ONLINE IMPULSIVE BUYING BEHAVIOUR ON LAZADA MALAYSIA AMONG UNIVERSITY STUDENTS IN MALAYSIA

BY

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DECLARATION

We hereby declare that:

(1) This undergraduate research project is the end result of our own work and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.

(2) No portion of this research project has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.

(3) Equal contribution has been made by each group member in completing the research project.

(4) The word count of this research project is 11375 words.

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DEDICATION

This final year project is especially dedicated to

Ms Lam Siew Yong

Ms Jenny Marisa Lim Dao Siang

and

our families and friends.

Thank you for the overwhelming support and assistance when we need it most.

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LIST OF ABBREVIATIONS

AVE	Average Variance Extracted
CR	Composite Reliability
EOU	Website Ease of Use
Et al.	And others
GI	General Information
MCMC	Malaysian Communications and Multimedia Commission
MOHE	Ministry of Higher Education
OIP	Online Impulse Purchase
PAD	Pleasure, Arousal, Dominance
PLS	Partial Least Squares
PLS-SEM	Partial Least Squares Structural Equation Modelling
PS	Privacy & Security
RP	Respondent's Profile
SE	Shopping Enjoyment
S-O-R	Stimulus-Organism-Response
SPSS	Statistical Package for Social Science
US	United States
VA	Visual Appeal
VAF	Variance Accounted For
VIF	Variance Inflation Factors

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PREFACE

The physical analogy of buying products and services offline has evolved in this 20th century generation to online platform. Past empirical studies have proven that more and more people are getting reliable and comfortable in shopping virtually. Nevertheless, through the findings in accordance to our research, the leading e-commerce platform Lazada Malaysia was expecting more than two million new customers to adopt online shopping behavior and a 30% increment in their frequency of shopping online monthly in 2018. Unfortunately, there were limited research study covering a specified study on e-commerce website in Malaysia that will contribute to this statement or help the e-commerce world in identifying better growth. Consequently, the impact of Internet access has affected the rising younger generation immensely serving as the hidden gem of potential online shoppers with their higher acceptance buying in online platform. Hence, the proposal to conduct a research study on the online impulsive buying behavior on Lazada (M) among university students within Malaysia.

ABSTRACT

The contribution from various establishment of different e-commerce platform including the Malaysia's top 1 e-commerce website, Lazada Malaysia has raised the growth of e-commerce in Malaysia. Malaysia's university students have a growing spending power and willingness in spending online. This research focuses on studying the impact of website attributes of Lazada Malaysia (privacy&security, website ease of use, visual appeal) on online impulse purchase and the mediating role of shopping enjoyment between website attributes and online impulse purchase among Malaysia's university students. The conceptual framework based on Stimulus-Organism-Response (S-O-R) model were developed and used to assess the relationships between these constructs with 320 sets of data collected through Partial Least Teachnique (SMART-PLS3) software. Findings showed that both privacy&security and website ease of use have direct effect towards online impulse purchase on Lazada Malaysia, as well as indirect effect on online impulse purchase, mediated by shopping enjoyment. Visual appeal has no direct effect on online impulse purchase, but the indirect effect mediated by shopping enjoyment is still exist.

CHAPTER 1: RESEARCH OVERVIEW

1.0 Introduction

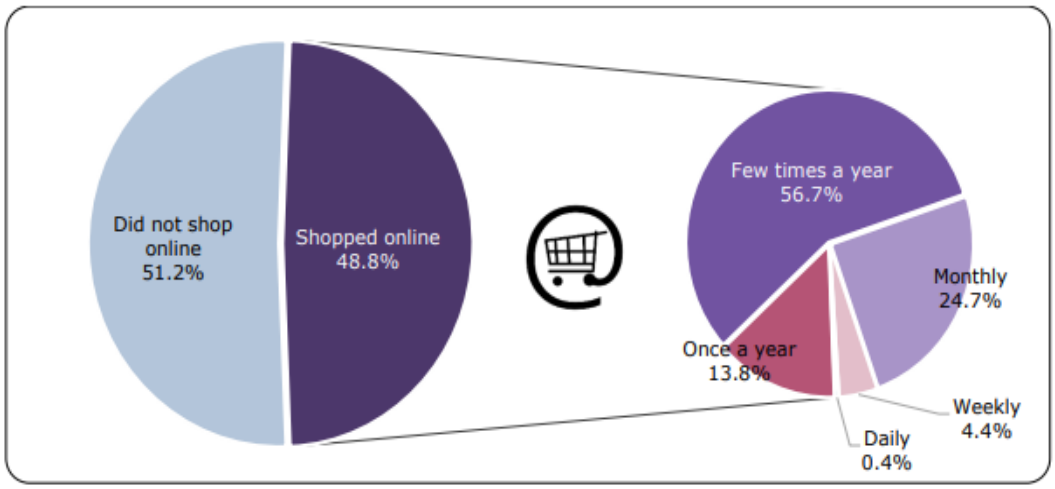
General view of the research by justifying the impulsive buying behaviour towards online platform through research background, its problem and objectives, research questions, hypotheses and importance to conduct the study are discussed.

1.1 Research Background

As e-commerce grows tremendously, online shopping or purchasing is not only gaining its popularity across the world, but also becoming a common purchasing method (Akram, Peng, Khan, Saduzai, Akram, & Bhati, 2017).

Malaysian Communications and Multimedia Commission (MCMC) (2017) indicated, Malaysian Internet users was 76.9% of the total population in 2016, which means there were roughly 24.5 million Internet users in Malaysia. Out of these internet users, 48.8% of them shop online via Internet (MCMC, 2017). Figure 1.1 shows, 56.7% of Malaysian online shoppers made online purchases few times per year, 24.7% of them purchased monthly, 4.8% of them shopped online weekly or daily, and 13.8% of them bought online once a year (MCMC, 2017).

Figure 1.1: Percentage of Malaysia's Internet Users Engaged in Online Shopping and its Frequencies



Source: Malaysian Communications and Multimedia Commission (MCMC). (2017). *Internet Users Survey 2017*. Retrieved from https://www.mcmc.gov.my/skmmgovmy/media/General/pdf/MCMC-Internet-Users-Survey-2017.pdf

In Malaysia, e-commerce sales are predicted to increase yearly, with roughly 20% to 25% of growth rate (Wong, 2017). In 2017, the total market size of e-commerce were US$5.53 billion, approximately RM24.6 billion (Wong, 2017). Most online transactions are related to travel, such as buying flight tickets, making hotel bookings, and purchasing travel packages, making up to 80% of the total e-commerce market size, which is around RM19.6 billion; the other 20% of the market size goes to purchasing physical products through various online marketplace, such as Lazada Malaysia, Mudah.com, and Lelong.my (Wong, 2017). These are accounted for RM4.99 billion (Wong, 2017).

This rapid growth of e-commerce has contributed to establishment of different e-commerce website to take a share of Malaysia's e-commerce market in order to reach the Malaysian's population of 31 million ("Top 10 E-commerce," 2018). Lazada Malaysia is ranked as first among the top 10 e-commerce websites browsed in Malaysia with the largest share in Malaysia's e-commerce market and a forecasted 45 million visitors every month ("Top 10 E-commerce," 2018). In addition, it is the fastest-growing e-commerce platform in Southeast Asia as 100% of growth rate in sales in 2016 are recorded ("Lazada Malaysia Overtakes," 2017).

As e-commerce market size is growing rapidly, we believe consumers often buy impulsively through online shopping. Easy access to products, one-click ordering, and absence of social pressures have sparked the consumers' online impulsive buying behaviour (Akram et al., 2017). In online context, spending due to impulse buying constituted around 40% of the overall online expenditures (Chang, Cheung, & Lee, 2017). Therefore, it is significant for the marketers today to comprehend the online purchasing behaviour of e-shoppers.

Ministry of Higher Education (MOHE) (2017) indicated, population of university students in Malaysia were 1.3 million, equivalent to 4.14% of Malaysia's total population. They were also equivalent to 17.1% of Malaysia's Internet users, in which 67.4% of them are currently enrolled in college or university (MCMC, 2017). Past studies indicated, Malaysia's university students always go online and spend a lot of time over the Internet (Anuar, Mujayid, Idris, & Noh, 2013; Teong & Ang, 2016). Moreover, young generations including students are acting positively towards online shopping as they believe purchasing online is convenient and help in saving time and money (Mohd, Shamsudin, Zaidan, & Mohamed, 2016). Besides, more university students are accepting e-shopping as their shopping platform (Lim, Osman, Romle, & Haji-Othman, 2015).

1.2 Research Problem

Department of Statistics Malaysia (2017) stated, Malaysia's total population is 32 million. Out of these 32 million, 1.3 million are university students (MOHE, 2017). Malaysians have long started to adopt and practice online shopping. However, research on e-shopping behaviour among Malaysia's university students is inadequate (Mohd et al., 2016). There are also insufficient studies examining factors affecting purchase decisions and online purchasing behaviour among university students.

Figure 1.2: Malaysia's Total Population with Annual Growth Rate from 2016 to 2017

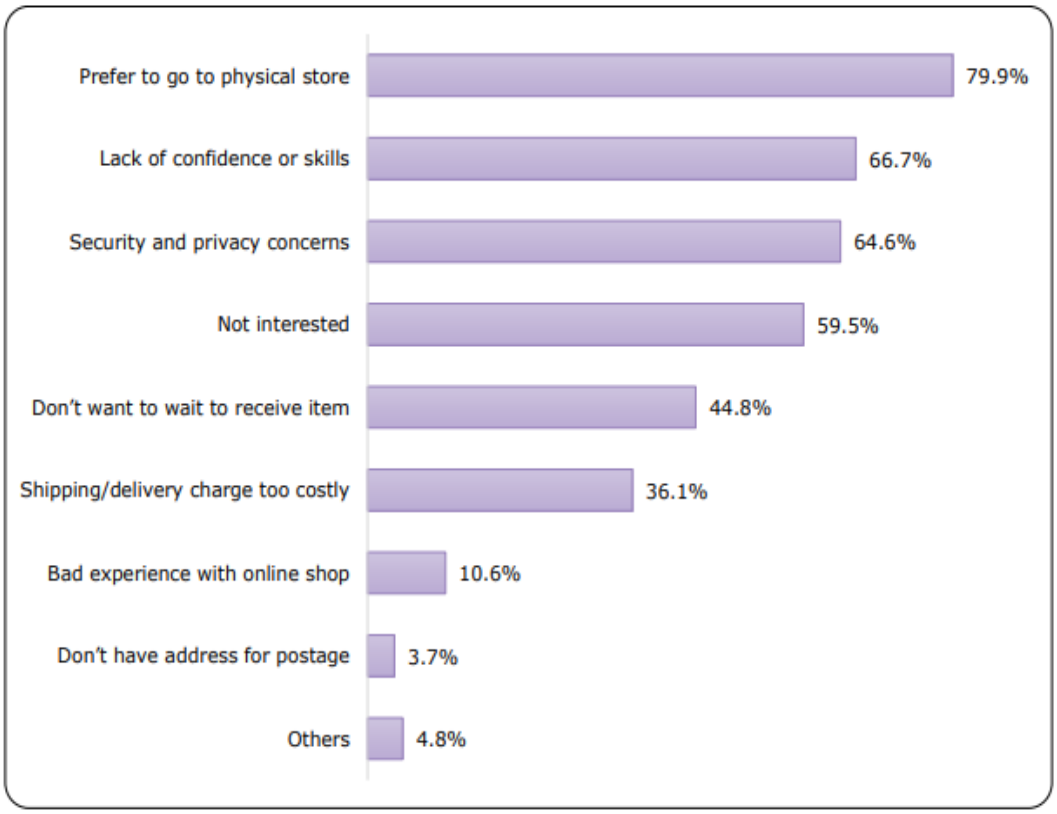
Source: Department of Statistics Malaysia. (2017). *Current population estimates, Malaysia, 2016-2017* [Press release]. Retrieved from https://www.dosm.gov.my/v1/index.php?r=column/pdfPrev&id=a1d1UTFZazd5ajJiRWFHNDduOXFFQT09

Malaysia's internet users are mostly between 20 to 34 years old (MCMC, 2017). Most Malaysian university students fall between this age group. According to Mohd et al. (2016), online shoppers in Malaysia not only are relatively young and highly educated, they are also possessing a more superior social status and better financial position. Furthermore, due to growing spending power of young consumer group, their spending behaviour are changing due to easy access to debit and credit cards and have obtained considerable attention from marketing practitioners (Schor, 1998). According to Bighiu, Manolică, and Roman (2015), U.S. students spent approximately 12% of their allowance online. Wang and Xiao (2009) also stated, college students tend to buy impulsively as they always exposed to abundant material goods at all time and unable to resist their urge to buy. Thus, it is worthwhile to study the online impulsive buying behaviour of university students, a major sector of young consumer group.

Rapid growth of information technology has caused the number of Internet shoppers to purchase goods and services online to increase exponentially and their impulsive buying can bring significant economic effect to online retailers in terms of sales and revenue. However, according to MCMC (2017), there are 51.2% of

Internet users did not or refuse to shop online. The main three reasons are due to they prefer to visit physical stores, lack of confidence or skills, and concerns on privacy and security issues.

Figure 1.3: Causes of Refusing E-Shopping as Percentage of Non-Internet Shopper



Source: Malaysian Communications and Multimedia Commission (MCMC). (2017). *Internet Users Survey 2017.* Retrieved from https://www.mcmc.gov.my/skmmgovmy/media/General/pdf/MCMC-Internet-Users-Survey-2017.pdf

Consumers are reluctant to buy online due to inability to feel and touch the products personally (Wong, 2014). Similarly, MCMC (2017) indicated that 79.9% of non-online shoppers prefer to visit physical stores rather than purchasing online as they are able to touch and feel items when visiting a brick-and-mortar store. Therefore, visual appeal in e-commerce website is crucial in attracting consumers or users to make a purchase or impulse purchase. Effective website design including the presentation of product and its information is important as online shoppers will leave the website easily without purchasing if they are discouraged when they are unable to reach the information needed (Kim, Kim, & Lennon, 2011). Thus, website

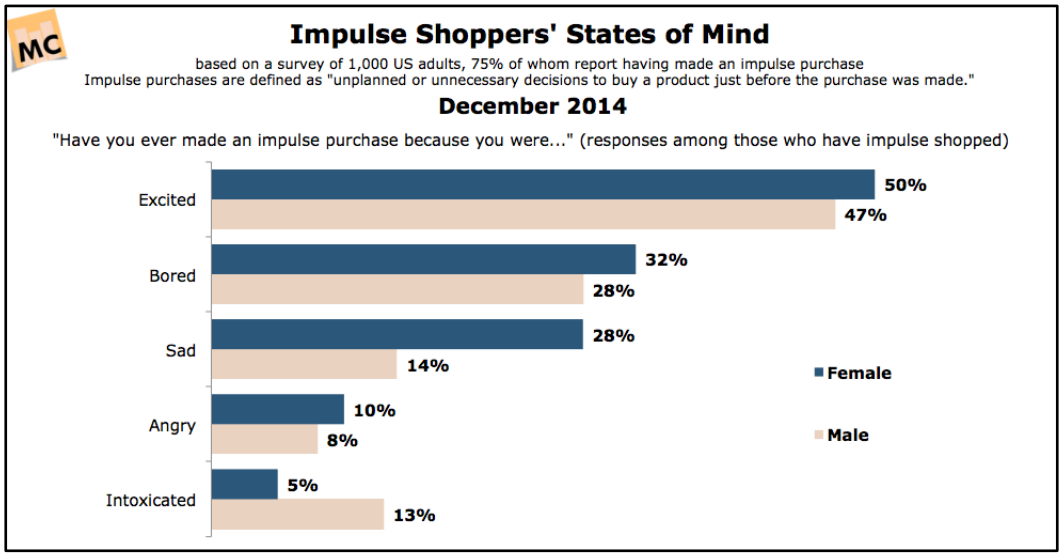
design in terms of visual appeal is significant in luring consumers to purchase and make impulse purchase online.

66.7% of Internet users that did not shop online are lacking of confidence and relevant skills to involve in e-shopping activities (MCMC, 2017). So, it is vital to make sure that e-shopping website should be easy for anyone to use it. If website is designed in a way that consumers need extra effort to learn and master at using it, consumers may be frustrated and eventually, abandon the website (Kim & Stoel, 2004; Ozturk, Bilgihan, Nusair, & Okumus, 2016).

64.6% of non-online shoppers are concerned on the issues regarding website's security and protection of customer information (MCMC, 2017), as money and individual information are involved when making the transaction via Internet (Parasuraman, Zeithaml, & Malhotra, 2005; Riquelme & Román, 2014). Moreover, the risk of personal information to be misused has placed privacy and security to be an important matter in online retailing and this has caused the people afraid of purchasing online (Chong, 2014). Thus, we can say that privacy and security affects consumers' shopping outcome such as shopping intention and impulse purchase.

Fun, excitement or pleasure are something that consumers are seeking for when they go shopping online. According to Figure 1.4 by Merzer (2014), 50% of female impulse shoppers and 47% of male impulse shoppers are excited when making impulse purchases. This shows that consumers' shopping intentions and experiences are impacted by shopping enjoyment and can further influence their purchasing behaviour (Floh & Madlberger, 2013). Dissatisfaction with online shopping process will result in lower impulse buying, and then injure the e-store's image (Bong, 2010; Lo, Lin, & Hsu, 2016). Empirical studies by Koufaris (2002), and Verhagen and van Dolen (2011) indicated relationship between shopping enjoyment and impulsive buying behaviour online is positive. However, the studies on consumers' hedonic aspect and belief regarding shopping enjoyment of e-commerce website is lacking (Ha & Stoel, 2008).

Figure 1.4: Impulse Shopper's State of Mind



Source: Merzer, M. (2014, November 23). *Survey: 3 in 4 Americans make impulse purchases.* Retrieved from https://www.creditcards.com/credit-card-news/impulse-purchase-survey.php

Lots of e-marketplace are provided for Malaysia's netizens, including university students with growing spending power. There are a lot of potential for e-commerce sector in Malaysia but there is still little research on understanding the online impulse buying behaviour context (Chen, Su, & Widjaja, 2016).

Thus, a framework is required to study the website attributes (privacy&security, visual appeal and ease of use) mediated by shopping enjoyment to influence the online impulse buying behaviour on Malaysia's number 1 e-commerce website, Lazada Malaysia. It was chosen as the niche website to be studied as this research aims to conduct online impulse purchase within the local e-commerce market in Malaysia and Lazada Malaysia is listed as first among top 10 e-commerce websites browsed in Malaysia ("Top 10 E-commerce," 2018). Moreover, there are limited field studies carried out on Lazada Malaysia.

1.3 Research Objectives

1.3.1 General Objective

The rapid expansion of e-commerce has transformed the world with intense obsession among online consumers. This study aims to probe how website attributes impact on impulsive purchase online and shopping enjoyment as mediator on the relationship between website attributes and online impulsive purchase on Lazada Malaysia among university students in Malaysia.

1.3.2 Specific Objectives

1.3.2.1 To inspect effect of privacy and security on online impulse purchase of university students in Malaysia on Lazada Malaysia.

1.3.2.2 To inspect effect of website ease of use on online impulse purchase of university students in Malaysia on Lazada Malaysia.

1.3.2.3 To inspect effect of visual appeal on online impulse purchase of university students in Malaysia on Lazada Malaysia.

1.3.2.4 To inspect effect of website attributes on online impulse purchase of university students in Malaysia on Lazada Malaysia.

1.3.2.5 To inspect effect of shopping enjoyment on online impulse purchase of university students in Malaysia on Lazada Malaysia.

1.3.2.6 To inspect the mediating role of shopping enjoyment on relationship between website attributes and online impulse purchase of university students in Malaysia on Lazada Malaysia.

1.4 Research Questions

1. Does privacy and security of the website influence online impulse purchase?
2. Does website ease of use influence online impulse purchase?
3. Does visual appeal of the website influence online impulse purchase?
4. Does website attributes influence online impulse purchase?
5. Does shopping enjoyment influence online impulse purchase?
6. Does shopping enjoyment mediates relationship between website attributes and online impulse purchase?

1.5 Significance of the Study

Firstly, a better understanding regarding online impulse purchasing behaviour among university students in Malaysia on Lazada Malaysia can be obtained.

This would help Lazada Malaysia to understand their website attributes contributing to purchase behaviour of university students. Moreover, this research specifies on Lazada Malaysia's website attributes as it operates virtually. Therefore, the online platform they can get engaged with their customers are important because it is their only medium in running business. With this study, Lazada Malaysia is able to know the impulsivity effect on their purchase online through its website attributes and shopping enjoyment as the mediating factor.

Besides, Lazada Malaysia will have additional insights specifically on the buying behaviour of university students in Malaysia instead of all Lazada Malaysia's customers. The benefits gained from this research can contribute to further

improvement in Lazada Malaysia's management to sustain current users and attract new users.

As from consumers' perspectives, this research can help them to grab the attention of different e-commerce marketplace regarding the consumers' opinion on various e-store's environmental stimuli that can enhance consumers' excitement and pleasure during online shopping process. These insights provided to e-commerce platforms can further improve their website attributes quality including visual appeal, privacy and security, and website ease of use, in order to provide an enjoyable atmosphere where consumers will feel excited and fun during e-shopping process and at the same time, feel protected and secure when making transactions online.

1.7 Conclusion

On the whole, this chapter reviews on the research background, research problem of an online shopping website; Lazada Malaysia and the trend of e-commerce market. Here, an explanation to examine online impulse purchase behaviour on Lazada Malaysia among university students in Malaysia by applying the concept of Stimulus-Organism-Response have been outlined.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

In this chapter, discussion on factors affecting online impulse purchase of university students in Malaysia on Lazada Malaysia through the perspective of Stimulus-Organism-Response (S-O-R) Model are conducted. An extensive review on variables according to relevant past literatures done, the hypotheses and research framework developed will be further discussed.

2.1 Literature Review

2.1.1 Online Impulse Purchase (OIP)

The dependent variable is OIP. Impulse purchasing is a complex buying behaviour that instantaneously precludes thoughts, considerations or future implications towards a sudden purchase (Amos, Holmes, & Keneson, 2013). It is caused by external or environmental factors (Bighiu et al., 2015). Early studies determined impulse buying in offline context, as the result of environmental cues or exposure to in-store stimuli (Chan, Cheung, & Lee, 2017). It is also stated that impulse buying is complex in hedonic aspects and facilitate emotional conflict potentially (Chan et al., 2017).

OIP is a society shopping addiction that is not entirely to satisfy ones' needs. Today, the generation grew with the Internet and has become habitual to online world (Bighiu et al., 2015). Online shopping is action or activity of buying goods through Internet. E-shoppers have reduced buying through physical stores due to the convenience of single click system in e-shopping (Pabalkar, 2015). Therefore, online shops are able to sell anything with speedy results from its online delivery process which grips the customers to

develop a tendency to buy more online as well as purchase impulsively (Pabalkar, 2015).

According to Chen et al. (2016), OIP is said to be impulsiveness; an impulse buying trait that positively affect intention to shop online. It is an unplanned decision driven by a strong temptation of immediate satisfaction to improve ones' mood without considerations of consequences (Amos et al., 2013). The sudden act of consumption often accompanied by a temporary state of positive emotional charge for immediate self-fulfilment (Amos et al., 2013).

Chen and Wang (2016) supported concept of impulsivity purchasing trait reflects one's likelihood to engage in impulsive shopping. This obnoxious behaviour occurs when one experiences unexpected, strong and persevering psychological conflict urge to buy something instantly that is against their usual shopping pattern (Chen & Wang, 2016).

2.1.2 Website Attributes

Website attributes are the independent variables in this research. Website attributes to examine e-stores or web design principles are categorized into three macro-categories: structural firmness, functional convenience, and representational delight, in which PS, EOU, and VA are fall into these macro-categories respectively (Geng & Tian, 2015; Parboteeah, 2005).

