AN EMPIRICAL INVESTIGATION ON THE INFLUENCE OF ONLINE REVIEWS AFFECTS THE INDIVIDUAL'S PURCHASE INTENTION IN MALAYSIA

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BY

ONG WEI CHI

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DECLARATION

I hereby declare that:

(1)   This undergraduate FYP is the end result of my own work and that due acknowledgementhas been given in the references to ALL sources of information be they printed,electronic, or personal.

(2)   No portion of this FYP 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)   Sole contribution has been made by me in completing the FYP.

(4)   The word count of this research report is____19880____.

Name of student:	Student ID:	Signature:
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Date: 20 April 2022

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DEDICATION

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"I would maintain that thanks are the highest form of though; and that gratitude is happiness doubled by wonder."

G.K. Chesterton.

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LIST OF ABBREVIATIONS

α	Cronbach's coefficient
Adjusted R^2	Adjusted R-squared
ANOVA	Analysis of Variance
β	Beta
df	Degrees of Freedom
eWOM	Electronic Word-of-Mouth
F	F ratio
H_0	Null Hypothesis
H_1	Hypothesis 1
H_2	Hypothesis 2
H_3	Hypothesis 3
H_4	Hypothesis 4
INQ	Information Quantity
MLR	Multiple Linear Regressions
N	Sample Population
OCR	Online Consumer Reviews
p-value	Significant Value / Probability Value
PIQ	Perceived Information Quality
r	Pearson's Correlation Value
R	Multiple R
R^2	Coefficient of determination / R-squared
RC	Review Credibility
SAQ	Self-administrated Questionnaire
SE	Standard Error
SPSS	Statistical Package for Social Sciences
SR Model	Stimulus-Response Model
UGT	Uses and Gratifications Theory
VIF	Variance Inflation Factor

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PREFACE

The title of this research study is "An empirical investigation on the influence of online reviews affects the individual's purchase intention in Malaysia". This research study is cover under the compulsory unit subject UKMZ 3016 Research Project for all the undergraduate students pursuing the Bachelor of International Business (Honours) in Universiti Tunku Abdul Rahman upon the completion of the study.

In this era of globalization, technology advancement has brought many changes in the business environment, especially in Malaysia. Due to Malaysia's high internet penetration, the e-commerce business is expected to grow further in the future. Therefore, online shopping is one emerging trend that is rapidly developing as the consumers increasingly purchase the products through online by relying online reviews. In fact, over 90% of consumers seek out and read consumer reviews before purchase a product, and most of them believe the reviews as much as they trust personal recommendations. Positive reviews aid in capturing consumers' attention and interest which may efficiently generate confidence.

In this research, it will provide a good understanding of the influences of online reviews towards the consumers' purchase intention in Malaysia. Several review factors will be examined in this research such as perceived information quality, information quantity, review credibility and review valence. In addition, this research has contributed the future researchers and practitioners on the influence of online reviews, so that the practitioners can better understand about which review factors do consumers care the most and make improvement to satisfy consumers' needs.

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ABSTRACT

In the rapidly growing Internet of Malaysia, online shopping has spread to the daily lives of most people. When making purchases on the Internet platform, consumers must carefully analyse the product's characteristic, price, quality, and other information and carefully select them to increase the satisfaction of shopping. Online product reviews are one of the sources of product feature information that online buyers are increasingly valuing. This research will examine the literature on online reviews and the influencing review factors primarily focused on Uses and Gratification Theory (UGT) and Stimulus-Response Model. Therefore, this paper aims to investigate the influence of perceived information quality, information quantity, review credibility and review valence on Malaysian consumers' purchase intention when online shopping. With this aim, this research used Statistical Package for the Social Sciences (SPSS) version 26.0 to test the proposed hypothesis with a valid sample of 391 respondents. The target respondents for this study are the Malaysian who have purchased products through online. Questionnaires for this research were distributed conveniently in Malaysia through convenience sampling method. The findings of this study revealed that perceived information quality, information quantity, review credibility and review valence have a positive relationship on purchase intention in Malaysia. Review valence has the strongest influences towards consumers' purchase intention. This study defines constructs for purchase intention after reading online consumer reviews towards a product, which serves as a good framework for practitioners to design business strategies to retain consumers and set as a foundation for future research studies. There are some limitations faced throughout the process of conducting this research project, and thus some recommendations are presented to propose beneficial suggestion and call for future studies.

Keywords: online reviews, purchase intention, perceived information quality, information quantity, review credibility, review valence.

CHAPTER 1: RESEARCH OVERVIEW

1.0 Introduction

This research aims to investigate on the influence of online reviews affects the individual's purchase intention in Malaysia. This chapter outlines background of research, problem statement, research questions, research objectives, significance of research, and summary.

1.1 Research Background

Rapid development of the Internet has given birth to a new way of communication such as electronic world-of-mouth (eWOM). It has become more common for people to purchase goods and services online, hence, there are many online reviews can be found in Internet through online communication (Zhang, Zheng and Wang, 2020). Online reviews are the consumer's voluntary feedback on their purchase experiences and there is great potential information value to both businessman and consumers (Liu, Lei, Guo and Zhou, 2020). Online reviews offer consumers a direct way to learn about products' advantages, user experience, shortcoming, and purchase considerations by listening to the true voice of previous consumers (Cui, Niu and Guo,2015). When buying products, consumers always seek for information written by other consumers on the Internet, because that consumer relies on others' opinion to help in making decisions (Zhu, Li, Wang, He and Tian,2020). Additionally, many online businesses, such as Amazon, offer a way for their consumers to comment and read their products information on company's website, so online reviews have changed the way businesses conduct their business (Arora

and Sharma, 2018). As a result, consumers will tend to evaluate the quality of products by reading online reviews, because those online channels do not allow consumers to physically view the products, unlike traditional channels (Dhahak and Huseynov, 2020).

Figure 1.1: Trend of reading online reviews among shoppers
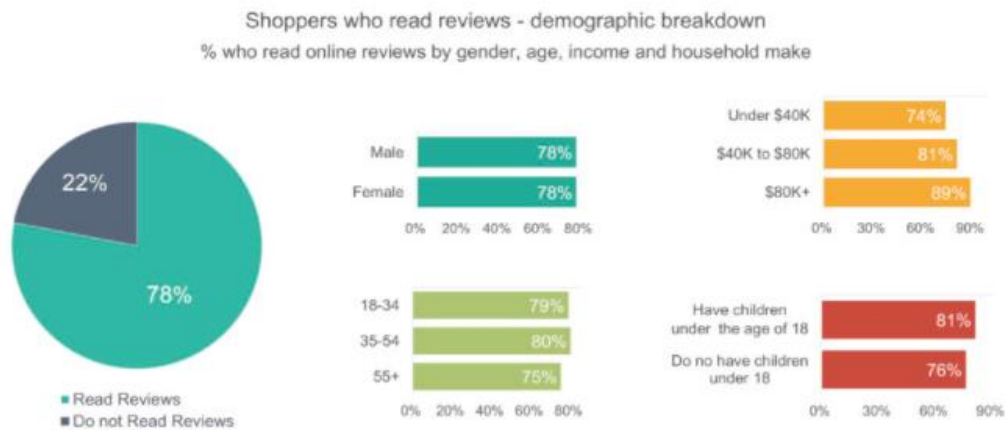
Source: Freddie. (2020). *Demographic profile of customers read online reviews to make purchase decision.* Retrieved from https://reviewmonitoring.com/demographic-profile-of-customers-who-read-online-reviews-to-make-a-purchase-decision/

Based on Malaysia Digital Marketing Statistics 2021, Malaysians use internet for an average of 7.5 hours per day, and 61% of Malaysian use internet for online shopping (digitalinfluencelab, 2021). Besides, according to Figure 1.1 by Freddie (2020) in Malaysia, it showed that there are 78% of the shoppers will read reviews before make purchasing decision. Hence, it highlighted that more consumers would read the online reviews when online shopping. In addition, based on the local consumer review survey (Figure 1.2), it shows 66% of respondents used PC or Mac to read the online reviews in 2019. Based on Figure 1.3, most of the shoppers will read between 1 and 3 online reviews before make purchasing decisions in both 2019 and 2021, which are 35.8% and 36.4% respectively. Moreover, according to study of Lackermair, Kailer and Kanmaz (2013), it reveals there are 74.04% of total 104 respondents are rated online reviews as important, while there are 4.80% think that

reviews are unimportant. Hence, in this study, there are some variables that need to explore and investigate in terms of online review's influences in Malaysia.

Figure 1.2: Devices that used by consumers to read reviews
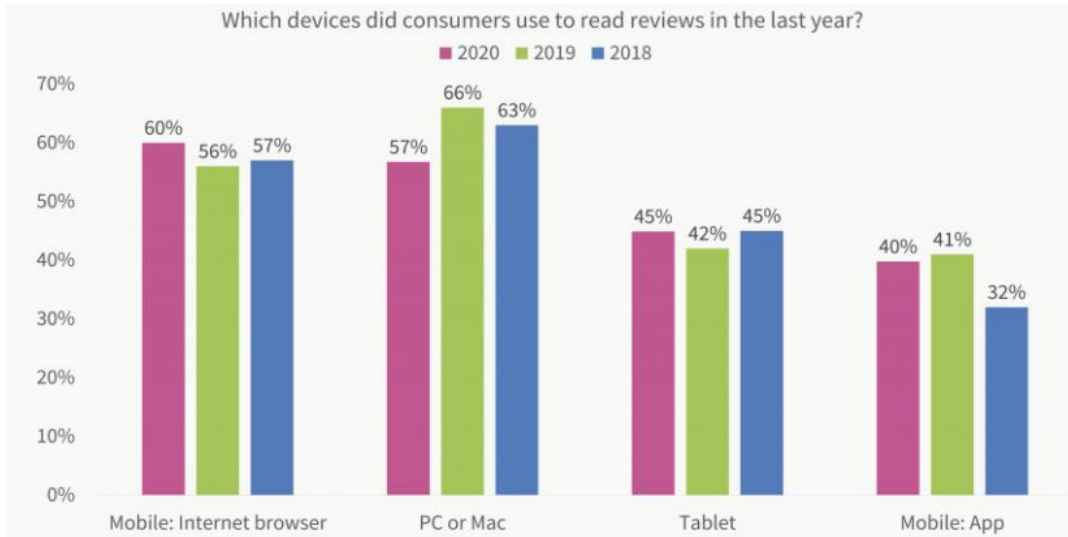
Source: BrightLocal. Ltd. (2020). *Local consumer review survey 2020.* Retrieved from https://www.brightlocal.com/research/local-consumer-review-survey/

