Factors Affecting Online Shopping Purchase Intention among Generation Z Consumers in Malaysia

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ABSTRACT

Online shopping is increasingly taking over the global retail space, including Malaysia. With the projections of growth for online shopping, it is vital that managers identify the main factors behind the purchase intention of consumers. This study seeks to identify the significant factors that contribute to the purchase intention of Generation Z consumers in Malaysia when shopping online. A quantitative approach via survey questionnaire is deployed for this study. The factors of Perceived Site Quality, Trust, Product Information Quality and Perceived Risk are examined through a study on 200 Generation Z consumers in Malaysia. The findings indicated that Product Information Quality is the most significant factor which contributes to purchase intention. Contrary to previous studies, the findings of this study also provided valuable insight to the Generation Z's perception towards Perceived Site Quality, Trust and Perceived Risk. Managerial implications on improving Product Information Quality are discussed. The study also provided insight into demographic differences such as gender and highest education level towards online shopping behaviour.

Keywords: online shopping, purchase intention, consumer behaviour, perceived site quality, trust, perceived risk, product information quality

INTRODUCTION

Overview of Online Shopping

Online shopping refers to the activities of buying and selling products or services online which has significantly changed the way consumers meet their needs, wants and demands in a technologically-rich era. With the rise in e-books, digital distribution, streaming media and social commerce on a multitude of multinational e-commerce platforms, brick and mortar stores are slowly adapting to an omni–channel approach, catering to consumers who want to make purchases at the convenience of their time, physical location and preferences (Alexander and Cano, 2020).

The beginning of online shopping dates back to 1994, where technological innovations such as SSL data transfer encryption standards made it possible for online shopping to happen (Gilbert, 2004). Pioneering in the online shopping space is one of the most well-known shopping sites today - Amazon, which launched its shopping site in 1995 and was subsequently followed by eBay in the same year (Page, 2021).

Amazon's founder, Jeff Bezos, only aspired to sell books around the world when he founded the company on 5th July 1995 (Hartmans, 2021). Little did he know, the company managed to spark a revolution in retail shopping, introducing the endless possibilities of online shopping to the world. When their fiercest competitor, eBay, came in with the online auction mechanism, Amazon was quick to capitalise on the concept and offered

its own online auction platform to compete (Hartmans, 2021). As time went by, Amazon realised that their online retail space selling directly to customers was a more viable option, so they started to store a wider range of products in their warehouses and directly shipping them to customers, effectively putting into place the online shopping business framework that we see today (Grant, 2005).

Today, it is estimated that there are over 3 billion websites on the surface web and at least 400 times bigger than that in the deep web (Kunder, 2022). Those 3 billion websites are readily accessible by more than 84% adults in the US, increasing from just 52% at the beginning of the century (Perrin and Duggan, 2015). Globally, online shopping has drastically changed the retail landscape, amounting to 14.1% of total retail sales in 2019, with great room for growth as it is expected to rise to 22% by 2023 (Ouellette, 2022). Based on a study by Austin (2021), the top three countries dealing in online shopping are China, the United States and the United Kingdom. Through online shopping, the decision-making process of consumers has substantially changed as they are able to easily gain information, compare products and prices, share buying experiences and complete purchases conveniently (Wang, Lin and Spencer, 2019).

Figure 1.1: Online Shopping Sales by Country as in Austin (2021)

Most of the traction in online shopping was gained from the boom in the smartphone industry. Since the first release of the touchscreen iPhone by Apple in 2010, the mobile device scene has seen numerous advancements such as smart apps and NFC technology. Most notably, the availability of smartphones at various price points have enabled virtually all Americans to own a smartphone. A study conducted by the Pew Research Centre in 2021 notes that 97% of Americans own their own device, up from 35% in 2011 (Pew Research Centre, 2021). This essentially means that online shopping is now closer to consumers than ever.

Most online shopping platforms operate on their own website and mobile applications. For instance, Amazon has operated on their website amazon.com since 1995 and Amazon Shopping mobile app since 2014. Their shopping app is one of the most accessed globally, with 500 million downloads to date. This provides shoppers a variety of ways to complete their shopping online. Moving into the 2020s, there are a handful of platforms such as China's WeChat, Facebook and PayPal that have started to shift to super apps, an app which offers multiple functionalities such as shopping, e-hailing, delivery, cryptocurrency, finance facilities, insurance, bill payments and more (O'Brien, 2022).

One of the conveniences of online shopping is in making payments. As the transaction is completed digitally, digital forms of payment have been widely welcomed around the world. Online shoppers can now enjoy the privilege of making payments via their credit/debit cards and online banking through payment gateways such

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as PayPal, Apple Pay, Stripe, Google Pay, Masterpass, Visa Checkout, Amazon Pay, American Express, Alipay and more (Castro, 2022). In recent years, many e-wallets have been introduced globally including America's CashApp and Venmo; India's MobiKwik and PayU; China's Alipay and WeChat Pay and Malaysia's Touch n' Go eWallet and GrabPay, making online payments even more seamless (Castro, 2022).

A study by Prajapati (2021) found out that consumers prefer to shop online nowadays due to the variety of products, convenience, easy refund and replacement schemes and availability of reviews. As brick-and-mortar stores have limited space and demand, physical retailers carefully select the products that they want to put up for sale in their stores. This will limit the choices that consumers have as they might not have a particular model or variant in stock. Conversely, most online vendors operate from a warehouse which provides them the ability to store all the available forms of the products. Furthermore, consumers can find rare products online such as off-season goods and collectible items which are not readily available in stores.

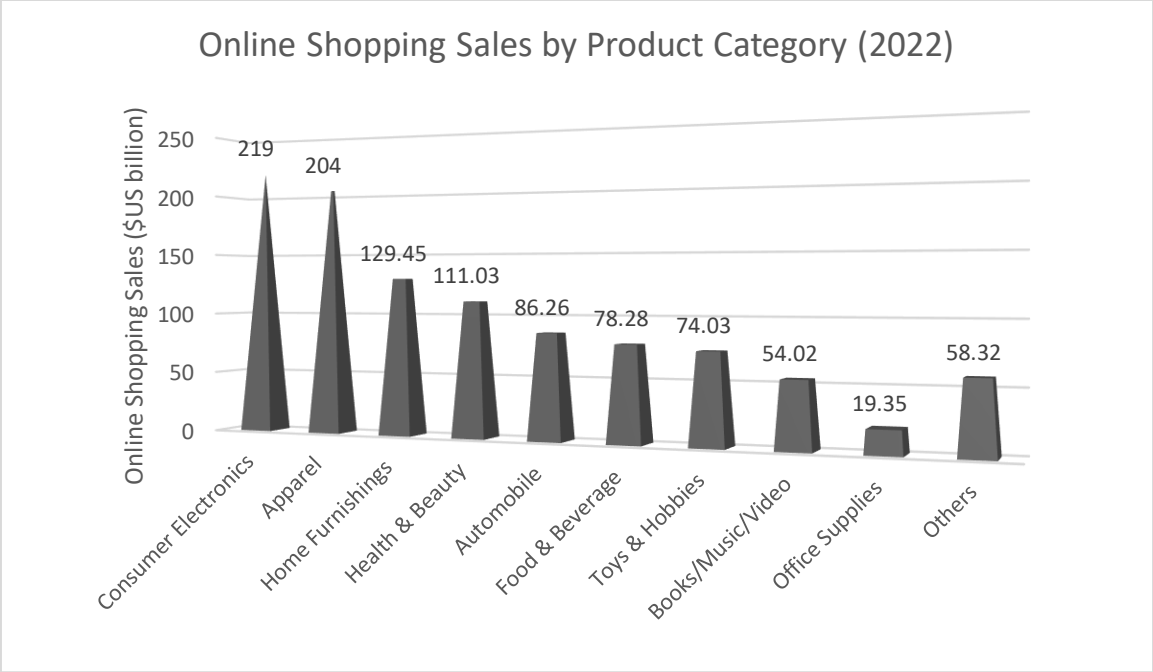

Figure 1.2: Online Shopping Sales by Product Cateogory as studied by Oberlo (2022)

With regards to convenience, online shoppers can complete the entire transaction seamlessly within the mobile apps. Through the search engine embedded within the app, they can easily search, filter and sort a wide range of available products. After curating their shopping cart, they can then checkout easily via the online payment modes. Soon after, they will receive their products at their doorstep thanks to the integrated global logistics network. This significantly reduces the hassle of shopping as they will not need to visit a physical store to complete the transaction. In fact, in a study by McGann (2004), it was found that 78% of consumers ranking convenience as their sole reason to opt into online shopping.