2.1.2.1 Privacy & Security (PS)

PS are critical elements that e-businesses need to recognize to build consumer online trust (Riquelma & Roman, 2014). Some studies showed that PS have an impact on online trust significantly and positively (Ganguly, Dash, & Cyr, 2011; Hu, Wu, Wu, & Zhang, 2010). Pavlou (2001) and Yang, Pang, Liu, Yen, and Tarn (2015) argued, online transactions are related to

risk of losing privacy and monetary loss risk. Küster, Vila, and Canalas (2016) agreed that online transactions are related to PS and it is more important in online transactions than offline transactions (Bowen & Bowen, 2015). PS signifies a subjective probability from customers' belief whereby web retailers' actions to respect consumers' privacy and protect their security subjecting to the Internet infrastructure to facilitate secure transmission (Pavlou, 2001).

The significance of online PS should include both financial and non-financial issues (Bowen & Bowen 2015). Financial issue refers to consumers' concerns regarding safety of credit/debit card information when making transactions online (Chong, 2014). Non-financial issue refers to online consumers expect information in privacy policy are written clearly to prohibit against selling of individual information or disclosure of their information without consent (Bowen & Bowen 2015). PS of website is also the ability to deliver safe infrastructure to users (Chen, Hsu, & Lin, 2010). According to Palbakar (2014), PS contain security to pay through online using credit/debit card, anywhere, everywhere with the vast information provided through virtual stores in one click.

2.1.2.2 Website Ease of Use (EOU)

EOU is a critical criteria of an e-commerce website that affects consumers' attitudes and behaviours (Yoo & Donthu, 2001) as EOU is a website quality feature categorized under functional convenience, a high-task relevant cue influencing consumers' behaviours (Parboteeah, 2005). In e-commerce context, EOU is the users' perceptions that it is effortless, simple, and convenience to use a website for online shopping (Amin, Rezaei, & Tavana, 2015; Cho & Sagynov, 2015; Vijayasarathy, 2004). Liu, Li, and Hu (2013) explained EOU as "how easy it is in navigating within an online shopping website" (p. 832). Besides, EOU is customers can easily browse through a well-organized website, read and understand the information displayed on website (Loiacono, Watson, & Goodhue, 2002; Wu, Chen, & Chiu, 2016).

EOU also involves the interactivity and navigability in a site, quick and trustworthy search systems, presentation of updated and complete information on website orderly, and ease of payment (Akram et al., 2017; Bilgihan & Bujisic, 2014; Verhagen & van Dolen, 2011).

2.1.2.3 Visual Appeal (VA)

VA is a representational delight construct of website quality in low-task relevant cue (Lim & Yazdanifard, 2015; Parboteeah, 2005). It is the tangible things that reflect the overall view, sense, and distinguished attractiveness of website (Montoya-Weiss, Voss, & Grewal, 2003). VA is perceived by individuals through senses such as sight and hearing in online context (Wang & Lin, 2015). Graphics, colours, pictures, background patterns, fonts, animation, website layouts and other visual elements are examples of VA that can enhance the websites' attractiveness to attract customers (Eroglu, Machleit, & Davis, 2003; Liu et al., 2013; Pabalkar, 2014; Parboteeah, Valacich, & Wells, 2009; van der Heijden, Verhagen, & Creemers, 2003).

VA can induce consumers to buy product, especially by placing pictures of the products on the website has a higher impact than word descriptions (Xiang, Zheng, Lee, & Zhao, 2016). Xiang et al. (2016) further explained, users' vision senses are affected by product's picture, which means they can provoked by visual appeal easily. Besides, aesthetic visuals are critical in creating positive first impressions leading to further exploration within website (Pavur, Abdullah, & Murad, 2016). Past studies showed that customers are unwilling to surf and purchase online due to confusion, or even leave the site within seconds if the website presents unattractive graphic design elements with unorganized information (Montoya-Weiss et al., 2003).

2.1.3 Shopping Enjoyment (SE)

The mediator in this study, SE, instead of the satisfaction received from purchasing goods or services, it is the pleasure and experience derived from shopping activity in shopping process (Razmdoost, Dimitriu, & Macdonald, 2015). In other words, SE is the result of entertaining e-shopping experience, instead of the outcome of shopping task completion (Bizuneh, 2012). Pavur et al. (2016) regarded e-shopping as an activity that is pleasurable and enjoyable. SE is also the intrinsic senses of pleasure derived during interaction with an ambience (Park, Kim, Funches, & Foxx, 2012; Wu et al., 2016). In addition, SE derived from e-shopping process is essential for determining consumer behaviour, such as customer loyalty (Pavur et al., 2016). It may derived during the process of searching goods or services, looking for sales and discounts, learning new trends and fashions, to connect with others such as friends and families, and to release stress while shopping online (Ozen & Engizek, 2014).

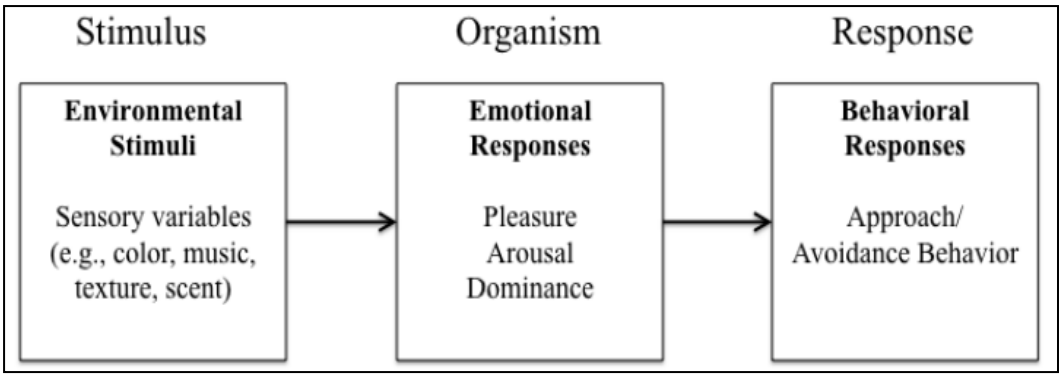
Past studies showed that SE is critical in consumers' acceptance of e-shopping intentions (Childers, Carr, Peck, & Carson, 2001; Ha & Stoel, 2008; Pavlou, 2001). Childers et al. (2001) defined enjoyment as an antecedent of attitude towards online shopping, either positively or negatively, where positive attitude in making impulse purchase may be developed when e-shopping experience is pleasing and enjoyable (Bizuneh, 2012). However, Koufaris, Kambil, and LaBarbera (2001) argued, online stores face challenges in creating SE as a type of pleasure because the experience of purchasing online is finite and unable to provide full experience of viewing the product in physical, thus reduce the level of enjoyment and impulse purchase.

2.2 Review of Relevant Theoretical Models

2.2.1 Stimulus-Organism-Response (S-O-R) Model

Mehrabian and Russell (1974) proposed S-O-R model to investigate how store's environment and atmosphere affects one's shopping behaviour. According to S-O-R model, Stimulus (S) in an environment lead to certain behavioural responses (R), mediated by an individual's (O) emotional responses evoked by the surroundings.

Figure 2.1: S-O-R Model



Adapted from: Mehrabian, A., & Russell, J. A. (1974). *An approach to environmental psychology*. Cambirdge, MA: Massachusetts Institute of Technology.

In Figure 2.1, environmental stimuli are sensory variables such as colour, music, texture and scent, or things of everyday ambience (Yoon, 2012). These stimuli influence ones' internal processes or affective states that serve as mediator in determining ones' behavioural responses. The three dimensions affecting ones' states are pleasure, arousal, and dominance (PAD) (Ha & Lennon, 2010; Yoon, 2012). However, lacking of empirical support, dominance found to have little or no impact on consumers' behaviour responses in past research. So, most of the studies omitted dominance in assessing consumers' affective states (Eroglu et al., 2003).

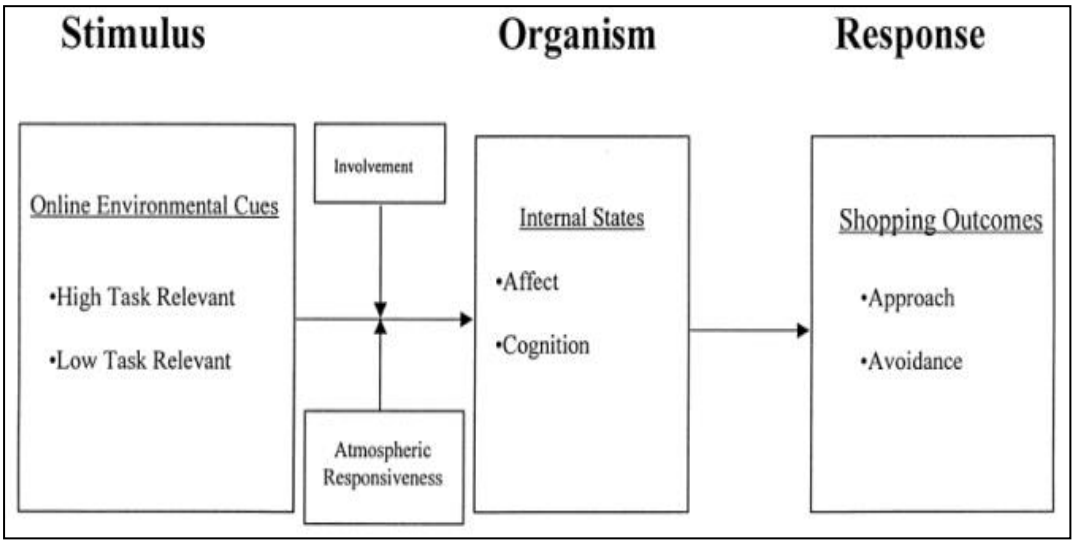
Behavioural responses of a consumer can be in a positive or negative way. An approach behaviour is a positive response such as purchase intention, or positive actions taken towards certain condition (Eroglu, Machleit, & Davis,

2001). In contrast, avoidance approach include negative actions taken to avoid certain setting.

2.2.2 Extended S-O-R Model

An extended S-O-R model by Eroglu et al. (2001) to explain the atmospheric cues in e-retailing setting. Similarly, this model proposed that environmental elements of e-commerce website serve as stimulus to affect the affective and cognitive states of consumers that mediate consumers' responses to internet shopping experience, either positively (approach behaviour) or negatively (avoidance behaviour) (Eroglu et al., 2001). Additionally, Eroglu et al. (2001) take into account the role of involvement and atmospheric innovativeness as moderators to affect relationship between stimulus and organism. Involvement is consumers' perceptions on how e-shopping activities help to reach their goals (Eroglu et al., 2001).

Figure 2.2: Extended S-O-R Model



Adapted from: Eroglu, S. A., Machleit, K. A., & Davis, L. M. (2001). Atmospheric qualities of online retailing. A conceptual model and implications. *Journal of Business Research, 50*, 177-184.

According to Figure 2.2, atmospheric cues as stimulus in online context are separated into two categories: High task-relevant cues and low task-relevant cues.

High task-relevant cues are site descriptors appeared on screen, either in verbal or pictorial, that help consumer to attain shopping goal (Eroglu et al., 2001), like price, product's descriptions, delivery and return policies, product's pictures, and navigation assistance. Low task-relevant cues are relatively inessential site information for accomplishing shopping task, like typeface and fonts, sounds and music, pictures for decorative purpose, colours, borders, and background patterns (Eroglu et al., 2001).

According to Eroglu et al. (2001), organism consists of affection and cognition in its internal states, which then mediates the connection between stimulus and one's responses. Affection is derived from PAD in online shopping experience, while cognitive state deals with how internet shoppers decode the information given through the screen which lead to certain behaviour and attitude towards the e-commerce website (Eroglu et al, 2001).

High task-relevant cues consist of structural firmness and functional convenience (Parboteeah, 2005). Structural firmness is the system structure that conquer both prospective and unanticipated threats, and affect website performance and security (Geng & Tian, 2015; Kim, Lee, Han, & Lee, 2002), with seven characteristics: (1) protection of consumers' information, (2) quick error recovery, (3) risk perceptions, (4) system performance, (5) system reliability, (6) system security, and (7) response time (Parboteeah, 2005).

Functional convenience is the convenient functions or characteristics that help users to perform transaction activities within website (Geng & Tian, 2015). Its representative features includes (1) ease of navigation, (2) ease of understanding, (3) ease of use, (4) functional fit-to-task, (5) information availability, (6) interactivity, (7) personalization, (8) price competitiveness, (9) product assortment, and (10) responsiveness (Parboteeah, 2005).

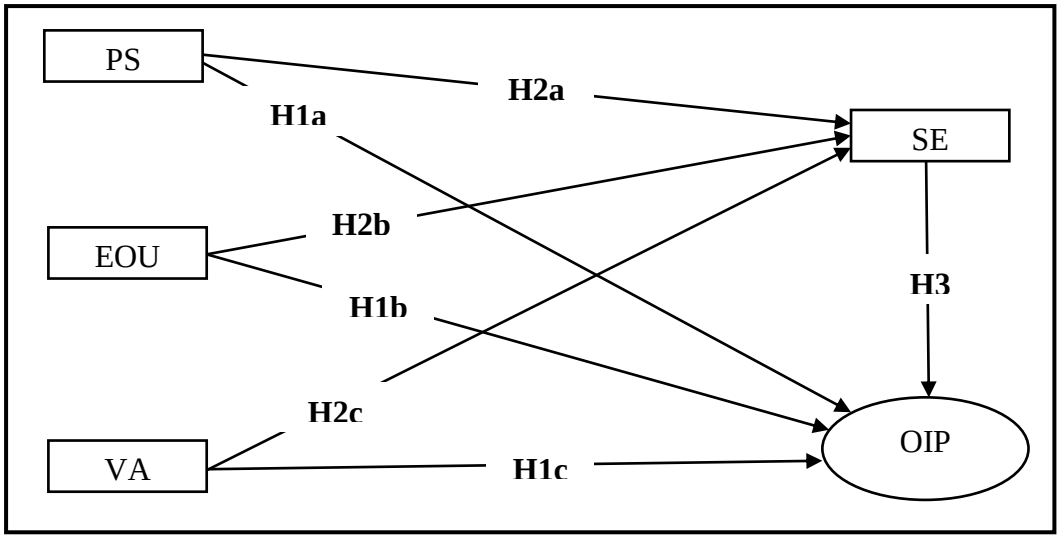
Compared to structural firmness, studies have shown that functional convenience has larger impact on consumers' response behaviours (Parboteeah, 2005).

Kim et al. (2002) indicated representational delight as aspects related to website interface where user comes into contact, is a low task-relevant cue (Parboteeah, 2005). It includes users' interaction with a website through hearing and sense of sight, which comprised of (1) emotional appeal, (2) entertainment value, (3) flow, (4) innovativeness, and (5) visual appeal (Parboteeah, 2005).

In this research, one characteristic is chosen from structural firmness, functional convenience and representational delight, respectively. This is to better illustrate environmental cues online implied by Eroglu et al. (2001). Pleasure will be focused in assessing consumers' affective states as it has larger impact on one's responses. Dominance omitted due to little or no impact on behaviour responses as tested in past studies (Eroglu et al., 2003). Approach behaviour of consumers will be focused as their responses or shopping outcome to study their online impulsive buying behaviour.

2.3 Suggested Theoretical Framework

Figure 2.3: Suggested S-O-R Framework



Source: Developed for the research

For better illustration of effect of online environmental cues' impacts on online impulse purchase behaviour of Malaysia's university students on Lazada Malaysia, website attributes including PS, EOU, and VA are proposed as independent variables in this study that will influence university student's online impulsive buying behaviour, mediated by SE. PS, EOU and VA are selected due to each of them is the representative characteristic for structural firmness, functional convenience, and representational delight, respectively (Parboteeah, 2005).

SE is regarded as a mediating variable between website attributes and OIP, the dependent variable. This is according to idea by Mehrabian and Russell (1974), where they emphasized that stimuli have an impact on one's emotional states. Besides, as Childers et al. (2001) suggested that enjoyment derived from interactive online environment has an impact on consumers' attitudes towards internet shopping, so a like concept is employed.

2.4 Hypotheses Development

2.4.1 The relationship between Website Attributes and Online Impulse Purchase

Pavlou (2001) indicated information privacy and security are significant drivers for consumers' intention to engage in e-commerce transaction and guarantee positive effect towards attitude on website (Hwang & Kim, 2007). PS is classified as a website functionality to facilitate simplified online purchase process and to motivate repetitive buying online as confidentiality (consumers' privacy) is an important ethical requirement (Bester, 2015). In the situation where consumers think that their individual privacy and information are unprotected in an online shopping website, they will choose to not to buy from that website (Chakraborty Lala, & Warren, 2003).

Past studies proved that PS as an e-shopping quality or website personality, impacted impulse purchase behaviour (Ha & Stoel, 2008; Rezaei, Ali, Amin, & Jayashree, 2016). Similarly, Ang, Liew, Wai and Yeoh (2015) concluded PS has an impact on Gen-Y online impulse buying when they shop online. Thus, we believe that PS issue in e-shopping context is essential in stimulating OIP. Hence,

H1a: *There is a positive relationship between PS and OIP.*

EOU is proven by several studies as a significant factor for consumers' intentions to use an e-commerce website (Parboteeah, 2005; van der Heijden, 2003; Vijayasarathy, 2004). Cheema, Rizwan, Jalal, Durrani, and Sohail (2013) confirmed that when customers' interaction with the website including searching product information and making payment online is simple, they preferred to shop online. Liu et al. (2013) and Wells, Parboteeah, and Valacich (2011) stated, EOU is also an environmental cue affecting the likelihood of consumers to go through the urge to make impulse purchase. Turkyilmaz, Erdem, and Uslu (2015), and Parboteeah

(2005) mentioned, EOU has an impact on consumers' OIP behaviour in their study. Akram et al. (2017) stated that although EOU has less impact on OIP, but still positively related to OIP during "Double Eleven" shopping festival. There are debates on navigability aspect of EOU, where some studies stated it is effective for OIP, some are not (Lim & Yazdanifard, 2015). But, it is still posited as:

H1b: *There is a positive relationship between EOU and OIP.*

Suitable and appropriate used of visual elements help to draw customers' attention and to prevent cluttered pages that will hinder consumers' impulse purchase behaviour (Loiacono et al., 2002; Montoya-Weiss et al., 2003). Wang, Minor, and Wei (2011) stated, it is essential for consumers to enjoy in aesthetically and visually appealing online shopping environment as this will result in OIP behaviour among consumers (Liu et al., 2013). Therefore, by designing and presenting the e-commerce website and products in visually appealing manner help to facilitate impulsive buying behaviour, as consumers' senses of vision of are triggered causing them to be stimulated easily and bought impulsively eventually (Liu et al., 2013). Similarly, Turkyilmaz et al. (2015) proposed, media and website layout dimensions are website design attributes in contributing to stimulating OIP. Lim and Yazdanifard (2015) further confirmed that VA is external or environmental factor for OIP context. Therefore,

H1c: *There is a positive relationship between VA and OIP.*

2.4.2 The relationship between Website Attributes and Shopping Enjoyment

Ha and Stoel (2008) suggested that e-shopping quality associated with PS issues affects one's SE. Hwang and Kim (2007) indicated that PS dimension of perceived web quality has a positive impact on enjoyment as by

protecting consumers' privacy or private information can improve their intrinsic motivation. Parboteeah (2005) implied the similar concept where security perceptions as a structural firmness feature of a website influence the perceived enjoyment of one's experience in the website. Parboteeah et al., (2009) suggested, higher quality of task-relevant cues including PS aspects, enhance greater enjoyment emerged from surfing a website, even though the impact on enjoyment is not as strong as a website's mood-relevant cues. Therefore,

H2a: *There is a positive relationship between PS and SE.*

According to van der Heijden (2003), an easy-to-use website brings enjoyment to the users. Parboteeah (2005) specifically mentioned EOU as a high task-relevant cue improved consumers' SE significantly. Sukhu, Zhang, and Bilgihan (2015) confirmed that EOU influence user's enjoyment positively, and their research has been supported by Kwon and Chidambaram (2000), where easy-to-use technologies give higher enjoyment to users. Moreover, a sufficient level of EOU brings intrinsic enjoyment to those who visit the website (Moon & Kim, 2001). According to Agrebi and Jallais (2015), in mobile shopping, users feel interesting when the system is easy-to-use as a sense of control are given, which translate to greater enjoyment to users. Therefore,

H2b: *There is a positive relationship between EOU and SE.*

Van der Heijden (2003) proposed, VA includes visual attractiveness related to visual elements used in website, such as colours used and website layout, and he confirmed that perceived visual attractiveness influence ones' enjoyment. Ha and Stoel (2008) empirically illustrated that different features of e-shopping quality including the VA, has a positive influence on SE. Floh and Madlberger (2013) stated, the idea of online store design relates to visual appearance and have concluded that when a customer perceive better e-store design, customer's SE in the online store is higher.

Xiang et al. (2016) confirmed the positive relationship between VA and SE in social media platforms. Frustration due to poor VA impedes users from interacting with the website will reduce their positive impression towards the website and eventually decrease their SE (Xiang et al., 2016). Cyr, Head, and Ivanov (2006) also proposed that design aesthetics influence one's enjoyment in mobile commerce applications. Thus,

H2c: *There is a positive relationship between VA and SE.*

2.4.3 The relationship between Shopping Enjoyment and Online Impulse Purchase

According to Saad and Metawie (2015), higher SE in-store will lead to impulsive buying behaviour. Park et al. (2012) proved that hedonic aspect of SE affects the buying impulsiveness when browsing through website offering apparel products. Xiang et al. (2016) confirmed that when usage of social commerce platforms are enjoyable, users tend to buy impulsively. Similar conclusion by Adelaar, Chang, Lancendorfer, Lee, and Morimoto (2003) stated, one's positive emotional reactions to a stimulus enhance one's impulse-purchase intention. Hence,

H3: *There is a positive relationship between SE and OIP.*

2.4.4 The relationship between Website Attributes and Online Impulse Purchase through Shopping Enjoyment as Mediator

PS is a critical factor that affects consumers' emotions strongly, therefore websites with adequate PS features able to stimulate consumers' positive emotions and their probability to buy impulsively will increase (Yoo & Donthu, 2001). Past studies by Ha and Stoel (2008), and Kwek, Lau, and Tan (2010) stated that when e-commerce website protects consumers'

privacy and secures their personal information, security felt by consumers leading them to express greater SE and tend to make unplanned purchase. These studies are also supported by Ang et al. (2015) where PS is a significant cause to influence consumers' SE in e-stores and then impact on their OIP behaviour. Therefore,

H4a: *SE mediates the relationship between PS and OIP.*

According to Agrebi and Jallais (2015), an easy-to-use m-commerce technology generates SE for the users, which then affects their intention to use mobile for shopping. Verhagen and van Dolen (2011), as well as Floh and Madlberger (2013) discovered that EOU has a critical impact on one's positive affective emotion or SE, which mediates the impact of EOU on one's OIP. This is supported by Parboteeah et al. (2009) where they found that easy-to-use aspect of task-relevant cues of a website affects the consumers' SE and then impact on their OIP. Similarly, Parboteeah (2005) suggested that a website's ease of use influence one's enjoyment, which in turn trigger the intention to make unplanned purchases. Hence,

H4b: *SE mediates the relationship between EOU and OIP.*

VA is selection of fonts and other visual elements that help to heighten a website's overall appearance (Parboteeah et al., 2009; van der Heijden et al., 2003). Saad and Metawie (2015) concluded, impulse purchase in-store is fully mediated by SE generated from store environment factors, such as music and layout design. In online context, Floh and Madlberger (2013) confirmed, the atmospheric cues of online store, including its design, have large impact on SE and impulsiveness, which in turn affect OIP.

Xiang et al. (2016) mentioned, VA influence users' perceived enjoyment and then affect their urge to purchase impulsively on social commerce platforms. Parboteeah et al. (2009) also discovered that a visually appealing website elicited more pleasure in consumers' emotional states during their interaction with that website that in turn, influence urge to purchase

impulsively. Adelaar et al. (2003) found that one's emotional responses mediate the impact of different media formats, such as videos and images, on their intention of purchasing impulsively. So,

H4c: *SE mediates the relationship between VA and OIP.*

2.5 Conclusion

Literature review on the variables and effect of website attributes (PS, EOU, VA) on OIP, mediated by SE using S-O-R model were discussed, supporting by the findings and theoretical frameworks of past studies. Next chapter will discuss the explanation regarding research methodology.