Figure 1.3: Number of reviews that consumer will read before make
purchase
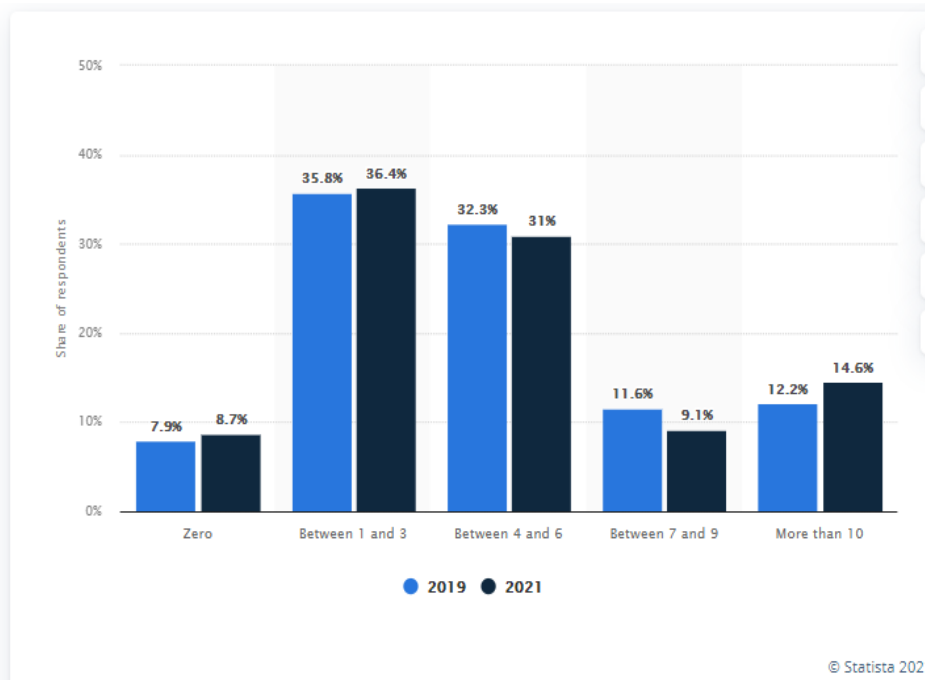
Source: Tighe, D. (2021). *How many reviews do you typically read before make a
decision to purchase? Statista*. Retrieved from
https://www.statista.com/statistics/1020836/share-of-shoppers-reading-
reviews-before-purchase/

There are two general types of consumer reviews in online platform, which are
average ratings that providing product's overall perceived quality and the single
reviews that describing personal experiences with specific products (Von Helversen,
Abramczuk, Kopeć, and Nielek, 2018). Based on the survey conducted by
Brightlocal (2020), it demonstrated that 84% of respondents are most concerned
about overall star rating (Figure 1.4). Besides, Zinegele and Weber (2015) indicated
although average ratings were significant, but single vivid narrative are more
persuasive. In addition, consumers will believe negative reviews have more value
than positive reviews in marketing fields, however negative review will decrease
purchase intention (Cui et al., 2015).

Figure 1.4: Review factors that consumers care most
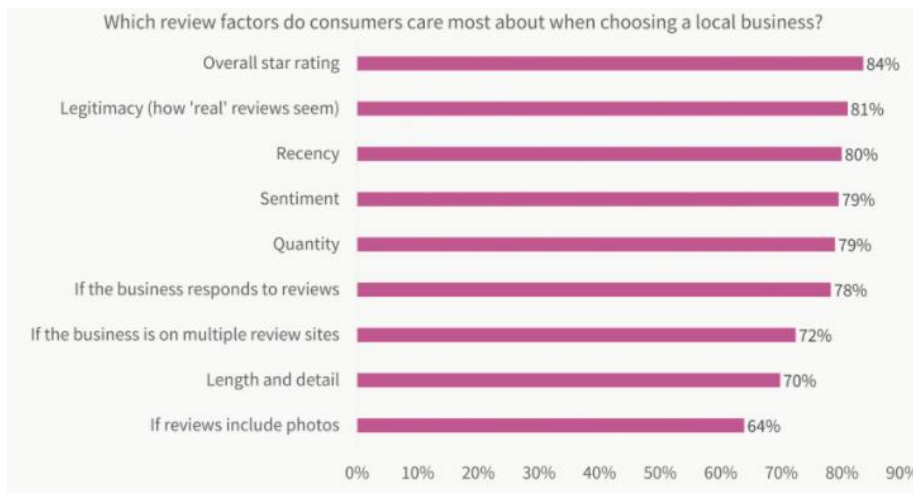
Source: BrightLocal. Ltd. (2020). *Local consumer review survey 2020.* Retrieved
from https://www.brightlocal.com/research/local-consumer-review-survey/

According to Dhahak and Huseynov (2020), businesses can use online reviews to develop highly effective marketing strategy in which consumers write reviews to aid future consumers in getting their products. By these online reviews, businesses able to identify areas to improve their products or services, ultimately, enhance the customer trust by allowing contrary reviews.

For the limitation, based on some previous studies, it was less highlighted about how online reviews creates purchase intention among the Malaysian shoppers. Still, some of the research was not accurate due to target all respondents from the same geographic area. Based on Cheong, Muthaly, Kuppusamy and Han(2020), their research was only carried out in Federal Territory of Kuala Lumpur, so cannot represent entire Malaysia. Hence, this study will not adopt sampling location. Despite extensive research on online purchase intention, but there is lack of understanding of what review factors influence the purchase intention in Malaysia context (Al-Hassani, Khakimova and Aldadaa, 2020). Therefore, this study intended to examine the influence of online reviews towards purchase intention in Malaysia because of less studies to explain these impacts.

1.2 Problem Statement

In today's world, online reviews play critical role as an influencer factor, because consumers are sharing their post-purchase experiences through online (Dhahak and Huseynov, 2020). In theory, online reviews should improve the consumer's ability to judge unobservable quality. However, the possible existence of fake or "promotional" online reviews is an important obstacle in revealing product quality (Mayzlin, Dover and Chevalier, 2014). A fake review is inconsistent with true evaluations of the products or services; hence, fake reviews are deceptive, false and bogus (Sahut, Laroche and Braune, 2021). Study of Salehi-Esfahani and Ozturk (2018) stated estimated 16% to 33% of reviews are fake in online. Undeniable, Kingdom Digital Solution (2018) stated Malaysia's online shopping platform has numerous fake reviews posted. Based on Local Consumer Review Survey 2020 (Figure 1.5), 80% of consumers believe they have read fake review in 2019.

Figure 1.5: Do consumers believe they have read fake review
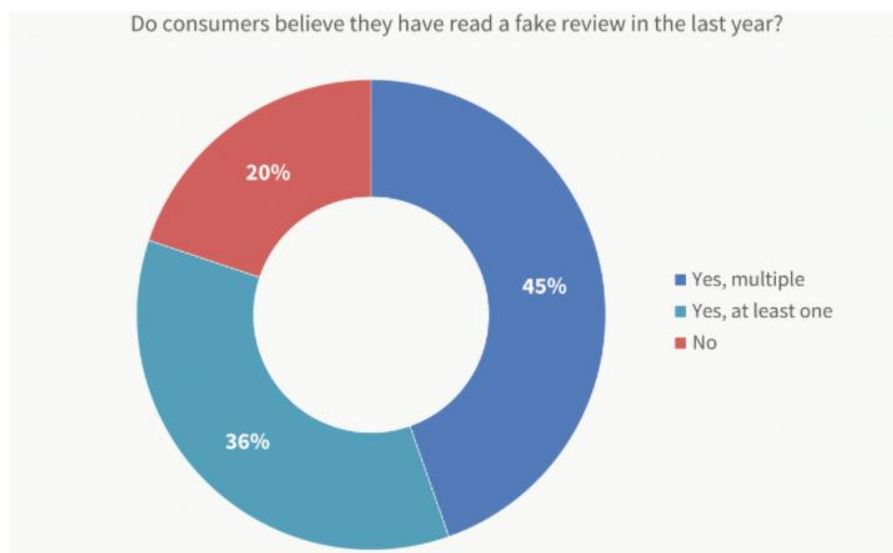
Source: BrightLocal. Ltd. (2020). *Local consumer review survey 2020.* Retrieved from https://www.brightlocal.com/research/local-consumer-review-survey/

Perceived information quality is determined by the persuasive power of the reviews, which is reflected in an informational message (Arora and Sharma, 2018). When consumers make purchase decisions, they not only search for product information, but also read reviews posted by others (Jiang, Liu, Liu, Chen and Xu, 2021). Nevertheless, consumers may not able to accurately judge the product quality, because they are not easy to obtain the true information (Liu and Park, 2015). This is because fake reviews lead to reduces informativeness and information quality (Sahut et al., 2021). According to Goswami, Park and Song (2017), stated some online businesses use reviews to spread fake information about a product, as fake information can boost product's sales or enhance their competitiveness. Hence, it is essential to understand whether information quality will affect purchase intention.

Information quantity refers to the number of online reviews available for a product (Thomas, Wirtz and Weyerer, 2019). A large number and long review that provides more details will be helpful for improving persuasive power (Li, Zhang, Xia and Chen, 2019). However, due to consumers' limited capacity to process all available information, it may lead to information overload (Milan, Bebber, De Toni and Eberle, 2015). According to Li et al. (2019), stated consumers may not buy a product if there is too much information provided but most are not useful for their purchase decision. Conversely, if too little reviews are provided, consumers may not enough information to make informed purchase decision. Zhang, Wu and Mattila (2016) indicated large amount of information in reviews is not always helpful, because mixed reviews may complicate the consumer's decision-making process. Therefore, it is crucial to understand whether information quantity will influence purchase intention.

Review credibility is perception of the message recipient regarding the trustworthiness of a message source (Tee, 2017). Nowadays, many consumers look for product-related information through Internet, so consumers generally trust the credible opinion of other consumers rather than opinions from experts (Arora and Sharma, 2018). Nevertheless, since many fake reviews exists, hence, these reviews

source are not always credible. Based on research of Goswami et al. (2017), stated review credibility is fundamentally destroyed due to fake reviews. Spread of fake reviews could systematically degrade the source reliability if the false information permeates the marketplace at scale (Salminen, Kandpal, Kamel, Jung and Jansen, 2021). Thus, for this study, it is a key to understand whether consumers' mind will be affected by review credibility when making purchase.

Review valence refers to the negative or positive nature of online reviews for certain products or services (Kordrostami, 2016). However, product's ranking in online marketplace can be affected either negatively or positively by fake reviews, since the online marketplaces' algorithms will use reviews as a signal in determining the ranking of product with other items in same product category (Gobi and Rathinavelu, 2019). Thus, fake review can deflate or inflate product's ranking, creating unfair competition (Salminen et al., 2021). End up, it will mislead consumers with false product's rating when they make a purchase. Previous study recommended that review valence variable can be study in future research which may influence purchase intention (Fang, 2014). In this study, it is essential to investigate whether review valence will affect consumers' purchase intention.

1.3 Research Objectives

The goal of this research is to overcome the problem statement stated above through the further developed specific objectives.

1.3.1 General Objectives

Main objective of this research is to examine the influence of online reviews affect the purchase intention in Malaysia.

1.3.2 Specific Objectives

The research objectives are as following:

1) To investigate the relationship between perceived information quality of online reviews and consumers' purchase intention in Malaysia.

2) To investigate the relationship between information quantity of online reviews and consumers' purchase intention in Malaysia.

3) To investigate the relationship between review credibility of online reviews and consumers' purchase intention in Malaysia.

4) To investigate the relationship between review valence of online reviews and consumers' purchase intention in Malaysia.

1.4 Research Questions

Following are the research questions which should figure out from the overall research.

1) Is there a relationship between perceived information quality of online reviews and consumers' purchase intention in Malaysia?

2) Is there a relationship between information quantity of online reviews and consumers' purchase intention in Malaysia?

3) Is there a relationship between review credibility of online reviews and consumers' purchase intention in Malaysia?

4) Is there a relationship between review valence of online reviews and consumers' purchase intention in Malaysia?

1.5 Research Significance

In this digital era, online reviews have the power to connect potential consumers to make purchase because it provides information to consumers. However, it is hard to maintain good relationship between online businessman and consumers, because both parties do not have physical contact with each other. As a result, online businesses are difficult to know what the expectation of consumers towards their products is. Thus, this research is to help the online businessman in clarifying the expectation of consumers. Based on the findings of this study, online businessman will be able to determine what aspect they need to make improvement to enhance

their business performance. Online businesses will be able to retain its current consumers and attract potential ones in the future by understanding the influence of online reviews which might affect consumers' purchase intention. Besides, this study also assists online businessman in strengthen their company's credibility against potential competitors, because most of the consumers will read online reviews before making transaction. Moreover, this study also helps online businessman in increasing their reputation by knowing their consumers' mind through online reviews. Once the businesses understand about which reviews factors do consumers care the most, they able to do some actions immediately to satisfy the consumers' needs.