One of the most concerned areas of consumers are the refund and replacement schemes should the purchase not satisfy them. As such, many online retailers have put in place an easy scheme to return their products, usually free of charge at a delivery partner and receive their refund instantly. With this assurance in mind, shoppers are more confident when making purchases and they do not need to worry about returning to the store just to return their products.

Lastly, one of the most prominent features of online shopping platforms is the availability of reviews by previous buyers. This allows prospective buyers to make a more informed decision regarding the product before proceeding with the transaction. As buyers think alike, one's experience would likely answer the questions that buyers would ask. Therefore, prospective buyers have greater control when it comes to making a purchase decision as they have another form of input.

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Online Shopping in Malaysia

With the rise of large e-marketplaces around the world serving Malaysia such as AliExpress, Taobao, Lazada, Shopee and more, shopping has never been made easier with a click away. A study conducted by Facebook and Bain & Company in 2021 revealed that Malaysians were ahead of their regional peers when it comes to online shopping (Ganesan, 2021). By 2020, there were already more than 21.9 million users within its e-commerce space (e-Conomy SEA 2021 report, 2021). Coming out on top at 88% of the population being digital consumers, it is ahead of Indonesia and Singapore. ASEAN e-commerce is seen to have achieved a mature stage and is expected to be worth US$ 172 billion by 2025 - a more than 250% increase from 2020 (Murugiah, 2022). This growth is supported by international retailers like IKEA, Zalora and Tesco which have grown their e-commerce presence in Malaysia, making a structural change of the market towards a more omni-channel approach. This boom in online shopping is very much attributed to the rise in the logistics network in Malaysia, rise in e-wallet adoption by consumers and Malaysia's young consumers.

The COVID-19 pandemic in 2020 was a catalyst for growth for the Malaysian e-commerce market, contributing up to 37% of growth (Raj and Gohain, 2021). When Malaysians were in the multiple phases of the Movement Control Order (MCO), they were stuck indoors and had to rely on online shopping to sustain their needs, wants and demands (Hansman et al., 2020). This led to an economic boom in the e-commerce sector, to the point where logistics firms like Pos Malaysia Berhad were facing difficulties in coping with the volume of deliveries (Kee et al., 2021). This phase was also crucial in changing the consumer patterns of Malaysians. Post-COVID-19, more Malaysians are making purchases online as they have already experienced the convenience and reliability of online shopping.

Online shopping is largely supported by a strong delivery network in Malaysia, with the existence of many strong players in the field such as PosLaju, J&T Express, DHL, GDex and the in-house logistics arm of major marketplaces such as Shopee Express and LEL Express. Furthermore, the country has seen a rise in on-demand delivery services such as GrabExpress and Lalamove which made the transition of brick-and-mortar stores into e-commerce stores much easier. In 2020, foreign logistics networks such as Cainiao and Best Inc from China have started establishing their services in Malaysia and saw an increase of 104.4% of deliveries in Malaysia by December 2021 (Khoo, 2022).

As online shopping requires an electronic form of payment, the surge in e-wallet usage in Malaysia was synergistic to the growth of online shopping. Domestic Trade and Consumer Affairs Minister Datuk Seri Alexander Nanta Linggi announced that the usage of e-wallets increased by 131% to over 600 million transactions made in 2020 and the e-commerce transactions income rose to RM254.6 billion in Q1 2021 (The Edge Markets, 2022). With major marketplaces adopting their own version of the e-wallet e.g., ShopeePay, GrabPay, LazWallet, etc. and the adoption of a universal payment QR code (DuitNow QR), Malaysians have been welcoming the usage of e-wallets with open arms. A report by Mastercard showed that Malaysia is leading e-wallet adoption in the ASEAN region with 40% usage against the Philippines' 36%, Thailand's 27% and Singapore's 26% (Boey, 2020)

Furthermore, Malaysia's younger generation is already on the rise to command most of the new economy with large spending power and matured adoption of technology. The Malaysian government has even taken the initiative to cater towards the younger generation via transfer payments such as the ePemula scheme in April 2022, handing out a total of RM300 million to 2 million youths to stimulate the digital economy (The Star, 2022). This study will be angled towards the online shopping behaviour of the youths in Malaysia. With regards to adoption of technology, the Malaysian government is eager to establish itself as a developed country and has so far managed to allow 96.7% of users to access the internet via their smartphone (Kemp, 2021).

The online shopping scene in Malaysia is sought to grow to a projected US$4.46 billion in 2022 since its inception in the early 2000s (Kemp, 2021). According to a study conducted by Google, Temasek and Bain & Company, more than 33% of digital service users were new to online shopping in 2020, largely attributed to the COVID-19 pandemic (e-Conomy SEA 2021 report, 2021). The International Trade Administration of the

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US further estimates that the e-commerce market in Malaysia will grow at 17.8% between 2020 and 2024 (International Trade Administration, 2021).

The rise of e-commerce platforms in Malaysia is spearheaded by the top five platforms being Shopee, Lazada, Mudah, PGMall, Lowyat and Carousell (Buii, 2021). The leading e-commerce platform, Shopee, is raking in more than 56 million monthly web visits and is ranked #1 on both the App Store and Play Store with regards to mobile shoppers.

Figure 1.3: Top Online Shopping Websites in Malaysia by Monthly Visitors as in Buii (2021)

Many parties such as PayPal have conducted studies on Malaysian consumers and found out that the primary reason why they shop online is because it saves time (PayPal, 2018). Most Malaysians have a busy schedule and the convenience of doorstep delivery and a large online marketplace have been allowing Malaysians to shop more (Balmaceda and Leong, 2021).

The report by PayPal added that 40% of Malaysian purchases were cross-border, citing that overseas products have better prices and are not available locally (PayPal, 2018). A further read on the report by the International Trade Administration stated that Malaysians like to buy items from China, Singapore, Japan, the United States and South Korea (International Trade Administration, 2021).

PayPal also found that a great motivation for Malaysians to purchase online was the availability of good deals (PayPal, 2018). This is the reason why many online shopping platforms have organised a variety of shopping events such as the annual 11.11 (11 December, dubbed “Single’s Day”), 12.12 (12 December), and Payday Sale on the 25th of every month which offers countless deals and discounts. In 2021, Shopee managed to set a new daily sales record of over 2 billion items on their 11.11 Big Sale (Algadrie, 2021).

Factors Influencing Consumers’ Purchase Intention in Online Shopping

When online shoppers make a purchase decision on the shopping platforms, a thorough decision-making process is put into place. A great number of research has taken place to identify the factors that come into play when shoppers are making their decisions.

Notable research such as Qalati et al. (2021) brought to light the significance of perceived website quality when they attributed a firm’s success to the website, a communication channel between a company and their customers. It was also critically examined by McKnight, Choudhury and Kacmar (2002) as they found that an

online vendor's identity is carried by their website and has to appeal to prospective customers.

Secondly, this study will examine the trust of online shoppers towards a website as studied by Thomas, Kavya and Monica (2018). Khan et al. (2015) suggested that trust acts as a binding force between buyer and seller transactions and a trusting relationship has to be built before purchase intention can be established.

Next, product information quality is to be examined as conducted in a study by Bigné-Alcañiz et al. (2008). Studies by Brusch et al. (2019); and Sharma and Aggarwal (2019) both attribute the long-term success of online retailers to the satisfaction of shopping experience through the availability of product information. Mortimer et al. (2016), Pandey and Chawla (2018); and Tzeng et al. (2020) noted that online customers will scrutinise an online shopping platform for complete and relevant product information before a purchase intention is generated.

Perceived risk is the final factor to be examined in this study as significantly identified to be a heavy contributing factor by Kuswanto et al. (2019) who found that 59% of respondents claimed perceived risk to be the most concerning issue surrounding online shopping. Ariff et al. (2014) also proposed that perceived risk forms the bulk of consumers' attitude and intention to purchase. Salisbury et al. (2001) notes that consumers will not be as concerned about the products as much as they are on perceived risk.