CHAPTER 3: METHODOLOGY

3.0 Introduction

This part discusses overall methodology employed to underpin the research on how the attributes of Lazada Malaysia can affect the online impulse buying behaviour of university student in Malaysia. Throughout this chapter, components that will be covered are the methods of gathering, processing and examining of data.

3.1 Research Design

Based on the journal by Burns and Bush (2009), research design is used during research as a comprehensive plan specifying the methods to gather and examine the data. Research design will also explain the instruments and techniques needed to be included to analyse collected data information.

The research approach in this study is quantitative research approach. According to Rahi (2017), quantitative research is defined as a technique that aims on the collection of new data in line with the study of the population and data analysis. This approach also helps researches to describe the data and creating a result that are statically reliable and accurate besides interpreting the data.

For the study we have used descriptive research approach to obtain our data. Descriptive research is define as to describe systematically and accurately the facts and characteristics of a given population, object or organization (Babin & Zikmund, 2015). The purpose of using descriptive research approach is to identify in details for each variable that is being studied (Salaria, 2012). Due to the research question where it focuses on a wide impact which in this case the impact is website attributes is the reason descriptive analysis is being employed.

3.2 Data Collection Method

This process is used to obtain precise data in order to maintain the research integrity. Thus, primary data has been employed.

In primary data collection, survey method was used where the questionnaires were distributed to Malaysia's university students who have experienced and used Lazada Malaysia. 320 questionnaires set were collected from states around Malaysia, including Kedah, Penang, Perak, and Selangor, through physical distribution. However, only 290 sets were usable. 22 out of 320 discarded questionnaires contained missing value in Respondent's Profile section as the respondents were unable to provide their monthly income while the remaining eight sets of questionnaire were discarded due to inexperienced online purchase on Lazada Malaysia. A small-scaled pilot test on 30 respondents were carried out before conducting the full-scale study.

3.3 Sampling Design

3.3.1 Target Population

For this research, the target population was drawn among university students in Malaysia who have tried online purchase on Lazada Malaysia. According to Norliah, Safiah, Zakiaf, Massila, Mahadi, and Shahrulanuar (2017), the most frequent users of internet based-technology are university students. Apparently, university students have higher purchasing power compared to other generations when it comes to online shopping (See, Al-Agaga & Nor, 2012). Since Malaysia is a country with melting pot of races, the questionnaires have been distributed to different races, such as Malay, Chinese, Indian, and others.

3.3.2 Sampling Location

Distribution of the questionnaires were carried out physically. Survey questionnaires were distributed in universities located in Kedah, Penang, Perak, and Selangor. Out of 320 sets, 150 sets of questionnaire were collected from MAHSA University, Management and Science University (MSU), Multimedia University (MMU), and Taylor's University in Selangor, 90 sets of questionnaire were collected from Tunku Abdul Rahman University College (TARUC) and University Science Malaysia (USM) in Penang, 80 sets of questionnaire were collected from Universiti Tunku Abdul Rahman (UTAR) in Perak, and the other 20 sets were collected from Universiti Utara Malaysia (UUM) in Kedah.

3.3.3 Sampling Elements

Respondents that have used the platform at least once are the targeted sampling elements for the study. It is important as it helps to provide the actual service experience that they have undergone and thus creating a more reliable and solid data (Kelley, Clark, Brown, & Sitzia, 2003).

3.3.4 Sampling Technique

The sampling method used in this research was non-probability sampling. Alvi (2016) stated, non-probability sampling is defined as every population unit will not get an equal chance of involvement in the research study and no random selection is made. The non-probability sampling method that is applied for the research study is judgmental sampling where researchers are able to make the judgement in selecting the respondents that best meet the purpose of the research study. Hence, respondents be a university student who tried purchasing online on Lazada Malaysia.

3.3.5 Sampling Size

Hill (1998) proposed, the sample size ranging from 30 to 500 is considered to be the ideal size for the research. 320 was set as the sample size of this full-scale study. However, only 290 were usable questionnaires apart from the additional 30 sets for pilot testing.

3.4 Research Instrument

Methods for gathering data refers to research instrument. The survey questionnaire was constructed based on reviewed literature and research variables including PS, VA, EOU, SE and OIP.

3.4.1 Pilot Test

Pilot study is a pre-test conducted prior to real questionnaire is given out, in order to detect any flaws in the questionnaires, whether the participants understand the questions directed to them, and to avoid miscommunication (Hair et al., 2015). This allows researchers to access the reliability or consistency of each construct and make any amendments and improvements until the final questionnaires are ready to be distributed. The feedback obtained from the 30 respondents in the pilot test was positive. Thus, the questionnaires are ready to be used in the full-scale study. The acceptable value of alpha is ranging from 0.6 and above (Hair et. al., 2015). Hence, based on the Appendix 3.2, the constructs are considered reliable.

3.4.2 Questionnaire Design

Structured questionnaire was employed to conduct the survey. 320 questionnaires were given out physically from 06 June 2018 to 20 June 2018.

Before distributing the questionnaires, several consideration was taken into matter:

- Respondents are university student.
- Malaysian citizens.
- Experienced online purchase on Lazada previously.

The questionnaire was divided into seven sections with a total of 32 question: Section A-G. Section A consisted of four questions asking respondents' general behaviour on Lazada Malaysia, including number of visitation, expenditure, payment method, and product category they purchased the most.

Section B to F consisted of five questions each, asking about PS, VA and EOU, SE as mediator, OIP as dependent variable on Lazada Malaysia. Five-Point Likert-Scale was employed in these sections, in order to show their degree of agreement, respondents are urged to select from the scale of 1 to 5 in where 1 represents "Strongly Disagree" and 5 represents "Strongly Agree".

Section G contained three questions related to respondents' background, comprised of gender, ethnicity and monthly income. All questions were asked in simple English and in straightforward manner so that the respondents can understand it easily.

3.5 Constructs Measurement

3.5.1 Scale Definition

Table 3.1: Measurement of General Information, Independent Variables, Dependent Variables, and Respondent Profiles

Section	Variables	Measurement Scales	Scaling Techniques
Section A: General Information (GI)	Number of Visitation	Ordinal	-
	Expenditure	Ordinal	-
	Payment Method	Nominal	-
	Product Category Most Bought	Nominal	-
Section B, C, & D: Independent Variables	Privacy & Security	Interval	Five-Point Likert
	Visual Appeal	Interval	Five-Point Likert
	Website Ease of Use	Interval	Five-Point Likert

Section E: Mediator	Shopping Enjoyment	Interval	Five-Point Likert
Section F: Dependent Variable	Online Impulse Purchase	Interval	Five-Point Likert
Section G: Respondent's Profile (RP)	Gender	Nominal	-
	Ethnicity	Nominal	-
	Monthly Income	Ordinal	-

Source: Developed for the research

3.6 Data Processing

Data processing was carried out to ensure that the accuracy and relevancy of collected data. Data processing for this study comprised of processes including checking, coding, and cleaning of data.

3.6.1 Data Checking

This process was executed to detect any missing values after the collection of questionnaires. In this study, 22 questionnaires were discarded due to missing value under Respondent's Profile section and eight questionnaires as respondents never tried online purchase on Lazada Malaysia.

3.6.2 Data Coding

Each survey question in this study provides was numerically pre-coded in order to ease the data key-in process. This can help with data interpretation and development of final result as well. The data were then key-in into Microsoft Excel based on the assigned code for the choice chosen in each survey question.

3.6.3 Data Cleaning

After entering the data into Microsoft Excel, further detection of missing values during the data input process were carried out to ensure data quality. To further improve the data validity, values that are considered below desirable will be removed.

3.7 Data Analysis

Partial Least Square (Smart-PLS 3) software was adopted for analysis of data collected. SMART-PLS 3 assist researchers in creating an accurate and strong prediction by specifying dependent variables and multiple independent variable in a single model as well as handling multicollinearity issues within the independent variables (Wong, 2013).

3.7.1 Descriptive Analysis

Descriptive data collected for this research study were gender, ethnicity and monthly income. The data that we have obtained will be transformed into frequencies and percentages. For our research study, the overall respondent information that was obtained will be generated and tabulated using SPSS software. In this way the data will be summarized. For the descriptive

analysis the statistics that are being measured are central tendency and variability. The main measures for central tendency are mean, median and mode. The measures for variability are standard deviation and range.

3.7.2 Inferential Analysis

Partial least squares path modelling (PLS-SEM) estimates the cause-effect relationship models with potential variables was applied for inferential analysis. This systems helps to better understand the multivariate model data (Monecke & Leisch, 2012).

3.7.2.1 Reliability Test for Reflective Measurements Method

Reliability is defined as the degree where a tool will measure in an identical way when utilize under the identical subject and situation. In other words, the ability to forecast the measurement consistency. The main point of reliability is consistency (Adam, Khan, Raeside & White, 2007).

The measurement tool is deemed to be reliable but not valid when the result of the measuring process can be produced. Thus, although the variables are wrongly measured, it is considered reliable when a consistent result is obtained. The scales were analyse based of the reliability via internal consistency. For the research study, composite reliability test and Cronbach's Alpha were used. Composite Reliability was applied to test the internal consistency and the ideal value is above 0.7. Cronbach's Alpha coefficient evaluation is according to the rules of the thumb as stated in Table 3.2:

Table 3.2: Rules Of Thumb about Cronbach's Alpha Coefficient Size

Cronbach's alpha	Internal consistency
$\alpha = 0.9$	Excellent (High-Stakes Testing)
$0.7 = \alpha < 0.9$	Good (Low-Stakes Testing)
$0.6 = \alpha < 0.7$	Acceptable
$0.5 = \alpha < 0.6$	Poor
$\alpha < 0.5$	Unacceptable

Source: Manerikar, V., & Manerikar, S. (2015). Cronbach's alpha. *A Peer Review Research Journal aWEshkar WeSchool, 19*(1), 117-119.

3.7.2.2 Convergent Validity & Discriminant Validity

Convergent validity is define as a test to inspect whether the object planned to measure the construct are related to one another. In order to develop an acceptable convergent validity, the aspect need to be looked into is average variance expected (AVE) and its desirable value should be 0.5 and above. (Hair, Ringle & Sarstedt, 2015).

Discriminant validity is defined as a test to inspect whether the object planned to measure the construct are distinct to one another. For discriminant validity, Fornell-Lacker and cross-loading method were used. It is suggested that each indicator's loading must have an exceedingly value on all of its cross loading (Hair, Ringle & Sarstedt, 2015).

3.7.2.3 Structural Model Evaluation

Structural Model Evaluation is model that includes various set of diverse set of computer algorithms, mathematical models, and statistical methods that is relevant to networks of constructs to data (Kaplan, 2007). Through this model we will be evaluating path analyses, R^2 and Q^2.

Path Analyses is a direct multiple regression extension that aims the study situation with several final dependent variable or when there is influence chain between each variable (Streiner, 2005). This method is used toensure that the collected data is consistent as well as it is in line with the model. Through this method, the readings that will be taken into consideration are the VIF, t-value and p-value to determine whether chain between the variables should be accepted or rejected. The ideal conditions of the readings are VIF should be less than 10, t-value should be more than 2 and p-value should be 0.05 and below.

To quantify the variation part of the dependent variable described by the independent variable, Coefficient of determination, R^2 is employed (Hössjer, 2008). The R^2 is used as either for hypotheses testing or to forecast the future result. As for Q^2 it is applied to predict the relevance of the model. To indicate that the model is well constructed and have predictive relevance the value should be above 0.5 (Vinzi, Chin, Henseler, & Wang, 2010).

3.8 Conclusion

Based on Chapter 3, the overall methodology applied to obtain data has been explained and discussed. In Chapter 4, data and information collected will be analysed to generate result for the research.

CHAPTER 4: DATA ANALYSIS

4.0 Introduction

290 sets out of 320 raw data were collected through the survey questionnaire from respondents mainly distributed at Perak, Penang and Kuala Lumpur were used. There were 30 respondents out of 320 were incompatible as target respondents due to inexperienced online purchase on Lazada Malaysia. The data will be analysed using Partial Least Square (SMART-PLS3) statistical software to test the relationship between the independent and dependent variables along with the mediator. The performed analysis of statistical test results will be provided in this chapter below.

4.1 Descriptive Analysis

4.1.1 General Information

Questionnaire in Section A includes four questions enquiring the general behaviour of Lazada (M) users in brief. In GI1 under Appendix 4.1, the surfing frequency of 1-2 times/month shows the highest frequent surfing rate (52%) followed by 3-4 times/month (29%), more than 6 times/month (12%) and 5-6 times/month (7%). In GI2, the majority expenditure spent on Lazada (M) amounts to RM51-100 (42%) as the highest, seconded with below RM50 (26%), then RM101-150 (22%) and the least chosen amount, more than RM50 (10%).

While the highest voted payment mode in GI3 were tied with 44% for both Online Banking and Credit/Debit card along with Cash On Delivery (7%), PayPal (4%), Pay Cash at 7-Eleven store (0.7%) and the least preferred choice, Instalment (0.3%). Moving on to GI4, Electronic devices &

Accessories (34.1%) was voted second after Clothes & Accessories (38.6%) as the most bought product category in Lazada (M). The remaining product choice in descending orders were Health & Beauty Care (11.7%), Sports & Travel (4.8%), TV & Home Appliances (4.8%), Automotive & Motorcycles Accessories (2.8%), Groceries & Pets (2.8%) and Babies & Toys (0.4%).

4.1.2 Respondents' Demographic Profile

The questionnaire also consists of three sets of demographic information questions (Section G) on gender, ethnicity and monthly income. Appendix 4.3 shows the data analysis generated from the survey.

According to Appendix 4.4, there were 159 female respondents (54.8%) and 131 male respondents (45.2%). Overall, 152 were Malay respondents (52.4%) followed by 91 Chinese respondents (31.4%), 37 Indian respondents (12.8%) and a minority of 10 respondents (3.4%) categorized under others.

Most respondents possess income below RM1000 with 188 respondents (64.8%) indicating that they have no income or low income. Secondly, followed by the income range of RM1001-2000 with 48 respondents (16.6%), third with income group of RM2001-3000 by 30 respondents (10.3%), forth income group of RM3001-4000 with 15 respondents (5.2%) and the least selected income group, above RM4000 with 9 respondents (3.1%) respectively.

4.2 Measurement Model

To support measurement model, 3 types of validity namely content validity, convergent validity and discriminant validity are needed (Lin & Lo, 2015). This will cover an analysis to examine the items used to measure the model.

4.2.1 Indicators' Reliability

Reliability is a factor for validity and a first study measurement to see if the associated indicators are common in capturing the latent construct (Kwong & Wong, 2016). After analysing the factor loadings developed through SMART-PLS3 in Appendix 4.5, apart from *VA_1* was dropped from the scale due to its outer loading 0.660 which is lower than 0.7, other constructs of the study are accepted with the values above 0.7 after the removal. The new construct obtained a score of 0.712 to 0.821 above the threshold level.

4.2.2 Convergent Validity

This test is to convey the measures of two or more items with related construct. The degree of confidence shows whether an attribute is effectively measured by its indicators (Alarcon & Sanchez, 2015; Campbell & Fiske, 1959). Average Variance Extracted (AVE) and Composite Reliability (CR) is commonly evaluated using Fornell-Larcker (Alarcon & Sanchez, 2015). An AVE value greater than 0.5 to consider acceptable, 0.6 as desirable and above 0.7 as very good (Lin & Lo, 2015; Alarcon & Sanchez, 2015; Bagozzi & Yi, 1988).

As shown in Appendix 4.6, all construct scores from 0.560 to 0.653 which demonstrates the degree of confidence is well measured by the indicators. The elimination of *VA_1* that forms *Visual Appeal* in PLS model has led to a growth of AVE and CR of their respective latent constructs. Fornell-Larcker (1981) argued that CR is less biased compared to Cronbach's Alpha in testing reliability with acceptance value above 0.7. Appendix 4.6 shows satisfactory convergent validity results.

4.2.3 Discriminant Validity

According to Henseler, Ringle, and Sarstedt (2015), discriminant validity requires "a test not correlate too highly with measures from which it is supposed to differ" (as cited in Campbell, 1960, p.548). This is to prevent any risk of collinearity problems (multicollinearity) which will affect the hypotheses and model interpretation to be false (Ab Hamid, Sami, & Sidek, 2017). Multicollinearity or collinearity is the coefficient estimation within the model to define the degree of accuracy by indicating how well it can predict the outcome variables.

To evaluate cross-loading values with items loading in comparison, factor loadings items should be higher than all other factor loadings while square root of AVE must be higher than other latent constructs' correlations (Fornell-Larcker, 1981; Henseler et al., 2015). In Appendix 4.8, all constructs generated have a reading above 0.7. The values on the diagonal are greater than values off the diagonal. As such, based on Fornell-Larcker (1981)'s criterion, there is a presence of discriminant validity.

In Appendix 4.9 and 4.10, the outer-loadings and cross-loadings before VA_1 was eliminated is shown. Assessing cross-loadings, each indicator loading should consist greater loading value compared to all its cross-loadings (Henseler et al., 2015). Appendix 4.11 and 4.12 shows a result of each construct complying with this theory. In conclusion, it is confirmed that the items have passed the testing of discriminant validity.

4.3 Structural Model

According to Appendix 4.13, VIF values in all paths range from 1.431 to 1.941, suggesting that there is no indication of multicollinearity problems nor issues with each set of the variables as it is lower than 5. All readings were fine except for the VA $\rightarrow$ OIP because the value has exceeded 0.05 for its P-Value. Furthermore, T-

statistic readings are highly significant at 0.01-0.001 showing a 95% confidence interval. Unfortunately, this path is the only figure that is below 1.96. Thus, resulting 6 out of 7 hypotheses proposed have significant effect (T-Statistics > 1.96).

R^2 value is the quality criteria used to assess the overall relationship strength while R^2 adjusted is only used to compare two or more structural models shown in Appendix 4.16. The R^2 value of OIP (0.320) is considered weak, whereas the R^2 value of SE (0.481) is considered close to moderate (Moore, Notz, & Flinger, 2013). It means that 32% of changes in OIP and 48.1% of variation in SE are because of PS, EOU and VA.

f^2 effect size is to assess the impact of a specific construct on an internal construct. According to Appendix 4.17, PS (0.02) has a little effect while VA (0.009) have the smallest effect in producing R^2 value for OIP. The value of 0.028 indicates that EOU has a relatively larger effect in generating R^2 for OIP, SE (0.147) has an almost medium effect in generating R^2 for OIP.

The predictive relevance Q^2, 0.172 of OIP shows that the model demonstrates moderate predictive relevance for this construct under Appendix 4.18. The value lower than 0 is reviewed as lack of predictive relevance. Hence, both OIP and SE has a decent predictive level.

To assess the mediation effect in the proposed framework, significance of direct effect between independent variables (PS, EOU, VA) and dependent variable (OIP), without mediator (SE), must be first assessed. In Appendix 4.19, both direct effects without mediator of PS (0.202) and EOU (0.279) on OIP are significant, whereas the direct effect without mediator of VA on OIP is not significant (0.097). However, past studies not only showed presence of significant relationship between VA and OIP, but also SE as a mediator mediating the relationship between VA and OIP (Loiacano et al., 2002; Wang et al. 2011; Liu et al., 2013; Adelaar et al., 2003; Floh & Madlberger, 2013). Therefore, significance of indirect effect with mediator between PS, EOU, VA and SE, and between SE and OIP are assessed.

Correspondingly in Appendix 4.20, the indirect effects with mediator between PS (0.142), VA (0.438), EOU (0.249) and SE as well as between SE (0.439) and OIP are significant. Hence, variance accounted for (VAF) will be assessed. From the results of T-Statistics and P-Values in Appendix 4.21, the total indirect effects of PS $\rightarrow$ OIP ($t=2.199$, $p<0.05$), VA $\rightarrow$ OIP ($t=4.719$, $p<0.05$) and EOU $\rightarrow$ OIP ($t=3.495$, $p<0.05$) are significant. Whereas, total effect = sum of direct + indirect effects as the shown in Appendix 4.22.

Similarly, total effects results are used to calculate Variance Accounted For (VAF) to test the dependent variable by indirect relationship if there is a presence of mediation occur. In Appendix 4.24, the relationships of PS $\rightarrow$ SE $\rightarrow$ OIP, EOU $\rightarrow$ SE $\rightarrow$ OIP and VA $\rightarrow$ SE $\rightarrow$ OIP are significant ($t=2.199$, $p<0.05$; $t=3.495$, $p<0.05$; $t=4.719$, $p<0.05$, respectively). These results provide support for H4a, H4b and H4c, whereby SE partially mediates both relationship between PS and OIP as well as between EOU and OIP. Besides, SE fully mediates the relationship VA and OIP.

4.4 Conclusion

The item VA_1 was withdrawn from the measurement scale in order to improve other construct results. The data analysis has been discussed in detailed through statistics generated from research in this chapter.

CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICATIONS

5.0 Introduction

Ultimate chapter concludes the entire study by discussing the findings and analysis derived from previous chapters. Obstacles faced and suggestions for the research will be made at the end to improve future research.

5.1 Discussions of Major Findings

Table 5.1: Outline of Hypothesis Testing

Hypothesis	Relationship
H1a. There is a positive relationship between PS and OIP.	**Supported**
H1b. There is a positive relationship between EOU and OIP.	**Supported**
H1c. There is a positive relationship between VA and OIP.	**Not Supported**
H2a. There is a positive relationship between PS and SE.	**Supported**
H2b. There is a positive relationship between EOU and SE.	**Supported**
H2c. There is a positive relationship between VA and SE.	**Supported**
H3. There is a positive relationship between SE and OIP.	**Supported**
H4a. SE mediates the relationship between PS and OIP.	**Supported**
H4b. SE mediates the relationship between EOU and OIP.	**Supported**
H4c. SE mediates the relationship between VA and OIP.	**Supported**

Source: Developed for the research

The study is intended to inspect the impact of website attributes (PS, EOU, VA) on OIP and the effects of SE as mediator between website attributes and OIP on Lazada Malaysia. All hypotheses in this study were supported empirically except for H1c, whereby VA_1 showed no direct effect on OIP.

The result outcome supported H1a and H2a by confirming PS as an essential factor to practise e-shopping affects both consumer's OIP and SE positively. Adequate security features of e-commerce websites to protect consumers' confidential information not only can stimulate consumer's OIP, but also can translate greater enjoyment. These results are similar with findings by Ha and Stoel (2008), Hwang and Kim (2007), Parboteeah (2005) and Parboteeah et al. (2009), as well as Ang et al. (2015), Chakraborty et al. (2002), Ha and Stoel (2008), and Rezaei et al. (2016). Past studies have showed that consumers' positive emotions were triggered and elicited greater SE when they felt a sense of security, this emotion then impacted on their OIP (Ang et al, 2015; Ha & Stoel, 2008; Kwek et al., 2010; Yoo & Donthu, 2001). Thus, H4a was supported as partial mediation effect by SE existed between PS and OIP.

It was indicated in past studies, consumers tend to purchase impulsively when a website is user-friendly, such as simpler navigation and effortless payment procedures (Akram et al., 2017; Cheema et al., 2013; Liu et al., 2013; Turkyilmaz et al., 2015; Wells et al., 2011). Besides, SE was created as well when the website provides easy-to-use technologies (Agrebi & Jallais, 2015; Kwon & Chidambaram, 2000; Moon & Kim, 2001; Parboteeah, 2005; Sukhu et al., 2015; van der Heijden, 2003). Hence, H1b and H2b were supported as results showed EOU was positively influencing OIP and SE, and its results are consistent with past findings. H4b was supported as result showed SE mediated the relationship between EOU and OIP. This finding is consistent with Agrebi and Jallais (2015), Floh and Madlberger (2013), and Verhagen and van Dolen (2011).