Besides, for researchers who intend to conduct relevant studies in the future, this framework can be used to enhance and support the data reliability. Hereby, researchers identify the how online reviews affect purchase intention by using Uses and Gratification Theory and Stimulus-Response Model.

1.6 Conclusion

In this chapter, the statistics regarding the Malaysians tend to read online reviews before making purchase was discussed. Then, the following Chapter 2 will further discuss the review of variables with related to this research study.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

A literature review consists of journal articles, books and other academic resources pertaining to a specific research question (McCombes, 2019). In this chapter, it mainly discusses the relevant variables and theoretical framework that were explored in the previous studies. To support the research carried out in this chapter, secondary data which incorporated some resources has been utilized.

2.1 Underlying Theories

2.1.1 Uses and Gratifications Theory (UGT)

It was developed by Jay Blumler and Elihu Katz in 1974. Due to growing use of media technologies, research on the uses and gratifications theory are more vital to examine people's motivations for using media and how they get benefit from it (Vinney, 2019). According to Lim and Ting (2012), UGT theory is designed to explain the needs which shape the people's use of media and the reasons that motivate people to participant in certain media for fulfil their needs.

UGT was used to explore new media and communication technologies such as Internet, Facebook, and online games (Hossain, 2019). Internet users

normally intend to meet certain social needs and personal needs such as information seeking, enjoyment, and social presence. However, basically it is a theoretical framework that can utilized for develop hypothesis related how the online factors influence information-seeking behaviour (Guo, Shan and Yulei, 2020). Main objective of the UGT approach is to provides insight into the motivation behind consuming media content, and it also demonstrates how the media content interacts with its users (Hossain, 2019). Hence, there are many scholars have used this theory to study the motivators behind the use of most recent forms of media use such as information seeking.

Example of prior study that using UGT approach was conducted by Wu, Peng, Li and Chen (2016). Researchers were utilized this theory to examine the online consumers who loves to take part in the online shopping carnival on Singles' Day in China. In this study, the online consumers seek out a buying platform to gratify their interests and wants, as well as look for the good quality online seller in the certain platform.

Uses and Gratification Theory will be utilized in this study to explain the consumers seek for the online reviews before making a purchase through Internet. Online reviews were shared by other consumers about their first-hand experiences in the media. Thus, the online reviews will be used to gratify the consumers' needs because online consumers cannot touch, view and feel the products physically, only can rely on the product information from online reviews to judge the product.

2.1.2 Stimulus-Response Model

Figure 2.1: Stimulus-response model
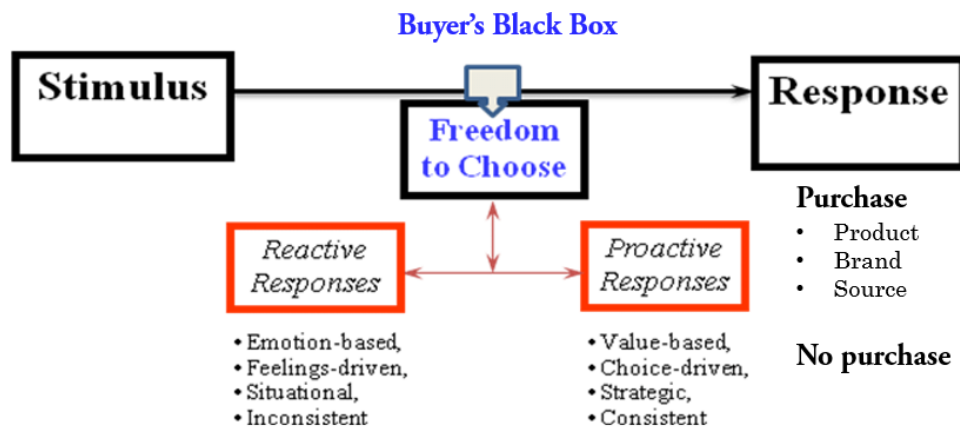
Source: Mujtaba, B. G. (2008). Interpersonal change through the" inside-out-approach": exercising the freedom to choose our responses during conflict and stressful situations. *RU International Journal*, *2*(1), 1-12.

Stimulus-response model of consumer behaviour provides useful insights into purchase behaviour of the consumers in the context of individuals buying consumer goods (Kanagal, 2016). Stimulus-response theory was developed by Edward Thorndike. It is a concept in psychology that describes the belief that about the interaction of stimulus and response. According to this philosophy, an individual that receives a stimulus, then responds to it, and ultimately produces "behaviour". Besides, the marketers require to know how the stimuli are converted into reactions inside the consumers' minds, the buyer's black box (Claessens, 2015).

An example of past study utilized stimulus-response(SR) theory was conducted by Chen and Li (2020). It is to examine the influence of online shopping festival promotion strategy affects consumer participation. This

theory is often used to study the consumer behaviour towards online shopping to explore the relationship between influencing factors and consumer behaviours (Chen and Li, 2020).

Hence, stimulus-response model will be utilized in this study to understand the influence of online reviews affect the purchase intention in Malaysia. In this study, online reviews factors such as perceived information quality, information quantity, review credibility and review valence act as stimulus, which may stimulate the consumers' purchase intention (responses).

2.2 Reviews of Variables

Review of variables is to indicate how the several variables were defined by past researchers based on the related research topics.

2.2.1 Purchase Intention

Purchase intention defined as the subjective likelihood that consumers intend to purchase products, which can be predicted for consumers' purchase behaviors under certain conditions (Martin, Costa, Oliveira, Goncalves & Branco, 2019). Based on Mirabi, Akbariyeh and Tahmasebifard (2015), stated purchase intention is kind of decision-making that investigates the reason for buying a particular product. Morwitz (2014) indicated the higher the purchase intention is, the higher chance of purchasing a product.

In the business word, purchase intention is important because increasing purchase intent will promote more profitable businesses (Xiao, Yang and Iqbal, 2019). In addition, Nam, Dong and Lee (2017) highlighted that consumer's purchase intention determines if a product meets consumers' expectations. Jarrah (2018) indicated that it is essential to determine consumers' purchase intention since it considered as significant tool in safeguarding a business competitive advantage. Further, buying intention are crucial to long-term business success, which helps to retain consumers.

Past study conducted by Mirabi, Akbariyeh and Tahmasebifard (2015) with 384 valid respondents in Tehren. It aimed to understand the factors influencing on the purchase intention of Bono brand tile. Research questionnaire was distributed through random sampling method and the data were analysed by using multiple regression analysis and confirmatory factor analysis (Mirabi et al., 2015). According to the finding of study, variable of brand advertising, name, and product quality had the highest effect on purchase intention.

Another prior study from Zhen, Pandey, Traiwanmakij and Samarkjarn (2021) in China with 273 respondents. It aimed to analyse the consumer's online purchase intentions with perceived reputation, convenience variable, consumers attitude and perceived risk. Online and offline questionnaires were distributed to Chinese consumers who have ever used the JD.com services (Zhen et al., 2021). Findings showed that perceived reputation, convenience variable and consumers attitude have positive relationship with consumers' online purchase intention, while perceived risk have negative correlation with purchase intention (Zhen et al., 2021).

Research from Hidayat, Wibowo, Gunawan, Dewi and Wijayaningtyas (2021) conducted in Indonesia, which investigate subjective norms and

health value effect on purchase intention toward hand sanitizer with 160 respondents. Also, attitude act as intervening variable in this study. The results showed subjective norm will influence purchase intention, while health value will not influence purchase intention (Hidayat et al., 2021). Data analysis reveals that attitude has a significant impact on purchase intention.

2.2.2 Perceived Information Quality

Perceived information quality defined as the dimension of accuracy and completeness in providing information that meets the expectations of the information users (Leong, Loi and Woon, 2021).

A better-quality information can lead to better decisions (Machdar, 2019). High quality of product information may satisfy consumers' needs, and consumers can rely on the quality of information provided through online (Al Zoubi and Hashem, 2015). Thence, competitive advantage arises when product meets the needs of consumers better and cheaper than the products of any competitors (Al Zoubi and Hashem, 2015).

Based on previous study from Wandoko, Panggati and Sukmaningsih (2020), to examine the effect of perceived information quality, reputation, e-WOM towards e-trust and e-loyalty in Indonesia retail sectors with 406 respondents. In this study, the reputation, perceived information quality and e-WOM act as independent variables, e-trust act as mediator variable and loyalty act as dependent variable. Results indicated the perceived information quality has positive impact on e-trust and e-loyalty.

Based on study of Hanjaya, Kenny and Gunawan (2019), which is to evaluate the ease of use, usefulness, system quality, perceived information quality and service quality towards consumers' online purchase intention through mobile app with 100 samples. Result showed usefulness and perceived information quality have significant effect on online purchase intention in Indonesia (Hanjaya et al., 2019).

Another study from Prastiwi and Iswari (2019) with sample of 100 respondents, to examine the consumers' impulse buying behaviour which involves perceived information quality and price towards consumers repurchase intentions. Trust as a mediator variable in the study. Findings indicated that both price and perceived information quality have positively influence consumers' impulse buying (Prastiwi and Iswari, 2019).

2.2.3 Information Quantity

Information quantity is the amount of information that available through online for consumers to obtain the product information (Zhong, Qu, Chen, Liao and Xiao, 2021). Number of reviews not only indicate the products' performance on the market, but also the popularity of a product (Arora and Sharma, 2018). Arora and Sharma (2018) stated information quantity in consumer reviews is the total number of comments available for consumers to make purchasing decision.

Information quantity considered as important factor when making decisions (Goswami,2015). When perceived large amount of information in reviews, the consumers will tend to convince themselves that the product is popular since many other consumers have bought it (Huyen and Costello, 2017).

Consequently, information quantity may reduce potential risk exposure concerns while potentially increasing consumer confidence.

Past study of Fu, Bin, Xie, Liuli and Yu (2011) with respondents of 320 undergraduates in Southwestern University of Finance and Economy, China, which is to investigate the influence of eWOM timeliness and information quantity on consumers' purchase intention when purchase different products. Consumer trust variables as mediator variable in the study. Researchers have adopted Multiple Regression technique to analyse the data. Findings illustrated that the timeliness and information quantity have significant influences on consumer trust, which have positive relationship on purchase intention (Fu et al., 2011).

Danish, Hafeez, Ali, Shahid and Nadeem (2019) has investigated the influence online reviews on hotel booking intentions in Pakistan by using mediational mechanism with 195 respondents. The independent variables are realism, positive reviews, information quantity and negative reviews. Trust act as mediator variable in this study. Findings showed that the information quantity, realism and positive reviews have the significant relationship on hotel booking tension with trust, while negative reviews have indirect impact on the hotel booking intention (Danish et al., 2019).

Another prior study conducted by Lkhaasuren and Nam (2018) with 321 Mongolian respondents, to examine the impact of e-WOM on purchase intention towards Korean cosmetic products. Results indicated that information quality and credibility showed a significant impact on Mongolian consumers' purchase intention, while information quantity have no significant impact on purchase intention towards Korean cosmetic products (Luhaasuren and Nam, 2018).

2.2.4 Review Credibility

Review credibility defined as the degree to which reviewer can be trusted and seen as a credible source of product information to provide accurate information (Shan, 2016). Also, Leong et al. (2021) claimed that review credibility is the credible sources that provide valuable information and facilitate the transfer of knowledge, but it is also a vital aspect in persuasion process.