Generation Z

Generation Z refers to people that are born from 1995 to 2010 based on the definition provided by Dimock (2019). Furthermore, Strauss and Howe (1992) identified that this generation's lifespan should reach 15 years as it is supported by a record rise in birth rates and advancements in technology. This generation is largely brought up in an era of unprecedented technology (Yadav and Rai, 2017). They are born into a time where access to the internet is increasingly available and towards the very end of the generation, an increase in smartphone technology and social media enabled people of this generation to have a "digital bond" as mentioned by Turner (2015).

This generation also lived in tandem with globalisation and they are exposed to a great degree of global events (Vitelar, 2019). They have formulated a very different perspective of the world compared to millennials and contributed to structural change in society in matters of race, religion, gender, environment, etc. (Bitterman and Hess, 2021). Witt and Baird (2018) noted that this generation is very much aware of the realities of the world at a young age. For instance, this generation are the most interested in introducing sustainability into the world such as using green technology, participating in recycling campaigns and promoting social responsibility (Dabija, Brandusa and Puscas, 2017; Djafarova and Foots, 2022).

Problem Statement

The website and mobile application of an online shopping platform is the most crucial avenue for users to carry out their purchases. There are a variety of elements within the website and mobile application which needs to suit the taste of the Generation Z consumers. This includes aspects such as user interface, readability, user experience design, functionality, etc. Compared to older users, Generation Z users have significantly different likings when it comes to user experience design. For instance, websites have to don a simple design as it is found that Generation Z users have a shorter attention span - 8 seconds, compared to 12 seconds of millennials (Wright, 2020). Therefore, this study will examine the perceived site quality by Generation Z users based on their vastly different user behaviour.

As purchasing online requires a user to input a plethora of personal details into the platform, they might be concerned about providing their sensitive information such as contact details, addresses, payment details, etc. to a service provider. A study by Javelin reported that identity theft committed in the US in 2020 cost up to US$43 billion (Business Insider, 2021). Security breaches very commonly happen with data leaking into the wrong hands, as reported by Thales eSecurity which found that 75% of US retailers are experiencing some

form of security breach (Thales Group, 2018). As such, some users will be wary of security measures when making purchases online especially when it comes to making payments and shipping. This study ought to identify the major concerns surrounding consumers' trust towards online shops.

When purchasing in stores, customers are able to enquire virtually any details of the products with the store attendant. However, when browsing through the catalogue online, customers will only be shown information about the product based on what is published on the online store. All information that is crucial towards purchase intention such as name of the product, specifications of the product and functions of the product suddenly becomes abstract and virtual. Therefore, it is vital that users be provided with sufficient and useful information to make a purchase decision. This is evident in the study by Chau, Au and Tam (2000).

Just like many technology-centred services, online shopping platforms are also susceptible to risks. These risks are largely based on the avenue that customers aren't able to examine the products by themselves as opposed to being in a physical store. More often than not, there are technical specifications which need to be examined by customers to match with their expectations. When these specifications can only be aligned to a certain extent via product information, pictures, videos and reviews, there is bound to be room for risk and this might affect purchase intention. A study by Burke (2002) resonates the similar notions that the availability of credible and relevant product information is required for a confident online purchase.

Research Objectives

- RO1: To investigate the relationship between perceived site quality, trust, product information quality, perceived risk and purchase intention, among Generation Z consumers
- RO2: To determine the most significant factor that influence Generation Z consumers to purchase online
- RO3: To determine the distinction between male and female consumers with regards to the most frequently purchased product category from online shopping websites.

LITERATURE REVIEW

Technology Acceptance Model (TAM)

Figure 2.1: Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) developed by Fred Davis in 1986 at the University of Michigan, US is used to gauge the adoption of new technology based on the attitudes of consumers. The TAM offers two components which are attributed to the success of adopting new technology, which are perceived usefulness and perceived ease of use. The TAM was based on the work of Ajzen and Fishbein (1980) - Theory of Reasoned Action (TRA) but Davis adapted it to examine technology exclusively.

The perceived usefulness refers to the degree of functionality as perceived by the user. Among the included components are functions, control, performance, efficiency and productivity (Allen, 2020). The perceived ease of use refers to the level of difficulty in learning and adopting the new technology. Allen (2020) described the

component to include the frequency of errors, flexibility, recovery from errors and satisfying the intentions of the user.

In this study, the Technology Acceptance Model is adapted to suit the constructs of online shopping purchase intention. The component of product information quality emulates the perceived usefulness of online shopping which examines the usefulness of the information that online shoppers are able to obtain from the vendors. The variety of information provided to online shoppers will directly reflect on their decision-making ability when they are able to determine whether the product fulfils their requirements.

The component of perceived site quality emulates the perceived ease of use which examines the ease of using the online shopping website. Based on Sharma and Bahl (2018), the ease of navigating, browsing, comparing and processing the transaction allows consumers to have a more comfortable time using the website, thus willing to form the behavioural intention to purchase and later the actual purchase intention.

Perceived Site Quality

As online shopping websites act as the initial touchpoint of online shoppers, it is crucial that a website is designed with the user in mind, providing a seamless shopping experience as vivid as possible to being in a physical store. McKnight, Choudhury and Kacmar (2002) stated that a website produces the first impression that consumers have towards the online shop and will likely base their beliefs on the vendor's ability, integrity and reputation on the perceived quality of the website. Furthermore, Fung and Lee (1999) proposed that consumer trust can be formulated with site information quality and an excellent interface design. A study by Di Fatta, Musotto and Vesperi (2016) concluded that perceived site quality has a significant influence on the ease of use and usefulness of the online shop and will encourage online shoppers to make a purchase.

Perceived site quality is also defined by Bai, Law and Wen (2008) as a user's perception of the design of a website. Their study successfully established a positive connection between site quality and customer satisfaction. Sharma and Bahl (2018) also found a significant synergy between website design, perceived quality and customer trust in online shopping. Lee et al. (2016) further proposed that perceived site quality covers four aspects - design, reliability, security and customer service.

Trust

Trust has been historically identified as one of the most crucial elements in online shopping as perceived risk can be reduced and a positive word of mouth can be created (Bauman and Bachmann, 2017). They also mentioned that when consumers use the Internet as a means of communication with an online vendor and are forced to surrender their personal details, the consumers expect that the website is reliable, honest and professional. On top of that, Khan et al. (2015) added that trust is a "binding force in online shopping between buyers and sellers".

Yuen et al. (2018) proposed that there are three main components of trust - predictability, reliability and fairness which are explored by consumers when shopping online. There were many concrete studies conducted on trust such as in Kim and Park (2013) where they concluded trust to be one of the four important antecedents of trust alongside perceived ability, perceived integrity and perceived critical mass. Mukherjee and Nath (2007) suggested that security features of websites are crucial factors of trust.

Product Information Quality

Product information quality refers to details of the products that are provided to consumers to examine the product before purchasing. It includes technical specifications, description of the functionality, photos, videos, payment options, etc. which substantially affects customer satisfaction (Masinova and Svandova, 2016). In another study by Bauboniene and Guleviciute (2015) on 183 customers from Lithuania, it was found that availability of product information is one of the four significant factors that influence customer behaviour.

Bakos (1997) concluded that online vendors should aim to provide price-related and product information to reduce the search cost of customers. On top of that, Peterson, Balasubramanian and Bronnenberg (1997) added that extensive product information can lead to better buying decisions and greater levels of consumer satisfaction.

Perceived Risk

The definition provided by Schierz et al. (2010) on perceived risk is the losses expected by a consumer. Chiu et al. (2014) further defined perceived risk as consumers' trade-off between benefit and costs. Ko et al. (2004) stated that perceived risks are the contrary outcomes from purchasing a product. It was later concurred by Laroche et al. (2005) that perceived risks are the negative perceptions towards the unpredictability of purchasing a product. Based on Bianchi and Andrews (2012), when consumers perceive that there is risk in using or purchasing a product, it can deter a consumer from making a purchase. Choi and Lee (2003) added on that the abstract of online transactions also serves as a risk for consumers. They proposed that perceived risk becomes a barrier to completing online shopping transactions because customers will intentionally and automatically judge products when purchasing online. Ko et al. (2004) also aligned with that statement in that the perception of consumers towards risk is crucial in evaluating purchase decision.