Past studies showed VA positively influence OIP in offline and online context due to attractive website layout, interesting pictures and appropriate used of visual elements (Turkyilmaz et al., 2015). Surprisingly, findings from this research showed H1c was not supported as VA has no direct effect on OIP probably due to

extensive use of visual elements causing confusion among consumers, leading them to leave the website. Additionally, most respondents perceived Lazada Malaysia as visually unappealing and the products were not displayed aesthetically. Hence, the absence of OIP. However, findings by Floh and Madlberger (2013), Ha and Stoel (2008), Van der Heijden (2003), and Xiang et al. (2016) were similar to the results obtained from this research. VA was positively affecting SE, proving H2c was supported. Although VA has no direct effect on OIP, it has shown presence of indirect effect on OIP, fully mediated by SE, making H4c to be supported. This result is tally with findings by Floh and Madlberger (2013), Parboteeah et al. (2009), Saad and Metawie (2015), and Xiang et al. (2016).

Our results have showed SE being influenced by OIP positively in this study. Hence, H3 is supported as enjoyable shopping experiences can make consumers further explored the website and arouse their OIP. This is consistent with the results obtained by Adelaar et al. (2003), Park et al. (2012), Saad and Metawie (2016), and Xiang et al. (2016).

5.2 Implications of the Study

5.2.1 Managerial Implication

5.2.1.1 Privacy & Security

PS is examined with a significant relationship affecting shopping enjoyment and online impulse purchase. This results in the importance of trust concern by online users when they access Lazada Malaysia. In another words, relevant authorities should take extra precaution and measures in ensuring users are experiencing tip-top safe transactions when they purchase or provide any of their personal information. These data should be encrypted and protected from leaking to hackers or the risk of unethical use. A time to time maintenance on the website have to be provided to retain the stability of website because transactions are done through virtual platform.

5.2.1.2 Website Ease of Use

EOU is proven to affect shopping enjoyment and online impulse purchase strongly. Complying with shopping enjoyment, the design of user-friendly website does influences shopping enjoyment. Authorities have to be mindful not to over-do-it as complexity drives potential transactions to fail. This particularly happens during sales season. The excessive flooding of pop-up ads will trigger users or worse; diminish their initial excitement and attempt in shopping. Absence of difficulty and nurture simplicity of the website can surge better retention of enjoyment in users during impulsivity behavior.

5.2.1.3 Visual Appeal

Visual elements design in an e-store or e-commerce website do have effect on consumer's OIP behaviour causing them to make unplanned purchase. However, not as significant as the past. Consumers nowadays are smart enough not to be deceived by appearance as they knew most of the pictures are for illustration purposes only. Therefore, relevant authorities should take note that aesthetically appealing e-store or e-commerce designs are able to attract consumers to visit and stay at the site longer but it may not have direct effect on consumers' online impulse buying behaviour. Visual appeal is what meets the eye. Authorities should emphasize on website appeal quality because it affects how users' perceive, use, and remember it. In short, it can attract attention while serving as the websites' first impression that affect long-term relationship. Once a website obtained negative first impression, chances are visitors are unlikely to come back.

5.2.1.4 Shopping Enjoyment

SE has positively revealed significant effect mediating website attributes in affecting OIP behavior. Authorities are suggested to position more effort into driving browsers to develop enjoyment in surfing through the shopping

website. By situating this as a focus helps relevant authorities to improve customer retention and satisfaction from obtaining goods or services through online platform. It is relatively tougher to evaluate what the users are feeling at the moment because virtual shopping is unlike brick-and-mortar. Physical shopping experiences enable respective authorities to identify how customers feel. Enjoyment can be an antecedent of positive or negative attitude towards online shopping. Therefore, preparing endeavoring measures to combat the challenges in creating online shopping enjoyment will decrease the risk of shrinking level of enjoyment to conduct OIP.

5.2.2 Academic Implication

Through our findings, although VA shows no direct implication in direct effect but in terms of indirect effect of full mediation the relationship still exist. Therefore, it is still an important factor leading to enjoyment. Future researches should not neglect VA. Instead, examine it with other placement. Such as innovativeness, emotional appeal and entertainment value perceived by online consumers, instead of visual appeal of the website. Hereinafter, by adopting other elements rather than visual appeal may help the researcher to better examine consumers' OIP context through the presence of indirect relationship.

5.3 Limitations of the Study

Some limitations have been recognized in this research. Firstly, our data collection took place in certain West Malaysia states instead of the whole Malaysia. This is due to the limitation of physical distribution of questionnaires ability to reach all Malaysia's university students. Additionally, because of time constraints, university students in different states all around Malaysia were unable to reach through physical distribution of questionnaires. Therefore, not all university students in

Malaysia are examined on their online impulse purchase behaviour. Hence, the findings may not fully translate to university students in Malaysia.

Furthermore, as this research focused on online impulse purchase behaviour on Lazada Malaysia with a wide range of product categories, most respondents are found to buy less impulsively when they purchased a high-involvement product such as electronic devices, automotive and motorcycles accessories, and etc. Hence, without mentioning the product category purchased on Lazada Malaysia in the questionnaires, respondents tend to create their own assumptions on the product category they acquired and answer based on the assumed product category on their online impulse purchase behaviour. Thus, this will result in data inconsistency due to differences in assumptions.

Although there are some limitations in this research, however they are not jeopardizing the significance of findings. The limitations have been acknowledged in order to provide platforms for conducting better research in future.

5.4 Recommendations

According to the previous evaluations above, the first suggestion we would proposed is to conduct online survey for this research in future. By utilizing the Internet, it minimizes the time consumption and solves the distance issue that we faced in the current study. University students possess to a high usage of Internet. Therefore, it would be a better option to be used to conduct a research that targets and reaches out to university students in Malaysia.

To refine the current research, conducting the study based on a specific sales season such as Lazada's Online Revolution campaign in 2017 is recommended. The online beast was reported breaking new sales record of RM100mil during their kicked off campaign, Single's Day (11.11) event that lasted a month having an estimation of 1,400 transactions per minute (Mahpar, 2017). Referring to this, it is more likely that users will be surfing Lazada Malaysia more often because they know there will

be different ranges of products on sale everyday within that month. With the anticipation for cheaper offers, the urge of impulse buying behavior would be more prominent as compared to normal days.

In addition, for future researchers regarding this scope of study, a particular segment/category should be targeted for precision and accuracy in their research such as Zalora (an apparel website). Adopting this would help them in understanding respondents' OIP out of the scope we conducted.

5.5 Conclusion

On the whole, the final results has proven that shopping enjoyment moderates website attributes towards online impulse purchase among University students of Malaysia on Lazada Malaysia. All factors are said to be positively influencing online impulse purchase except for the lacking of support for visual appeal of Lazada Malaysia website. Finally, although the variables covered are variables identified from past literature reviews, the research can be further advanced by attempting other theories to provide a deeper insight towards OIP.

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APPENDICES

Appendix 3.1: Survey Questionnaire

FACULTY OF BUSINESS AND FINANCE
BACHELOR OF MARKETING (HONS)

FINAL YEAR PROJECT
SURVEY QUESTIONNAIRE

Title: Online impulsive buying behavior on Lazada Malaysia among university students in Malaysia.

Dear Sir/Madam,

We are final year undergraduate students from Universiti Tunku Abdul Rahman (UTAR), currently pursuing in Bachelor of Marketing (Hons). The aim of this questionnaire is to examine the factors that influence the impulsive buying behavior towards online shopping at Lazada Malaysia among university students within Malaysia.

This questionnaire comprises of seven (7) sections. You are required to answer ALL the following questions best in accordance to your knowledge. There are no certain right or wrong responses to any of these statements. For your information, all responses collected will be strictly kept confidential and use for academic purposes only. This survey data will be reported in a manner that does not associate the participants' name or identify information provided about the participant. We would like to offer you our heartfelt thanks and appreciation for the effort and time for participating.

Thank you for your participation.

Prepared by:	LIN PEIK CHEW	16ABB07180
	LIM WAN JIN	16ABB05715
	KHISHENRAJ LEE	14ABB01751

Before starting this survey, please answer the following question.

Have you ever tried online purchase on Lazada Malaysia?

Yes [ ] **No** [ ]

SECTION A: GENERAL INFORMATION

In this section, we are interested in your general behaviour at Lazada Malaysia in brief. Please tick ONLY ONE answer for each question and your answers will be strictly kept confidential.

GI1. How often do you surf Lazada Malaysia?

□ 1-2 times/month$_1$ □ 3-4 times/month$_2$

□ 5-6 times/month$_3$ □ More than 6 times/month$_4$

GI2. How much do you normally spend at Lazada Malaysia for each transaction?

□ Below RM50$_1$ □ RM51-RM100$_2$

□ RM101-RM150$_3$ □ Above RM150$_4$

GI3. What is your payment mode for items purchased on Lazada Malaysia?

□ Online Banking$_1$ □ Credit/Debit Card$_2$

□ Installment (Maybank)$_3$ □ Pay cash at 7-Eleven store$_4$

□PayPal$_5$ □ Cash On Delivery$_6$

GI4. Which product category you buy the most on Lazada Malaysia?

□ Clothes & Accessories$_1$ □ Sports & Travel$_2$

□ Health & Beauty Care$_3$ □ TV & Home Appliances$_4$

□ Babies & Toys$_5$ □ Groceries & Pets$_6$

□ Automotive & Motorcycles Accessories$_7$

□ Electronic Devices & Accessories$_8$

***** Instructions: Please circle the best answer based on the scale of 1 to 5 [(1) = Strongly Disagree;***

(2) = Disagree; (3) = Neutral; (4) = Agree; (5) = Strongly Agree] for the following sections.

SECTION B: PRIVACY & SECURITY

This section is seeking your opinion about privacy & security towards impulsive buying behaviour.

No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
PS1.	Lazada Malaysia protects my privacy.	1	2	3	4	5
PS2.	Lazada Malaysia ensures that my transaction is safe.	1	2	3	4	5
PS3.	Lazada Malaysia has my trust.	1	2	3	4	5
PS4.	Lazada Malaysia has adequate security features.	1	2	3	4	5
PS5.	Lazada Malaysia is reputable.	1	2	3	4	5

SECTION C: VISUAL APPEAL

This section is seeking your opinion about visual appeal towards impulsive buying behaviour.

No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
VA1.	Lazada Malaysia displays pleasant visual elements.	1	2	3	4	5
VA2.	Lazada Malaysia displays visually pleasing design.	1	2	3	4	5
VA3.	Lazada Malaysia displays products aesthetically appealing online.	1	2	3	4	5

VA4.	Lazada Malaysia has an attractive layout.	1	2	3	4	5
VA5.	Lazada Malaysia uses beautiful colours and graphics.	1	2	3	4	5

SECTION D: WEBSITE EASE OF USE

This section is seeking your opinion about website ease of use toward impulsive buying behaviour.

No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
EOU1.	Lazada Malaysia is easy to navigate.	1	2	3	4	5
EOU2.	Lazada Malaysia is a user-friendly site.	1	2	3	4	5
EOU3.	Lazada Malaysia provides easy access to product information.	1	2	3	4	5
EOU4.	It is easy for me to master at using Lazada Malaysia.	1	2	3	4	5
EOU5.	It is clear and understandable when using Lazada Malaysia.	1	2	3	4	5

SECTION E: SHOPPING ENJOYMENT

This section is seeking your opinion about shopping enjoyment towards impulsive buying behaviour.

No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
SE1.	It is exciting to shop on Lazada Malaysia.	1	2	3	4	5
SE2.	It is fun to shop on Lazada Malaysia.	1	2	3	4	5
SE3.	It is enjoyable to shop on Lazada Malaysia.	1	2	3	4	5

SE4.	It is entertaining to shop on Lazada Malaysia.	1	2	3	4	5
SE5.	It is interesting to shop on Lazada Malaysia.	1	2	3	4	5

SECTION F: ONLINE IMPULSE PURCHASE

This section is seeking your opinion about online impulsive buying behaviour.

No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
OP1.	I often buy things through Lazada Malaysia without thinking.	1	2	3	4	5
OP2.	I often buy things through Lazada Malaysia according to how I feel at the moment.	1	2	3	4	5
OP3.	I often buy things that are not listed in my shopping list through Lazada Malaysia.	1	2	3	4	5
OP4.	I often make a purchase when my intention is merely to browse through Lazada Malaysia.	1	2	3	4	5
OP5.	I often buy things through Lazada Malaysia without considering the consequences when I see something that really interests me.	1	2	3	4	5

SECTION G: RESPONDENT'S PROFILE

In this section, we are interested in your background in brief. Please choose your answers. The respondent of this questionnaire will be kept anonymous and confidential.

RP1. Gender

□ Female$_1$ □ Male$_2$

RP2. Ethnicity

□ Malay$_1$ □ Chinese$_2$

□ Indian$_3$ □ Others$_4$

RP3. Monthly Income

□ Below RM1000$_1$ □ RM1001- RM2000$_2$

□ RM2001-RM3000$_3$ □ RM3001-RM4000$_4$

□ Above RM4000$_5$

Thank you for your time and effort to complete this questionnaire.

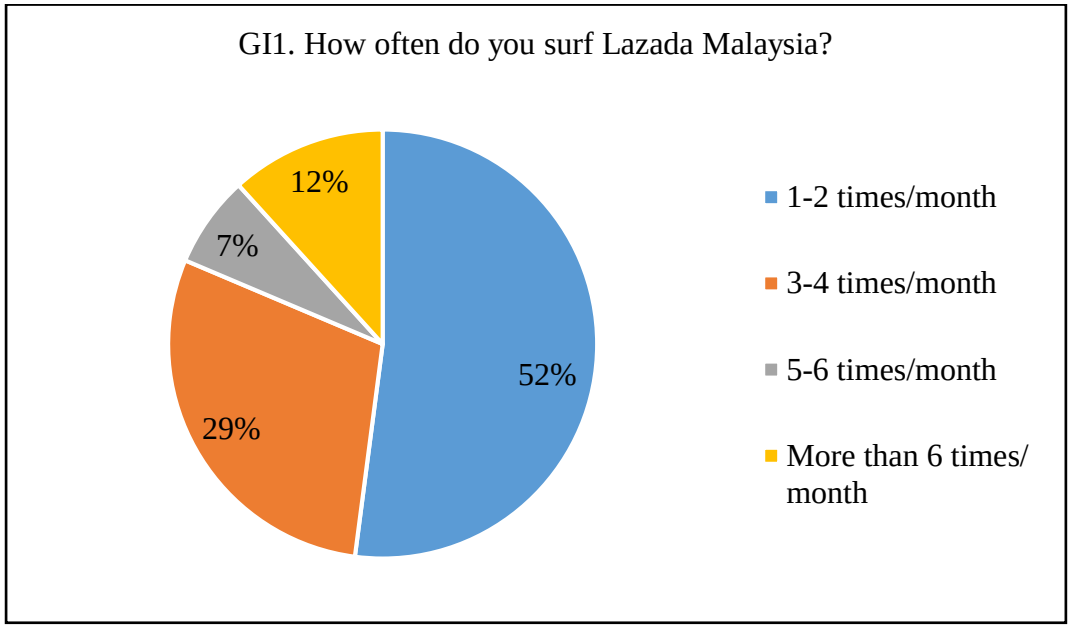
Appendix 3.2: Pilot Test Results

Pilot Test of Reliability

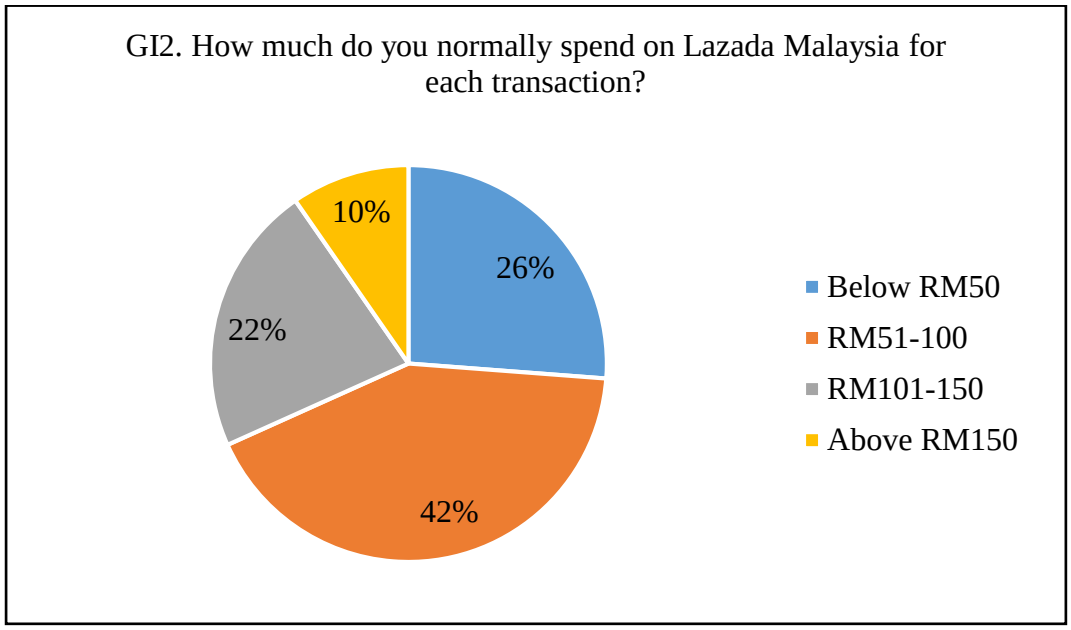
Construct	Number of Items	Cronbach's Alpha
Privacy & Security	5	0.883
Visual Appeal	5	0.762
Website Ease of Use	5	0.743
Shopping Enjoyment	5	0.856
Online Impulse Purchase	5	0.697

Source: Developed for the research

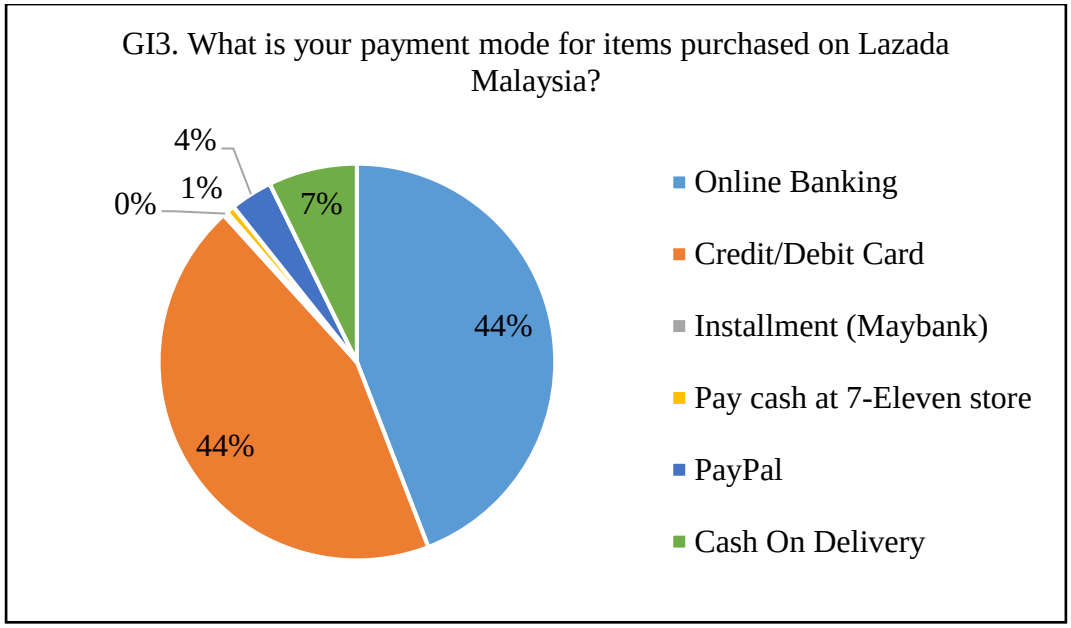
Appendix 4.1: General Information



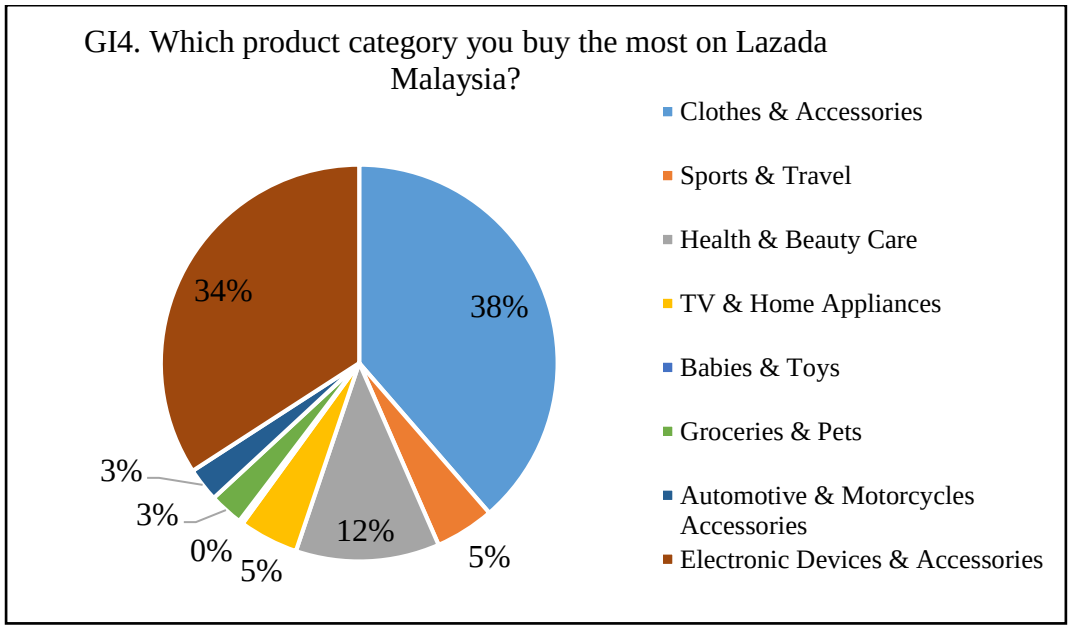
Source: Developed for the research



Source: Developed for the research



Source: Developed for the research



Source: Developed for the research

Appendix 4.2: Summary of General Information

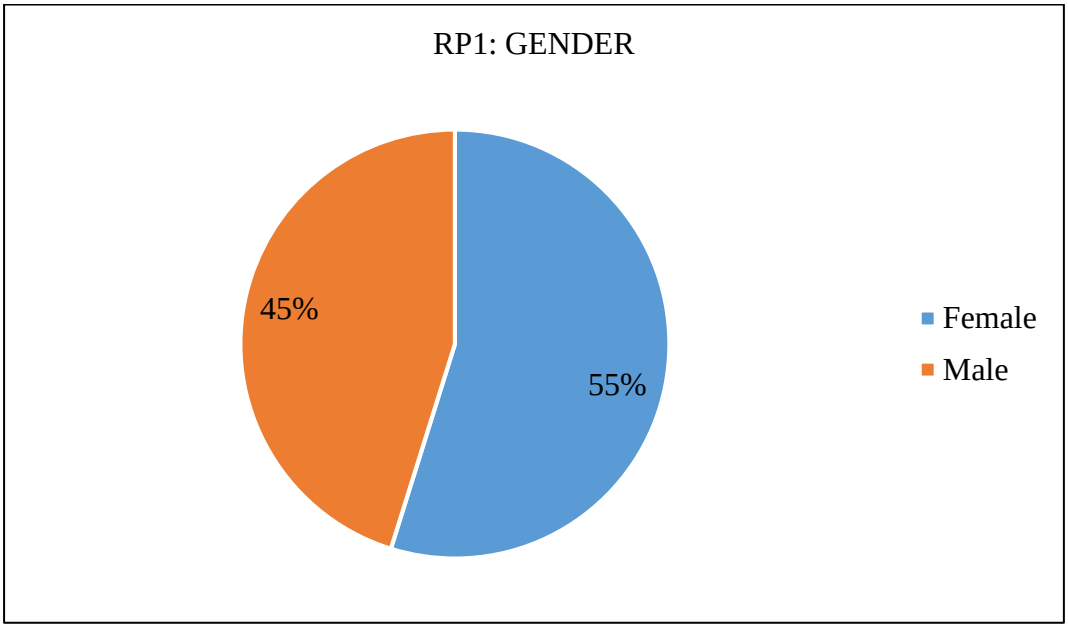
Summary of General Information

Category		Frequency	Percentage%
How often do you surf Lazada Malaysia? **	1-2 times/month	151	52
	3-4 times/month	85	29
	5-6 times/month	20	7
	More than 6 times/ month	34	12
How much do you normally spend at Lazada Malaysia for each transaction? **	Below RM50	76	26
	RM51-100	122	42
	RM101-150	64	22
	Above RM150	28	10
What is your payment mode for items purchased at Lazada Malaysia? **	Online Banking	128	44
	Credit/Debit Card	128	44
	Instalment (Maybank)	1	0.3
	Pay cash at 7-Eleven store	2	0.7
	PayPal	10	4
	Cash On Delivery	21	7
Which product category you buy the most at Lazada Malaysia? **	Clothes & Accessories	112	38.6
	Sports & Travel	14	4.8
	Health & Beauty Care	34	11.7
	TV & Home Appliances	14	4.8
	Babies & Toys	1	0.4
	Groceries & Pets	8	2.8
	Automotive & Motorcycles Accessories	8	2.8
	Electronic Devices & Accessories	99	34.1