Review credibility is important in the online environment because it facilitates consumer trust and decrease perceived risk inherent in online recommendations (Hsieh and Li, 2020). This is because that purchasing decisions are frequently influenced by other consumers' evaluation when consumer lacks first-hand experience towards the products (Hsieh and Li, 2020). Trusted sources of reviews will influence consumers to create a sense of reliability, which will lead to increase consumers' purchase intention (Rizaldi, Suliyanto and Suwandari, 2020). Adding on, Hsieh and Li (2020) also claimed that often consumers have limited information regarding products before making purchase decision, so they assess the credibility of received messages based on available cues.

Chiou, Hsiao and Chiu (2018) demonstrated the differences between low and high knowledge consumer on the credibility of online review with attribution theory and accessibility-diagnostic theory, with 364 respondents. Results indicated that perception of review credibility in high-knowledge consumers is lower, and they make more non-product-relevant attributions than low-knowledge consumers in the negative reviews (Chiou et al., 2018). Besides, consumer attribution which act as mediator variable have mediate the impact of consumer knowledge interaction on review credibility.

Chih, Hsu and Ortiz (2020) have conducted a study about the impacts of interpersonal determinants (homophily and tie strength) and informational determinants (customer endorsement and source trustworthiness) on review credibility, which may influence attitude toward Fan Page(ATFP), attitude toward product(ATP) and review adoption, with 402 responses (Chih et al., 2020). Findings reveal that homophily, tie strength, customer endorsement and source trustworthiness have significant positive effect on review credibility. Besides, review credibility has significant positive impact on ATP, ATFP and review adoption.

Another past research conducted by Rusdiana, Suroso and Suwandari (2020) with 230 valid respondents. Research objective is to determine the impact of source homophily, source trustworthiness, source expertise and review credibility on purchase intention. Consumer involvement act as moderating variable in the study with elaboration likelihood models. Results reveal that source expertise, review credibility, source homophily and source trustworthiness have effect on consumer purchase intention, however, consumer involvement does not moderate the influence of four independent variables (Rusdiana et al., 2020).

2.2.5 Review Valence

Review valence refers to effective indicators of consumers' opinions, which enhances the products' awareness with relatively scarce information (Wang and Kim, 2021). Review valence usually defined as the average rating of consumers' opinion towards a product and normally it will be used by five-star rating system (Elwalda & Lu, 2016).

Wang and Kim (2021) demonstrated that review valence determines a general opinion towards a product, and its information can be considered reliable for buying decision if the reviews are consistent. Moreover, Zhong et al. (2021) stated positive review may strengthen consumers' belief on the products, which help in enhance purchase intention, however, negative reviews demonstrated dissatisfaction of consumer, which may have adverse impact on consumer attitude.

A prior study from Han, Qu and Zhang (2019) with 446 valid respondents, to investigate the review valence, disease risk and trust influence health consumer' choices when exposed to neighbour-recommend physician. Findings indicated that review valence have positive relationship with physician selection. Positive reviews have greater impact than negative reviews on physician selection, because consumers were more likely to choose physicians with positive reviews (Han et al., 2019). Besides, disease risk also significant influenced the consumers' physician selection. Consumers with high-risk disease more likely to select the neighbour-recommend physician who has positive online reviews than low-risk diseases. Further, trust was positively related with physician selection who had positive reviews.

In addition, another past research from Lo and Yao (2019) in Hong Kong, to examine the interaction effect of reviewer expertise, review valence and review rating consistency on the perceived credibility towards hotel online reviews. The results reveal that review expertise, review rating consistency and review variance have significant effect on perceived credibility of hotel reviews (Lo and Yao, 2019). Besides, the reviews with consistent rating, written by experts and negative reviews are perceived as having greater credibility.

Yang, Sarathy and Walsh (2016) has determined the impact of review valence and review volume on the consumers' perceptions and purchase intention with 382 respondents. Findings demonstrated that review valence has stronger effect on consumers' perception and purchase intention (Yang et al., 2016).

2.3 Review of relevant theoretical model

2.3.1 Perceived information quality

Figure 2.2: Theoretical model of perceived information quality
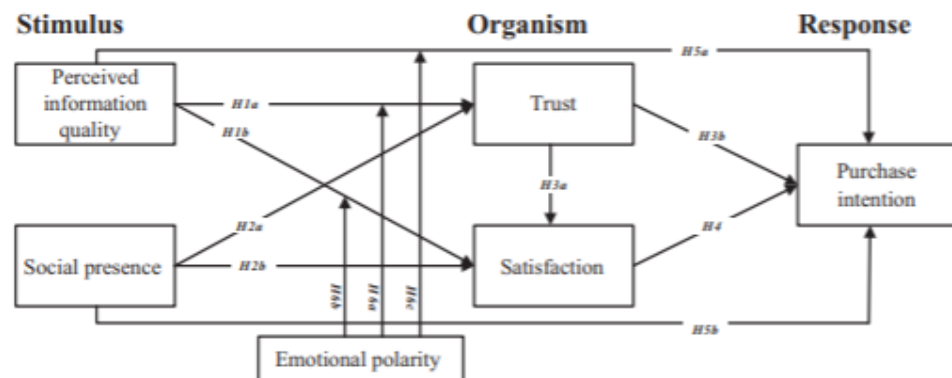
Adopted from: Zhu, L., Li, H., Wang, F. K., He, W., & Tian, Z. (2020). How online reviews affect purchase intention: a new model based on the stimulus-organism-response (SOR) framework. *Aslib Journal of Information Management, 72*(4), 463-488.

Figure 2.2 showed the framework that explore the intrinsic relationship between the perceived information quality and social presence generated from the online reviews towards purchase intention.

Perceived information quality variable from the framework by Zhu et al. (2020) will be adopted to create the proposed framework for this research. While other variables (social presence, trust and satisfaction) are not adopted, because other variables are kind of a respondent's emotional which is not consistent with the theory employed (Stimulus-Response model) in this study. Besides, this study will be only focus on the review factors which may influence purchase intention.

2.3.2 Information quantity and review credibility

Figure 2.3: Theoretical model of review quantity and review credibility
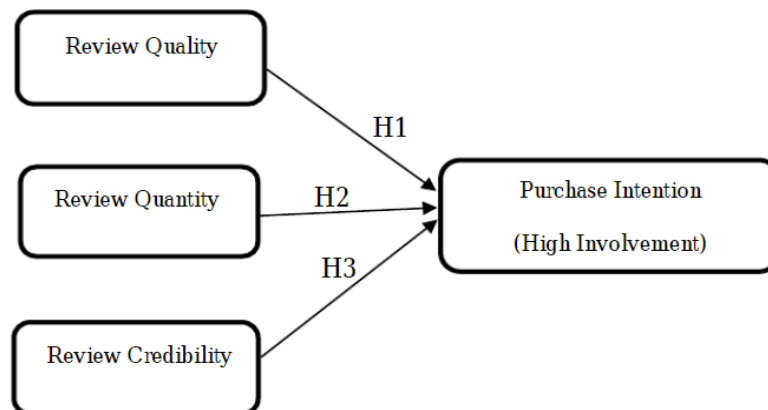
Adopted from: Arora, L., & Sharma, B. K. (2018). Influence of review quality, review quantity and review credibility on purchase intention in the context of high involvement products. *European Journal of Applied Business Management, 4*(4), 25-40.

Figure 2.3 indicated the framework that investigate the influence of review quality, review quantity and review credibility on purchase intention towards high involvement products.

Thus, review quantity and review credibility variables from the framework by Arora and Sharma (2018) will be adopted to create proposed framework for this research. While the review quality is not adopted, because the researcher will be more tend to the term of "perceived information quality" in the review, because it is more specific than "Review quality". The review quality variable is too broad, as it can be considered as the uniqueness of the review, the accurate of the review, or even the completeness of reviews (Thomas, Wirtz and Weyerer, 2019).

2.3.3 Review Valence

Figure 2.4: Theoretical model of review valence
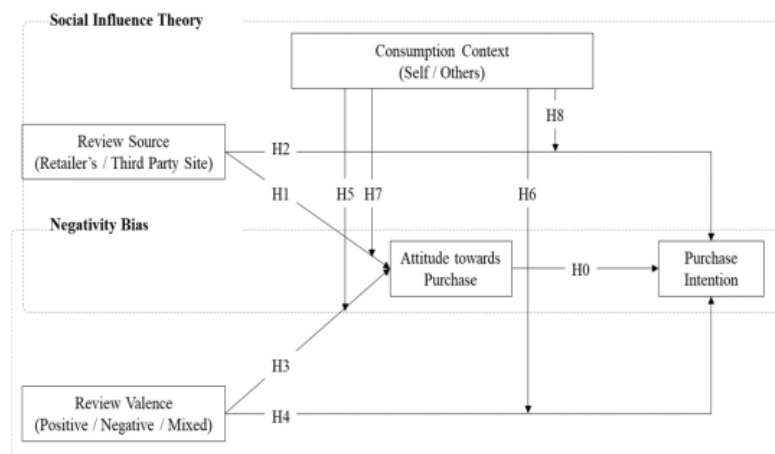
Adopted from: Tata, S. V., Prashar, S., & Gupta, S. (2020). An examination of the role of review valence and review source in varying consumption contexts on purchase decision. *Journal of Retailing and Consumer Services*, *52*, 1-10.

Figure 2.4 indicated the framework that examine the influence of review valence and source of online reviews on consumers' attitude and ultimately consumers' purchase intention. The framework adopted also investigate the indirect effects moderated by consumption context on the relationship.

Review valence variable from the framework by Tata et al. (2018) will be adopted to create proposed framework for this research. Nevertheless, the other variables are not taken into consideration, because this research only focus on the review factors that affect purchase intention. Besides, the variable of Review Source from Tata et al. (2018) study is not adopted, because the researcher utilized "Review Credibility" instead of "Review Source". This is because that the researcher wants to examine whether the credibility of the reviews will affect purchase intention. Fang (2014) suggested future researchers can study review valence.

2.4 Conceptual Framework

Figure 2.5 showed the proposed conceptual framework that would be used in this research project.

Figure 2.5: Conceptual Framework
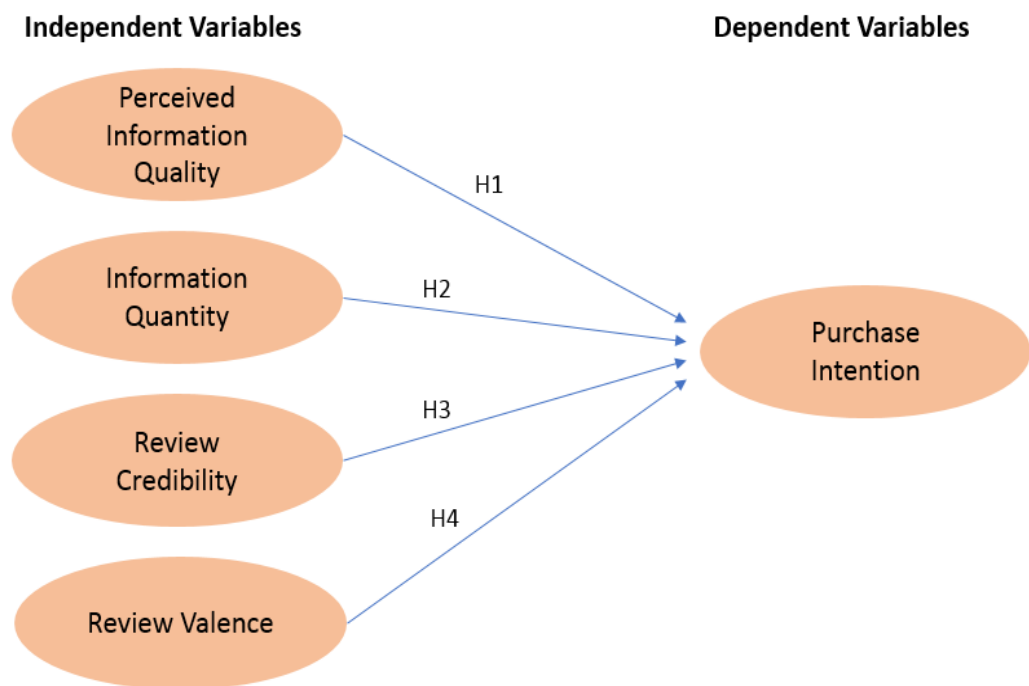
Source: Developed for the research

2.5 Hypothesis Development

2.5.1 Relationship between perceived information quality and purchase intention

Perceived information quality refers to the information available to public that is accurate and satisfy with the needs of consumers. Consumers may evaluate and judge the information quality based on the accuracy of the information (Milan, Bebber, De Toni and Eberla, 2015). High quality of information in online reviews has strong influence on the product evaluation as well as result in increased purchase intention (Jiang et al., 2021).