Purchase Intention

Meskaran et al. (2013) provided the definition to purchase intention that is the customers' readiness to complete a purchase through the Internet. Li and Zhang (2002) added to that it is the consumers' willingness to purchase via internet stores.

Ariffin, Mohan and Goh (2018) revealed that identifying purchase intention is crucial in forecasting consumer behaviour. Scholsser et al. (2006) concluded that a significant factor that affects purchase intention is privacy and security. They proposed that consumers need to develop trust in the ability of the online vendor to deliver their expectations.

Relationship between Perceived Site Quality, Trust, Product Information Quality, Perceived Risk and Purchase Intention

Relationship between Perceived Site Quality and Purchase Intention

Pawlasova and Kiezi (2017) were able to study 160 Korean respondents and found a positive relationship between website quality and purchase intention. Other studies carried out in Indonesia found that students care about the perceived site quality and form their purchase intention based on the enjoyment and quality of the website (Kuswanto et al., 2019). Hampton-Sosa and Koufaris (2005) also found that perceived site quality can convince consumers that an online shopping website will accomplish their shopping tasks.

Relationship between Trust and Purchase Intention

Referring to Constantinides (2004), it is found that trust is a psychological component of consumers which must be communicated and established in order to convince customers to explore and interact with the website and later form a purchase intention. Gefen et al. (2003) also found that trust in online vendors is crucial to the customers' purchase intention. Lu, Fan and Zhou (2016) also found a positive relationship in that trustworthy signals can increase the confidence of consumers towards the unobservable quality of the website.

Relationship between Product Information Quality and Purchase Intention

Based on Cyr (2008), when customers are unsatisfied with the product information that is available, they will leave the website and not make a purchase. Wang, Yeh and Liao (2009) noticed that product information quality has a direct and significant impact towards purchase intention. Al-Tit (2020) also found that information found on an online store can contribute positively to purchase intention if the information is

accurate and relevant. Park, Lennon and Stoel (2005) added that the presentation of product information may trigger an emotional response when a consumer is deciding to make a purchase.

Relationship between Perceived Risk and Purchase Intention

According to Choi and Lee (2003); Hsu and Lin (2008); and Bianchi and Andrews (2012), it is found that there is a negative association between perceived risk and purchase intention. Interestingly, Forsythe et al. (2006) found that perceived risk has a negative effect on purchase intention on online shopping, especially those who purchase less frequently. Dai, Forsythe and Kwon (2014) found the same in the case of purchasing apparel, that perceived risk has a negative effect on purchase intention. It was seen in a similar study on apparel purchase by Bhukya and Singh (2015).

RESEARCH METHODOLOGY

Theoretical Framework

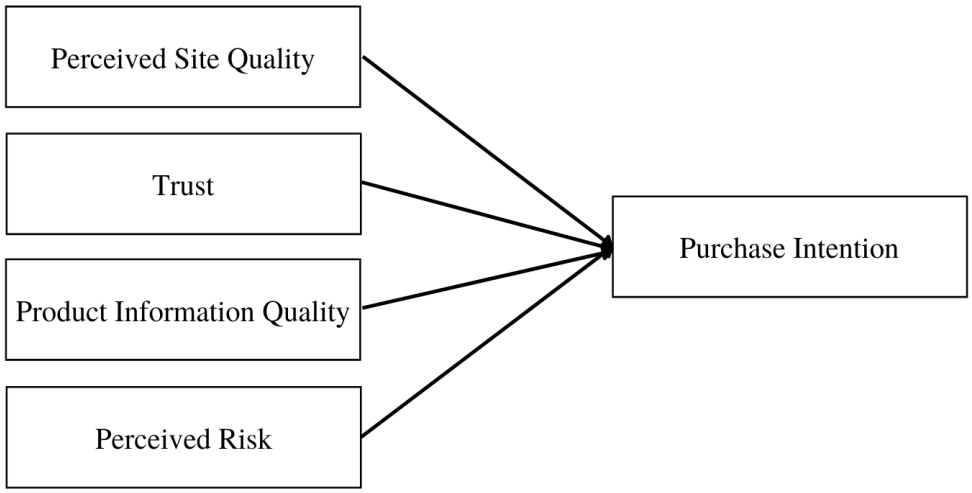

Figure 3.1: Proposed Theoretical Framework

The proposed theoretical framework is adapted by McKnight, Choudhury and Kacmar (2002); Constantinides, Lorenzo-Romero and Gomez (2010); Park and Kim (2003); Teo (2002); and Oghazi et al. (2018).

Hypothesis Development

Perceived Site Quality

Sharma and Bahl (2018) concluded that there is a positive relationship between perceived site quality and purchase intention in e-commerce. Lee et al. (2016) formulated a website quality conceptual model including perceived site quality and saw a positive influence on purchase intention. As such, the following hypothesis is proposed:

H1: Perceived site quality positively influences the purchase intention of Generation Z consumers in Malaysia towards online shopping.

Trust

Referring to Chuang and Fan (2011) on a study in Taiwan, it is found that there is a positive relationship between trust and purchase intention. Hong and Cha (2013) also added to that finding. Furthermore, the study by Katawetawaraks and Wang (2011) found a significant positive relationship between trust and purchase intention. Therefore, the following hypothesis is proposed:

H2: Trust positively influences the purchase intention of Generation Z consumers in Malaysia towards online shopping.

Product Information Quality

According to Sabiote, Frias and Castaneda (2012), there is a positive and significant relationship between product information quality and purchase intention. Szymanski and Hise (2000) carried out a similar study and returned a positive relationship. Park and Kim (2003) found that product information is the most significant factor which leads to a purchase by consumers. Therefore, the following hypothesis is proposed:

H3: Product information quality positively influences the purchase intention of Generation Z consumers in Malaysia towards online shopping.

Perceived Risk

Based on Ariff et al. (2014), it is concluded that there is significant negative influence of perceived risk on purchase intention. Furthermore, Almousa (2011) also proved that perceived risk negatively affects the online purchase intention of consumers. Hong and Cha (2013) also tested and concluded the direct effect of perceived risk on purchase intention and thus the following hypothesis is proposed:

H4: Perceived risk negatively influences the purchase intention of Generation Z consumers in Malaysia towards online shopping.

Sampling Method

This study will deploy quantitative analysis where non-probability, convenience and snowball sampling are used to obtain the data for analysis. Non-probability sampling will be deployed for the purpose of this study. It refers to a sampling technique where a selected pool of respondents will be considered for the study as opposed to the entire population.

Convenience sampling is a type of non-probability sampling which will be used for this study. Samples from the population are selected conveniently available to the researcher. In this study, the survey questionnaire will be aimed towards the researcher's social circle as they will be easy to recruit.

Snowball sampling will also be deployed in this study to assist the researcher in reaching a wider audience of respondents. It is done by getting respondents to refer their social circle to participate in the study. Through snowball sampling, a reasonable sample size will be easily achieved.

Data Collection Method

The survey questionnaire with a total of thirty-one questions designed on a five-point Likert scale will be constructed on Google Forms and distributed to the social circle of the author via social media platforms i.e., Facebook, Instagram, WhatsApp and LinkedIn. The questionnaire will be open for collection for a period of two weeks.

The respondents will fall under that age group of 17-27 years old and must be a Malaysian. Although the definition of Generation Z only accounts for individuals aged 18-27 years old, this study includes individuals who are 17 years old. This is due to the fact that they have fully developed the cognitive capacity to make important decisions, in conjunction with many institutions recognising the same i.e., being able to obtain a driving license in Malaysia. This is similarly considered in the study by Berkova and Krpalek (2017).

Limitations of the Research

As this study is exclusively conducted on Generation Z consumers in Malaysia, there are two limitations of

the research with regards to the geographical location and demographics of the study respondents. In future research, a wider variety of consumers such as the Generation X and Boomers can be studied. Based on Dorie and Loranger (2020), there are distinct differences between the generations, such as that Generation X and Boomers are more inclined in using larger devices e.g., tablets and laptops to shop online.

