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Consumers' Perception of Online Shopping in Kota Samarahan, Sarawak

Nalini Arumugam[1], Afiq Khaiqal Kamri[2]

[1]Senior Lecturer, Universiti Sulatan Zainal Abidin
[2]Graduate, Universiti Sultan Zainal Abidin

ABSTRACT
In contemporary times, individuals commonly employ a combination of conventional and modern approaches to get products and services, driven by shifts in consumer purchasing patterns. This is seen in the growing preference for cashless payment methods when making purchases. This study aims to examine the elements that impact customers' perception of online shopping in Kota Samarahan and assess the correlation between two variables that influence consumers' impression of online shopping. The sample approach employed for this investigation is random simple sampling. The data was obtained using a survey conducted in person, where participants scanned a QR code to access the questionnaire. A total of 208 respondents were included in this survey, and the data was analyzed using descriptive analysis and Pearson correlations. This study identified four factors that impact consumers' impression of online purchasing. The study identified four distinct characteristics that influenced customers' view of online buying: convenience, website design/feature, time efficiency, and security. These aspects were considered independent variables, while consumers' perception of online shopping was the dependent variable. All the results from the correlation coefficient data were determined to be positive, suggesting a direct association between the variables.

Keyword: Consumers' Perception, Online Shopping, Convenience, Website design, Time efficiency, and Security.

Introduction

Internet usage continuously increased every year. According to Statistica 2023, the internet usage among Malaysian has increased from 26.21million users in 2017 to 32.62 million users in 2022. It also predicted it will be continuously rise from 2023 to 2028 (33.47 million to 35.33 million users). In Malaysia, there were 33.03 million internet users in the start of 2023, when internet penetration was 96.8%, according to a piece written by Simon Kemp and published in February 2023. In January 2023, there were 26.80 million social media users in Malaysia, or 78.5 percent of the country's population. Early in 2023, there were 44.05 million active mobile phone connections in Malaysia, which represents 129.1% of the country's population. Main reason of increasing usage of internet government policy in government policy to maximize internet use and also the Covid-19 pandemic hit from 2020 to 2022.

The emergence of e-commerce has revolutionized the retail industry, offering consumers unparalleled ease, a wide range of choices, and enhanced accessibility. Comprehending the way consumers perceive online buying is crucial for firms to customize their strategies efficiently and improve the overall shopping

experience. It is important to investigate how consumers in Kota Samarahan, Sarawak, view online buying, given the coexistence of traditional markets and modern ecommerce platforms.

Research by Kirkbride & Soopramanien (2010) indicates that experience significantly influences consumers' attitudes towards online shopping. As individuals become more familiar with online transactions, their skepticism and risk aversion tend to decrease, leading to a greater inclination to engage in online shopping activities. Bailusy et al. (2022) delve into consumer perceptions related to online shopping, highlighting factors such as security, self-efficacy, usefulness, and ease of use, which notably impact purchase intentions and customer satisfaction.

Furthermore, Arora & Aggarwal (2018) stress the importance of perceived benefits, such as convenience, product variety, and financial security, in shaping consumers' satisfaction with online shopping. Additionally, Aris et al. (2021) point out that factors like perceived ease of use, usefulness, and past online shopping experience significantly influence young shoppers' online shopping preferences. In the unique context of Kota Samarahan, Sarawak, where local markets and cultural influences intersect with modern online shopping trends, understanding consumer perceptions towards online retailing is essential. Dzimiri et al. (2018) offer insights into consumer perceptions towards online retailing in Botswana, providing valuable lessons that can be applied to similar studies in Kota Samarahan.

Moreover, exploring factors such as risk perception, usability, and convenience, as highlighted by (Ellitan & Prayogo, 2022), can illuminate how consumers in Kota Samarahan perceive and engage with online shopping platforms. The problem at hand is the need to gain a deeper insight into consumers' perception of online shopping, with a focus on identifying the key factors that influence their decision-making processes. While the convenience and accessibility of online shopping are often highlighted, issues such as trustworthiness of online platforms, data security, and the overall satisfaction with the online shopping experience are critical aspects that demand attention. Moreover, the rapid evolution of technology, the emergence of new online business models, and the ever-changing consumer expectations pose additional challenges for businesses aiming to thrive in the competitive online marketplace. Understanding how consumers perceive these changes and innovations is crucial for online retailers to adapt their strategies and enhance the overall consumer experience.

Factors Influencing Consumers' Perception

A consumer's perspective on purchasing online is influenced by several factors. Here are a few of the most important characteristics that might affect how picky a certain consumer is.

