) It quickly delivers what I order	4.62	.588
(C3) The website sends out the ordered items	4.64	.533



(C4) The ordered products arrived in a good condition	4.62	.575
(C5) I am generally very satisfied with the order reliability	4.67	.513
<b>PERCEIVED EASE OF USE (IV3)</b>		
(D1) The information on the website is effective	4.63	.582
(D2) The purchasing process was not difficult	4.62	.556
(D3) The website adequately meets my information needs	4.66	.527
(D4) The text on the website is easy to read	4.66	.546
(D5) The website has interactive features, which help me accomplish my task	4.70	.533

## 4.2 CORRELATION AND REGRESSION ANALYSIS

Table 5 presents the Pearson’s inter-correlation between variables. According to Nunnally (1978), since the correlation among the independent variables did not exceed 0.70, as shown in Table 5, multicollinearity was not an issue in the data. The p-values (significance levels) for all correlations are less than 0.01, indicating that all correlations are statistically significant. The results suggest positive relationships between customer satisfaction and security, delivery time, and perceived ease of use. This implies that as security, delivery time, and perceived ease of use improve, customer satisfaction is likely to increase. Additionally, there is a strong positive relationship between security, delivery time, and perceived ease of use, indicating that these constructs are closely related.

Table 5: Pearson’s Inter-Correlation Between Variables

Variables	Customer Satisfaction	Security	Time of Delivery	Perceived Ease of Use
Customer Satisfaction	-			
Security	.536**	-		
Time of Delivery	.529**	.660**	-	
Perceived Ease of Use	.558**	.621**	.687**	-

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 6 presents the multiple regression results, examining the relationship between the dependent and independent variables. The adjusted R-squared value of 0.377 indicates that 37.7% of the variation in customer satisfaction can be explained by the three independent variables in the model, after accounting for the number of predictors. This suggests that the model is not overfitting the data, as the adjusted R-squared value is not significantly lower than the R-squared value. The standard error of the estimate, 0.37355, implies that the predicted values of customer satisfaction are likely to be within 0.37355 of the actual values, indicating a relatively accurate prediction.

Overall, the model summary demonstrates that the model is capable of predicting customer satisfaction with a good degree of accuracy. The three predictors—security, delivery time, and perceived ease of use—play a significant role in influencing customer satisfaction. The p-values, all less than 0.001, further support the significance of security, delivery time, and perceived ease of use as key factors affecting customer satisfaction. However, the lower significance of delivery time (p=0.006) suggests that consumers may prioritize security and ease of use over delivery speed.

Table 6: Multiple Regression Result

Variable	B	Standard Coefficients (beta)	T values	Significant
Security	.234	.245	4.344	.001
Time of Delivery	.172	.167	2.752	.006
Perceived Ease of Use	.309	.291	4.991	.001
R square		.382		
Adjusted R square		.377		
F value		78.415		0.001

4.3 RESULT OF HYPOTHESIS TESTING

Table 7 presents the findings of the hypothesis testing. The results indicate a positive and significant relationship between security, delivery time, perceived ease of use, and customer satisfaction.

Table 7: Summary of Hypothesis Statement

Number of Hypothesis	Statement of Hypothesis	Results
H1	Security (trust) has a positive relationship with customer satisfaction towards e-commerce platforms among young adults in Klang Valley.	Accepted
H2	Time of delivery has a positive relationship with customer satisfaction towards e-commerce platforms among young adult in Klang Valley.	Accepted
H3	Perceived ease of use has a positive relationship with customer satisfaction towards e-commerce platforms among young adults in Klang Valley.	Accepted
H4	Security (trust) does significantly predict customer satisfaction towards e-commerce platforms among young adults in Klang Valley.	Accepted
H5	Time of delivery does significantly predict customer satisfaction towards e-commerce platforms among young adults in Klang Valley.	Accepted
H6	Perceived ease of use does significantly predict customer satisfaction towards e-commerce platforms among young adults in Klang Valley.	Accepted

5.0 DISCUSSION

5.1 RELATIONSHIP BETWEEN SECURITY & CUSTOMER SATISFACTION

The findings of this study reveal a strong and positive relationship between security and customer satisfaction. The results align with prior research emphasizing the role of security and usability in shaping customer satisfaction. Research findings consistently show that security (trust) plays a crucial role in customer satisfaction in e-commerce. Pilioura (1998) found that clear security policies, strong protective measures, and a supportive service relationship significantly increased customer trust and satisfaction. Similarly, Kim et al. (2010) discovered that customers who felt secure using an e-commerce platform were more committed, leading to higher productivity in online shopping and reduced security concerns. A meta-analysis by Judge and Piccolo (2004) further confirmed a strong positive correlation between security and customer satisfaction among young adults in e-commerce. Their study emphasized that trust fosters commitment, ultimately improving service quality and satisfaction. Overall, these studies highlight the importance of security in building customer trust and enhancing satisfaction. E-commerce platforms should prioritize strong security measures to create a trustworthy environment that encourages customer engagement and long-term success.