Following that, a study on wider geographical locations can be conducted such as the top e-commerce countries - China (US$2.78 trillion annually), United States (US$843 billion annually and the United Kingdom (US$169 billion annually) (Freedman, 2022). A wide variety of regions can be examined such as on developed and developing countries to identify any cross-cultural differences in purchase intention. Given that most online shopping surveys are able to be conducted globally, future studies should seek to explore these areas of limitation.

Statistical Analysis

Descriptive Analysis

Descriptive analysis is deployed to describe and summarise data points in a constructive manner to derive meaningful results from them. There are types of measures under descriptive analysis - measures of frequency, measures of central tendency, measures of dispersion and measures of position (Rawat, 2021). Descriptive analysis will be examined on the demographics of the respondents in Section A of the survey questionnaire. Measures of frequency refers to knowing how frequent a certain response occurs. It is first tallied up based on the count and later transformed into a percentage to derive further understanding of the frequency against the entire pool of respondents. This is primarily conducted on the nine demographic questions to understand the profile of the respondents. Furthermore, cross-tabulation is conducted in order to derive a meaningful insight into the relationship between the demographic profiles and their online shopping behaviour.

Inferential Analysis

Reliability Test

A reliability test is carried out to examine the reliability of the data returned from a Likert scale survey as deployed in this study. Developed by Lee Cronbach in 1951, the Cronbach's alpha measures the reliability of data. Since Likert scales are used to measure latent (unobservable) variables of a person's preference, Cronbach's alpha will examine how closely consistent the dataset is (Lavrakas, 2008). It is aimed that a Cronbach's alpha greater than 0.7 will be significantly consistent.

Table 3.1: Cronbach's Alpha Rule of Thumb as in Cronbach (1951)

Cronbach's Alpha	Internal Consistency
$\boldsymbol{\alpha \geq 0.9}$	Excellent
$\boldsymbol{0.8 \leq \alpha < 0.9}$	Good
$\boldsymbol{0.7 \leq \alpha < 0.8}$	Acceptable
$\boldsymbol{0.6 \leq \alpha < 0.7}$	Questionable
$\boldsymbol{0.5 \leq \alpha < 0.6}$	Poor
$\boldsymbol{\alpha < 0.5}$	Unacceptable

Pearson Correlation Analysis

Pearson correlation analysis is a test statistic which measures the relationship between two continuous variables. Based on the method of covariance, it is the best method in measuring the association between variables, showing the magnitude and direction of the relationship. It will be applied onto the questionnaires in Section B through SPSS.

Table 3.2: Direction and Strength of Pearson's Correlation Coefficient Value as in Zou et al. (2003)

Correlation Coefficient Value (r-value)	Direction and Strength
-1	Perfectly Negative
-0.8	Strongly Negative
-0.5	Moderately Negative
-0.2	Weakly Negative
0	No Association
0.2	Weakly Positive
0.5	Moderately Positive
0.8	Strongly Positive
1	Perfectly Positive

Multiple Regression Analysis

Multiple regression analysis is used to examine the relationship between several independent variables towards a dependent variable (Moore et al., 2006). The objective of this analysis is to obtain the predicted value of the dependent variable based on the independent variable values that have been retrieved from the study. A multiple regression model will be created for this purpose. Furthermore, Analysis of Variance (ANOVA) and a t-test will be conducted to analyse the multiple regression model.

RESULTS

Descriptive Analysis

The survey questionnaire collected a total of 207 responses. However, 7 responses were not valid for this study as they do not fall in the correct age group. Therefore, the invalid responses have been removed prior to analysis to which only 200 responses were analysed.

Age

Table 4.1: Descriptive Analysis for Age

Age Group	Frequency	Percentage (%)
Below 17 years old	0	0
17-27 years old	200	100
28-38 years old	0	0
39-49 years old	0	0
50 years old and above	0	0
TOTAL	**200**	**100**

Based on the above table, it is found that all 200 respondents collected in the survey falls under the criteria of Generation Z and are all valid for the study. The underlying reason behind this could be due to the researcher's social circle which is largely made up of friends and classmates in the similar age group.

Gender

Table 4.2: Descriptive Analysis for Gender

Gender	Frequency	Percentage (%)
Male	98	49
Female	102	51
TOTAL	**200**	**100**

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Based on the above table, it is found that about half of the respondents are males and the other half being females. This would contribute to the study in that a balanced view between male consumers and female consumers are obtained.

Nationality

Table 4.3: Descriptive Analysis for Nationality

Nationality	Frequency	Percentage (%)
Malaysian	200	100
TOTAL	**200**	**100**

Based on the above table, it is found that exactly 100% of Malaysians are obtained for the purpose of the study.

Highest Level of Education

Table 4.4: Descriptive Analysis for Highest Level of Education

Highest Level of Education	Frequency	Percentage (%)
Secondary/High School	73	36.5
Pre-University/Foundation/UEC	92	46.0
Bachelor's Degree	27	13.5
Master's Degree	8	4.0
TOTAL	**200**	**100**

Based on the above table, it is found that majority of the respondents have achieved the highest level of education of Pre-University/Foundation/UEC.

Estimated Income & Allowance (Monthly)

Table 4.5: Descriptive Analysis for Estimated Income & Allowance (Monthly)

Estimated Income & Allowance (Monthly)	Frequency	Percentage (%)
Less than RM2000	94	47
RM2000 to RM3999	82	41
RM4000 to RM5999	22	11
RM6000 and above	2	1
TOTAL	**200**	**100**

Based on the above table, it is found that majority of the respondents have less than RM2000 or RM2000 to RM3999 monthly estimated income & allowance. This is in line with the age group and highest level of education achieved by the respondents. As most of them are still tertiary school students, they rely on allowance from their guardians and/or have a part-time job which pays at the entry level.

Frequency of Online Shopping (Monthly)

Table 4.6: Descriptive Analysis for Frequency of Online Shopping (Monthly)

Frequency of Online Shopping (Monthly)	Frequency	Percentage (%)
None or once	70	35
2 to 3 times	96	48
4 to 5 times	27	13.5
More than 5 times	7	3.5
TOTAL	**200**	**100**

Based on the above table, it is found that majority of the respondents shop online for 2 to 3 times monthly. Accounting for the time taken for logistics, the respondents are actually making successive purchases. This would mean that the Generation Z are frequent shoppers on online shopping websites.

Preferred Online Shopping Website

Table 4.7: Descriptive Analysis for Preferred Online Shopping Website

Preferred Online Shopping Website	Frequency	Percentage (%)
Shopee	139	69.5
Lazada	43	21.5
Zalora	4	2.0
PGMall	0	0.0
AliExpress	4	2.0
Taobao	10	5.0
TOTAL	**200**	**100**

Based on the above table, it is found that majority of the respondents shop on Shopee. This is in line with the findings of Buii (2021) which states that Shopee is the top online shopping website Malaysia with 59.33 million monthly visits in Malaysia.

Most Frequently Purchased Category

Table 4.8: Descriptive Analysis for Most Frequently Purchased Category

Most Frequently Purchased Category	Frequency	Percentage (%)
Apparel	24	12.0
Cosmetics & Fragrances	7	3.5
Electronics	52	26.0
Books & Stationery	48	24.0
Baby Products	0	0.0
Groceries & Pets	7	3.5
Home Furnishing	4	2.0
Health & Beauty	11	5.5
Sports & Outdoor	8	4.0
Travel	0	0.0
Games & Hobbies	39	19.5
TOTAL	**200**	**100**

Based on the above table, it is found that majority of the respondents purchase electronics and books & stationary. This is due to the Generation Z's digital lifestyle of using gadgets and other forms of technology. Furthermore, as most of the respondents are tertiary school students, books & stationery are their essential needs.

Access to Online Shopping Website

Table 4.9: Descriptive Analysis for Gender

Access to Online Shopping Website	Frequency	Percentage (%)
Laptop/Desktop	13	6.5
Mobile Devices (smartphones, PDAs, tablets)	187	93.5
TOTAL	**200**	**100**

Based on the above table, it is found that majority of the respondents access their preferred online shopping website using mobile devices i.e., smartphones, PDAs and tablets. This is due to the online shopping website being mainly developed on mobile applications. Online shopping websites such as Shopee have a more user-friendly interface in the mobile application and allow the use of restricted vouchers only on their mobile application (Shopee, 2020). Most online shopping websites utilise similar tactics to encourage purchases from their mobile apps. Furthermore, given that majority of Generation Z consumers own a smartphone and spend most of their time on a smartphone, they would find it more convenient to shop through their smartphone (Tjiptono, 2020).