Convenience

Convenience is a critical factor that significantly impacts the perception of online shopping. The ease and efficiency of the online shopping experience play a crucial role in attracting and retaining consumers. Numerous studies have explored the relationship between convenience and online shopping, providing valuable insights into this topic. One of the main factors affecting consumers' acceptance of internet purchasing was determined to be convenience. The researchers emphasised how consumers' perception of online purchasing was favourably impacted by convenience elements including 24/7 accessibility, simple product comparison, and speedy checkout procedures (Ahmed & Sathish, 2015). Bhatti & Rehman (2019) however emphasised that convenience is crucial in lowering the perceived dangers of online buying, such as doubts about the quality of the products or the protection of personal data. Consumers view the process as more convenient and reliable when online shopping platforms provide convenient features including

user-friendly interfaces, secure payment gateways, and hassle-free return policies. The study by Jarvenpaa and Todd (1997) also emphasised the significance of ease in getting around geographical and time restrictions. Online shopping reduces the need for consumers to physically travel to real locations, enabling them to shop whenever they want from any location. Consumers benefit from flexibility and time efficiency due to this convenience element, which ultimately improves their whole purchasing experience. Moreover, Pham et al (2018) studied how ease affected online shoppers' desire to make additional purchases. The results showed a significant positive association between convenience and repurchase intention, showing that consumers are more likely to make additional purchases after a convenient online shopping experience.

Time efficiency

With its ease and time-saving benefits, online shopping has completely changed the way people purchase. This part of online shopping that saves time is essential for improving how the experience is perceived overall (Lloyd et al., 2014). Timesaving has been the subject of several research investigating how it affects online buying, and the results consistently show that it has favourable consequences (Khalifa & Liu, 2007). The fact that internet buying saves time is one of the main factors in why consumers favour it. People need to physically visit traditional brick-and-mortar establishments, negotiate aisles, wait in queue for a long time, and deal with any potential traffic or parking problems. Online shopping, in comparison, enables consumers to browse through a variety of items while relaxing in the comfort of their homes or offices, saving them a lot of time and effort (Bauerová & Klepek, 2018). Research by Sarkar and Das (2017) also looked at the advantages of internet purchasing over conventional shopping techniques in terms of time efficiency. The results showed that internet buyers saved a significant amount of time by looking for specific goods fast, using search filters, and reading consumer reviews to make wise decisions. By removing the need to physically visit different stores, this effective method saves a significant amount of time that can be used for other chores or leisure activities. Yang and Li's (2018) study further highlighted the time-saving benefits of online purchasing in terms of transactional efficiency. With features like stored payment information and tailored suggestions, online platforms enable consumers to complete purchases in only a few minutes. Due to the simplified procedure, there is no longer a need to spend time searching for things physically, standing in line to pay, or handling any potential payment complications that could occur in conventional retail environments. The advantages of internet purchasing in terms of saving time have generally been validated by studies. The perception of online shopping as a convenient and effective means to fulfil one's purchasing requirements is improved by the capacity to shop whenever and from anywhere, to rapidly search for desired items, access user evaluations, and simplify transactions.

Websites Design/Features

The layout and functionality of a website significantly influence how consumers see online buying. Numerous website design and functioning factors have been repeatedly proved to have a major impact on user happiness, trust, and purchase intention. First off, how a website looks has a big influence on how credible and professional people think it is. According to studies (Fogg et al., 2002; Liang and Huang, 2016), aesthetically pleasant and visually appealing designs have a beneficial impact on consumers' trust and satisfaction levels. The whole user experience may be improved, and prospective consumers' trust can be increased by implementing a clear and straightforward layout, consistent branding components, and high-quality product photographs. Additionally, website navigation and usability have a big impact on

how consumers feel about convenience and effectiveness. According to research, user satisfaction is favourably impacted, and cognitive load is decreased by clear and intuitive navigation menus, search capabilities, and well-organized product categories (Liang and Huang, 2016; D'Elia et al., 2020). By supporting easy browsing and product discovery, tools like breadcrumb trails, filters, and sorting choices may improve the user experience. The addition of thorough product information and in-depth descriptions is another vital component. Online shoppers mainly depend on product information to make wise purchases. According to research (Liang and Huang, 2016; D'Elia et al., 2020), giving thorough specs, correct size charts, consumer reviews, and high-resolution product photos may greatly improve consumers' confidence, buy intention, and satisfaction.

Additionally, including social proof components might enhance consumers' perception of credibility and trust. By giving prospective consumers access to the opinions and experiences of prior users, features like user ratings, reviews, and testimonials may help them develop trust (Keegan et al., 2020). According to research, consumers' purchase intentions are greatly increased by positive social evidence, and the perceived danger of online purchasing is decreased (Huang et al., 2016). In conclusion, people' perception of online buying are significantly influenced by the functionality and appearance of websites. Having a visually attractive design, easy navigation, thorough product details, and social proof components all help to improve the user experience, foster trust, and sway purchasing choices.