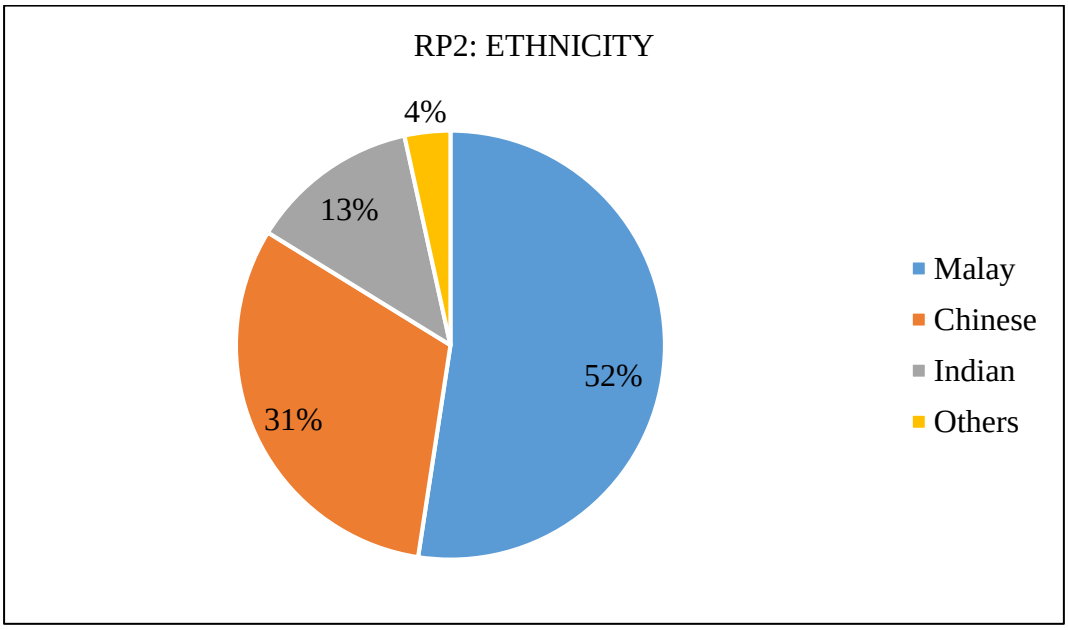
Note: ** Multiple choice questions

Source: Developed for the research

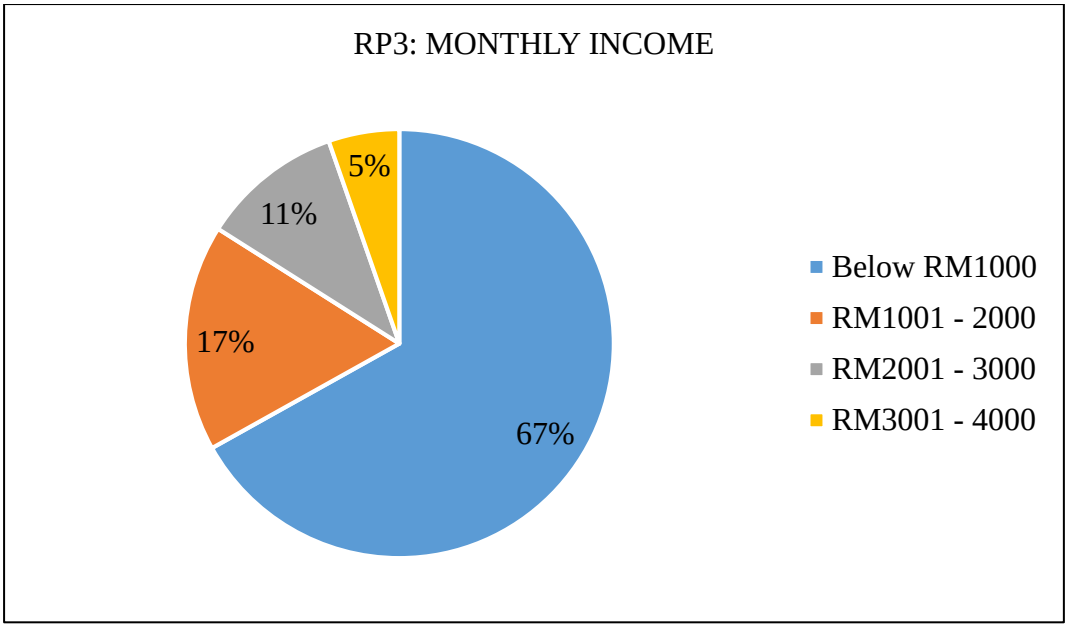
Appendix 4.3: Respondents' Demographic Profile



Source: Developed for the research



Source: Developed for the research



Source: Developed for the research

Appendix 4.4: Summary of Respondents' Demographic Profile

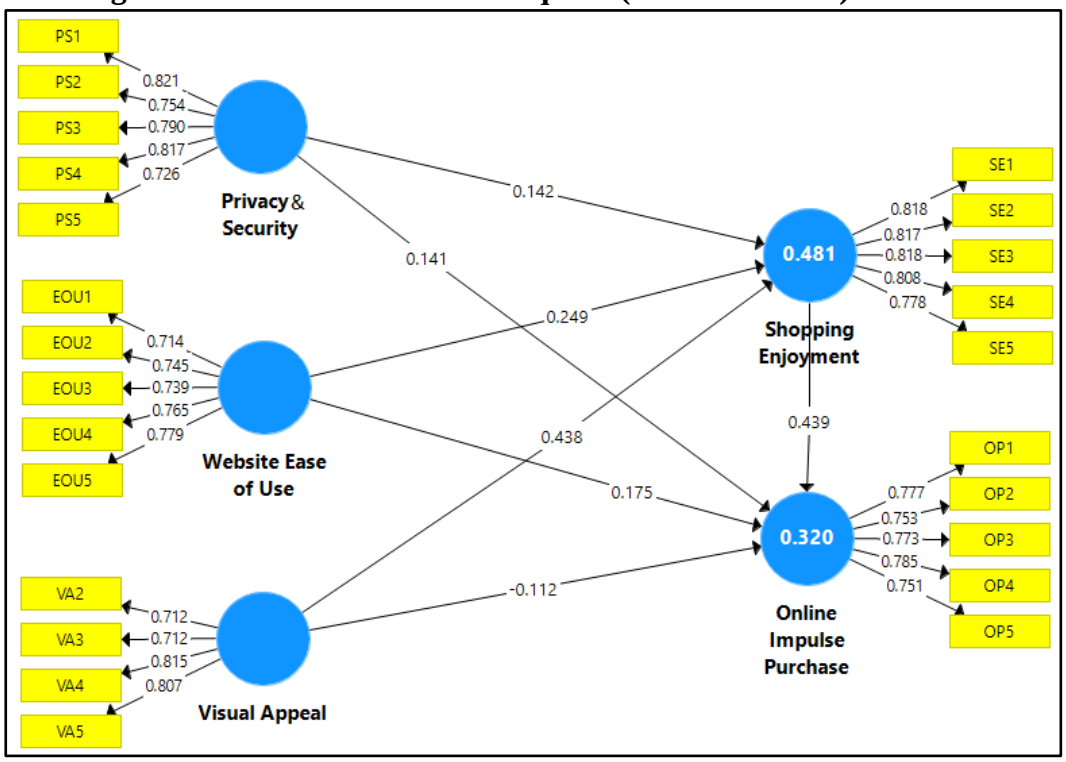
Summary of Respondents' Demographic Profile

Category		Frequency	Percentage%
Gender	Female	159	54.8
	Male	131	45.2
Ethnicity	Malay	152	52.4
	Chinese	91	31.4
	Indian	37	12.8
	Others	10	3.4
Monthly Income	Below RM1000	188	64.8
	RM1001 - 2000	48	16.6
	RM2001 - 3000	30	10.3
	RM3001 - 4000	15	5.2
	Above RM4000	9	3.1
Total		**290**	**100.0**

Source: Developed for the research

Appendix 4.5: Partial Least Square (SMART-PLS 3) Model

Results generated from Partial Least Square (SMART-PLS 3) Model



Source: Developed for the research

Appendix 4.6: Assessments of Convergent Validity

Assessments of Convergent Validity

Constructs	Item	Factor Loading	Average Variance Extracted (AVE)	Composite Reliability	Cronbach's Alpha
Privacy & Security	PS1	0.821	0.612	0.887	0.842
	PS2	0.754			
	PS3	0.790			
	PS4	0.817			
	PS5	0.726			
Visual Appeal	VA2	0.712	0.582	0.847	0.761
	VA3	0.712			
	VA4	0.815			
	VA5	0.807			
Website Ease of Use	EOU1	0.714	0.560	0.864	0.804
	EOU2	0.745			
	EOU3	0.739			
	EOU4	0.765			
	EOU5	0.779			
Shopping Enjoyment	SE1	0.818	0.653	0.904	0.867
	SE2	0.817			
	SE3	0.818			
	SE4	0.808			
	SE5	0.778			
Online Impulse Purchase	OP1	0.777	0.590	0.878	0.827
	OP2	0.753			
	OP3	0.773			
	OP4	0.785			
	OP5	0.751			

Source: Developed for the research

Appendix 4.7: Construct Reliability and Validity

Construct Reliability and Validity

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Online Impulse Purchase	0.827	0.830	0.878	0.590
Privacy & Security	0.842	0.856	0.887	0.612
Shopping Enjoyment	0.867	0.868	0.904	0.653
Visual Appeal	0.761	0.772	0.847	0.582
Website Ease of Use	0.804	0.805	0.864	0.560

Source: Developed for the research

Appendix 4.8: Fornell-Larcker Criterion

Fornell-Larcker Criterion

	Online Impulse Purchase	Privacy & Security	Shopping Enjoyment	Visual Appeal	Website Ease of Use
Online Impulse Purchase	**0.768**				
Privacy & Security	0.371	**0.782**			
Shopping Enjoyment	0.529	0.474	**0.808**		
Visual Appeal	0.331	0.504	0.639	**0.763**	
Website Ease of Use	0.417	0.447	0.540	0.521	**0.749**

Source: Developed for the research

Appendix 4.9: Outer Loadings *(Without withdrawal of VA_1)*

Outer Loadings

	Online Impulse Purchase	Privacy & Security	Shopping Enjoyment	Visual Appeal	Website Ease of Use
OP1	**0.777**				
OP2	**0.753**				
OP3	**0.773**				
OP4	**0.785**				
OP5	**0.751**				
PS1		**0.821**			
PS2		**0.754**			
PS3		**0.790**			
PS4		**0.817**			
PS5		**0.726**			
SE1			**0.818**		
SE2			**0.817**		
SE3			**0.818**		
SE4			**0.808**		
SE5			**0.778**		
VA1				**0.660**	
VA2				**0.750**	
VA3				**0.699**	
VA4				**0.778**	
VA5				**0.771**	
EOU1					**0.714**
EOU2					**0.745**
EOU3					**0.739**
EOU4					**0.765**
EOU5					**0.779**

Source: Developed for the research

Appendix 4.10: Cross Loadings *(Without withdrawal of VA_1)*

Cross Loadings

	Online Impulse Purchase	Privacy & Security	Shopping Enjoyment	Visual Appeal	Website Ease of Use
OP1	**0.777**	0.339	0.466	0.268	0.343
OP2	**0.753**	0.283	0.425	0.274	0.319
OP3	**0.773**	0.269	0.389	0.259	0.356
OP4	**0.785**	0.256	0.378	0.277	0.340
OP5	**0.751**	0.264	0.354	0.181	0.228
PS1	0.357	**0.821**	0.403	0.416	0.365
PS2	0.267	**0.754**	0.298	0.379	0.383
PS3	0.272	**0.790**	0.407	0.403	0.399
PS4	0.338	**0.817**	0.414	0.385	0.309
PS5	0.177	**0.726**	0.303	0.398	0.298
SE1	0.387	0.426	**0.818**	0.538	0.496
SE2	0.405	0.396	**0.817**	0.503	0.408
SE3	0.390	0.347	**0.818**	0.469	0.421
SE4	0.488	0.328	**0.808**	0.476	0.398
SE5	0.458	0.410	**0.778**	0.581	0.452
VA1	0.201	0.382	0.400	**0.660**	0.368
VA2	0.144	0.415	0.431	**0.712**	0.365
VA3	0.224	0.367	0.475	**0.712**	0.395
VA4	0.308	0.347	0.504	**0.815**	0.366
VA5	0.307	0.422	0.532	**0.807**	0.461
EOU1	0.293	0.285	0.363	0.357	**0.714**
EOU2	0.312	0.364	0.420	0.397	**0.745**
EOU3	0.331	0.306	0.417	0.407	**0.739**
EOU4	0.291	0.361	0.416	0.407	**0.765**
EOU5	0.330	0.354	0.402	0.380	**0.779**

Source: Developed for the research

Appendix 4.11: Outer Loadings *(With withdrawal of VA_1)*

Outer Loadings

	Online Impulse Purchase	Privacy & Security	Shopping Enjoyment	Visual Appeal	Website Ease of Use
OP1	**0.777**				
OP2	**0.753**				
OP3	**0.773**				
OP4	**0.785**				
OP5	**0.751**				
PS1		**0.821**			
PS2		**0.754**			
PS3		**0.790**			
PS4		**0.817**			
PS5		**0.726**			
SE1			**0.818**		
SE2			**0.817**		
SE3			**0.818**		
SE4			**0.808**		
SE5			**0.778**		
VA2				**0.712**	
VA3				**0.712**	
VA4				**0.815**	
VA5				**0.807**	
EOU1					**0.714**
EOU2					**0.745**
EOU3					**0.739**
EOU4					**0.765**
EOU5					**0.779**

Source: Developed for the research

Appendix 4.12: Cross-Loadings *(With withdrawal of VA_1)*

Cross Loadings

	Online Impulse Purchase	Privacy & Security	Shopping Enjoyment	Visual Appeal	Website Ease of Use
OP1	**0.777**	0.339	0.466	0.268	0.343
OP2	**0.753**	0.283	0.425	0.274	0.319
OP3	**0.773**	0.269	0.389	0.259	0.356
OP4	**0.785**	0.256	0.378	0.277	0.340
OP5	**0.751**	0.264	0.354	0.181	0.228
PS1	0.357	**0.821**	0.403	0.416	0.365
PS2	0.267	**0.754**	0.298	0.379	0.383
PS3	0.272	**0.790**	0.407	0.403	0.399
PS4	0.338	**0.817**	0.414	0.385	0.309
PS5	0.177	**0.726**	0.303	0.398	0.298
SE1	0.387	0.426	**0.818**	0.538	0.496
SE2	0.405	0.396	**0.817**	0.503	0.408
SE3	0.390	0.347	**0.818**	0.469	0.421
SE4	0.488	0.328	**0.808**	0.476	0.398
SE5	0.458	0.410	**0.778**	0.581	0.452
VA2	0.144	0.415	0.431	**0.712**	0.365
VA3	0.224	0.367	0.475	**0.712**	0.395
VA4	0.308	0.347	0.504	**0.815**	0.366
VA5	0.307	0.422	0.532	**0.807**	0.461
EOU1	0.293	0.285	0.363	0.357	**0.714**
EOU2	0.312	0.364	0.420	0.397	**0.745**
EOU3	0.331	0.306	0.417	0.407	**0.739**
EOU4	0.291	0.361	0.416	0.407	**0.765**
EOU5	0.330	0.354	0.402	0.380	**0.779**

Source: Developed for the research

Appendix 4.13: Path Analyses

Path Analyses

Path	VIF	Path Coefficient	T-Statistic	P-Value	Result
PS → OIP	1.469	0.141	2.440	0.015	**Supported**
VA → OIP	1.941	-0.112	1.533	0.125	**Not Supported**
EOU → OIP	1.584	0.175	2.739	0.006	**Supported**
PS → SE	1.431	0.142	2.403	0.016	**Supported**
VA → SE	1.571	0.438	6.956	0.000	**Supported**
EOU → SE	1.465	0.249	4.317	0.000	**Supported**
SE → OIP	1.927	0.439	6.833	0.000	**Supported**

Source: Developed for the research

Appendix 4.14: Inner VIF Values

Inner VIF Values

	Online Impulse Purchase	Privacy & Security	Shopping Enjoyment	Visual Appeal	Website Ease of Use
Online Impulse Purchase					
Privacy & Security	1.469		1.431		
Shopping Enjoyment	1.927				
Visual Appeal	1.941		1.571		
Website Ease of Use	1.584		1.465		

Source: Developed for the research

Appendix 4.15: Path Coefficient

Mean, STDEV, T-Statistics, P-Values

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
PS → OIP	0.141	0.144	0.058	2.44	0.015
EOU → OIP	0.175	0.176	0.064	2.739	0.006
VA → OIP	-0.112	-0.114	0.073	1.533	0.125
PS → SE	0.142	0.142	0.059	2.403	0.016
EOU → SE	0.249	0.248	0.058	4.317	0.00
VA → SE	0.438	0.441	0.063	6.956	0.00
SE → OIP	0.439	0.441	0.064	6.833	0.00

Source: Developed for the research

Appendix 4.16: R^2 Results

R square

	R^2	Adjusted R^2
Online Impulse Purchase	**0.320**	0.310
Shopping Enjoyment	**0.481**	0.476

Source: Developed for the research

Appendix: 4.17: f^2 Effect Size

f^2 Effect Size

	Online Impulse Purchase	Privacy & Security	Shopping Enjoyment	Visual Appeal	Website Ease of Use
Online Impulse Purchase					
Privacy & Security	**0.020**		0.027		
Shopping Enjoyment	**0.147**				
Visual Appeal	**0.009**		0.235		
Website Ease of Use	**0.028**		0.081		

Source: Developed for the research

Appendix: 4.18: Q^2 Predictive Relevance

Q^2 Predictive Relevance

	SSO	SSE	Q^2 (=1-SSE/SSO)
Online Impulse Purchase	1,450.00	1,201.01	**0.172**
Privacy & Security	1,450.00	1,450.00	
Shopping Enjoyment	1,450.00	1,031.19	**0.289**
Visual Appeal	1,160.00	1,160.00	
Website Ease of Use	1,450.00	1,450.00	

Source: Developed for the research

Appendix: 4.19: Direct Effect without Mediator of Shopping Enjoyment

Direct Effect

	Online Impulse Purchase	Privacy & Security	Shopping Enjoyment	Visual Appeal	Website Ease of Use
Online Impulse Purchase					
Privacy & Security	0.202				
Visual Appeal	**0.097**				
Website Ease of Use	0.279				

Source: Developed for the research

Appendix 4.20: Indirect Effect with Mediator of Shopping Enjoyment

Indirect Effect

	Online Impulse Purchase	Privacy & Security	Shopping Enjoyment	Visual Appeal	Website Ease of Use
Online Impulse Purchase					
Privacy & Security	0.141		**0.142**		
Shopping Enjoyment	0.439				
Visual Appeal	-0.112		**0.438**		
Website Ease of Use	0.175		**0.249**		

Source: Developed for the research

Appendix 4.21: Total Indirect Effect

Total Indirect Effect

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Value
PS→OIP	**0.062**	0.063	0.028	2.199	0.028
PS→SE					
SE→OIP					
VA→OIP	**0.192**	0.193	0.041	4.719	0.00
VA→SE					
EOU→OIP	**0.109**	0.110	0.031	3.495	0.00
EOU→SE					

Source: Developed for the research

Appendix 4.22: Total Effect

Total Effect

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Value
PS → OIP	0.203	0.207	0.062	3.278	0.001
PS → SE	0.142	0.143	0.059	2.402	0.016
SE → OIP	0.439	0.44	0.065	6.697	0.00
VA → OIP	0.080	0.079	0.074	1.092	0.275
VA → SE	0.438	0.438	0.065	6.75	0.00
EOU → OIP	0.284	0.285	0.064	4.411	0.00
EOU → SE	0.249	0.249	0.059	4.191	0.00

Source: Developed for the research

Appendix 4.23: Specific Indirect Effect

Mean, STDEV, T-Statistics, P-Values

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
PS→SE→OIP	0.062	0.063	0.028	2.199	0.028
EOU→SE→OIP	0.109	0.110	0.031	3.495	0.00
VA→SE→OIP	0.192	0.193	0.041	4.719	0.00

Source: Developed for the research

Appendix 4.24: Mediation Effect

Variance Accounted For (VAF)

	P-Value	**T-Statistics**	**VAF =** $\frac{Total\ Indirect\ Effect}{Total\ Effect}$	**VAF**
PS→SE→OIP	0.028	2.199	30.5%	**Partial Mediation**
EOU→SE→OIP	0.00	3.495	38.4%	**Partial Mediation**
VA→SE→OIP	0.00	4.719	240%	**Full Mediation**

Source: Developed for the research

Appendix 6.1: Turnitin Report

Online Impulsive Buying Behaviour on Lazada Malaysia among University Students in Malaysia

by Peik Chew Lin

Submission date: 10-Aug-2018 12:01PM (UTC+0800)
Submission ID: 987579518
File name: ur_on_Lazada_Malaysia_among_University_Students_in_Malaysia.docx (473.4K)
Word count: 14464
Character count: 83418

ABSTRACT

The contribution from various establishment of different e-commerce platform including the Malaysia's top 1 e-commerce website, Lazada Malaysia has rised the growth of e-commerce in Malaysia. Malaysia's university students have a growing spending power and willingness in spending online. This research focuses on studying the impact of website attributes of Lazada Malaysia (privacy&security, website ease of use, visual appeal) on online impulse purchase and the mediating role of shopping enjoyment between website attributes and online impulse purchase among Malaysia's university students. The conceptual framework based on Stimulus-Organism-Response (S-O-R) model were developed and used to assess the relationships between these constructs with 320 sets of data collected through Partial Least Teachnique (SMART-PLS3) software. Findings showed that both privacy&security and website ease of use have direct effect towards online impulse purchase on Lazada Malaysia, as well as indirect effect on online impulse purchase, mediated by shopping enjoyment. Visual appeal has no direct effect on online impulse purchase, but the indirect effect mediated by shopping enjoyment is still exist.

CHAPTER 1: RESEARCH OVERVIEW

1.0 Introduction

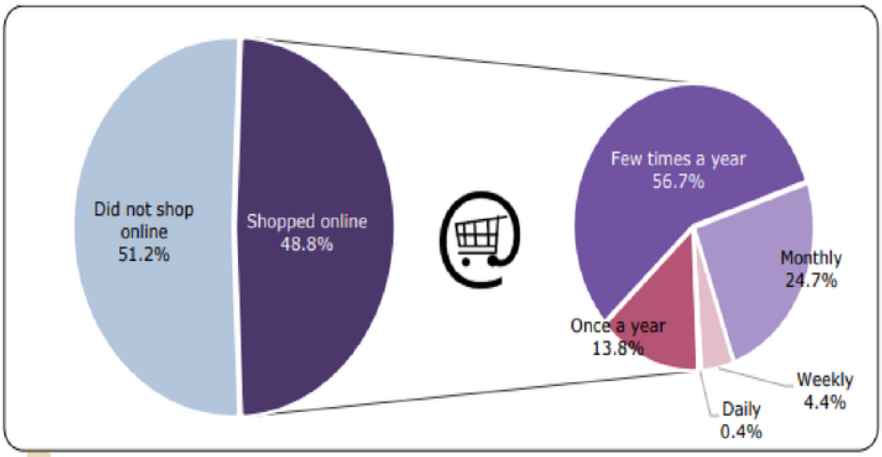
General view of the research by justifying the impulsive buying behaviour towards online platform through research background, its problem and objectives, research questions, hypotheses and importance to conduct the study are discussed.