Previous study of Halim, Rianto and Hebrard (2020) with 438 respondents, which study about the impact of marketing influencer and perceived information quality on purchase intention towards Instagram users in Jakarta, Indonesia. Findings showed perceived information quality have positively impact towards Instagram users' purchase intention. In addition, study of Liao, Huang and Liu (2021) revealed that perceived information quality has positive relationship with online purchase intention in Taiwan with sample of 193 undergraduate students. Further, past research from Wirani, Diniputri and Romadhon (2020), which is to determine the influence of information quality, information seeking, and familiarity on purchase intention in Indonesia with 175 samples. Findings revealed that the perceived information quality have significant positive relationship with purchase intention among Instagram Users in Indonesia.

However, according to study of Wei, Wang, Zhu, Xue and Chen (2018), indicated that perceived information quality in website have no impact with

purchase intention towards fruits. Furthermore, Hasanov's and Khalid's (2015) study found that there is no correlation between perceived information quality in website and purchase intention towards organics food in Malaysia. Besides, findings from study of Fernandus and Legowo (2020), demonstrated that perceived information quality had no significant impact on consumers' purchase intention towards E-Commerce in Jakarta, Indonesia.

H1: There is a relationship between Perceived Information Quality in online reviews and consumers' purchase intention in Malaysia.

2.5.2 Relationship between information quantity and purchase intention

Information quantity in online reviews refers to the number of comments available online regarding the product information. Number of reviews indicated that the product's market performance and product's popularity (Eberstadt, 2017). Hence, a good amount of information that posted by existing consumer may increase the purchase intention.

Prior study from Zhou, Liu and Tang (2013), which investigate how the online reviews affect consumers' purchase intention. Findings indicated there was positive effect between information quantity and purchase intention when online shopping. Moreover, past study from Ismagilova, Slade, Rana and Dwivedi (2020), to study eWOM factors influencing purchase intention. Findings reveals that a positive relationship between information quantity and purchase intention. Furthermore, based on study conducted by Huyen and Costello (2017) with 223 respondents, which

examine impacts of eWOM on individual's purchase intention towards coffee shop in Hanoi, Vietnam. Result was showed that information quantity has strong effect on consumer's buying intention. Researchers highlighted that the large number of coffee shop reviews will lead to higher purchase intention.

Nevertheless, from Kevin, Wahab's and Shihab's (2020) study, indicated the information quantity of online review has no significant effect on purchase intentions in Tokopedia application. In addition, based on study of Arora and Sharma (2018) with 455 respondents, reveals that there is no significant impact between information quantity of online reviews and purchase intention towards high-involvement products. Based on Fong, Kian, Fern and Quan (2018), results proved there is no significant correlation between information quantity and the purchase intention towards hotel booking in Malaysia.

H2: There is a relationship between Information Quantity in online reviews and consumers' purchase intention in Malaysia.

2.5.3 Relationship between review credibility and purchase intention

Review credibility refers to the source of information in online review that can influence the persuasiveness of consumers (Ismagilova et al, 2020). The higher the review credibility, consumer will more trust the reviews, which ultimately increased purchase intention (Chakraborty, 2019).

Prior study of Thomas, Wirtz and Weyerer (2019) with 282 samples, which examine the determinants of review credibility affect purchase intention. Findings showed there is positive relationship between review credibility and purchase intention in Germany. Furthermore, prior study from Tee (2017), which study about the impact of review credibility on purchase intention in Malaysia with 120 university students. Findings showed review credibility has positive relationship with purchase intention. Adding on, study conducted by Shukla and Mishra (2021) with a sample of 310 travellers in India, which examine the effect of online reviews on purchase intention for booking hotel online. Results revealed that there is a positive effect of review credibility on purchase intention.

However, past study of Muda and Hamzah (2021) with 272 respondents, showed no effect of review credibility of user generated content in YouTube on purchase intention. Besides, study from Johansen and Hovland (2012) with 253 respondents, reveals that no significant effect of review credibility on purchase intention. Moreover, Bilgen's and Zoghi's (2017) study with sample size of 280, showed no influences of review credibility and online purchase intention.

H3: There is a relationship between Review Credibility in online reviews and consumers' purchase intention in Malaysia.

2.5.4 Relationship between review valence and purchase intention

Review valence is the average rating that reflected by the distribution of star rating for the product. With general understanding, one- to two-star

considered as negative, three-star reviews considered as neutral and four- to five-star considered as positive (Yang et al., 2016). More positive reviews may result in stranger purchase intention (Zhang et al., 2020).

Based on Van Lohuizen and Trujillo-Barrera (2020), which is to investigate the influence of online reviews on purchase intention towards restaurant, with 256 respondents. Findings demonstrated that review valence has significant direct effect on purchase intention in service industry. Adding on, prior study from Cheong et al. (2020), with 215 millennials respondents in Malaysia. Findings reveals that there is a significant correlation between review valence and online purchase intention towards electronic product. Furthermore, past study conducted by Sutanto and Aprianingsih (2016) which aimed to clarify the effect of online review to purchase intention in premium cosmetic product in Indonesia. Results indicated that there is significant positive relationship between review valence and purchase intention towards premium cosmetic product.

Nevertheless, prior study from Togas, Kindangen and Tumbuan (2019) reveals that the review valence has no relationship with purchase intention towards online hotel booking. Further, study from Qiu (2017) proved that there is no evidence to support the relationship between review valence and purchase intention.

H4: There is a relationship between Review Valence in online reviews and consumers' purchase intention in Malaysia.

2.6 Conclusion

In this chapter, it discussed the overview of each variable derived from relevant and prior studies. Relevant theoretical models and underlying theories are adopted to form proposed conceptual framework of this study. Hypotheses were developed. In next chapter, research methodologies used will be discussed.

CHAPTER 3: METHODOLOGY

3.0 Introduction

This chapter illustrates the research methodologies used for collecting and analyzing the data in systematic manner. With the information provided, readers can have better understanding and evaluate overall validity and reliability of study.

3.1 Research Design

Research design is the framework from which research techniques and methods are taken by researcher.

3.1.1 Quantitative Research

According to Apuke (2017), quantitative research approaches defined as a phenomenon that can be studied mathematically with the aid of statistics and numerical data collection. Eyisi (2016) remarks that quantitative research focused on numbers and figures in the collection and analysis of data. In addition to saving time, it is also considered less cost-effective as it uses a representative sample of the population to represent its interests (Eyisi, 2016). Thus, in this research, quantitative data collected from the survey questionnaires will be used to analyse by using the computer

programs and will be converted into useful information to test for hypothesis of this study.

3.1.2 Descriptive Research

Descriptive research is kind of the research that involves describing a phenomenon or population's characteristics such as the age, ethnic, and gender (Siedlecki,2020). It aims to answers who, where, what, when and how (Swatzell & Jennings, 2007). Further, it helps to develop a deeper understanding of the data obtained in research investigations as well as help to simplify a great deal of data in a clever manner. Thus, in this study, researcher used quantitative research method to perform statistical analysis of the population sample. Under quantitative data, researcher may describe the sample's characteristic in terms of percentage or mean. Thus, descriptive research was adopted in this research to identify the relationship between online reviews factors that affect purchase intention in Malaysia.

3.2 Sampling Design

A sampling procedure is defined as the selection of sample from a large group of population for certain types of the research purpose (Bhardwaj, 2019). It is the specific approach, framework or method that research that guides the selection of a survey sample.

Figure 3.1: Sampling process steps
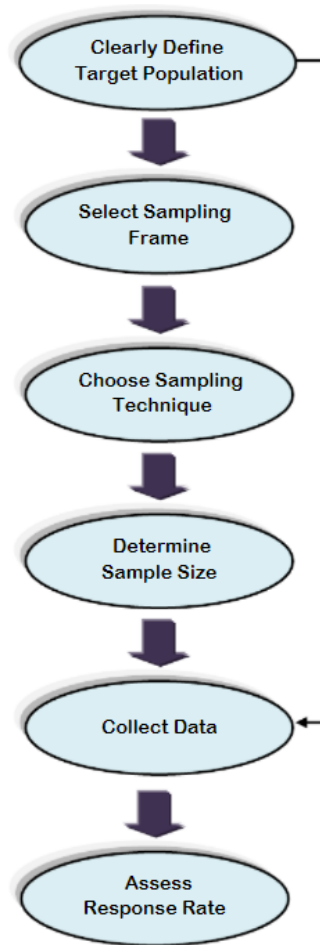
Source: Taherdoost, H. (2016). Sampling methods in research methodology;
how to choose a sampling technique for research. *International
Journal of Academic Research in Management (IJARM),5*(2),18-
27.

3.2.1 Target Population

Target population refer to a group of individuals who share similar
characteristics and are identified as the intended audience for the research
(Asiamah, Mensah and Oteng-Abatie, 2017). Thence, target population of

this research are Malaysian who have the experience of use e-commerce website or social media platforms for purchase products through online because researchers can examine the behaviour of target population about whether they have read reviews before buying a product, as they are more likely to access the online reviews. Thus, they are considered to have better understanding and perception towards the influence of online reviews factors.

3.2.2 Sampling Location and Sampling Frame

Sampling frame is set of individuals that can be selected from the target population based on the sampling process used in the study (Martínez-Mesa, González-Chica, Duquia, Bonamigo, and Bastos, 2016). However, this research does not specify a specific institution or location where to conduct the survey as Malaysia is the sampling location in this study. This is because researcher wants to examine the purchasing behaviour of entire nation, Malaysia. If specify sampling location in this study, the result will be not accurate as the samples in particular states/locations cannot represent entire population in Malaysia. Researcher targeted the Malaysian who have experience of purchase a product through online as the respondents of this study. In addition, there is no restriction of gender, ethnicity, religion, and education level in this study.

3.2.3 Sampling Element

Sampling elements is the unit of analysis in a population that is being investigated, where it could be a person, group, or an organization (DJS

Research, 2022). Sampling elements for this study are the Malaysian, who have experience of purchase a product through online.