Security

Security is a crucial element that profoundly influences how consumers see online buying. Building confidence and trust among users while maintaining a great user experience are directly impacted by the amount of security that an e-commerce website has adopted. The effect of security on user perception has been reliably shown in several research investigations. For instance, it has been shown that SSL encryption, which safeguards critical user information during online transactions, has a favourable impact on consumers' perception of security and trust (Huang and Benyoucef, 2013; Lee et al., 2016). Strong data security practises and transparent privacy rules are also essential in building user confidence. According to research (Malhotra et al., 2004; Sheehan and Hoy, 2000), privacy rules that are readily available and properly expressed improve consumers' perception of security and reliability. Additionally, consumers' perception of security is greatly influenced by the existence of trust seals and certifications from prominent security organisations. According to studies (Chang et al., 2016; Keh et al., 2007), trusted seals have a favourable impact on consumers' trust and confidence while purchasing online. Users' perception of security is also influenced by reliable payment alternatives and secure payment gateways, which affects their trust and desire to make online transactions (Kim et al., 2007; Suh and Han, 2003). E-commerce websites may develop a feeling of security, establish trust, and improve the impression of online buying by prioritising certain security measures and clearly explaining them to consumers.

Conceptual Framework

Figure 1 indicates the conceptual framework for the variables that are associated with the present study. The dependent variable is consumers' perception, while the independent variable consists of five factors: convenience, time efficiency, website design/features, and security. Firstly, the study will identify factors that influence consumers' perception of online shopping. Second, followed by determining the relationship of consumer's perception with convenience, time efficiency, website design/features, and security.

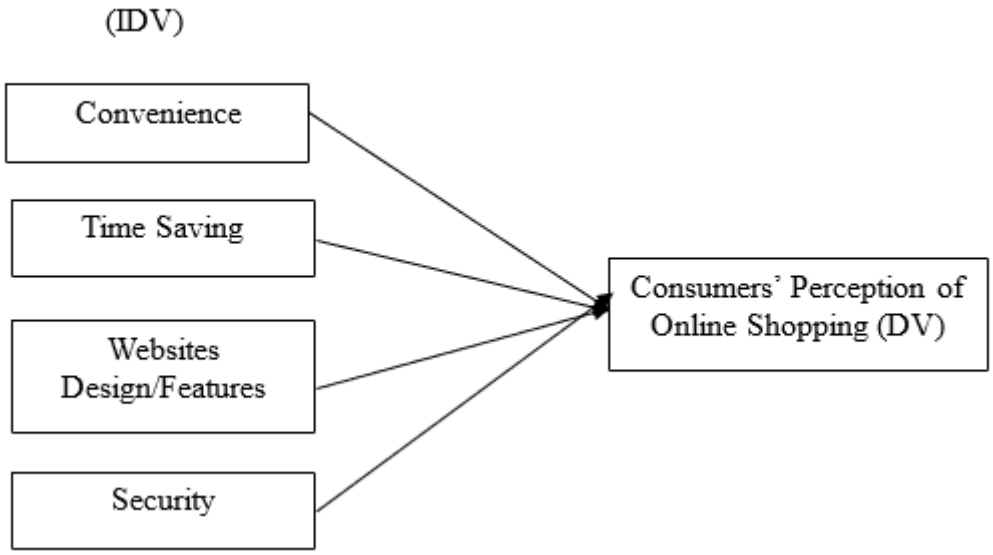

Figure 1 Conceptual Framework

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Methodology

The primary data was acquired from 208 respondents through face-to-face interviews by scanning a QR code to access the developed questionnaire in the Kota Samarahan area of Sarawak. The questionnaire was rigorously designed to fulfill all the requirements of the research. Some of the questions are designed by the researcher to address different research problems, while others are based on previous studies on consumers' views towards online shopping, with the intention of further confirming the validity of the current study. The survey is divided into two primary portions and one supplementary section, with the former primarily focusing on inquiries regarding the factors that drive customers to make online purchases. The purpose of the second component of the survey is to gather data that will assist us in addressing our research inquiries regarding the demographics of online shoppers and potential variations between online shoppers from Kota Samarahan and consumers in other locations.

Results and Discussion

Table 1 displays the demographic profiles of the respondents. The demographic characteristics of respondents, most respondents were female. This demonstrates that researcher is more likely to approach a female responder than a male responder. According to research, demographic features such as age and income would not be highlighted since age and money no longer influence consumer's perception of online shopping. Also, older generations may adjust to the new purchasing norms, such as utilising electronic payments or just using an online shopping platform. In terms of religion and ethnicity, more over half of those polled are Muslim Malay (59.6 and 53.4 percent, respectively). This is because Kota Samarahan is a rural region with a Malay majority. Because of its proximity to Sarawak's capital city, it

became home to another ethnicity. Christianity has the second highest number of adherents (39.4 percent), with the majority of Iban and Bidayuh ethnic members being Christians. Furthermore, Iban (26.0 percent) and Bidayuh (11.1%) are the second and third biggest ethnic groups in Kota Samarahan. Respondents of another ethnicity are the city's second least ethnic residents. What's more intriguing is that the bulk of the population is Muslim. As a result, researchers might deduce that they were either Melanau or converted to Islam. Finally, according to research, Buddhist and Chinese are the least followed and ethnic groups in Kota Samarahan, with just 1.9 percent being Chinese and 1 percent adhering to Buddhism. In term of education, all of respondents has finished their high school. However, most of them has either has a Diploma and equivalent or in bachelor's degree. Data revealed that more than half respondents was a bachelor 's degree holder with 51 percent. The respondents with diploma and equivalent holder such ad STPM, STAM, or matric are the second most likely to answer the survey with 35.6 percent participate to answer the survey.