1.1 Research Background

As e-commerce grows tremendously, online shopping or purchasing is not only gaining its popularity across the world, but also becoming a common purchasing method (Akram, Peng, Khan, Saduzai, Akram, & Bhati, 2017).

Malaysian Communications and Multimedia Commission (MCMC) (2017) indicated, Malaysian Internet users was 76.9% of the total population in 2016, which means there were roughly 24.5 million Internet users in Malaysia. Out of these internet users, 48.8% of them shopping online via Internet (MCMC, 2017). Figure 1.1 shows, 56.7% of Malaysian online shoppers made online purchases few times per year, 24.7% of them purchased monthly, 4.8% of them shopped online weekly or daily, and 13.8% of them bought online once a year (MCMC, 2017).

Figure 1.1: Percentage of Malaysia's Internet Users Engaged in Online Shopping and its Frequencies



Source: Malaysian Communications and Multimedia Commission (MCMC). (2017). *Internet Users Survey 2017*. Retrieved from https://www.mcmc.gov.my/skmmgovmy/media/General/pdf/MCMC-Internet-Users-Survey-2017.pdf

In Malaysia, e-commerce sales are predicted to increase yearly, with roughly 20% to 25% of growth rate (Wong, 2017). In 2017, the total market size of e-commerce were US$5.53 billion, approximately RM24.6 billion (Wong, 2017). Most online transactions are related to travel, such as buying flight tickets, making hotel bookings, and purchasing travel packages, making up to 80% of the total e-commerce market size, which is around RM19.6 billion; the other 20% of the market size go to purchasing physical products through various online marketplace, such as Lazada Malaysia, Mudah.com, and Lelong.my (Wong, 2017). These are accounted for RM4.99 billion (Wong, 2017).

This rapid growth of e-commerce has contributed to establishment of different e-commerce website to take a share of Malaysia's e-commerce market in order to reach the Malaysian's population of 31 million ("Top 10 E-commerce," 2018). Lazada Malaysia is ranked as first among the top 10 e-commerce websites browsed in Malaysia,with the largest share in Malaysia's e-commerce market and a forecasted 45 million visitors every month ("Top 10 E-commerce," 2018). In addition, it is the fastest-growing e-commerce platform in Southeast Asia as 100% of growth rate in sales in 2016 are recorded ("Lazada Malaysia Overtakes," 2017).

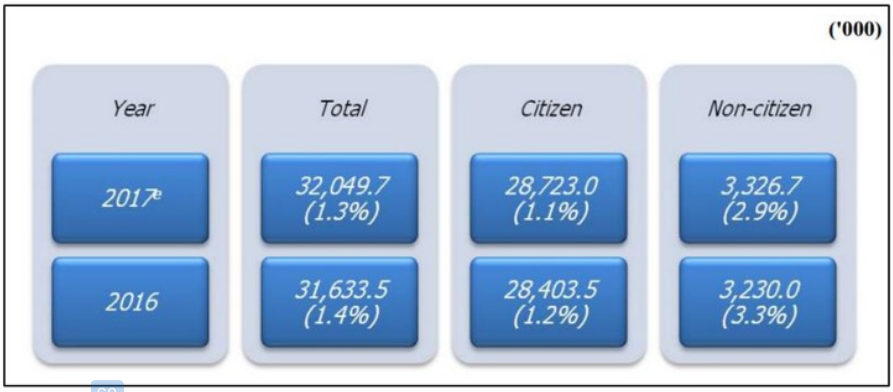
As e-commerce market size is growing rapidly, we believe consumers often buy impulsively through online shopping. Easy access to products, one-click ordering, and absence of social pressures have sparked the consumers' online impulsive buying behaviour (Akram et al., 2017). In online context, spending due to impulse buying constituted around 40% of the overall online expenditures (Chang, Cheung, & Lee, 2017). Therefore, it is significant for the marketers today to comprehend the online purchasing behaviour of e-shoppers.

Ministry of Higher Education (MOHE) (2017) indicated, population of university students in Malaysia were 1.3 million, equivalent to 4.14% of Malaysia's total population. They were also equivalent to 17.1% of Malaysia's Internet users, in which 67.4% of them are currently enrolled in college or university (MCMC, 2017). Past studies indicated, Malaysia's university students always go online and spend a lot of time over the Internet (Anuar, Mujayid, Idris, & Noh, 2013; Teong & Ang, 2016). Moreover, young generations including students are acting positively towards online shopping as they believe purchasing online is convenient and help in saving time and money (Mohd, Shamsudin, Zaidan, & Mohamed, 2016). Besides, more university students are accepting e-shopping as their shopping platform (Lim, Osman, Romle, & Haji-Othman, 2015).

1.2 Research Problem

Department of Statistics Malaysia (2017) stated, Malaysia's total population is 32 million. Out of these 32 million, 1.3 million are university students (MOHE, 2017). Malaysians have long started to adopt and practice online shopping. However, research on e-shopping behaviour among Malaysia's university students is inadequate (Mohd et al., 2016). There are also insufficient studies examining factors affecting purchase decisions and online purchasing behaviour among university students.

Figure 1.2: Malaysia's total population with annual growth rate from 2016 to 2017

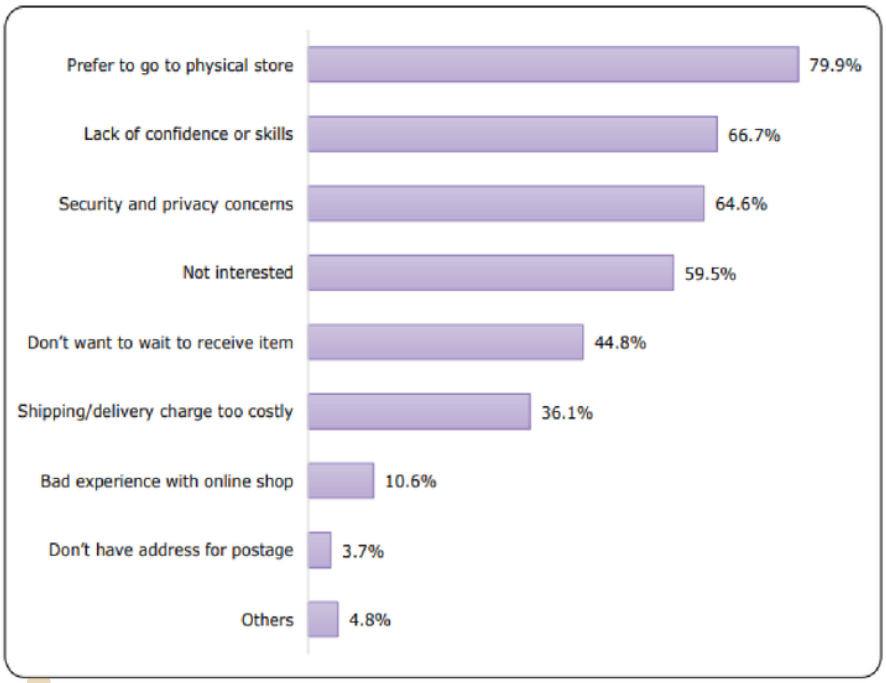


Source: Department of Statistics Malaysia. (2017). *Current population estimates, Malaysia, 2016-2017* [Press release]. Retrieved from https://www.dosm.gov.my/v1/index.php?r=column/pdfPrev&id=a1d1UTFZazd5ajJiRWFHNDduOXFFQT09

Malaysia's internet users are mostly between 20 to 34 years old (MCMC, 2017). Most Malaysian university students fall between this age group. According to Mohd et al. (2016), online shoppers in Malaysia not only are relatively young and highly educated, they are also possessing a more superior social status and better financial position. Furthermore, due to growing spending power of young consumer group, their spending behaviour are changing due to easy access to debit and credit cards and have obtained considerable attention from marketing practitioners (Schor, 1998). According to Bighiu, Manolică, and Roman (2015), U.S. students spent approximately 12% of their allowance online. Wang and Xiao (2009) also stated, college students tend to buy impulsively as they always exposed to abundant material goods at all time and unable to resist their urge to buy. Thus, it is worthwhile to study the online impulsive buying behaviour of university students, a major sector of young consumer group.

Rapid growth of information technology has caused the number of Internet shoppers to purchase goods and services online to increase exponentially and their impulsive buying can bring significant economic effect to online retailers in terms of sales and revenue. However, according to MCMC (2017), there are 51.2% of Internet users did not or refuse to shop online. The main three reasons are due to they prefer to visit physical stores, lack of confidence or skills, and concerns on privacy and security issues.

Figure 1.3: Causes of refusing e-shopping as percentage of non-Internet shopper



Source: Malaysian Communications and Multimedia Commission (MCMC). (2017). *Internet Users Survey 2017*. Retrieved from https://www.mcmc.gov.my/skmmgovmy/media/General/pdf/MCMC-Internet-Users-Survey-2017.pdf

Consumers are reluctant to buy online due to inability to feel and touch the products personally (Wong, 2014). Similarly, MCMC (2017) indicated that 79.9% of non-online shoppers prefer to visit physical stores rather than purchasing online as they are able to touch and feel items when visiting a brick-and-mortar store. Therefore, visual appeal in e-commerce website is crucial in attracting consumers or users to make a purchase or impulse purchase. Effective website design including the presentation of product and its information is important as online shoppers will leave the website easily without purchasing if they are discouraged when they are unable to reach the information needed (Kim, Kim, & Lennon, 2011). Thus, website design in terms of visual appeal is significant in luring consumers to purchase and make impulse purchase online.

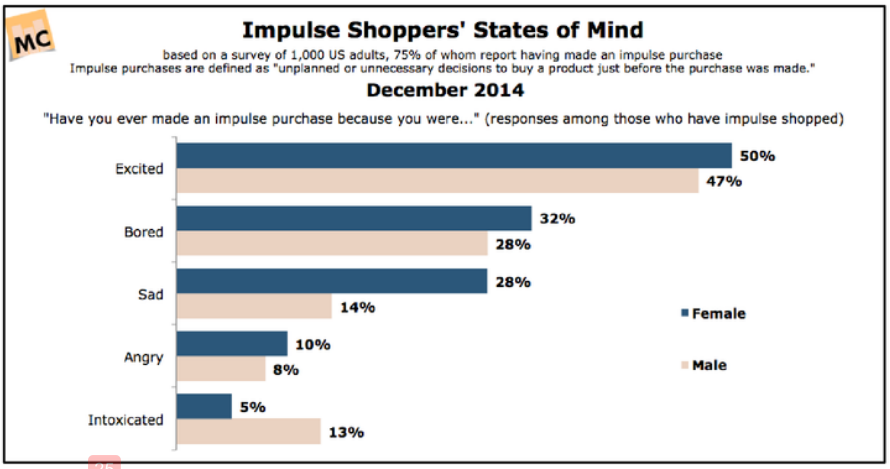
66.7% of Internet users that did not shop online are lacking of confidence and relevant skills to involve in e-shopping activities (MCMC, 2017). So, it is vital to make sure that e-shopping website should be easy for anyone to use it. If website is designed in a way that consumers

need extra effort to learn and master at using it, consumers may be frustrated and eventually, abandon the website (Kim & Stoel, 2004; Ozturk, Bilgihan, Nusair, & Okumus, 2016).

64.6% of non-online shoppers are concerned on the issues regarding website's security and protection of customer information (MCMC, 2017), as money and individual information are involved when making the transaction via Internet (Parasuraman, Zeithaml, & Malhotra, 2005; Riquelme & Román, 2014). Moreover, the risk of personal information to be misused has placed privacy and security to be an important matter in online retailing and this has caused the people afraid of purchasing online (Chong, 2014). Thus, we can say that privacy and security affects consumers' shopping outcome such as shopping intention and impulse purchase.

Fun, excitement or pleasure are something that consumers are seeking for when they go shopping online. According to Figure 1.4 by Merzer (2014), 50% of female impulse shoppers and 47% of male impulse shoppers are excited when making impulse purchases. This shows that consumers' shopping intentions and experiences are impacted by shopping enjoyment and can further influence their purchasing behaviour (Floh & Madlberger, 2013). Dissatisfaction with online shopping process will result in lower impulse buying, and then injure the e-store's image (Bong, 2010; Lo, Lin, & Hsu, 2016). Empirical studies by Koufaris (2002), and Verhagen and van Dolen (2011) indicated relationship between shopping enjoyment and impulsive buying behaviour online is positive. However, the studies on consumers' hedonic aspect and belief regarding shopping enjoyment of e-commerce website is little (Ha & Stoel, 2008).

Figure 1.4: Impulse Shopper's State of Mind



Source: Merzer, M. (2014, November 23). *Survey: 3 in 4 Americans make impulse purchases.* Retrieved from https://www.creditcards.com/credit-card-news/impulse-purchase-survey.php

Lots of e-marketplace are provided for Malaysia's netizens, including university students with growing spending power. There are a lot of potential for e-commerce sector in Malaysia but there is still little research on understanding the online impulse buying behaviour context (Chen, Su, & Widjaja, 2016).

Thus, a framework is required to study the website attributes (privacy&security, visual appeal and ease of use) mediated by shopping enjoyment to influence the online impulse buying behaviour on Malaysia's number 1 e-commerce website, Lazada Malaysia. It was chosen as the niche website to be studied as this research aims to conduct online impulse purchase within the local e-commerce market in Malaysia and Lazada Malaysia is listed as first among top 10 e-commerce websites browsed in Malaysia ("Top 10 E-commerce," 2018). Moreover, there are limited field studies carried out on Lazada Malaysia.

1.3 Research Objectives

1.3.1 General Objective

The rapid expansion of e-commerce has transformed the world with intense obsession among online consumers. This study aims to probe how website attributes impact on impulsive purchase online and shopping enjoyment as mediator on the relationship between website attributes and online impulsive purchase on Lazada Malaysia among university students in Malaysia.

1.3.2 Specific Objectives

1.3.2.1 To inspect effect of privacy and security on online impulse purchase of university students in Malaysia on Lazada Malaysia.

1.3.2.2 To inspect effect of website ease of use on online impulse purchase of university students in Malaysia on Lazada Malaysia.

1.3.2.3 To inspect effect of visual appeal on online impulse purchase of university students in Malaysia on Lazada Malaysia.

1.3.2.4 To inspect effect of website attributes on online impulse purchase of university students in Malaysia on Lazada Malaysia.

1.3.2.5 To inspect effect of shopping enjoyment on online impulse purchase of university students in Malaysia on Lazada Malaysia.

1.3.2.6 To inspect the mediating role of shopping enjoyment on relationship between website attributes and online impulse purchase of university students in Malaysia on Lazada Malaysia.

1.4 Research Questions

1. Does privacy and security of the website influence online impulse purchase?
2. Does website ease of use influence online impulse purchase?
3. Does visual appeal of the website influence online impulse purchase?
4. Does website attributes influence online impulse purchase?
5. Does shopping enjoyment influence online impulse purchase?
6. Does shopping enjoyment mediates relationship between website attributes and online impulse purchase?

1.5 Significance of the Study

Firstly, a better understanding regarding online impulse purchasing behaviour among university students in Malaysia on Lazada Malaysia can be obtained.

This would help Lazada Malaysia to understand their website attributes contributing to purchase behaviour of university students. Moreover, this research specifies on Lazada Malaysia's website attributes as it operates virtually. Therefore, the online platform they can get engaged with their customers are important because it is their only medium in running business. With this study, Lazada Malaysia is able to know the impulsivity effect on their purchase online through its website attributes and shopping enjoyment as the mediating factor.

Besides, Lazada Malaysia will have additional insights specifically on the buying behaviour of university students in Malaysia instead of all Lazada Malaysia's customers. The benefits gained from this research can contribute to further improvement in Lazada Malaysia's management to sustain current users and attract new users.

As from consumers' perspectives, this research can help them to grab the attention of different e-commerce marketplace regarding the consumers' opinion on various e-store's environmental stimuli that can enhance consumers' excitement and pleasure during online shopping process. These insights provided to e-commerce platforms can further improve their website attributes quality including visual appeal, privacy and security, and website ease of use, in order to

provide an enjoyable atmosphere where consumers will feel excited and fun during e-shopping process and at the same time, feel protected and secure when making transactions online.

1.7 Conclusion

On the whole, this chapter reviews on the research background, research problem of an online shopping website; Lazada Malaysia and the trend of e-commerce market. Here, an explanation to examine online impulse purchase behaviour on Lazada Malaysia among university students in Malaysia by applying the concept of Stimulus-Organism-Response have been outlined.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

In this chapter, discussion on factors affecting online impulse purchase of university students in Malaysia on Lazada Malaysia through the perspective of Stimulus-Organism-Response (S-O-R) Model are conducted. An extensive review on variables according to relevant past literatures done, the hypotheses and research framework developed will be further discussed.

2.1 Literature Review

2.1.1 Online Impulse Purchase (OIP)

The dependent variable is OIP. Impulse purchasing is a complex buying behaviour that instantaneously precludes thoughts, considerations or future implications towards a sudden purchase (Amos, Holmes, & Keneson, 2013). It is caused by external or environmental factors (Bighiu et al., 2015). Early studies determined impulse buying in offline context, as the result of environmental cues or exposure to in-store stimuli (Chan, Cheung, & Lee, 2017). It is also stated that impulse buying is complex in hedonic aspects and facilitate emotional conflict potentially (Chan et al., 2017).

OIP is a society shopping addiction that is not entirely to satisfy ones' needs. Today, the generation grew with the Internet and has become habitual to online world (Bighiu et al., 2015). Online shopping is action or activity of buying goods through Internet. E-shoppers have reduced buying through physical stores due to the convenience of single click system in e-shopping (Pabalkar, 2015). Therefore, online shops are able to sell anything with speedy results from its online delivery process which grips the customers to develop a tendency to buy more online as well as purchase impulsively (Pabalkar, 2015).

According to Chen et al. (2016), OIP is said to be impulsiveness; an impulse buying trait that positively affect intention to shop online. It is an unplanned decision driven by a strong temptation of immediate satisfaction to improve ones' mood without considerations of consequences (Amos et al., 2013). The sudden act of consumption often accompanied by a temporary state of positive emotional charge for immediate self-fulfilment (Amos et al., 2013).

Chen and Wang (2016) supported concept of impulsivity purchasing trait reflects one's likelihood to engage in impulsive shopping. This obnoxious behaviour occurs when one experiences unexpected, strong and persevering psychological conflict urge to buy something instantly that is against their usual shopping pattern (Chen & Wang, 2016).

2.1.2 Website Attributes

Website attributes are the independent variables in this research. Website attributes to examine e-stores or web design principles are categorized into three macro-categories: structural firmness, functional convenience, and representational delight, in which PS, EOU, and VA are fall into these macro-categories respectively (Geng & Tian, 2015; Parboteeah, 2005).

2.1.2.1 Privacy & Security (PS)

PS are critical elements that e-businesses need to recognize to build consumer online trust (Riquelma & Roman, 2014). Some studies showed that PS have an impact on online trust significantly and positively (Ganguly, Dash, & Cyr, 2011; Hu, Wu, Wu, & Zhang, 2010). Pavlou (2001) and Yang, Pang, Liu, Yen, and Tarn (2015) argued, online transactions are related to risk of losing privacy and monetary loss risk. Küster, Vila, and Canalas (2016) agreed that online transactions are related to PS and it is more important in online transactions than offline transactions (Bowen & Bowen, 2015). PS signifies a subjective probability from customers' belief whereby web retailers' actions

to respect consumers' privacy and protect their security subjecting to the Internet infrastructure to facilitate secure transmission (Pavlou, 2001).

The significance of online PS should include both financial and non-financial issues (Bowen & Bowen 2015). Financial issue refers to consumers' concerns regarding safety of credit/debit card information when making transactions online (Chong, 2014). Non-financial issue refers to online consumers expect information in privacy policy are written clearly to prohibit against selling of individual information or disclosure of their information without consent (Bowen & Bowen 2015). PS of website is also the ability to deliver safe infrastructure to users (Chen, Hsu, & Lin, 2010). According to Palbakar (2014), PS contain security to pay through online using credit/debit card, anywhere, everywhere with the vast information provided through virtual stores in one click.

2.1.2.2 Website Ease of Use (EOU)

EOU is a critical criteria of an e-commerce website that affects consumers' attitudes and behaviours (Yoo & Donthu, 2001) as EOU is a website quality feature categorized under functional convenience, a high-task relevant cue influencing consumers' behaviours (Parboteeah, 2005). In e-commerce context, EOU is the users' perceptions that it is effortless, simple, and convenience to use a website for online shopping (Amin, Rezaei, & Tavana, 2015; Cho & Sagynov, 2015; Vijayasarathy, 2004). Liu, Li, and Hu (2013) explained EOU as "how easy it is in navigating within an online shopping website" (p. 832). Besides, EOU is customers can easily browse through a well-organized website, read and understand the information displayed on website (Loiacono, Watson, & Goodhue, 2002; Wu, Chen, & Chiu, 2016). EOU also involves the interactivity and navigability in a site, quick and trustworthy search systems, presentation of updated and complete information on website orderly, and ease of payment (Akram et al., 2017; Bilgihan & Bujisic, 2014; Verhagen & van Dolen, 2011).

2.1.2.3 Visual Appeal (VA)

VA is a representational delight construct of website quality in low-task relevant cue (Lim & Yazdanifard, 2015; Parboteeah, 2005). It is the tangible things that reflect the overall view, sense, and distinguished attractiveness of website (Montoya-Weiss, Voss, & Grewal, 2003). VA is perceived by individuals through senses such as sight and hearing in online context (Wang & Lin, 2015). Graphics, colours, pictures, background patterns, fonts, animation, website layouts and other visual elements are examples of VA that can enhance the websites' attractiveness to attract customers (Eroglu, Machleit, & Davis, 2003; Liu et al., 2013; Pabalkar, 2014; Parboteeah, Valacich, & Wells, 2009; van der Heijden, Verhagen, & Creemers, 2003).

VA can induce consumers to buy product, especially by placing pictures of the products on the website has a higher impact than word descriptions (Xiang, Zheng, Lee, & Zhao, 2016). Xiang et al. (2016) further explained, users' vision senses are affected by product's picture, which means they can provoked by visual appeal easily. Besides, aesthetic visuals are critical in creating positive first impressions leading to further exploration within website (Pavur, Abdullah, & Murad, 2016). Past studies showed that customers are unwilling to surf and purchase online due to confusion, or even leave the site within seconds if the website presents unattractive graphic design elements with unorganized information (Montoya-Weiss et al., 2003).

2.1.3 Shopping Enjoyment (SE)

The mediator in this study, SE, instead of the satisfaction received from purchasing goods or services, it is the pleasure and experience derived from shopping activity in shopping process (Razmdoost, Dimitriu, & Macdonald, 2015). In other words, SE is the result of entertaining e-shopping experience, instead of the outcome of shopping task completion (Bizuneh, 2012). Pavur et al. (2016) regarded e-shopping as an activity that is pleasurable and enjoyable. SE is also the intrinsic senses of pleasure derived during interaction with an ambience (Park, Kim, Funches, & Foxx, 2012; Wu et al., 2016). In addition, SE derived from e-shopping process is essential for determining consumer behaviour, such as customer loyalty (Pavur et al., 2016). It may derived during the process of searching goods or services, looking for sales and discounts, learning new trends and fashions, to connect with others such as friends and families, and to release stress while shopping online (Ozen & Engizek, 2014).