3.2.4 Sampling Techniques

Figure 3.2: Sampling techniques
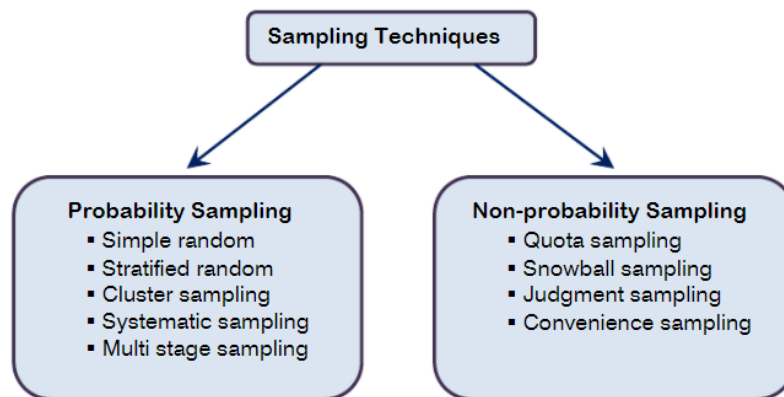
Source: Taherdoost, H. (2016). Sampling methods in research methodology; how to choose a sampling technique for research. *International Journal of Academic Research in Management (IJARM), 5*(2), 18-27.

Sampling technique is an identification of specific processes based on the chosen entities of the sample. Based on Zikmund, Babin, Carr and Griffin (2013), sampling techniques can be classified into probability sampling and non-probability sampling. Probability sampling defined as each member of the population has a known probability of being chosen as sample (Bhardwaj, 2019). While non-probability sampling method is the selection of participants is based on the non-random criteria, and not every individual has an equal chance of being chosen (McCombes, 2019).

In present study, non-probability sampling method is being adopted due to time-effective and cost-effective. Under the non-probability sampling categories, **convenience sampling method** is chosen because it is convenient, inexpensive, and quick, thus it will be easy for researcher to acquire the source of data (Jager, Putnick and Bornstein, 2017). Under convenience sampling technique, researcher can choose the samples based on their accessibility, availability, and proximity (Elfil and Negida, 2017). Thus, due to time constraint, convenience sampling can provide help researchers to get insights in a shorter period and without investing too much money. Gaille (2020) stated it is the most affordable information-collecting alternatives for researcher.

Survey questionnaires of this study will be distributed through online platform via Google Form, which makes it more convenience for respondents to access.

3.2.5 Sampling Size

Sample size refers to the subset of a population required to ensure sufficient information is available for the purpose of drawing conclusions (Memon, Ting, Cheah, Ramayah, Chuah and Cham, 2020). An ideal sample size can increase study's precision, because if the sample size too small may result in unreliable result or sample size too big may require a lot of time and resources.

Saunders, Lewis and Thornhill (2007) suggested that minimum of 384 samples shall be used for quantitative research to maximize the precision and accurate of results. Thus, sample size of this study will be calculated by

using the Cochran formula as Figure 3.3 shown. In this study, the confidence level is 95%, sample proportion is 50% and margin of error is 5%, thus, sample size recommended by Cochran formula is 384.

Figure 3.3: Cochran formula

Cochran Formula:

n_0	= Cochran's sample size recommendation
n	= Adjusted for smaller sample size
Z	= Z value (confidence level)
p	= sample proportion
e	= margin of error
N	= population size

$$n_0 = \frac{Z^2 pq}{e^2}$$

Calculation:

Estimated p = 0.5; 95% confidence level; at least 5% plus and minus precision

(Z value of 95% confidence level : 1.96)

$$n_0 = \frac{Z^2 pq}{e^2}$$

$$n_0 = \frac{1.96^2 \ x \ 0.5(1 - 0.5)}{0.05^2}$$

$$n_0 = \frac{0.9604}{0.0025}$$

$$n_0 = 384.16$$

$$n_0 = 384 \ (Sample \ size \ recommended \ by \ Cochran's formula)$$

Source: Adopted for the research

Table 3.1: Determining sample size for a given population

Population	Margin of error			
	5%	3%	2%	1%
50	44	48	49	50
100	79	91	96	99
150	108	132	141	148
200	132	168	185	196
250	151	203	226	244
300	168	234	267	291
400	196	291	343	384
500	217	340	414	475
750	254	440	571	696
1 000	278	516	706	906
2 000	322	696	1091	1655
5 000	357	879	1622	3288
10 000	370	964	1936	4899
100 000	383	1056	2345	8762
1 000 000	384	1066	2395	9513
10 000 000	384	1067	2400	9595

Source: Saunders, M., Lewis, P., & Thornhill, A. (2007). *Research methods
for business student* (4th ed.). England: Business Students 4th
edition Pearson Education Limited.

Saunders et al. (2007) stated that an increased sample size can reduces the
probability of error in generalizing the results. A sample size of 384 was
selected for this study. Also, from study of Fincham (2008), stated the
response rate approximating 75% is reasonable and should be the
researcher's goal. Hence, an expected non-response rate of this study is 25%.
As a result, a total set of 480 questionnaires survey were proposed and
distributed to target respondent to reduce the risk of receiving faulty results
from participants.

3.3 Data Collection Methods

Data collection is a procedure that involves the measurement and collection of information about variables in a systematic way (Kabir 2016).

3.3.1 Primary Data Collection

Primary data collection is the data obtained from original source, which is collected directly by the researchers for specific research purpose (Salkind, 2010). Kabir (2016) stated it is the data collected from first-hand experience such as experiment, interview, and questionnaire survey, which has not been published or altered by human-being.

In the present study, primary data collection has been adopted. Set of data was obtained through survey questionnaire by using Google Form. A total of 480 copies of survey questionnaires were distributed online to the targeted respondents. In contrast to secondary data, primary data can provide latest, reliable, and relevant perceptions from the targeted respondents, although it is more time-consuming and costly.

3.4 Research Instruments

Research instruments are the measurement tools that used to obtain data on a given topic of interest from research subjects (Sathiyaseelan, 2015). In this research study, it was designed with self-administrated questionnaire (SAQ). Based on Zikmund et al. (2010), self-administrated questionnaire is where the respondents take their

responsibility to read and complete the survey questionnaires without any help and presence of interviewer. Adding on, Mclntyre, Kless, Hein, Feilf, and Tung (2020) highlighted self-administrated questionnaire can more effectively and at less cost. Zikmund et al. (2010) reveals that interview bias can be eliminated because the respondents fill up self-administered questionnaires without assistance from interviews, thereby, it can reduce the likelihood of respondents give untrue responses. In this study, online questionnaires were conducted to gather the primary data from respondents.

3.4.1 Questionnaire Design

According to McLeod (2018), questionnaire is a research instrument that involves a series of questions that aiming to collect information from targeted respondents. It provides a quick and cheap way for researcher to gather large amount of information from samples. In this research, close-ended questions are utilised in the questionnaire. It gives respondents a set of limited options from which to choose the most appropriate response according to their own perceptions (Diaz, 2019). In addition, questionnaire in this study was designed in English language since it is considered an acceptable language for communicating with respondents.

In Section A, it consists of one screening question by asking the participants whether they have experience of using e-commerce website or social media platforms for purchase product. Purpose of this question is to screen out the non-online shopper to increase the accuracy of the result and avoid faulty or irrelevant results.

Section B is to gather information on the respondents' profiles. It consists of five demographic questions that requested respondents to provide their age, race, gender, monthly income, and occupation status. Multiple choice questions were utilised in this section.

Section C consists of five questions which are the basic information about the experience of reading online reviews while purchasing a product through online. Respondents must choose the one that best describes them.

In Section D, twenty-four questions involved that regarding the general opinion relates to the study's construct measurement in the four independent variables: perceived information quality, information quantity, review credibility and review valence; and one dependent variable: purchase intention. These variables will be used to investigate the relationship between independent variables and dependent variable upon information gathered from respondents via questionnaires. Respondents are required to use five-point Likert scale to answer the questions on each variable in this section suchlike 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree.

3.4.2 Pilot Test

Pilot test is a small feasibility study that is used to evaluate different aspects of the procedures that will be used in a larger, more detailed, and comprehensive investigation (Lowe, 2019). Major goal of pilot test is to prevent researchers from initiating a large-scale investigation without sufficient understanding of the methodologies offered; in other words, to

avoid the occurrence of fatal defect that is costly in money and time (Polit and Beck, 2017).

In this research, a pilot test of 30 samples was conducted on 7th January 2022 before the actual questionnaires were distributed, to eliminate faults and mistakes in the final survey questionnaires. Cronbach's Alpha was used to analyse the pilot test internal reliability and the results are reported in Table 3.2. All the variables of Cronbach alpha values are more than 0.70, which considered as acceptable internal consistency and satisfactory.

Table 3.2: Reliability Test Result of Pilot Test

No.	Construct	Cronbach's Alpha	Number of items	Strength of Association
1	Perceived Information Quality	0.801	5	Good
2	Information Quantity	0.795	4	Acceptable
3	Review Credibility	0.869	5	Good
4	Review Valence	0.757	4	Acceptable
5	Purchase Intention	0.807	6	Good

Source: Developed for the research

3.5 Constructs Measurement

3.5.1 Scale Measurement

According to Dalati (2018), scale measurement can be classified by four levels, which are comprised of nominal, ordinal, ratio and interval scales (Figure 3.4). In present study, nominal and ordinal measurement scales were utilized.

Figure 3.4: Levels of Scale Measurement
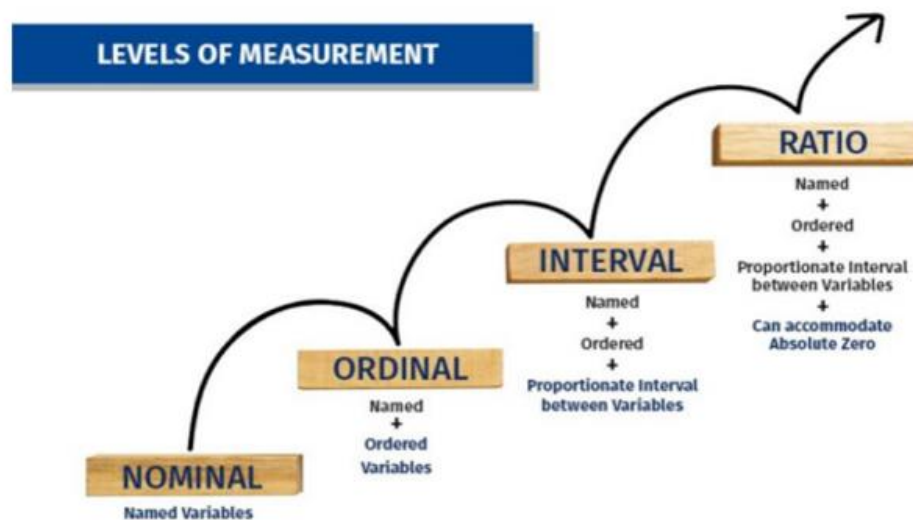
Source: Allanson, R. E., & Notar, C. E. (2020). Statistics as measurement: 4 scales/levels of measurement. *Education Quarterly Reviews,3*(3).

Nominal scale is the nominal data that merely names or characteristics with two or more categories, and the categories are no intrinsic ordering (Mishra et al., 2018). In this study, nominal scale was adopted in Section B of questionnaire, for identifying the respondent's gender, race, and occupation status, as well as in Section C which is to identify whether the respondents have read online reviews before purchase a product.

Besides, ordinal scale is the measurement scale that used to merely display the order of the variables rather than the difference between each of the variables, and typically utilised the non-numeric categories such as low, medium and high (Allanson and Notar, 2020). In the research, ordinal scale was applied in the questionnaire of Section C. For instance, the question of asking respondent's opinion towards the importance of online reviews with limited options. Besides, as well as in Section D, to collect the respondents' opinion towards the influence of online reviews affects the purchase intention.