Cross-tabulation

Cross-tabulation between Gender and Most Frequently Purchased Category

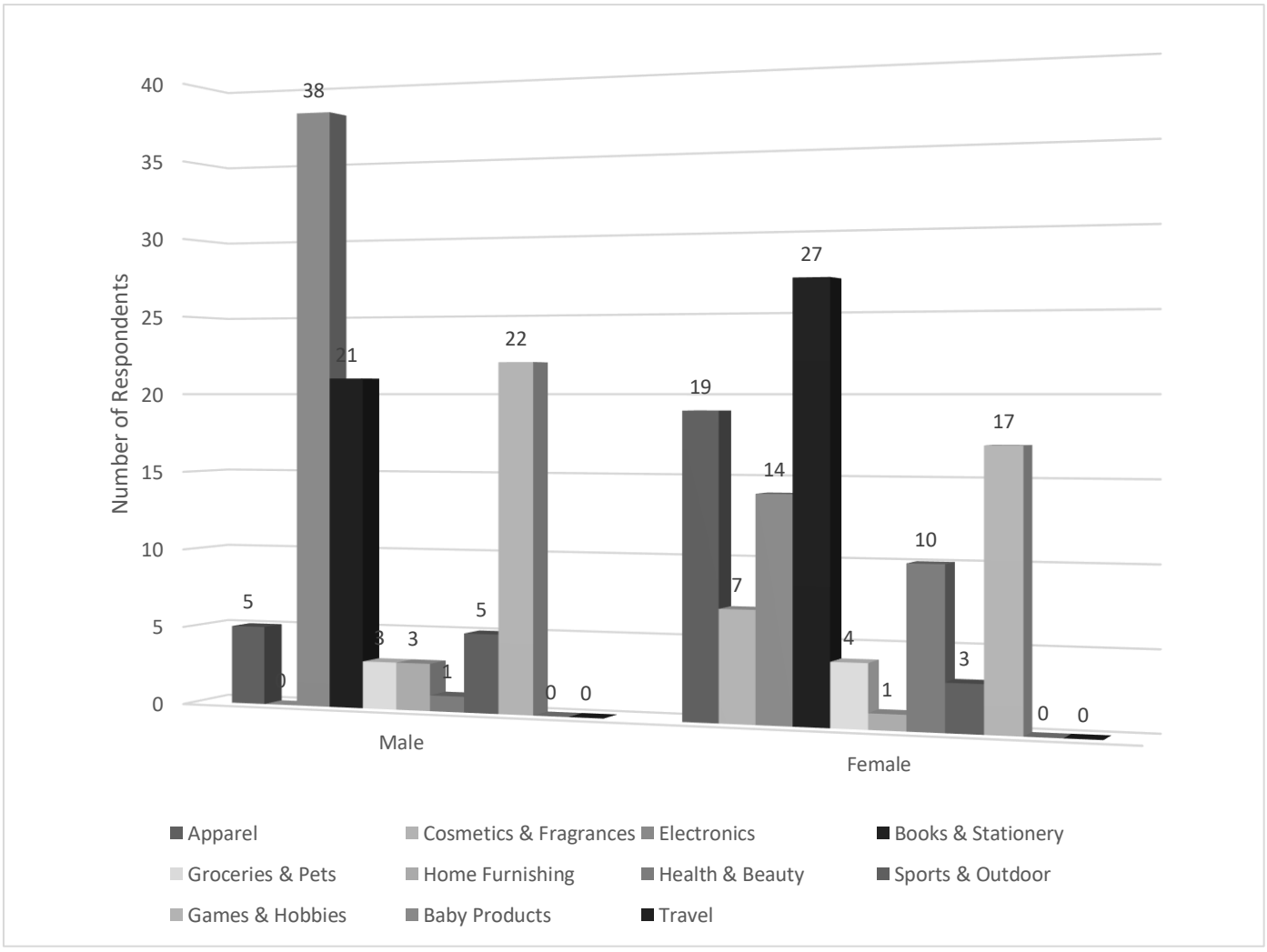

Figure 4.10: Cross-tabulation Chart between Gender and Most Frequently Purchased Category

The above chart cross-tabulates gender and most frequently purchased category. It is found that males (38) purchase significantly more electronics compared to females (14). This is in line with the findings of Macneil and Macintyre (2008) and Hines and Alexander (2008). Furthermore, it is found that females (19) purchase significantly more apparel compared to males (5). This is similar to the findings of Goldsmith and Goldsmith (2002). Females also purchased more self-care products in the cosmetics & fragrances and health & beauty categories. This matches the psychological profile drawn up by Elsesser (2019). Males and females purchase roughly the same amounts of books and stationery given that the respondents are tertiary school students. It is also notable that little to no purchases were made for baby products, groceries & pets, travel and home furnishing as they do not require such goods at their age.

Cross-tabulation between Highest Level of Education and Most Frequently Purchased Category

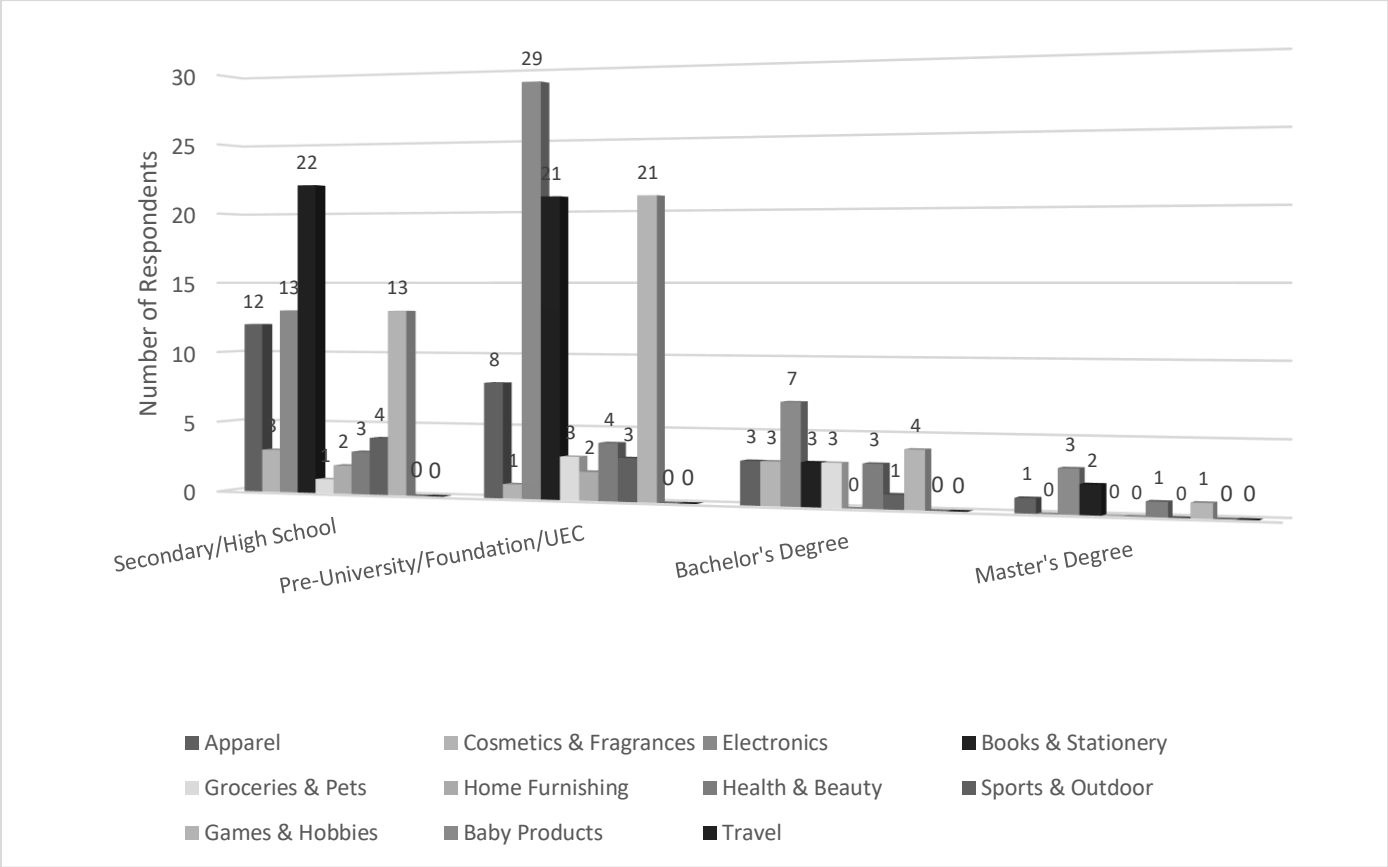

Figure 4.11: Cross-tabulation Chart between Highest Level of Education and Most Frequently Purchased Category