Table 1: Demographic Profile of Respondents (n=208)

Variables	Group Label	(n)	(%)
Gender	Male	74	35.6
	Female	134	64.4
Ethnicity	Malay	111	53.4
	Chinese	4	1.9
	Iban	54	26.0
	Bidayuh	23	11.1
	Others	16	7.7
Religion	Islam	124	59.6
	Christianist	82	39.4
	Buddhist	2	1.0
Education Level	High School	21	10.1
	Diploma and equivalent	74	35.6
	Bachelor's Degree	106	51.0
	Master's Degree	6	2.9
	PhD	1	0.5

Source: Survey 2023

Factors that influencing the consumers' perception of Online Shopping in Kota Samarahan, Sarawak

This part consists of the factors that influencing the consumers' perception of Online Shopping in Kota Samarahan, Sarawak. There are four factors that are affecting the dependent variables (convenience, website design/features, time efficiency, and security).

Convenience

Table 2 contains information on the Convenience independent variable (IDV1). Except for the second statement, all statements for this IDV received a mean of 4.0. For the first statement, around 146 respondents (70.6 percent) agreed, while no one strongly disputed that they always received on-time delivery while purchasing online. The mean for this statement was 4.1731, indicating that most

respondents felt they received their goods on time after purchasing them online. For the second statement, about 116 respondents (55.8 percent) agreed, while about 3 respondents strongly disagreed that the online shopping platform would provide detail information about the product they are selling. The mean for this statement was 3.9615, indicating that most respondents are unable to determine whether all online shopping platforms give detailed information or not. For the third statement, about 96 respondents (44.7 percent) strongly agreed, while about 6 respondents (2.9 percent) strongly disagreed that they could buy any product they wanted at any time 24 hours a day while shopping online. The mean for this statement was 4.1587, indicating that most respondents felt they could purchase any product they wanted at any time of day or night when shopping online. For the fourth statement, approximately 98 respondents (47.1 percent) agreed, while approximately 4 respondents (1.9 percent) strongly disagreed. The mean for this statement was 4.1058, indicating that most of respondents thought it was easy to pick and contrast items when shopping online. For the final and fifth statement, that online shopping allows people to shop during busy schedules without sacrificing convenience, approximately 95 respondents (45.7 percent) agreed, while approximately 3 respondents (1.4 percent) strongly disagreed. The mean for this statement was 4.1827, indicating that most respondents stated that internet shopping enables people to purchase throughout their hectic schedules without sacrificing convenience.

Table 2: Convenience

Item	Level of Importance					M
	1	2	3	4	5	
I get on-time delivery by shopping online.	0 (0.0)	4 (1.9)	7 (3.4)	146 (70.2)	51 (24.5)	4.17
Detail information is available while shopping online.	3 (1.4)	14 (6.7)	23 (11.1)	116 (55.8)	52 (25.0)	3.96
I can buy products anytime 24 hours a day while shopping online.	6 (2.9)	10 (4.8)	22 (10.6)	77 (37.0)	93 (44.7)	4.16
It is easy to choose and make comparison with other products while shopping online.	4 (1.9)	8 (3.8)	24 (11.5)	98 (47.1)	74 (35.6)	4.11
It allows me to shop during busy schedule without compromising convenience.	3 (1.4)	5 (2.4)	24 (11.5)	95 (45.7)	81 (38.9)	4.18

Website Design/Feature

It was a statement for IDV of Website Design/Feature based on Table 3. All assertions for this IDV had a mean score of 4.0. For the first statement, around 113 respondents (54.3 percent) agreed, while 2 respondents (1 percent) strongly disagreed that the website design aids users in readily browsing for items. The mean for this statement was 4.0817, indicating that most respondents thought the website's design made it easier to find items. For the second statement about consumers' preferences to purchase from a website that provides safety and ease of navigation and order while shopping online, approximately 120 respondents (57.7 percent) strongly agreed, while approximately 3 respondents (1.4 percent) strongly disagreed. The mean for this statement was 4.4231, indicating that most respondents chose to buy from a website that offers security, simplicity of navigation, and order.