In Section D, questions were designed using 5-points Likert measurement scale to measure all variables. Likert scale is used by the respondent to indicate the degree to which they disagree or agree with the statement (Ombea, 2020).

Table 3.3: Five-points Likert measurement scale

1	2	3	4	5
Strong Disagree (SD)	Disagree (D)	Neutral (N)	Agree (A)	Strongly Agree (SA)

Source: Developed for the research

3.5.2 Origin of Constructs

Sources of construct measurement are adapted from some literatures.

Table 3.4: Origin of Constructs

Construct	Adapted from	No. of Items
Perceived Information Quality	Arora and Sharma (2018)	5
Information Quantity	Arora and Sharma (2018)	4
Review Credibility	Arora and Sharma (2018)	5
Review Valence	Thomas, Wirtz and Wegerer (2019)	4
Purchase Intention	Arora and Sharma (2018)	6

Source: Developed for research

3.6 Data Processing

Data processing is the process of collecting and conversion of a data set into relevant and useable information (Shukla, 2018). It is critical for researcher to do preliminary screening of questionnaire to deliver more accurate results by reducing mistakes.

3.6.1 Questionnaire Checking

Data checking is the process of verifying the data's accuracy conditions. Thus, it can be used to check the completeness and quality of questionnaires to make sure high accuracy of the information.

A pilot test was undertaken in this study, and questionnaire checking procedure was conducted to uncover whether there is any early stages error such as instruction misinterpretation and questionnaire difficulties. Data checking aimed to correct the mistakes by taking corrective action before the actual questionnaire is carried out to ensure result's credibility. Furthermore, this process was repeated when the actual questionnaire was completed to exclude any unsatisfactory and unacceptable questions, such as missing data and incomplete questionnaires. Researcher must filter out the faulty data during data checking process. In this research, researcher received total 403 data and has screen out 12 faulty data, consequently, only 391 responses are valid.

3.6.2 Data Editing

Data editing is the process of verifying the data for consistency and readability before coding and transferring it to storage (Daalmans, 2018). Zikmund et al. (2010) stated data editing is a method of monitoring questionnaire for inconsistency in the data obtained, thus corrections may be made to improve precision. Likewise, researcher will filter out the ambiguous and erroneous data provided by respondents before transfer the data to information.

3.6.3 Data Coding

Data coding is the process of transforming the acquired data or observations into a meaning set of result (Allen, 2017). It involves summarising and representing the information to produce a systematic explanation of occurrence that has been recorded (Allen, 2017). All data was appropriately coded to allow the data transfer from questionnaires to computers while also ensuring data's correctness. It usually is the numerical symbols since it is easier to comprehend than long alphabetical descriptions.

In the questionnaire of present study, respondents' gender can be allocated as "1" for male and "2" for female respondents. At the same time, the ordinal rating of "strongly disagree","disagree","neutral","agree","strongly agree" can coded accordingly from 1 to 5, which to make the data entry more convenience.

Table 3.5: Data Coding

Question/ Code	1	2	3	4	5	6
Age Range	< 18	18-22	23-27	28-32	> 32	
Gender	Male	Female				
Race	Malay	Chinese	Indian	Others		
Occupation Status	Student	Employed	Unemployed	Household	Employer	
Monthly Income	< 2000	2001-3000	3001-4000	4001-5000	5001-6000	> 6000

Source: Developed for the research

3.6.4 Data Transcribing

Data transcribing is the activity of data code from the questionnaire or coding sheets is transformed directly into computer via keypunching, then the data will be processed further. Researchers will run all the data obtained from the transcribed questionnaires via the Statistical Project of Social Science (SPSS) software 26.0 version. Verification was carried out to confirm that the data keyed into SPSS software was legitimate and accurate.

3.6.5 Data Cleaning

Data cleaning is a method of detecting and removing problems in gathered data, such as inaccuracies and omissions. Ridzuan and Zainon (2019) explains that it is the process of removing the irregularities from the current data to produce an accurate data collection. In this research, data cleaning procedure went smoothly with the aid of SPSS software, due to the computer checks were more consistent and accurate. Consequently, it can help to overcome the value's extensiveness.

3.7 Data Analysis Tools

Data analysis's goal is to extract usable information from data and make decisions based on that knowledge (Johnson, 2022). There are a variety of methodologies and procedures for performing the analysis according to the goal of investigation.

3.7.1 Statistical Packaging for the Social Sciences (SPSS)

SPSS is a software programme that includes a series of statistical packages for social science research (Gogoi, 2020). It is to investigate technological data that is relevant to social science (Gogoi, 2020). In this research study, version 26 of SPSS software for Windows is utilised to analyse the quantitative data. With the use of SPSS, researcher can appropriately analyse the behaviours and viewpoints of individual using analytical approach. Adding on, SPSS software can help in data entry, analysis and the creation of tables and graphs.

3.7.2 Descriptive analysis

Descriptive analysis is a series of short descriptive coefficients that describe a data set, which might be a sample of population (Hayes, 2022). The measure of variability and measure of central tendency are the two types of descriptive statistics (Hayes, 2022). Mode, median and mean are the examples of central tendency measurements, whereas variance and standard deviation are the examples of variability measures. As a result, it is type of data analysis that aids in description, summarization of raw data, thus researchers may readily comprehend and analyse it.

Most importantly, descriptive statistics adopted to identify the influence of online reviews affects purchase intention. Under frequency distribution analysis, the data studied in Demographic Profile and General Information will be given in percentage, on the other hand, data evaluated in construct measurement will be presented in central tendency and dispersion way.

3.7.3 Scale Measurement

Scale measurement is adopted to determine the data's validity and reliability. Thence, reliability test was implemented to demonstrating the measurement's internal consistency.

3.7.3.1 Reliability Analysis

The term "reliability" is used to assess the research's quality, and it refers to the consistency of a measure utilised, while "validity" is a measure to evaluate the accuracy of measure (Middleton, 2019). Reliability test is important because it can make sure the data is reliable and replicable, and results are valid and accurate (Mohajan, 2017).

In the present study, Cronbach's alpha will be conducted to test the study's reliability and consistency. According to Taber (2017), Cronbach's alpha is a statistic used by researcher to show the tests and scales that created or utilised for research projects which are suitable for purpose. Cronbach's Alpha is utilized to examine the reliability of every construct in the study. Besides, Cronbach's alpha has a value range of 0 to 1, with the closer the result gets to 1, the better the internal consistency reliability (Nawi, Tambi, Samat and Mustapha, 2020). Meanwhile, value of 0.6 or less shows unsatisfactory internal consistency reliability.

Table 3.6: Cronbach's Alpha value

Cronbach's Coefficient alpha(α)	Classification
α ≥ 0.9	Excellent
0.9 > α ≥ 0.8	Good
0.8 > α ≥ 0.7	Acceptable
0.7 > α ≥ 0.6	Questionable
0.6 > α ≥ 0.5	Poor
0.5 > α	Unacceptable

Source: Nawi, F. A. M., Tambi, A. M. A., Samat, M. F., & Mustapha, W. M. W. (2020). A review on the internal consistency of a scale: the empirical example of the influence of human capital investment on Malcom Baldridge quality principles in Tvet institutions. *Asian People Journal (APJ),3*(1),19-29.

Cronbach's coefficient(α) was adopted to calculate the internal consistency coefficients of items involved in the questionnaire through a pilot test with 30 samples. In pilot test, Information Quantity (0.795) and Review Valance (0.757) are considered as acceptable reliability. Perceived Information Quality (0.801), Review Credibility (0.869) and Purchase Intention (0.807) are considered as good reliability.

3.7.4 Inferential Analysis

Inferential analysis is a study that uses one experiment or a sample of data and help the researcher to draw conclusion about the population (Guetterman, 2019). It is described as a method of inferring or deducing information about populations from samples or descriptive data (Kalish and Thevenow-Harrison, 2014).

3.7.4.1 Pearson's Correlation Coefficient (r)

According to Obilor and Amadi (2018), Pearson's correlation is to measure the strength of relationship between two variables. Pearson's Correlation Coefficient (r) is adopted to evaluate the relationship between variables as well as the two-tailed significant level will utilised to test for null hypothesis. The correlation coefficient (r) lies between -1.0 to +1.0, with -1 reflects a perfect negative linear relationship, +1 represents a perfect positive linear relationship, and 0 indicates no linear relationship between two variables (Janse, Hoekstra, Jager, Zoccali, Tripepi, Dekker and Van-Diepen, 2021). The higher the correlation coefficient, the stronger the level relationship between variables.

Figure 3.5: Value of Pearson's Correlation Coefficient

Values of Pearson's correlation coefficient

Pearson's correlation coefficient (r) for continuous (interval level) data ranges from -1 to +1:

r = -1		data lie on a perfect straight line with a negative slope
r = 0		no linear relationship between the variables
r = +1		data lie on a perfect straight line with a positive slope

Source: University of the west of England. (2021). *Person's correlation coefficient.* Retrieved from http://learntech.uwe.ac.uk/da/default.aspx?pageid=1442

Analytical test for this study is done at 5% of significance level and 95% of confidence level. Therefore, null hypothesis (H0) is rejected if the significant value(p) is less than 0.05 (McLeod, 2019).

If $p < 0.05$, reject H0 and accept H1

If $p > 0.05$, accept H0 and reject H1

3.7.4.2 Multiple Linear Regression Analysis

Multiple Linear Regression Analysis is the statistical approach that predicts the result of a response variable by combining many explanatory factors (Hayes, 2021). Knight (2018) explained that multiple regression analysis is to create a model in the form of linear equation that determines the optimum weighted linear combination of the independent variables in research to best predict the criterion variable. Hence, it is adopted in this study to model the linear relationship between independent variables (explanatory) and dependent variables (response). Adding on, it can provide a clearer picture and a better understanding of which construct will have most influence on dependent variable. Below is the equation for multiple linear regression analysis:

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \ldots + \beta_n X_n$$

Whereby,

Y = Dependent variable

a = constant

β_1 = coefficient associated with the independent variables

X_1 = independent variables

In present study, adjusted R square will be test as the result of perceived information quality, information quantity, review credibility and review valence towards the purchase intention. Following equation will be used to evaluate the relationship between the independent and dependent variables:

Purchase intention = a + β1 Perceived information quality + β2 Information Quantity + β3 Review Credibility + β4 Review Valence

In addition, Analysis of Variance (ANOVA) will also include in the present study. ANOVA is the statistical approach that divides observed variance data into multiple components for use in additional test (Kenton, 2021). ANOVA consists of calculations that provides information about the levels of variability within the regression model, and it serve as a foundation for significance tests.

3.7.4.3 Multicollinearity

Multicollinearity test was conducted to check whether there are consists of two or more independent variables are highly correlated (Daoud, 2017). If this occurs, the standard error of coefficient will rise as it will reduce the validity of the multiple regression analysis. It will reduce the statistical significance of independent variable, which result in decreasing the quality interpretation of independent variable. As a result, multicollinearity can cause problems including decrease in size of R, difficulty predicting the most significant predictor and unstable predictor equations. In short, multicollinearity might make it difficult for researchers to make a meaning estimate of regression coefficients.

In this research, multicollinearity is adopted to show the Variance Inflation Factor (VIF) and tolerance of each variable, to assess the existence of multicollinearity. VIF is indicator for determining how

strongly predictor variables are closely related in terms of their linear relationship (Kim, 2019). Besides, Tolerance measurers the amount that other predictor variables in the model impact beta coefficients (Kim, 2019). Multicollinearity occurs when VIF value is higher than 5 and tolerance is lower than 0.2 (Kim, 2019).