The above chart cross-tabulates highest level of education and most frequently purchased category. It is found that secondary/high school (22) and pre-university/foundation/UEC (21) students spend more on books and stationery. This is due to the students relying on reference books and book on exam preparation such as for SPM, O-levels, A-levels, AUSMAT, CIMP, etc. programs. Bachelor's degree (3) and master's degree (2) students purchase less as they rely on their campus libraries and online journal repositories. Furthermore, it is seen that pre-university/foundation/UEC students (29) purchase significantly more electronics and games & hobbies than any other age group. This is largely due to this age group's access to most of their childhood savings, autonomy in purchasing decisions and necessity as they are staying away from home. This is in line with the findings of Lester, Forman and Loyd (2005) in conjunction with the fact that technology adoption is steadily increasing.

Cronbach's Alpha Reliability Test

Table 4.12: Cronbach's Alpha Reliability Test for Actual Test

Construct	Number of Items	Cronbach's Alpha
Perceived Site Quality (PSQ)	5	0.572
Trust (T)	4	0.758
Product Information Quality (PIQ)	5	0.821
Perceived Risk (PR)	7	0.917
Purchase Intention (PI)	3	0.924

The construct which returned the greatest Cronbach's Alpha value of $\alpha = 0.924$ is Purchase Intention, which depicts that it is the most reliable construct in this study given that it is greater than $\alpha = 0.7$ as in Cronbach

(1951). The other four variables – Perceived Site Quality ($\alpha = 0.572$), Trust ($\alpha = 0.758$), Product Information Quality ($\alpha = 0.821$) and Perceived Risk ($\alpha = 0.917$) are all regarded as acceptable in this study of social science as outlined in Ghazali (2008). Given that the Cronbach's alpha are all acceptable, a high correlation between the items and high internal consistency is achieved (Green, Lissitz and Mulaik, 1977).

Pearson Correlation Test

Table 4.13: Pearson Correlation Test for Actual Test

		PSQ	T	PIQ	PR	PI
Pearson Correlation (r-value)	PSQ	1.000	0.420	0.249	-0.240	0.137
	T	0.420	1.000	0.399	-0.384	0.231
	PIQ	0.249	0.399	1.000	-0.316	0.266
	PR	-0.240	-0.384	-0.316	1.000	-0.166
	PI	0.137	0.231	0.266	-0.166	1.000
Significance (2-tailed) *(1-tailed)	PSQ	-	0.000	0.000	0.001	0.053 (0.0265)*
	T	0.000	-	0.000	0.000	0.001 (0.0005)*
	PIQ	0.000	0.000	-	0.000	0.000 (0.000)*
	PR	0.001	0.000	0.000	-	0.019 (0.0095)*
	PI	0.053	0.001	0.000	0.019	-

The Pearson Correlation Coefficient (r-value) is deployed to understand the direction and strength of the relationship between the independent variables of Perceived Site Quality (PSQ), Trust (T), Product Information Quality (PIQ), Perceived Risk (PR) and the dependent variable of Purchase Intention (PI). The r-value will be examined based on the guidelines mentioned in Chapter 3.

Perceived Site Quality has a r-value of 0.137 showing that it has a weakly positive relationship with Purchase Intention and $p<0.05$ showing that it is significant. This is in line with the findings of Kuswanto et al. (2019). Trust has a r-value of 0.231 showing that it has a weakly positive relationship with Purchase Intention and $p<0.01$ showing that it is significant. Product Information Quality has a r-value of 0.266 showing that it has a weakly positive relationship with Purchase Intention and $p<0.01$ showing that it is significant. Perceived Risk has a r-value of -0.166 showing that it has a weakly negative relationship with Purchase Intention and $p<0.01$ showing that it is significant.

Perceived Site Quality, Trust and Product Information Quality showed a weakly positive relationship towards Purchase Intention because they may not be the most important attributes for the Generation Z who are tech-savvy and will find most websites easy to navigate and trustworthy (Philippas and Avdoulas, 2019; Kim and Rhee, 2020). As such, when website developers are building the website, they might take for granted the ability of the Generation Z to navigate their website and obtain product information. As in Kim and Rhee (2020), it was found that Generation Z shoppers can adapt well to shortcomings of a website by searching for alternatives such as browsing through product reviews on YouTube to obtain product information.

Multiple Regression

Summary of Model

Table 4.14: Summary of Model for Actual Test

Coefficient of Correlation (R-value)	Coefficient of Determination (R-squared)	Adjusted R-squared	Standard Error of the Estimate	R-squared Change	Significance F-value Change
0.303	0.092	0.073	0.49722	0.092	0.001

The table above represents the summary of the linear regression model outlined in 4.7.3. As a multiple regression model is deployed, coefficient of correlation is not suitable to be examined. Rather, observing the coefficient of determination of 0.092 provides that only 9.20% of the average change in Purchase Intention can be explained by Perceived Site Quality, Trust, Product Information Quality and Perceived Risk. The other 90.80% could be explained by other factors not examined in this study such as social motive, escapism, value motive, familiarity, perceived benefit, website aesthetics, internet self-efficacy, etc. (Dharmesti et al., 2021; Shukla, Jain and Misra, 2022).

As the Generation Z was born into an era deeply immersed in technology, they might not prioritise technological issues but instead prioritise other issues surrounding their own attitudes, beliefs and values e.g., environmental sustainability, business ethics, etc. The low coefficient of determination could well be due to issues of such in the context of Malaysian Generation Z consumers.

ANOVA & F-Test

Table 4.15: ANOVA & F-Test for Actual Test

	Sum of Squares	df	Mean Square	F	Significance
Regression	4.875	4	1.219	4.930	0.001
Residual	48.209	195	0.247		
TOTAL	**53.084**	**199**			

The table above examines the analysis of variance which depicts the goodness of fit of the multiple regression model. Given the F-score of 4.930 and $p < 0.01$, this model is deemed to be statistically significant and possesses a good fit.

Coefficients

Table 4.16: Coefficients for Actual Test

	Unstandardised Beta ($\boldsymbol{\beta}$)	Coefficients Standard Error	Standardised Coefficients ($\boldsymbol{\beta}$)	t	Significance (2-tailed) *(1-tailed)
Constant	2.850	0.616	-	4.624	0.000 (0.000)*
PSQ	0.039	0.120	0.025	0.327	0.744 (0.372)*
T	0.135	0.091	0.123	1.488	0.138 (0.069)*
PIQ	0.230	0.090	0.194	2.551	0.012 (0.006)*
PR	-0.043	0.064	-0.052	-0.683	0.496 (0.248)*

The above table outlines the results of the multiple regression model predicting the purchase intention of online shopping consumers. The unstandardised beta ($\boldsymbol{\beta}$) provides the ability of the independent variables in determining the dependent variable.