For the third statement about how the website layout helps respondents search and select the right product while shopping online, approximately 106 respondents agreed, while approximately 2 respondents

strongly disagreed. The mean for this statement was 4.2067, indicating that most respondents agreed that the website architecture really assists them in searching for and selecting the proper product when purchasing online. For the fourth statement, about 102 respondents (49 percent) agreed, while about 2 respondents (1 percent) strongly disagreed that they believe familiarity with the website before making an actual purchase reduces the risk of shopping online. The mean for this statement was 4.0577, indicating that most respondents agreed that familiarity with the website prior to making an actual purchase reduced the danger of online purchasing.

For the final statement about preferring to buy from websites that provide high quality information, approximately 87 respondents (41.8 percent) strongly agreed, while approximately 2 respondents (1 percent) strongly disagreed. The mean for this statement was 4.1827, indicating that most respondents preferred to purchase from a website that gives reliable information.

Table 4.3: Website Design/Feature Influence

Item	Level of Importance					M
	1	2	3	4	5	
The website design helps me in searching the products easily.	2 (1.0)	10 (4.8)	20 (9.6)	113 (54.3)	63 (30.3)	4.08
While shopping online, I prefer to purchase from a website that provides safety and ease of navigation and order.	3 (1.4)	7 (3.4)	9 (4.3)	69 (33.2)	120 (57.7)	4.42
The website layout helps me in searching and selecting the right product while shopping online.	2 (1.0)	7 (3.4)	15 (7.2)	106 (51.0)	78 (37.5)	4.21
I believe that familiarity with the website before making actual purchase reduce the risk of shopping online.	2 (1.0)	12 (5.8)	25 (12.0)	102 (49.0)	67 (32.2)	4.06
I prefer to buy from website that provides me with quality of information.	2 (1.0)	11 (5.3)	22 (10.6)	86 (41.3)	87 (41.8)	4.18

Time efficiency

It was a statement for IDV of Time efficiency based on Table 4. Except for the first two assertions, all statements for this IDV received a mean of 4.0. Regarding the first statement, around 84 respondents (40.4 percent) agreed, whereas 4 respondents (1.9 percent) strongly disagreed that online shopping did not waste their time. The mean for this statement was 3.9615, indicating that most respondents said they couldn't tell whether internet shopping was a waste of time or not. For the second statement, it is about how much time is spent purchasing products online, around 98 respondents (47.1 percent) agreed, while approximately 4 respondents (1.9 percent) strongly disagreed. The mean for this statement was 3.9808, indicating that most respondents were unsure if they spend less time purchasing products online. For the third statement about how much time it takes to evaluate and select a product, approximately 101 respondents (48.6 percent) strongly agreed, while approximately 3 respondents (1.4 percent) strongly disagreed that they believe it takes less time to evaluate and select a product when shopping online. The mean for this statement was 4.2067, indicating that most respondents agreed that the website architecture really assists them in searching for and selecting the proper product when purchasing online. About 123 respondents (59.1

percent) strongly agreed with the fourth item about avoiding traffic and parking issues, whereas approximately 2 respondents (1 percent) strongly disagreed that they buy online to avoid traffic and parking hassles. The mean for this statement was 4.5048, indicating that the majority of respondents thought that buying online would save them from traffic and parking headaches. For the final and fifth statement about how online shopping allows respondents to avoid long lines and crowded stores, approximately 117 respondents (56.3 percent) strongly agreed, while approximately 2 respondents (1 percent) strongly disagreed that online shopping allows them to avoid long lines and crowded stores. The mean for this statement was 4.4567, indicating that most respondents stated that internet shopping allowed them to avoid lengthy lines and congested places.

Table 4: Time efficiency Influence

Item	Level of Importance					M
	1	2	3	4	5	
Online shopping doesn't waste time.	4 (1.9)	14 (6.7)	37 (17.8)	84 (40.4)	69 (3.2)	3.96
Online shopping takes less time to purchase.	4 (1.9)	12 (95.8)	31 (14.9)	98 (47.1)	63 (30.3)	3.98
I feel that it takes less time in evaluating and selecting a product while shopping online.	3 (1.4)	11 (5.3)	22 (10.6)	101 (48.6)	71 (34.1)	4.09
I can avoid traffic and parking hassles by shopping online.	2 (1.0)	1 (0.5)	10 (4.8)	72 (34.6)	123 (59.1)	4.50
Online shopping allows me to skip the long queues and crowded stores.	2 (1.0)	3 (1.4)	10 (4.8)	76 (36.5)	117 (56.3)	4.46

Security

It was a declaration for IDV of Security, according to Table 5. When compared to the first three IDVs, this IDV had the lowest mean. In response to the first statement, around 76 respondents (36.5 percent) chose to be neutral, while 5 respondents (2.4 percent) strongly disagreed that they felt safe and secure while purchasing online. The mean for this statement was 3.500, indicating that most respondents are still worried about security and safety while buying products online. For the second statement about purchasing from a trustworthy website, around 96 respondents (46.2 percent) agreed, whereas approximately one respondent (0.5 percent) strongly disagreed. The mean for this statement was 4.2692, indicating that most respondents normally purchase from a reliable website. For the third statement about internet purchasing protecting respondents' security, around 78 respondents (37.5 percent) agreed, whereas approximately 4 respondents (1.9 percent) strongly disagreed. The mean for this statement was 3.6058, indicating that most respondents were not convinced that internet purchasing respects their privacy. For the final and fourth statements about using secure payment methods, such as credit cards or trusted online payment platforms, approximately 99 respondents (47.6 percent) agreed, while no one strongly disagreed. The mean for this statement was 4.0577, indicating that most respondents utilise safe payment methods such as credit cards or trustworthy online payment systems.