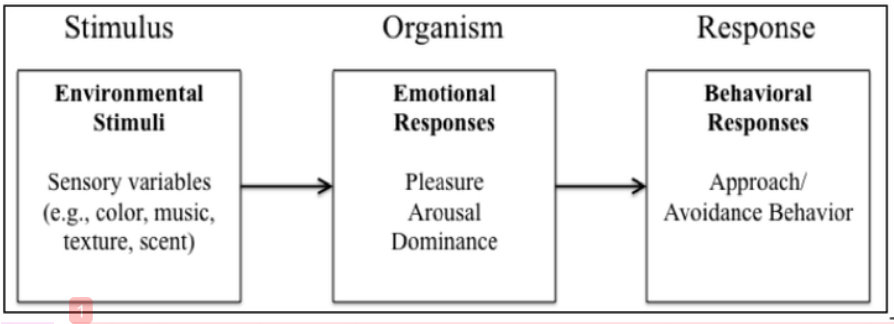
Past studies showed that SE is critical in consumers' acceptance of e-shopping intentions (Childers, Carr, Peck, & Carson, 2001; Ha & Stoel, 2008; Pavlou, 2001). Childers et al. (2001) defined enjoyment as an antecedent of attitude towards online shopping, either positively or negatively, where positive attitude in making impulse purchase may be developed when e-shopping experience is pleasing and enjoyable (Bizuneh, 2012). However, Koufaris, Kambil, and LaBarbera (2001) argued, online stores face challenges in creating SE as a type of pleasure because the experience of purchasing online is finite and unable to provide full experience of viewing the product in physical, thus reduce the level of enjoyment and impulse purchase.

2.2 Review of Relevant Theoretical Models

2.2.1 Stimulus-Organism-Response (S-O-R) Model

Mehrabian and Russell (1974) proposed S-O-R model to investigate how store's environment and atmosphere affects one's shopping behaviour. According to S-O-R model, Stimulus (S) in an environment lead to certain behavioural responses (R), mediated by an individual's (O) emotional responses evoked by the surroundings.

Figure 2.1: S-O-R Model



Adapted from: Mehrabian, A., & Russell, J. A. (1974). *An approach to environmental psychology*. Cambirdge, MA: Massachusetts Institute of Technology.

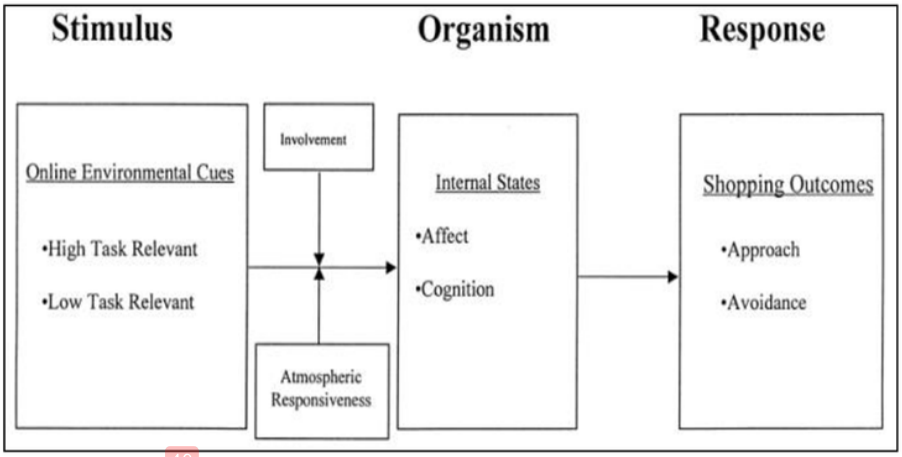
In Figure 2.1, environmental stimuli are sensory variables such as colour, music, texture and scent, or things of everyday ambience (Yoon, 2012). These stimuli influence ones' internal processes or affective states that serve as mediator in determining ones' behavioural responses. The three dimensions affecting ones' states are pleasure, arousal, and dominance (PAD) (Ha & Lennon, 2010; Yoon, 2012). However, as lacking of empirical support, dominance found to have little or no impact on consumers' behaviour responses in past research. So, most of the studies omitted dominance in assessing consumers' affective states (Eroglu et al., 2003).

Behavioural responses of a consumer can be in a positive or negative way. An approach behaviour is a positive response such as purchase intention, or positive actions taken towards certain condition (Eroglu, Machleit, & Davis, 2001). In contrast, avoidance approach include negative actions taken to avoid certain setting.

2.2.2 Extended S-O-R Model

An extended S-O-R model by Eroglu et al. (2001) to explain the atmospheric cues in e-retailing setting. Similarly, this model proposed that environmental elements of e-commerce website serve as stimulus to affect the affective and cognitive states of consumers that mediate consumers' responses to internet shopping experience, either positively (approach behaviour) or negatively (avoidance behaviour) (Eroglu et al., 2001). Additionally, Eroglu et al. (2001) take into account the role of involvement and atmospheric innovativeness as moderators to affect relationship between stimulus and organism. Involvement is consumers' perceptions on how e-shopping activities help to reach their goals (Eroglu et al., 2001).

Figure 2.2 Extended S-O-R Model



Adapted from: Eroglu, S. A., Machleit, K. A., & Davis, L. M. (2001). Atmospheric qualities of online retailing. A conceptual model and implications. *Journal of Business Research, 50*, 177-184.

According to Figure 2.2, atmospheric cues as stimulus in online context are separated into two categories: High task-relevant cues and low task-relevant cues.

High task-relevant cues are site descriptors appeared on screen, either in verbal or pictorial, that help consumer to attain shopping goal (Eroglu et al., 2001), like price, product's descriptions, delivery and return policies, product's pictures, and navigation

assistance. Low task-relevant cues are relatively inessential site information for accomplishing shopping task, like typeface and fonts, sounds and music, pictures for decorative purpose, colours, borders, and background patterns (Eroglu et al., 2001).

According to Eroglu et al. (2001), organism consists of affection and cognition in its internal states, which then mediate the connection between stimulus and one's responses. Affection is derived from PAD in online shopping experience, while cognitive state deals with how internet shoppers decode the information given through the screen which lead to certain behaviour and attitude towards the e-commerce website (Eroglu et al, 2001).

High task-relevant cues consist of structural firmness and functional convenience (Parboteeah, 2005). Structural firmness is the system structure that conquer both prospective and unanticipated threats, and affect website performance and security (Geng & Tian, 2015; Kim, Lee, Han, & Lee, 2002), with seven characteristics: (1) protection of consumers' information, (2) quick error recovery, (3) risk perceptions, (4) system performance, (5) system reliability, (6) system security, and (7) response time (Parboteeah, 2005).

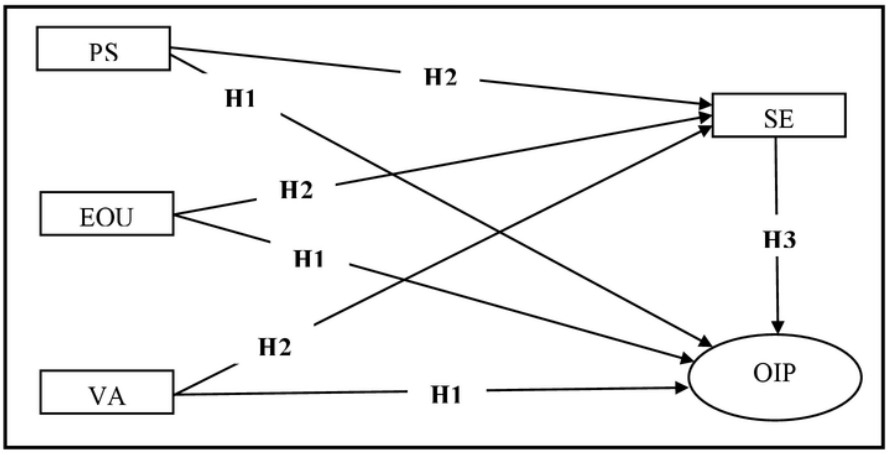
Functional convenience is the convenient functions or characteristics that help users to perform transaction activities within website (Geng & Tian, 2015). Its representative features includes (1) ease of navigation, (2) ease of understanding, (3) ease of use, (4) functional fit-to-task, (5) information availability, (6) interactivity, (7) personalization, (8) price competitiveness, (9) product assortment, and (10) responsiveness (Parboteeah, 2005). Compared to structural firmness, studies have shown that functional convenience has larger impact on consumers' response behaviours (Parboteeah, 2005).

Kim et al. (2002) indicated representational delight as aspects related to website interface where user comes into contact, is a low task-relevant cue (Parboteeah, 2005). It includes users' interaction with a website through hearing and sense of sight, which comprised of (1) emotional appeal, (2) entertainment value, (3) flow, (4) innovativeness, and (5) visual appeal (Parboteeah, 2005).

In this research, one characteristic is chosen from structural firmness, functional convenience and representational delight, respectively. This is to better illustrate environmental cues online implied by Eroglu et al. (2001). Pleasure will be focused in assessing consumers' affective states as it has larger impact on one's responses. Dominance omitted due to little or no impact on behaviour responses as tested in past studies (Eroglu et al., 2003). Approach behaviour of consumers will be focused as their responses or shopping outcome to study their online impulsive buying behaviour.

2.3 Suggested Theoretical Framework

Figure 2.3: Suggested S-O-R Framework



Source: Developed for the research

For better illustration of effect of online environmental cues' impacts on online impulse purchase behaviour of Malaysia's university students on Lazada Malaysia, website attributes including PS, EOU, and VA are proposed as independent variables in this study that will influence university student's online impulsive buying behaviour, mediated by SE. PS, EOU and VA are selected due to each of them is the representative characteristic for structural firmness, functional convenience, and representational delight, respectively (Parboteeah, 2005).

SE is regarded as a mediating variable between website attributes and OIP, the dependent variable. This is according to idea by Mehrabian and Russell (1974), where they emphasized that stimuli have an impact on one's emotional states. Besides, as Childers et al. (2001) suggested that enjoyment derived from interactive online environment has an impact on consumers' attitudes towards internet shopping, so a like concept is employed.

2.4 Hypotheses Development

2.4.1 The relationship between Website Attributes and Online Impulse Purchase

Pavlou (2001) indicated information privacy and security are significant drivers for consumers' intention to engage in e-commerce transaction and guarantee positive effect towards attitude on website (Hwang & Kim, 2007). PS is classified as a website functionality to facilitate simplified online purchase process and to motivate repetitive buying online as confidentiality (consumers' privacy) is an important ethical requirement (Bester, 2015). In the situation where consumers think that their individual privacy and information are unprotected in an online shopping website, they will choose to not to buy from that website (Chakraborty Lala, & Warren, 2003).

Past studies proved that PS as an e-shopping quality or website personality, impacted impulse purchase behaviour (Ha & Stoel, 2008; Rezaei, Ali, Amin, & Jayashree, 2016). Similarly, Ang, Liew, Wai and Yeoh (2015) concluded PS has an impact on Gen-Y online impulse buying when they shop online. Thus, we believe that PS issue in e-shopping context is essential in stimulating OIP. Hence,

H1a: *There is a positive relationship between PS and OIP.*

EOU is proven by several studies as a significant factor for consumers' intentions to use an e-commerce website (Parboteeah, 2005; van der Heijden, 2003; Vijayasarathy, 2004). Cheema, Rizwan, Jalal, Durrani, and Sohail (2013) confirmed that when customers' interaction with the website including searching product information and making payment online is simple, they preferred to shop online. Liu et al. (2013) and Wells, Parboteeah, and Valacich (2011) stated, EOU is also an environmental cue affecting the likelihood of consumers to go through the urge to make impulse purchase. Turkyilmaz, Erdem, and Uslu (2015), and Parboteeah (2005) mentioned, EOU has an impact on consumers' OIP behaviour in their study. Akram et al. (2017) stated that although EOU has less impact on OIP, but still positively related to OIP during "Double Eleven" shopping festival. There are debates on navigability aspect of EOU, where some studies stated it is effective for OIP, some are not (Lim & Yazdanifard, 2015). But, it is still posited as:

H1b: *There is a positive relationship between EOU and OIP.*

Suitable and appropriate used of visual elements help to draw customers' attention and to prevent cluttered pages that will hinder consumers' impulse purchase behaviour (Loiacono et al., 2002; Montoya-Weiss et al., 2003). Wang, Minor, and Wei (2011) stated, it is essential for consumers to enjoy in aesthetically and visually appealing online shopping environment as this will result in OIP behaviour among consumers (Liu et al., 2013). Therefore, by designing and presenting the e-commerce website and products in visually appealing manner help to facilitate impulsive buying behaviour, as consumers' senses of vision of are triggered causing them to be stimulated easily and bought impulsively eventually (Liu et al., 2013). Similarly, Turkyilmaz et al. (2015) proposed, media and website layout dimensions are website design attributes in contributing to stimulating OIP. Lim and Yazdanifard (2015) further confirmed that VA is external or environmental factor for OIP context. Therefore,

H1c: *There is a positive relationship between VA and OIP.*

2.4.2 The relationship between Website Attributes and Shopping Enjoyment

Ha and Stoel (2008) suggested that e-shopping quality associated with PS issues affects one's SE. Hwang and Kim (2007) indicated that PS dimension of perceived web quality has a positive impact on enjoyment as by protecting consumers' privacy or private information can improve their intrinsic motivation. Parboteeah (2005) implied the similar concept where security perceptions as a structural firmness feature of a website influence the perceived enjoyment of one's experience in the website. Parboteeah et al., (2009) suggested, higher quality of task-relevant cues including PS aspects, enhance greater enjoyment emerged from surfing a website, even though the impact on enjoyment is not as strong as a website's mood- relevant cues. Therefore,

H2a: *There is a positive relationship between PS and SE.*

According to van der Heijden (2003), an easy-to-use website brings enjoyment to the users. Parboteeah (2005) specifically mentioned EOU as a high task-relevant cue improved consumers' SE significantly. Sukhu, Zhang, and Bilgihan (2015) confirmed that EOU influence user's enjoyment positively, and their research has been supported by Kwon and Chidambaram (2000), where easy-to-use technologies give higher enjoyment to users. Moreover, a sufficient level of EOU brings intrinsic enjoyment to those who visit the website (Moon & Kim, 2001). According to Agrebi and Jallais (2015), in mobile shopping, users feel interesting when the system is easy-to-use as a sense of control are given, which translate to greater enjoyment to users. Therefore,

H2b: *There is a positive relationship between EOU and SE.*

Van der Heijden (2003) proposed, VA includes visual attractiveness related to visual elements used in website, such as colours used and website layout, and he confirmed that perceived visual attractiveness influence ones' enjoyment. Ha and Stoel (2008) empirically illustrated that different features of e-shopping quality including the VA, has a positive influence on SE. Floh and Madlberger (2013) stated, the idea of online store design relates to visual appearance and have concluded that when a customer perceive better e-store design, customer's SE in the online store is higher.

Xiang et al. (2016) confirmed the positive relationship between VA and SE in social media platforms. Frustration due to poor VA impedes users from interacting with the website will reduce their positive impression towards the website and eventually decrease their SE (Xiang et al., 2016). Cyr, Head, and Ivanov (2006) also proposed that design aesthetics influence one's enjoyment in mobile commerce applications. Thus,

H2c: *There is a positive relationship between VA and SE.*

2.4.3 The relationship between Shopping Enjoyment and Online Impulse Purchase

According to Saad and Metawie (2015), higher SE in-store will lead to impulsive buying behaviour. Park et al. (2012) proved that hedonic aspect of SE affects the buying

impulsiveness when browsing through website offering apparel products. Xiang et al. (2016) confirmed that when usage of social commerce platforms are enjoyable, users tend to buy impulsively. Similar conclusion by Adelaar, Chang, Lancendorfer, Lee, and Morimoto (2003) stated, one's positive emotional reactions to a stimulus enhance one's impulse-purchase intention. Hence,

H3: *There is a positive relationship between SE and OIP.*

2.4.4 The relationship between Website Attributes and Online Impulse Purchase through Shopping Enjoyment as Mediator

PS is a critical factor that affects consumers' emotions strongly, therefore websites with adequate PS features able to stimulate consumers' positive emotions and their probability to buy impulsively will increase (Yoo & Donthu, 2001). Past studies by Ha and Stoel (2008), and Kwek, Lau, and Tan (2010) stated that when e-commerce website protects consumers' privacy and secures their personal information, security felt by consumers leading them to express greater SE and tend to make unplanned purchase. These studies are also supported by Ang et al. (2015) where PS is a significant cause to influence consumers' SE in e-stores and then impact on their OIP behaviour. Therefore,

H4a: *SE mediates the relationship between PS and OIP.*

According to Agrebi and Jallais (2015), an easy-to-use m-commerce technology generates SE for the users, which then affects their intention to use mobile for shopping. Verhagen and van Dolen (2011), as well as Floh and Madlberger (2013) discovered that EOU has a critical impact on one's positive affective emotion or SE, which mediates the impact of EOU on one's OIP. This is supported by Parboteeah et al. (2009) where they found that easy-to-use aspect of task-relevant cues of a website affects the consumers' SE and then impact on their OIP. Similarly, Parboteeah (2005) suggested that a website's ease of use influence one's enjoyment, which in turn trigger the intention to make unplanned purchases. Hence,

H4b: *SE mediates the relationship between EOU and OIP.*

VA is selection of fonts and other visual elements that help to heighten a website's overall appearance (Parboteeah et al., 2009; van der Heijden et al., 2003). Saad and Metawie (2015) concluded, impulse purchase in-store is fully mediated by SE generated from store environment factors, such as music and layout design. In online context, Floh and Madlberger (2013) confirmed, the atmospheric cues of online store, including its design, have large impact on SE and impulsiveness, which in turn affect OIP.

Xiang et al. (2016) mentioned, VA influence users' perceived enjoyment and then affect their urge to purchase impulsively on social commerce platforms. Parboteeah et al. (2009) also discovered that a visually appealing website elicited more pleasure in consumers' emotional states during their interaction with that website that in turn, influence urge to purchase impulsively. Adelaar et al. (2003) found that one's emotional responses mediate the impact of different media formats, such as videos and images, on their intention of purchasing impulsively. So,

H4c: *SE mediates the relationship between VA and OIP.*

2.5 Conclusion

Literature review on the variables and effect of website attributes (PS, EOU, VA) on OIP, mediated by SE using S-O-R model were discussed, supporting by the findings and theoretical frameworks of past studies. Next chapter will discuss the explanation regarding research methodology.

CHAPTER 3: METHODOLOGY

3.0 Introduction

This part discusses overall methodology employed to underpin the research on how the attributes of Lazada Malaysia can affect the online impulse buying behaviour of university student in Malaysia. Throughout this chapter, components that will be covered are the methods of gathering, processing and examining of data.

3.1 Research Design

Based on the journal by Burns and Bush (2009), research design is used during research as a comprehensive plan specifying the methods to gather and examine the data. Research design will also explain the instruments and techniques needed to be included to analyse collected data information.

The research approach in this study is quantitative research approach. According to Rahi (2017), quantitative research is defined as a technique that aims on the collection of new data in line with the study of the population and data analysis. This approach also helps researches to describe the data and creating a result that are statically reliable and accurate besides interpreting the data.

For the study we have used descriptive research approach to obtain our data. Descriptive research is define as to describe systematically and accurately the facts and characteristics of a given population, object or organization (Babin & Zikmund, 2015). The purpose of using descriptive research approach is to identify in details for each variable that is being studied (Salaria, 2012). Due to the research question where it focuses on a wide impact which in this case the impact is website attributes is the reason descriptive analysis is being employed.

3.2 Data Collection Method

This process is used to obtain precise data in order to maintain the research integrity. Thus, primary data has been employed.

In primary data collection, survey method was used where the questionnaires were distributed to Malaysia's university students who have experienced and used Lazada Malaysia. 320 questionnaires set were collected from states around Malaysia, including Kedah, Penang, Perak, and Selangor, through physical distribution. However, only 290 sets were usable. 22 out of 320 discarded questionnaires contained missing value in Respondent Profile section as the respondents were unable to provide their monthly income while the remaining eight sets of questionnaire were discarded due to inexperienced online purchase on Lazada Malaysia. A small-scaled pilot test on 30 respondents were carried out before conducting the full-scale study.

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3.3 Sampling Design

3.3.1 Target Population

For this research, the target population was drawn among university students in Malaysia who have tried online purchase on Lazada Malaysia. According to Norliah, Safiah, Zakiaf, Massila, Mahadi, and Shahrulanuar (2017), the most frequent users of internet based-technology are university students. Apparently, university students have higher purchasing power compared to other generations when it comes to online shopping (See, Al-Agaga & Nor, 2012). Since Malaysia is a country with melting pot of races, the questionnaires have been distributed to different races, such as Malay, Chinese, Indian, and others.

3.3.2 Sampling Location

Distribution of the questionnaires were carried out physically. Survey questio nnaires were distributed in universities located in Kedah, Penang, Perak, and Selangor. Out of 320 sets, 150 sets of questionnaire were collected from MAHSA University, Management and Science University (MSU), Multimedia University (MMU), and Taylor's University in Selangor, 90 sets of questionnaire were collected from Tunku Abdul Rahman University College (TARUC) and University Science Malaysia (USM) in Penang, 80 sets of questionnaire were collected from Universiti Tunku Abdul Rahman (UTAR) in Perak, and the other 20 sets were collected from Universiti Utara Malaysia (UUM) in Kedah.

3.3.3 Sampling Elements

Respondents that have used the platform at least once are the targeted sampling elements for the study. It is important as it helps to provide the actual service experience that they have undergone and thus creating a more reliable and solid data (Kelley, Clark, Brown, & Sitzia, 2003).

3.3.4 Sampling Technique

The sampling method used in this research was non-probability sampling. Alvi (2016) stated, non-probability sampling is defined as every population unit will not get an equal chance of involvement in the research study and no random selection is made. The non-probability sampling method that is applied for the research study is judgmental sampling where researchers are able to make the judgement in selecting the respondents that best meet the purpose of the research study. Hence, respondents be a university student who tried purchasing online on Lazada Malaysia.

3.3.5 Sampling Size

Hill (1998) proposed, the sample size ranging from 30 to 500 is considered to be the ideal size for the research. 320 was set as the sample size of this full-scale study. However, only 290 were usable questionnaires apart from the additional 30 sets for pilot testing.

3.4 Research Instrument

Methods for gathering data refers to research instrument. The survey questionnaire was constructed based on reviewed literature and research variables including PS, VA, EOU, SE and OIP.

3.4.1 Pilot Test

Pilot study is a pre-test conducted prior to real questionnaire is given out, in order to detect any flaws in the questionnaires, whether the participants understand the questions directed to them, and to avoid miscommunication (Hair et al., 2015). This allows researchers to access the reliability or consistency of each construct and make any amendments and improvements until the final questionnaires are ready to be distributed. The feedback obtained from the 30 respondents in the pilot test was positive. Thus, the questionnaires are ready to be used in the full-scale study. The acceptable value of alpha is ranging from 0.6 and above (Hair et. al., 2015). Hence, based on the Appendix Table 3.1, the constructs are considered reliable.

3.4.2 Questionnaire Design

Structured questionnaire was employed to conduct the survey. 320 questionnaires were given out physically from 06 June 2018 to 20 June 2018. Before distributing the questionnaires, several consideration was taken into matter:

- Respondents are university student.

- Malaysian citizens.
- Experienced online purchase on Lazada previously.

The questionnaire was divided into seven sections with a total of 32 question: Section A-G. Section A consisted of four questions asking respondents' general behaviour on Lazada Malaysia, including number of visitation, expenditure, payment method, and product category they purchased the most.

Section B to F consisted of five questions each, asking about PS, VA and EOU, SE as mediator, OIP as dependent variable on Lazada Malaysia. Five-Point Likert-Scale was employed in these sections, in order to show their degree of agreement, respondents are urged to select from the scale of 1 to 5 in where 1 represents "Strongly Disagree" and 5 represents "Strongly Agree".

Section G contained three questions related to respondents' background, comprised of gender, ethnicity and monthly income. All questions were asked in simple English and in straightforward manner so that the respondents can understand it easily.