Given the general multiple regression model:

$$Y = \beta_0 + (\beta_1 \times x_1) + (\beta_2 \times x_2) + (\beta_3 \times x_3) + (\beta_4 \times x_4)$$

Purchase Intention is mapped to the dependent variable (Y) while Perceived Site Quality, Trust, Product

Information Quality and Perceived Risk are mapped to the independent variable (x), generating the multiple regression model in this study as:

$$PI = \beta_0 + (\beta_1 \times PSQ) + (\beta_2 \times T) + (\beta_3 \times PIQ) + (\beta_4 \times PR)$$

Substituting β_0, β_1, β_2, β_3 and β_4 with the respective unstandardised betas ($\boldsymbol{\beta}$) generates:

$$PI = 2.850 + (0.039 \times PSQ) + (0.135 \times T) + (0.230 \times PIQ) + (-0.043 \times PR)$$

where:

Table 4.17: Variables of the Multiple Regression Model

Variable	Symbol
Purchase Intention	PI
Perceived Site Quality	PSQ
Trust	T
Product Information Quality	PIQ
Perceived Risk	PR

When Perceived Service Quality, Trust, Product Information Quality and Perceived Risk is zero, the Purchase Intention is at 2.85 units. If Perceived Service Quality increases by 1 unit, the average Purchase Intention will increase by 0.039 units, holding other variables constant. If Trust increases by 1 unit, the average Purchase Intention will increase by 0.135 units, holding other variables constant. If Product Information Quality increases by 1 unit, the average Purchase Intention will increase by 0.230 units, holding other variables constant. If Perceived Risk increases by 1 unit, the average Purchase Intention will decrease by 0.043 units, holding other variables constant.

As such, Product Information Quality is deemed to have the strongest impact towards Purchase Intention ($\beta = 0.230, t = 2.551$), statistically significant with $p < 0.01$. This result aligns with the findings of Sabiote et al. (2012), Szymanski and Hise (2000) and especially Park and Kim (2003) which also found it to be the most significant factor. Therefore, hypothesis 3 (H3) is supported.

Perceived Site Quality ($\beta = 0.039, t = 0.327$) shows a positive relationship as hypothesised but due to $p > 0.05$ being non-significant, hypothesis 1 (H1) is not supported. This is in conflict with the findings of Sharma and Bahl (2018) and Lee et al. (2016). This could be due to the Generation Z consumers being more familiar with complicated website designs as they spend a significant amount of time online and can endure the lack in website quality and user-friendliness. Furthermore, they might be more flexible in navigating the websites by finding alternative points of contact. For instance, should an automated chat bot be missing from the website, the Generation Z might contact the vendors via Facebook Messenger instead. This would overcome the shortcomings in the quality of the website.

Trust ($\beta = 0.135, t = 1.488$) shows a positive relationship as hypothesised but due to $p > 0.05$ being non-significant, hypothesis 2 (H2) is not supported. This is in conflict with the findings of Chuang and Fan (2011), Hong and Cha (2013) and Katawetawaraks and Wang (2011). This could be due to the pre-existing behaviour of Generation Z of sharing personal information online on social media and their addresses and payment methods with platforms like Google. On top of that, this finding is backed by Beltrao and Sousa (2021) which found that Generation Z had the highest level of trust among all generations. Given that they were exposed to technology at such a young age, they have developed a high degree of trust towards using technological products. Unlike their predecessors, they were not exposed to a wider variety of experiences aside from technology. Hence, their scepticism towards technology is seen to be lower.

Perceived Risk ($\beta = -0.043, t = -0.683$) shows a negative relationship as hypothesised but due to $p > 0.05$

being non-significant, hypothesis 4 (H4) is not supported. This is in conflict with the findings of Ariff et al. (2014), Almousa (2011) and Hong and Cha (2013). This could be due to the Generation Z's high reliance upon product reviews on social media, blogs, YouTube and from word of mouth which can significantly reduce their perceived risk towards the products they ultimately decide to purchase. Furthermore, they might see value in other advantages that online shopping can bring such as the convenience of logistics, the convenience of refund and returns and the larger assortment of products which will outweigh the risks that they are willing to take when purchasing online.

Table 4.18: Findings of Hypotheses for Actual Test

Hypothesis	Statement	Findings
H1	Perceived site quality positively influences the purchase intention of Generation Z consumers in Malaysia towards online shopping.	Not Supported
H2	Trust positively influences the purchase intention of Generation Z consumers in Malaysia towards online shopping.	Not Supported
H3	Product information quality positively influences the purchase intention of Generation Z consumers in Malaysia towards online shopping.	Supported
H4	Perceived risk negatively influences the purchase intention of Generation Z consumers in Malaysia towards online shopping.	Not Supported

CONCLUSION AND RECOMMENDATIONS

Summary of Findings

Relationship between Perceived Site Quality and Purchase Intention

Based on Pearson's Correlation Coefficient, Perceived Site Quality ($r = 0.137, p < 0.05$) shows a weakly positive relationship and is significant. The multiple regression analysis ($\beta = 0.039, t = 0.327, p > 0.05$) shows that it is positively related but is insignificant. As a result, hypothesis 1 (H1) is not supported. This was attributed to the possibility of the Generation Z being more familiar with complicated websites and understand alternative points of contact outside of the website, therefore not contributing towards their purchase intention.

Relationship between Trust and Purchase Intention

Based on Pearson's Correlation Coefficient, Trust ($r = 0.231, p < 0.01$) shows a weakly positive relationship and is significant. The multiple regression analysis ($\beta = 0.135, t = 1.488, p > 0.05$) shows that it is positively related but is insignificant. As a result, hypothesis 2 (H2) is not supported. This was attributed to the pre-existing behaviour of Generation Z willing to share their personal information on social media and other online platforms. As they are digital natives unlike their predecessors, the Generation Z are more comfortable when accessing technology and have a higher tolerance towards issues surrounding trust. Furthermore, online shopping websites are increasingly seen to have included alternative forms of payment such as cash on delivery (COD) services which cater to consumers who have a higher confidence in making cash transactions instead of digital transactions (Ronquillo, 2021).

Relationship between Product Information Quality and Purchase Intention

Based on Pearson's Correlation Coefficient, Product Information Quality ($r = 0.266, p < 0.01$) shows a weakly positive relationship and is significant. The multiple regression analysis ($\beta = 0.230, t = 2.551, p < 0.01$) shows that it is positively related and is significant. As a result, hypothesis 3 (H3) is supported. This is largely due to the intangibility of products online and a deeper reliance on the information provided to consumers online. The availability of information on a product allows consumers to make more informed purchase decisions and they will be able to completely evaluate their purchase decisions before ultimately making the transaction.

Relationship between Perceived Risk and Purchase Intention

Based on Pearson's Correlation Coefficient, Perceived Risk ($r = -0.166, p < 0.01$) shows a weakly negative relationship and is significant. The multiple regression analysis ($\beta = -0.043, t = -0.683, p > 0.05$) shows that it is negatively related but is insignificant. As a result, hypothesis 4 (H4) is not supported. This was attributed to the Generation Z's high reliance on product reviews which provided them the confidence in making the purchase decision. The risk appetite of the Generation Z may be fuelled by other advantages that online shopping can bring such as convenience, variety and promotional discounts.

Satisfaction of Research Objectives

Based on the findings, the research objectives are satisfied as such:

- RQ1: Perceived Site Quality, Trust and Product Information Quality shows a weakly positive relationship with Purchase Intention while Perceived Risk shows a weakly negative relationship with Purchase Intention.
- RQ2: The most significant factor which influences Generation Z's purchase intention is Product Information Quality.
- RQ3: Male consumers purchase significantly more electronics whereas female consumers purchase significantly more apparel.

Implications of Findings and Recommendation

The findings of this study have provided reasonable insight into the need for managers to focus on product information quality when selling product online. For instance, they have to provide accurate technical specifications on a product, list out functions which are unobservable virtually and complementary materials e.g., photos, videos, tutorials to mimic a physical store purchase as closely as possible. Based on Munoz (2018), this would reduce cart abandonment, enhance brand image, and reduce product returns.

Apart from product information, managers can also pay attention to other details surrounding an online purchase such as the accuracy of delivery details, return/refund details, warranty details etc. which will also affect the buying experience of online shoppers. This includes price, availability of stock and variants and pre-order dates. At the same time, managers must maintain the high degree of perceived site quality, trust and risk level as to maintain the positive inclination of the Generation Z towards online shopping.

LIMITATIONS AND FUTURE RESEARCH

There are several limitations in this study that should be accounted for when interpreting the results. For instance, the convenience sampling technique used to collect data from the respondents does not fully represent the population of the Generation Z in Malaysia. It is recommended that the study be expanded throughout the country to attain a more accurate representative profile of the Generation Z population. It is recommended that in future research, other relevant variables such as those surrounding social motive, value motive, attitudes, beliefs and behaviour are studied (Dharmesti et al., 2021; Shukla, Jain and Misra, 2022).

Ethics Approval was provided by Taylor's University Ethics Committee. All authors have no conflict of interest.

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