Table 5: Security Influence

Item	Level of Importance					Mean
	1	2	3	4	5	
I feel safe and secure while shopping online.	5 (2.4)	22 (10.6)	76 (36.5)	74 (35.6)	31 (14.9)	3.50
I like to shop online from a trustworthy website.	1 (0.5)	4 (1.9)	20 (9.6)	96 (46.2)	87 (41.8)	4.27
Online shopping protects my security.	4 (1.9)	20 (9.6)	68 (32.7)	78 (37.5)	38 (18.3)	3.61
I like to use secure payment methods, such as credit card or trusted online payment platforms.	-	9 (4.3)	35 (16.8)	99 (47.6)	65 (31.3)	4.06

Consumers' perception toward Online Shopping

Table 6 shows the question on consumers perception of online shipping. The first subject would be the internet. It is evident that everyone is utilising the internet for numerous reasons right now. Most respondents began using the internet more than 5 years ago, indicating that they had been exposed to it for a long period. According to the data, 88.9 percent of respondents began using the internet more than 5 years ago. Most respondents (27.9 percent) utilised the internet 6 to 10 hours each week. The second subject was internet buying. According to the data, over 99 percent of respondents had made an online purchase. The remaining people who have never bought anything online may have done it because they sought assistance from someone who often brought goods online. Most respondents (40.9%) began shopping online more than 5 years ago and commonly bought items online more than 10 times. Most respondents (7.6 percent) picked Shopee as their primary online shopping site. According to the poll results, most respondents (38 percent) prefer to buy products online because of the ease of quick purchase, home delivery, and the flexibility to shop 24/7 at any time and from any location. Finally, research indicated that the greatest obstacle to online purchasing was that most respondents (30.3 percent) chose internet too sluggish, or page of online shopping platform take too long time to react as their response.

Table 6: Internet and Online Shopping Perception

Variables	Group Label	(n=208)	(%)
Do you use Internet?	Yes	208	100
	No	-	-
How long have you been using Internet?	Less than 1 year	2	1.0
	1-3 years	5	2.4
	3-5 years	16	7.7
	More than 5 years	185	88.9
How much time on the average (per weeks) do you spend in surfing the Web?	0 -5 hours	46	22.1
	6 -10 hours	58	27.9
	11-15 hours	46	22.1
	16 – 20 hours	29	13.9
	More than 20 hours	29	13.9

Have you purchased anything online ever?	Yes No	204 4	98.1 1.9
When did you shop for the first time via online?	Last 6 months 6 -12 months 1 – 3 years 3 – 5 years More than 5 years	38 6 58 35 71	18.3 2.9 27.9 16.8 34.1
How frequently did you purchase online?	Only once 2 – 4 times 5 – 7 times 8 – 10 times More than 10 times	9 79 22 13 85	4.3 38.0 10.6 6.3 40.9
Where do you most often access the Internet?	Home Office Cyber-cafes Others	185 12 2 9	88.9 5.8 1.0 4.3
Which application/web does you commonly used to buy through Internet?	Lazada Shopee TikTok Food panda/Grab food Shein Face Book	1 158 42 3 3 1	0.5 76.0 20.2 1.4 1.4 0.5
What is main motivation for buying through Internet?	Convenience Saves Time Superior Selection / Availability Product Comparison Price Others	79 46 12 16 48 7	38.0 22.1 5.8 7.7 23.1 3.4
What, according to you is the most important barriers to purchase online?	I am worried to giving out my debit/credit card number. I don't have a debit/credit card. I don't like providing personal information. I don't want to purchase for someone with whom I don't familiar. I enjoy going out to do my shopping. I like to see/touch the product in person, before buying it Internet too slow / Pages take too long to load.	50 5 41 8 5 20 63 - 1 3	24.0 2.4 19.7 3.8 2.4 9.6 30.3 - 0.5 1.4

	Delivery costs are too high.		
	Prices are too high.	3	1.4
	Technical foul-ups prevent transactions form going through.	6	2.9
	I can't find anything that I want to purchase on the Internet.	3	3
	I don't know how but I am not comfortable about purchasing through Internet.		
	The process is expensive due to cost of access.		

Source: Survey 2023

Purchased Goods

Table 7 displays the multiple response questions for the types of items purchased over the Internet. According to the data, most respondents buy online for books, technological devices, plane tickets, and other items. However, most respondents (145) said that they bought accessories and garments online. It includes a chain, trousers, a dress, and other items. Magazines are the least bought online, with just 0.8 percent of respondents having ever purchased a magazine online.