5.2 RELATIONSHIP BETWEEN TIME OF DELIVERY & CUSTOMER SATISFACTION

The findings of this study revealed a strong and significant positive relationship between delivery time and customer satisfaction. Our results align with previous studies, such as Vakulenko et al. (2019), which highlight the role of timely delivery in motivating customers and enhancing service quality in e-commerce. The study emphasized the importance of delivery time, including flexible order fulfilment, a variety of product delivery options, and a commitment to delivering the correct order on time while addressing performance issues through corrective actions. This, in turn, leads to increased customer satisfaction, improved service quality, and higher performance levels, ultimately reducing customer disappointment when delivery expectations are not met.

5.3 RELATIONSHIP BETWEEN PERCEIVED EASE OF USE AND CUSTOMER SATISFACTION

The findings of this study reveal a strong positive relationship between perceived ease of use and customer satisfaction. Several studies have supported this finding. For example, Ludin and Cheng (2014) revealed that website interface design significantly impacts customer satisfaction. Similarly, Yadav and Mahara (2017) examined the intention to purchase online based on perceived ease of use and its effect on customer satisfaction. Their study found that when e-commerce platforms provide an efficient interface design and detailed supportive

guidelines, customer satisfaction increases, leading to repeat purchases. E-commerce platforms should recognize the importance of optimizing website usability to enhance customer satisfaction and overall service success.

## **6.0 CONCLUSION AND RECOMMENDATIONS**

### **6.1 CONCLUSION**

This study examined the influence of e-commerce service quality on customer satisfaction among young adults in Klang Valley, focusing on the factors of security, time of delivery, and perceived ease of use. The findings indicate that security and perceived ease of use significantly contribute to customer satisfaction, while time of delivery has a comparatively minor impact. The results suggest that while timely delivery remains an essential aspect of service quality, consumers place greater emphasis on the security of their transactions and the ease of navigating e-commerce platforms. These insights highlight the critical role of a seamless, secure, and user-friendly e-commerce experience in enhancing customer satisfaction. By understanding these determinants, e-commerce businesses can strategically improve their platforms to foster customer loyalty and retention.

### **6.2 RECOMMENDATIONS**

Based on the findings, the following recommendations are proposed for e-commerce platforms seeking to enhance customer satisfaction:

1. **Enhance Security Measures:** E-commerce businesses should implement robust cybersecurity measures such as multi-factor authentication, encrypted transactions, and AI-driven fraud detection to improve trust and safety for online shoppers.
2. **Improve Website and App Usability:** Platforms should focus on user-friendly design, minimizing complexity, and ensuring smooth navigation. Features such as personalized recommendations, quick-loading pages, and accessible payment options can significantly enhance perceived ease of use.
3. **Optimize Logistics and Delivery Systems:** While time of delivery had a minor influence, it remains a crucial component of customer experience. Companies should collaborate with reliable logistics providers, implement real-time tracking systems, and offer flexible delivery options to meet customer expectations.

### **6.3 IMPLICATIONS**

The study carries several important implications for e-commerce businesses, policymakers, and researchers. Firstly, the strong influence of security on customer satisfaction suggests that businesses must prioritize robust security measures, including fraud detection, data protection, and secure payment gateways, to build consumer trust. Secondly, the significance of perceived ease of use implies that website and mobile app developers should focus on intuitive, responsive, and accessible designs that facilitate effortless navigation. Thirdly, while time of delivery was found to have a lower impact, it remains an important factor, particularly for customers expecting fast and reliable shipping. Hence, businesses must optimize logistics strategies and partnerships with delivery service providers to minimize delays. Furthermore, policymakers should consider regulations and incentives that encourage secure and efficient e-commerce practices to support Malaysia's growing digital economy. Lastly, researchers can build upon this study by exploring additional variables such as customer service responsiveness and product quality to gain a more holistic understanding of customer satisfaction in e-commerce.

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