3.5 Constructs Measurement

3.5.1 Scale Definition

Table 3.1 Measurement of General Information, Independent Variables, Dependent Variables, and Respondent Profiles

Section	Variables	Measurement Scales	Scaling Techniques
Section A: General Information	Number of Visitation	Ordinal	-
	Expenditure	Ordinal	-
	Payment Method	Nominal	-
	Product Category Most Bought	Nominal	-
Section B, C, & D: Independent Variables	Privacy & Security	Interval	Five-Point Likert
	Visual Appeal	Interval	Five-Point Likert
	Website Ease of Use	Interval	Five-Point Likert
Section E: Mediator	Shopping Enjoyment	Interval	Five-Point Likert
Section F: Dependent Variable	Online Impulse Purchase	Interval	Five-Point Likert
	Gender	Nominal	-

Section G: Respondent Profile	Ethnicity	Nominal	-
	Monthly Income	Ordinal	-

Source: Developed for the research

3.6 Data Processing

Data processing was carried out to ensure that the accuracy and relevancy of collected data. Data processing for this study comprised of processes including checking, coding, and cleaning of data.

3.6.1 Data Checking

This process was executed to detect any missing values after the collection of questionnaires. In this study, 22 questionnaires were discarded due to missing value under Respondent's Profile section and eight questionnaires as respondents never tried online purchase on Lazada Malaysia.

3.6.2 Data Coding

Each survey question in this study provides was numerically pre-coded in order to ease the data key-in process. This can help with data interpretation and development of final result as well. The data were then key-in into Microsoft Excel based on the assigned code for the choice chosen in each survey question.

3.6.3 Data Cleaning

After entering the data into Microsoft Excel, further detection of missing values during the data input process were carried out to ensure data quality. To further improve the data validity, values that are considered below desirable will be removed.

3.7 Data Analysis

Partial Least Square (Smart-PLS 3) software was adopted for analysis of data collected. SMART-PLS3 assist researchers in creating an accurate and strong prediction by specifying dependent variables and multiple independent variable in a single model as well as handling multicollinearity issues within the independent variables (Wong, 2013).

3.7.1 Descriptive Analysis

Descriptive data collected for this research study were gender, ethnicity and monthly income. The data that we have obtained will be transformed into frequencies and percentages. For our research study, the overall respondent information that was obtained will be generated and tabulated using SPSS software. In this way the data will be summarized. For the descriptive analysis the statistics that are being measured are central tendency and variability. The main measures for central tendency are mean, median and mode. The measures for variability are standard deviation and range.

3.7.2 Inferential Analysis

Partial least squares path modelling (PLS-SEM) estimates the cause-effect relationship models with potential variables was applied for inferential analysis. This systems helps to better understand the multivariate model data (Monecke & Leisch, 2012).

3.7.2.1 Reliability Test for Reflective Measurements Method

Reliability is defined as the degree where a tool will measure in an identical way when utilize under the identical subject and situation. In other words, the ability to forecast the measurement consistency. The main point of reliability is consistency (Adam, Khan, Raeside & White, 2007).

The measurement tool is deemed to be reliable but not valid when the result of the measuring process can be produced. Thus, although the variables are wrongly measured, it is considered reliable when a consistent result is obtained. The scales were analyse based of the reliability via internal consistency. For the research study, composite reliability test and Cronbach's Alpha were used. Composite Reliability was applied to test the internal consistency and the ideal value is above 0.7. Cronbach's Alpha coefficient evaluation is according to the rules of the thumb as stated in Figure 3.1:

Figure 3.1: Rules Of Thumb about Cronbach's Alpha Coefficient Size

Cronbach's alpha	Internal consistency
$\alpha = 0.9$	Excellent (High-Stakes Testing)
$0.7 = \alpha < 0.9$	Good (Low-Stakes Testing)
$0.6 = \alpha < 0.7$	Acceptable
$0.5 = \alpha < 0.6$	Poor
$\alpha < 0.5$	Unacceptable

Source: Manerikar, V., & Manerikar, S. (2015). Cronbach's alpha. *A Peer Review Research Journal aWEshkar WeSchool, 19*(1), 117-119.

3.7.2.2 Convergent Validity & Discriminant Validity

Convergent validity is define as a test to inspect whether the object planned to measure the construct are related to one another. In order to develop an acceptable convergent validity, the aspect need to be looked into is average variance expected (AVE) and its desirable value should be 0.5 and above. (Hair, Ringle & Sarstedt, 2015).

Discriminant validity is defined as a test to inspect whether the object planned to measure the construct are distinct to one another. For discriminant validity, Fornell-Lacker and cross-loading method were used. It is suggested that each indicator's loading must have an exceedingly value on all of its cross loading (Hair, Ringle & Sarstedt, 2015).

3.7.2.3 Structural Model Evaluation

Structural Model Evaluation is model that includes various set of diverse set of computer algorithms, mathematical models, and statistical methods that is relevant to networks of constructs to data (Kaplan, 2007). Through this model we will be evaluating path analyses, R^2 and Q^2.

Path Analyses is a direct multiple regression extension that aims the study situation with several final dependent variable or when there is influence chain between each variable (Streiner, 2005). This method is used toensure that the collected data is consistent as well as it is in line with the model. Through this method, the readings that will be taken into consideration are the VIF, t-value and p-value to determine whether chain between the variables should be accepted or rejected. The ideal conditions of the readings are VIF should be less than 10, t-value should be more than 2 and p-value should be 0.05 and below.

To quantify the variation part of the dependent variable described by the independent variable, Coefficient of determination, R2 is employed (Hössjer, 2008). The R^2 is used as either for hypotheses testing or to forecast the future result. As for Q^2 it is applied to predict the relevance of the model. To indicate that the model is well constructed and have predictive relevance the value should be above 0.5 (Vinzi, Chin, Henseler, & Wang, 2010).

3.8 Conclusion

Based on Chapter 3, the overall methodology applied to obtain data has been explained and discussed. In Chapter 4, data and information collected will be analysed to generate result for the research.

CHAPTER 4: DATA ANALYSIS

4.0 Introduction

290 sets out of 320 raw data were collected through the survey questionnaire from respondents mainly distributed at Perak, Penang and Kuala Lumpur were used. There were 30 respondents out of 320 were incompatible as target respondents due to inexperienced online purchase on Lazada Malaysia. The data will be analysed using Partial Least Square (SMART-PLS3) statistical software to test the relationship between the independent and dependent variables along with the mediator. The performed analysis of statistical test results will be provided in this chapter below.

4.1 Descriptive Analysis

4.1.1 General Information

Questionnaire in Section A includes four questions enquiring the general behaviour of Lazada (M) users in brief. In GI1 under Appendix 4.1, the surfing frequency of 1-2 times/month shows the highest frequent surfing rate (52%) followed by 3-4 times/month (29%), more than 6 times/month (12%) and 5-6 times/month (7%). In GI2, the majority expenditure spent on Lazada (M) amounts to RM51-100 (42%) as the highest, seconded with below RM50 (26%), then RM101-150 (22%) and the least chosen amount, more than RM50 (10%).

While the highest voted payment mode in GI3 were tied with 44% for both Online Banking and Credit/Debit card along with Cash On Delivery (7%), PayPal (4%), Pay Cash at 7-Eleven store (0.7%) and the least preferred choice, Instalment (0.3%). Moving on to GI4, Electronic devices & Accessories (34.1%) was voted second after Clothes & Accessories (38.6%) as the most bought product category in Lazada (M). The remaining product choice in descending orders were Health & Beauty Care (11.7%), Sports

& Travel (4.8%), TV & Home Appliances (4.8%), Automotive & Motorcycles Accessories (2.8%), Groceries & Pets (2.8%) and Babies & Toys (0.4%).

4.1.2 Respondents' Demographic Profile

The questionnaire also consists of three sets of demographic information questions (Section G) on gender, ethnicity and monthly income. Appendix Figure 4.2 shows the data analysis generated from the survey.

According to Appendix 4.2, there were 159 female respondents (54.8%) and 131 male respondents (45.2%). Overall, 152 were Malay respondents (52.4%) followed by 91 Chinese respondents (31.4%), 37 Indian respondents (12.8%) and a minority of 10 respondents (3.4%) categorized under others.

Most respondents possess income below RM1000 with 188 respondents (64.8%) indicating that they have no income or low income. Secondly, followed by the income range of RM1001-2000 with 48 respondents (16.6%), third with income group of RM2001-3000 by 30 respondents (10.3%), forth income group of RM3001-4000 with 15 respondents (5.2%) and the least selected income group, above RM4000 with 9 respondents (3.1%) respectively.

4.2 Measurement Model

To support measurement model, 3 types of validity namely content validity, convergent validity and discriminant validity are needed (Lin & Lo, 2015). This will cover an analysis to examine the items used to measure the model.

4.2.1 Indicators' Reliability

Reliability is a factor for validity and a first study measurement to see if the associated indicators are common in capturing the latent construct (Kwong & Wong, 2016). After analysing the factor loadings developed through SMART-PLS3 in

Appendix Figure 4.3, apart from *VA_1* was dropped from the scale due to its outer loading 0.660 which is lower than 0.7, other constructs of the study are accepted with the values above 0.7 after the removal. The new construct obtained a score of 0.712 to 0.821 above the threshold level.

4.2.2 Convergent Validity

This test is to convey the measures of two or more items with related construct. The degree of confidence shows whether an attribute is effectively measured by its indicators (Alarcon & Sanchez, 2015; Campbell & Fiske, 1959). Average Variance Extracted (AVE) and Composite Reliability (CR) is commonly evaluated using Fornell-Larcker (Alarcon & Sanchez, 2015). An AVE value greater than 0.5 to consider acceptable, 0.6 as desirable and above 0.7 as very good (Lin & Lo, 2015; Alarcon & Sanchez, 2015; Bagozzi & Yi, 1988).

As shown in Appendix Table 4.4, all construct scores from 0.560 to 0.653 which demonstrates the degree of confidence is well measured by the indicators. The elimination of *VA_1* that forms *Visual Appeal* in PLS model has led to a growth of AVE and CR of their respective latent constructs. Fornell-Larcker (1981) argued that CR is less biased compared to Cronbach's Alpha in testing reliability with acceptance value above 0.7. Appendix Table 4.4 shows satisfactory convergent validity results.

4.2.3 Discriminant Validity

According to Henseler, Ringle and Sarstedt (2015), discriminant validity requires "a test not correlate too highly with measures from which it is supposed to differ" (as cited in Campbell, 1960, p.548). This is to prevent any risk of collinearity problems (multicollinearity) which will affect the hypotheses and model interpretation to be false (Ab Hamid, Sami & Sidek, 2017). Multicollinearity or collinearity is the coefficient estimation within the model to define the degree of accuracy by indicating how well it can predict the outcome variables.

To evaluate cross-loading values with items loading in comparison, factor loadings items should be higher than all other factor loadings while square root of AVE must be higher than other latent constructs' correlations (Fornell-Larcker, 1981; Henseler et. al, 2015). In Appendix Table 4.5 below, all constructs generated have a reading above 0.7. The values on the diagonal are greater than values off the diagonal. As such, based on Fornell-Larcker (1981)'s criterion, there is a presence of discriminant validity.

In Appendix Table 4.6, the outer loadings before VA_1 was eliminated is shown. Assessing cross-loadings, each indicator loading should consist greater loading value compared to all its cross-loadings (Henseler et. al, 2015). Appendix Table 4.7 shows a result of each construct complying with this theory. In conclusion, it is confirmed that the items have passed the testing of discriminant validity.

4.3 Structural Model

According to Appendix Table 4.8, VIF values in all paths range from 1.431 to 1.941, suggesting that there is no indication of multicollinearity problems nor issues with each set of the variables as it is lower than 5. All readings were fine except for the VA → OIP because the value has exceeded 0.05 for its P-Value. Furthermore, T-statistic readings are highly significant at 0.01-0.001 showing a 95% confidence interval. Unfortunately, this path is the only figure that is below 1.96. Thus, resulting 6 out of 7 hypotheses proposed have significant effect (T-Statistics > 1.96).

R^2 value is the quality criteria used to assess the overall relationship strength while R^2 adjusted is only used to compare two or more structural models shown in Appendix Table 4.9. The R^2 value of OIP (0.320) is considered weak, whereas the R^2 value of SE (0.481) is considered close to moderate (Moore, Notz, & Flinger, 2013). It means that 32% of changes in OIP and 48.1% of variation in SE are because of PS, EOU and VA.

f^2 effect size is to assess the impact of a specific construct on an internal construct. According to Appendix Table 4.10, PS (0.02) has a little effect while VA (0.009) have the smallest effect in producing R^2 value for OIP. The value of 0.028 indicates that EOU has a relatively larger effect in generating R^2 for OIP, SE (0.147) has an almost medium effect in generating R^2 for OIP.

The predictive relevance Q^2, 0.172 of OIP shows that the model demonstrates moderate predictive relevance for this construct under Appendix Table 4.11. The value lower than 0 is reviewed as lack of predictive relevance. Hence, both OIP and SE has a decent predictive level.

To assess the mediation effect in the proposed framework, significance of direct effect between independent variables (PS, EOU, VA) and dependent variable (OIP), without mediator (SE), must be first assessed. In Appendix Table 4.12, both direct effects without mediator of PS (0.202) and EOU (0.279) on OIP are significant, whereas the direct effect without mediator of VA on OIP is not significant (0.097). However, past studies not only showed presence of significant relationship between VA and OIP, but also SE as a mediator mediating the relationship between VA and OIP (Loiacano et al., 2002; Wang et al. 2011; Liu et al., 2013; Adelaar et al., 2003; Floh & Madlberger, 2013). Therefore, significance of indirect effect with mediator between PS, EOU, VA and SE, and between SE and OIP are assessed.

Correspondingly in Appendix Table 4.13, the indirect effects with mediator between PS (0.142), VA (0.438), EOU (0.249) and SE as well as between SE (0.439) and OIP are significant. Hence, variance accounted for (VAF) will be assessed. From the results of T-Statistics and P-Values in Table 4.14, the total indirect effects of PS → OIP ($t=2.199$, $p<0.05$), VA → OIP ($t=4.719$, $p<0.05$) and EOU → OIP ($t=3.495$, $p<0.05$) are significant. Whereas, total effect = sum of direct + indirect effects as the shown in Appendix Table 4.15.

Similarly, total effects results are used to calculate Variance Accounted For (VAF) to test the dependent variable by indirect relationship if there is a presence of mediation occur. In Table 4.16, the relationships of PS → SE → OIP, EOU → SE → OIP and VA → SE → OIP are significant (t=2.199, p<0.05; t=3.495, p<0.05; t=4.719, p<0.05, respectively). These results provide support for H4a, H4b and H4c, whereby SE partially mediates both relationship between PS and OIP as well as between EOU and OIP. Besides, SE fully mediates the relationship VA and OIP.

4.4 Conclusion

The item VA_1 was withdrawn from the measurement scale in order to improve other construct results. The data analysis has been discussed in detailed through statistics generated from research in this chapter.

CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICATIONS

5.0 Introduction

Ultimate chapter concludes the entire study by discussing the findings and analysis derived from previous chapters. Obstacles faced and suggestions for the research will be made at the end to improve future research.

5.1 Discussions of Major Findings

Figure 5.1: Outline of Hypothesis Testing

Hypothesis	Relationship
H1a. There is a positive relationship between PS and OIP.	**Supported**
H1b. There is a positive relationship between EOU and OIP.	**Supported**
H1c. There is a positive relationship between VA and OIP.	**Not Supported**
H2a. There is a positive relationship between PS and SE.	**Supported**
H2b. There is a positive relationship between EOU and SE.	**Supported**
H2c. There is a positive relationship between VA and SE.	**Supported**
H3. There is a positive relationship between SE and OIP.	**Supported**
H4a. SE mediates the relationship between PS and OIP.	**Supported**
H4b. SE mediates the relationship between EOU and OIP.	**Supported**
H4c. SE mediates the relationship between VA and OIP.	**Supported**

Source: Developed for the research

The study is intended to inspect the impact of website attributes (PS, EOU, VA) on OIP and the effects of SE as mediator between website attributes and OIP on Lazada Malaysia. All hypotheses in this study were supported empirically except for H1c, whereby VA_1 showed no direct effect on OIP.

The result outcome supported H1a and H2a by confirming PS as an essential factor to practise e-shopping affects both consumer's OIP and SE positively. Adequate security features of e-commerce websites to protect consumers' confidential information not only can stimulate consumer's OIP, but also can translate greater enjoyment. These results are similar with findings by Ha and Stoel (2008), Hwang and Kim (2007), Parboteeah (2005) and Parboteeah et al. (2009), as well as Ang et al. (2015), Chakraborty et al. (2002), Ha and Stoel (2008), and Rezaei et al. (2016). Past studies have showed that consumers' positive emotions were triggered and elicited greater SE when they felt a sense of security, this emotion then impacted on their OIP (Ang et al, 2015; Ha & Stoel, 2008; Kwek et al., 2010; Yoo & Donthu, 2001). Thus, H4a was supported as partial mediation effect by SE existed between PS and OIP.

It was indicated in past studies, consumers tend to purchase impulsively when a website is user-friendly, such as simpler navigation and effortless payment procedures (Akram et al., 2017; Cheema et al., 2013; Liu et al., 2013; Turkyilmaz et al., 2015; Wells et al., 2011). Besides, SE was created as well when the website provides easy-to-use technologies (Agrebi & Jallais, 2015; Kwon & Chidambaram, 2000; Moon & Kim, 2001; Parboteeah, 2005; Sukhu et al., 2015; van der Heijden, 2003). Hence, H1b and H2b were supported as results showed EOU was positively influencing OIP and SE, and its results are consistent with past findings. H4b was supported as result showed SE mediated the relationship between EOU and OIP. This finding is consistent with Agrebi and Jallais (2015), Floh and Madlberger (2013), and Verhagen and van Dolen (2011).

Past studies showed VA positively influence OIP in offline and online context due to attractive website layout, interesting pictures and appropriate used of visual elements (Turkyilmaz et al., 2015). Surprisingly, findings from this research showed H1c was not supported as VA has no direct effect on OIP probably due to extensive use of visual elements causing confusion among consumers, leading them to leave the website. Additionally, most respondents perceived Lazada Malaysia as visually unappealing and the products were not displayed aesthetically. Hence, the absence of OIP. However, findings by Floh and Madlberger (2013), Ha and Stoel

(2008), Van der Heijden (2003), and Xiang et al. (2016) were similar to the results obtained from this research. VA was positively affecting SE, proving H2c was supported. Although VA has no direct effect on OIP, it has shown presence of indirect effect on OIP, fully mediated by SE, making H4c to be supported. This result is tally with findings by Floh and Madlberger (2013), Parboteeah et al. (2009), Saad and Metawie (2015), and Xiang et al. (2016).

Our results have showed SE being influenced by OIP positively in this study. Hence, H3 is supported as enjoyable shopping experiences can make consumers further explored the website and arouse their OIP. This is consistent with the results obtained by Adelaar et al. (2003), Park et al. (2012), Saad and Metawie (2016), and Xiang et al. (2016).

5.2 Implications of the Study

5.2.1 Managerial Implication

5.2.1.1 Privacy & Security

PS is examined with a significant relationship affecting shopping enjoyment and online impulse purchase. This results in the importance of trust concern by online users when they access Lazada Malaysia. In another words, relevant authorities should take extra precaution and measures in ensuring users are experiencing tip-top safe transactions when they purchase or provide any of their personal information. These data should be encrypted and protected from leaking to hackers or the risk of unethical use. A time to time maintenance on the website have to be provided to retain the stability of website because transactions are done through virtual platform.

5.2.1.2 Website Ease of Use

EOU is proven to affect shopping enjoyment and online impulse purchase strongly. Complying with shopping enjoyment, the design of user-friendly website does influences shopping enjoyment. Authorities have to be mindful not to over-do-it as complexity drives potential transactions to fail. This particularly happens during sales season. The excessive flooding of pop-up ads will trigger users or worse; diminish their

initial excitement and attempt in shopping. Absence of difficulty and nurture simplicity of the website can surge better retention of enjoyment in users during impulsivity behavior.

5.2.1.3 Visual Appeal

Visual elements design in an e-store or e-commerce website do have effect on consumer's OIP behaviour causing them to make unplanned purchase. However, not as significant as the past. Consumers nowadays are smart enough not to be deceived by appearance as they knew most of the pictures are for illustration purposes only. Therefore, relevant authorities should take note that aesthetically appealing e-store or e-commerce designs are able to attract consumers to visit and stay at the site longer but it may not have direct effect on consumers' online impulse buying behaviour. Visual appeal is what meets the eye. Authorities should emphasize on website appeal quality because it affects how users' perceive, use, and remember it. In short, it can attract attention while serving as the websites' first impression that affect long-term relationship. Once a website obtained negative first impression, chances are visitors are unlikely to come back.

5.2.1.4 Shopping Enjoyment

SE has positively revealed significant effect mediating website attributes in affecting OIP behavior. Authorities are suggested to position more effort into driving browsers to develop enjoyment in surfing through the shopping website. By situating this as a focus helps relevant authorities to improve customer retention and satisfaction from obtaining goods or services through online platform. It is relatively tougher to evaluate what the users are feeling at the moment because virtual shopping is unlike brick-and-mortar. Physical shopping experiences enable respective authorities to identify how customers feel. Enjoyment can be an antecedent of positive or negative attitude towards online shopping. Therefore, preparing endeavoring measures to combat the challenges in creating online shopping enjoyment will decrease the risk of shrinking level of enjoyment to conduct OIP.

5.2.2 Academic Implication

Through our findings, although VA shows no direct implication in direct effect but in terms of indirect effect of full mediation the relationship still exist. Therefore, it is still an important factor leading to enjoyment. Future researches should not neglect VA. Instead, examine it with other placement. Such as innovativeness, emotional appeal and entertainment value perceived by online consumers, instead of visual appeal of the website. Hereinafter, by adopting other elements rather than visual appeal may help the researcher to better examine consumers' OIP context through the presence of indirect relationship.

5.3 Limitations of the Study

Some limitations have been recognized in this research. Firstly, our data collection took place in certain West Malaysia states instead of the whole Malaysia. This is due to the limitation of physical distribution of questionnaires ability to reach all Malaysia's university students. Additionally, because of time constraints, university students in different states all around Malaysia were unable to reach through physical distribution of questionnaires. Therefore, not all university students in Malaysia are examined on their online impulse purchase behaviour. Hence, the findings may not fully translate to university students in Malaysia.

Furthermore, as this research focused on online impulse purchase behaviour on Lazada Malaysia with a wide range of product categories, most respondents are found to buy less impulsively when they purchased a high-involvement product such as electronic devices, automotive and motorcycles accessories, and etc. Hence, without mentioning the product category purchased on Lazada Malaysia in the questionnaires, respondents tend to create their own assumptions on the product category they acquired and answer based on the assumed product category on their online impulse purchase behaviour. Thus, this will result in data inconsistency due to differences in assumptions.

Although there are some limitations in this research, however they are not jeopardizing the significance of findings. The limitations have been acknowledged in order to provide platforms for conducting better research in future.

5.4 Recommendations

According to the previous evaluations above, the first suggestion we would proposed is to conduct online survey for this research in future. By utilizing the Internet, it minimizes the time consumption and solves the distance issue that we faced in the current study. University students possess to a high usage of Internet. Therefore, it would be a better option to be used to conduct a research that targets and reaches out to university students in Malaysia.

To refine the current research, conducting the study based on a specific sales season such as Lazada's Online Revolution campaign in 2017 is recommended. The online beast was reported breaking new sales record of RM100mil during their kicked off campaign, Single's Day (11.11) event that lasted a month having an estimation of 1,400 transactions per minute (Mahpar, 2017). Referring to this, it is more likely that users will be surfing Lazada Malaysia more often because they know there will be different ranges of products on sale everyday within that month. With the anticipation for cheaper offers, the urge of impulse buying behavior would be more prominent as compared to normal days.

In addition, for future researchers regarding this scope of study, a particular segment/category should be targeted for precision and accuracy in their research such as Zalora (an apparel website). Adopting this would help them in understanding respondents' OIP out of the scope we conducted.

5.5 Conclusion

On the whole, the final results has proven that shopping enjoyment moderates website attributes towards online impulse purchase among University students of Malaysia on Lazada Malaysia. All factors are said to be positively influencing online impulse purchase except for

the lacking of support for visual appeal of Lazada Malaysia website. Finally, although the variables covered are variables identified from past literature reviews, the research can be further advanced by attempting other theories to provide a deeper insight towards OIP.

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