Table 7: Purchased Goods

Variables	Group Label	Frequency	Percentage
Which category of goods have you brought through Internet? (Multiple Respond Question)	Books	110	7.0
	Railway Tickets	22	1.4
	Electronic Gadgets	106	6.8
	Airline Tickets	104	6.7
	CD / Videos	12	0.8
	Computer Hardware	71	4.5
	Accessories apparel	145	9.3
	Computer Software	48	3.1
	Gifts	108	6.9
	Magazine	19	1.2
	Event Tickets	25	1.6
	Movies Tickets	61	3.9
	Hotel Rooms / Car Rental	79	5.1
	Office Supplies	27	1.7
	Jewellery	54	3.5
	Food / Groceries	110	7.0
	Infant / Child Items	22	1.4
	Home tools and products	110	7.0
	Sporting Goods	75	4.8
	Health and fitness product	98	6.3

	Toys	66	4.2
	Others	91	5.8

Source: Survey 2023

Usage of Internet

Table 8 shows that how respondents used the internet for various tasks such as communication, information collecting, and more. Overall, total internet use in a variety of activities is more than the mean of three, indicating that all activities made excellent use of the internet. Communication is the first action. According to the survey, over half of all respondents (98 respondents), or 47.1 percent, used the internet for communication the most, while 8 respondents (3.8 percent) used it the least. The mean for this statement was 3.9375, indicating that most respondents spend a significant amount of time utilising the internet for information gathering. The second action is obtaining information. According to the survey, the majority of respondents (76 respondents, or 36.5 percent) mostly used the internet for communication, whereas 14 respondents (6.7 percent) primarily used the internet for information collecting. The mean for this statement was 3.6923, indicating that most respondents spend a significant amount of time utilising the internet to collect information. The third activity is recreation. According to the survey, most respondents (101 respondents) or 48.6 percent used the internet mostly for pleasure, while 13 respondents (6.3 percent) seldom used the internet for information gathering. The mean for this statement was 3.6923, indicating that most respondents spend a significant amount of time using the internet for amusement.

Finance is the fourth activity. According to the survey, the majority of respondents (54 respondents) or 26.0 percent used the internet extensively for financial, whereas 30 respondents (14.4 percent) infrequently utilised the internet for information collecting. The mean for this statement was 3.1683, indicating that the majority of respondents spend a significant amount of time using the internet for financial activities. Shopping is the last activity. According to the survey, the majority of respondents (71 respondents) or 34.1 percent used the internet for online shopping the most, while 16 respondents (7.7 percent) seldom used the internet for online shopping. The mean for this statement was 3.6442, indicating that the majority of respondents spend a significant amount of time using the internet for online shopping.

Table 8: Usage of Internet in Varieties of Activities

Activity	Level of Importance					M
	1	2	3	4	5	
Communication	8 (3.8)	22 (10.6)	43 (20.7)	37 (17.8)	98 (47.1)	3.93
Information Gathering	14 (6.7)	16 (7.7)	29 (13.9)	48 (23.1)	101 (48.6)	3.69
Entertainment	3 (1.4)	11 (5.3)	22 (10.6)	101 (48.6)	71 (34.1)	3.99
Finance	30 (14.4)	39 (18.8)	54 (26.0)	36 (17.3)	49 (23.6)	3.17
Shopping	16 (7.7)	25 (12.0)	47 (22.6)	49 (23.6)	71 (34.1)	3.64

Source: Survey 2023

Satisfaction toward Online Shopping's

Experience Table 9 shows the overall satisfaction of respondents based on their previous online purchasing transactions. Overall, it seems that the majority of respondents had a positive experience while buying things online. It may be proving as more than 75% of respondents were happy with their online purchasing experience. For this statement, the mean is 4.1394 shows that most respondents were pleased with their online buying experience.

Table 9: Overall Satisfaction toward Online Shopping's Experiences

Statement	Level of Importance					M
	1	2	3	4	5	
Overall, were you satisfied with your experience of online shopping?	1 (0.5)	-	8 (3.8)	159 (76.4)	40 19.2)	3.93

Source: Survey 2023

Pearson Correlation Analysis

This study employed Pearson Correlation Analysis to quantify the correlation between two variables that impact consumer perception of online purchasing. Pearson Correlation Analysis refers to the examination of the connection or correlation between two or more quantitative variables. This study is primarily predicated on the assumption of a linear correlation between the quantitative variables. Similar to the measures of association for binary variables, it quantifies the "intensity" or "degree" of a relationship between the variables and its direction (Gogtay & Thatte, 2017).

All the results from the correlation coefficient data were found to be positive, indicating that there is a direct relationship between the variables. When one variable increases, the other variable tends to increase as well, or vice versa. Furthermore, there exists a significant correlation among all the parameters. With the exception of pleasure, the results indicated that all correlations between the two elements were generally advantageous for convenience. The correlation coefficient (r) was found to be .622 ($p < .001$) for the relationship with website design, .564 ($p < .001$) for the connection with time efficiency, and .517 ($p < .001$) for the relationship with security, while it was .371 ($p < .001$) for the relationship with satisfaction. This illustrates that enhancing convenience would lead to an enhanced website design, time efficiency, enhanced security, and increased satisfaction.

Research on website design revealed that ease and time efficiency were highly regarded, whereas security was marginally valued, and satisfaction was extremely low. The results indicate that there is a strong positive correlation between convenience and the variable being measured ($r = .622$, $p < .001$). Similarly, there is a strong positive correlation between time efficiency and the variable being measured ($r = .582$, $p < .001$). Additionally, there is a moderate positive correlation between security and the variable being measured ($r = .476$, $p < .001$). Lastly, there is a weak positive correlation between satisfaction and the variable being measured ($r = .289$, $p < .001$). This illustrates that enhancing website design leads to superior outcomes in terms of ease, time efficiency, security, and happiness.

The data revealed that convenience and time efficiency were moderately positive, whereas security had a negative impact, and satisfaction was exceptionally low. The results indicate that there is a significant positive correlation between convenience and the variable of interest ($r = .564$, $p < .001$). Similarly, there is a significant positive correlation between time efficiency and the variable of interest ($r = .582$, $p < .001$). Additionally, there is a significant positive correlation between security and the variable of interest (r =

.443, p < .001). Lastly, there is a significant positive correlation between satisfaction and the variable of interest (r = .274, p < .001). This illustrates that augmenting time efficiency yields superior outcomes in relation to convenience, website design, security, and pleasure.

Research indicates that security is generally favorable when considering convenience, but it is somewhat unfavorable when considering website design, time efficiency, and satisfaction. The results indicate that there is a significant positive correlation between convenience and the variable of interest (r = .517, p < .001). Similarly, there is a significant positive correlation between website design and the variable of interest (r = .476, p < .001). Additionally, there is a significant positive correlation between time efficiency and the variable of interest (r = .443, p < .001). Lastly, there is a significant positive correlation between satisfaction and the variable of interest (r = .343, p < .001). This illustrates that enhancing security will lead to a more favorable outcome in terms of ease, website aesthetics, time efficiency, and overall satisfaction. Ultimately, the data revealed a slight positive correlation between satisfaction with convenience and security, and a minimal correlation between website design and time efficiency. The results indicate that there is a significant positive correlation between convenience and the variable of interest (r = .371, p < .001). Similarly, a significant positive correlation was found between website design and the variable of interest (r = .289, p < .001). Additionally, there is a significant positive correlation between time efficiency and the variable of interest (r = .274, p < .001). Lastly, a significant positive correlation was observed between security and the variable of interest (r = .343, p < .001). This illustrates that enhancing enjoyment results in enhanced convenience, website design, time efficiency, and security.

Table 10: Pearson Correlation

	Convenience	Website Design	Time efficiency	Security	Satisfaction
Convenience	1				
Website Design	.622**	1			
Time efficiency	.564**	.582**	1		
Security	.517**	.476**	.443**	1	
Satisfaction	.371**	.289**	.274**	.343**	1

**. Correlation is significant at the 0.01 level (1-tailed).

Conclusion

Shopping through online has become a new typical pastime, with most people beginning to purchase products or services online. This research was carried out at Kota Samarahan, Sarawak. The selected individual will be required to complete the survey. The investigation lasted around three months. As a result, the primary goal of the research was to investigate the elements that impact consumers impression of online purchasing.

This research identified four factors that will influence consumers'' perception of online buying. Convenience, website design/feature, time efficiency, and security are the factors. Four determining factors were examined using descriptive analysis. Meanwhile, the second analysis was examined using Pearson correlation analysis. The initial research shows that all the elements have had a direct impact on consumers' perception of online shopping. The findings also indicated that most respondents are

concerned about the security of online shopping platforms. These results should be taken carefully in order to ensure that the users' personal information was protected.

Aside from that, the results on convenience influence suggest that respondents are more inclined to purchase online if the online shopping platform developer focuses on maximising ease when shopping online. Furthermore, the studies discovered that adopting smart design to an online buying platform will most likely help consumer easily utilise the online shopping platform. Furthermore, research revealed that most respondents thought that internet shopping saves more time. In terms of significance, the study found that all four characteristics had a considerable impact on consumers'' perception of online shopping. However, there are only two characteristics that have a direct influence on consumers'' perception of online buying (convenience and security). The other two variables show that changes in these two parameters have minimal influence on overall satisfaction while shopping online.

In conclusion, this research discovered four elements that influence consumers' perception of online buying. The four independent factors were convenience, website design/feature, time efficiency, and security, with the dependent variable being consumers' perception of online shopping.

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