3.8 Conclusion

Numerous research techniques utilised to perform the research study were explained in this chapter. Total 480 questionnaires surveys were distributed to the target respondents in Malaysia. In Chapter 4, all the interpretations and analyses of the results acquired from the responses of questionnaires will be discussed in depth.

CHAPTER 4: DATA ANALYSIS

4.0 Introduction

In this chapter, it will discuss the finding of this study which were collected through survey questionnaires. Researcher utilised SPSS version 26 to analyse the data and summarise the findings.

4.1 Survey Distribution and Return Rate

A total of 480 survey questionnaires of this study were distributed randomly through convenience sampling technique. However, only received responses from 403 respondents, hence the non-response rate for this research was 16.04%. Among the 403 sets of questionnaires, there are 11 respondents have no experience to purchase a product through online platform and 1 respondent are not Malaysian, hence their questionnaires were rejected by the researcher as they are not the target respondents of this study. As a result, total of 391 questionnaires were used for this study.

4.2 Descriptive Analysis

Descriptive analysis defines the fundamental characteristics and summarizes the raw data in a comprehensible manner with charts and tables.

4.2.1 Respondent Demographic Profile

In the present research, researcher has collected 391 of valid responses. There are total 5 questions in Section B of questionnaires to ask for respondent's profile such as age range, gender, race, occupation status and monthly income level.

Figure 4.1: Age Range
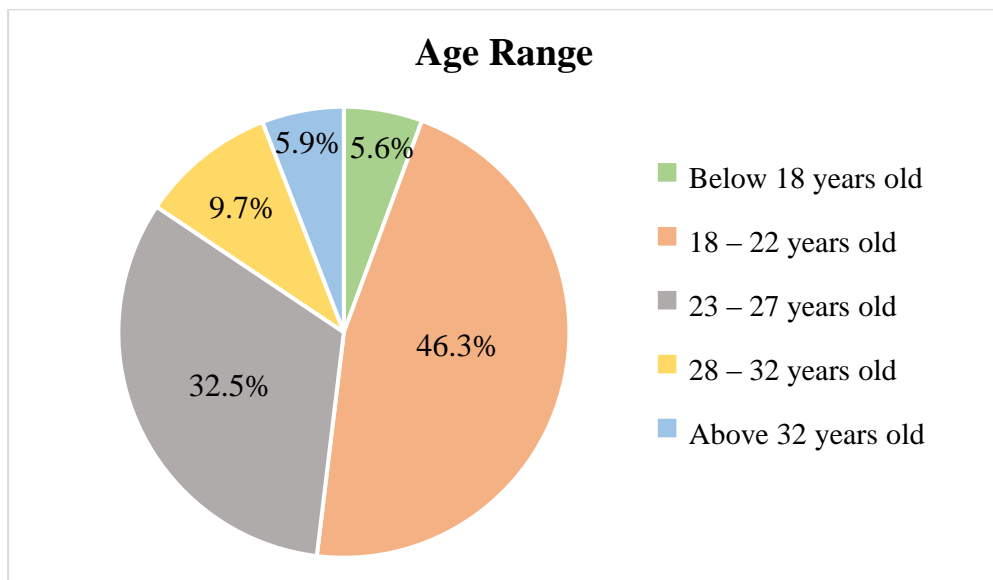
Source: Developed for the research

Table 4.1: Age Range

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	< 18 years old	22	5.6	5.6	5.6
	18 – 22 years old	181	46.3	46.3	51.9
	23 – 27 years old	127	32.5	32.5	84.4
	28 – 32 years old	38	9.7	9.7	94.1
	> 32 years old	23	5.9	5.9	100.0
	Total	391	100.0	100.0	

Source: Developed for the research

As shown in Figure 4.1 and Table 4.1, respondents aged 18 to 22 years old accounted for the highest proportion among 391 respondents, which is 181 respondents (46.3%) of the sample. Conversely, the lowest proportion are the respondents aged below 18 years old, which involves 22 respondents (5.6%). Besides, there are 127 respondents (32.5%) who aged 23–27 years old, 38 respondents (9.7%) between the ages of 28–32 years old, and 23 respondents (5.9%) above the age of 32 years old were participated in this study.

Figure 4.2: Gender
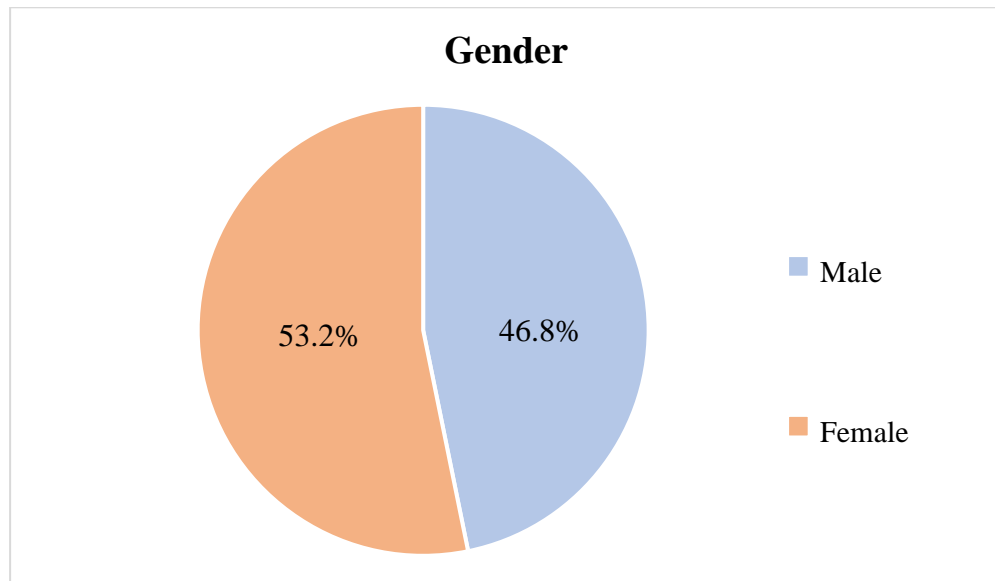
Source: Developed for the research

Table 4.2: Gender

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Male	183	46.8	46.8	46.8
	Female	208	53.2	53.2	100.0
	Total	391	100.0	100.0	

Source: Developed for the research

Figure 4.2 and Table 4.2 have showed female respondents contributed a higher proportion than male respondents. There are 208 of female respondents (53.2%) involved in this study, while male contributed 46.8% or 183 respondents of the samples.

Figure 4.3: Race
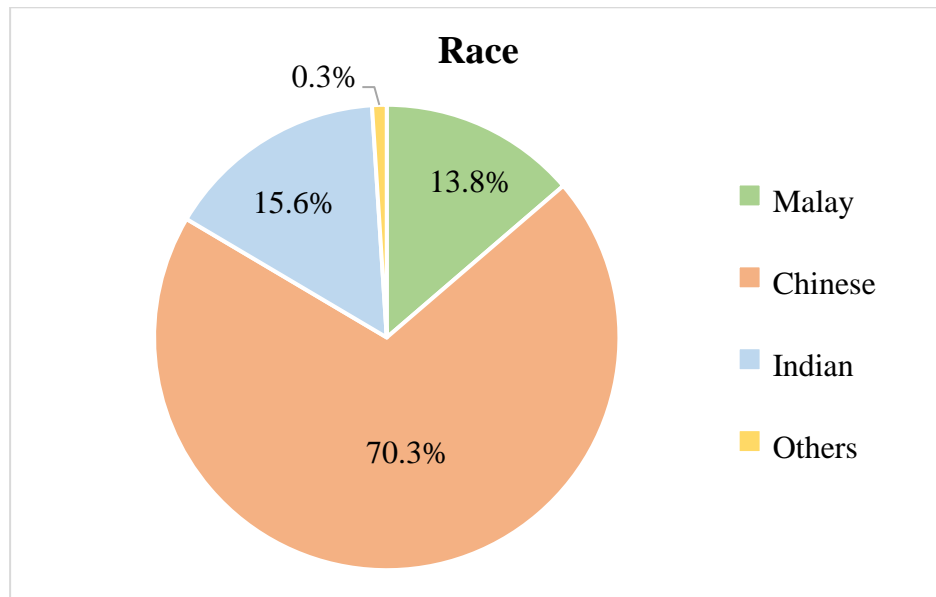
Source: Developed for the research

Table 4.3: Race

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Malay	54	13.8	13.8	13.8
	Chinese	275	70.3	70.3	84.1
	Indian	61	15.6	15.6	99.7
	Others	1	0.3	0.3	100.0
	Total	391	100.0	100.0	

Source: Developed for the research

As shown in Figure 4.3 and Table 4.3, majority of the respondents is Chinese which consists of 70.3% (275) of the total samples. In addition, there are 61 Indian respondents (15.6%) and 54 Malay respondents (13.8%) participated in present study. Also, only 1 respondent (0.3%) is Sino-Kadazan from Sabah, Malaysia.

Figure 4.4: Occupation Status
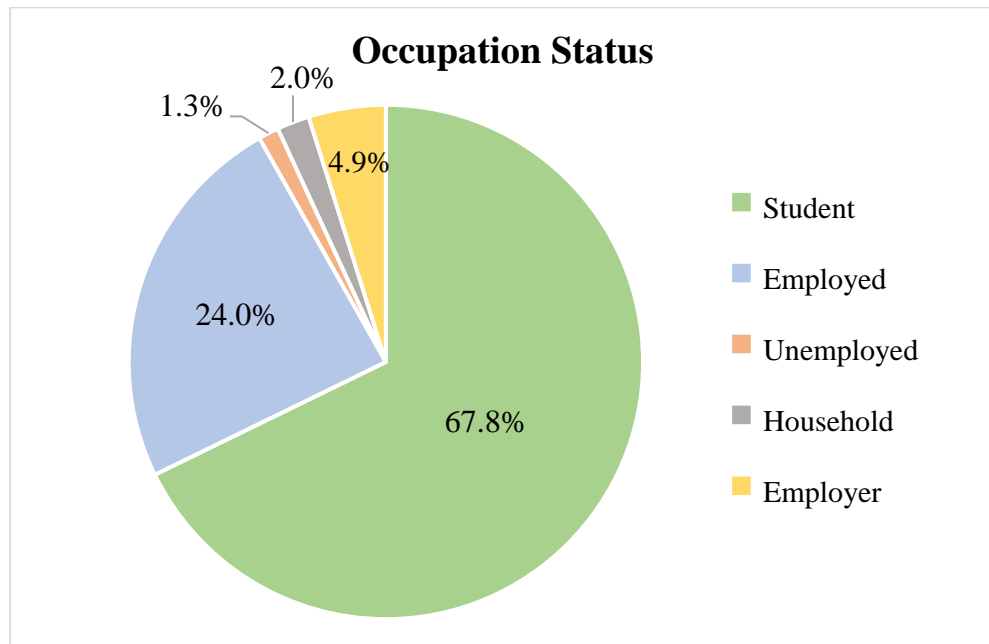
Source: Developed for the research

Table 4.4: Occupation Status

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Student	265	67.8	67.8	67.8
	Employed	94	24.0	24.0	91.8
	Unemployed	5	1.3	1.3	93.1
	Household	8	2.0	2.0	95.1
	Employer	19	4.9	4.9	100.0
	Total	391	100.0	100.0	

Source: Developed for the research

Based on Figure 4.4 and Table 4.4, the largest proportion among 391 respondents are student that involves 265 respondents (67.8%), while unemployed occupation status is the lowest proportion which consists of 5 respondents (1.3%). Adding on, 94 respondents (24%) are employed, 19 respondents (4.9%) are employer, and 8 respondents (2%) are household.

Figure 4.5: Monthly Income
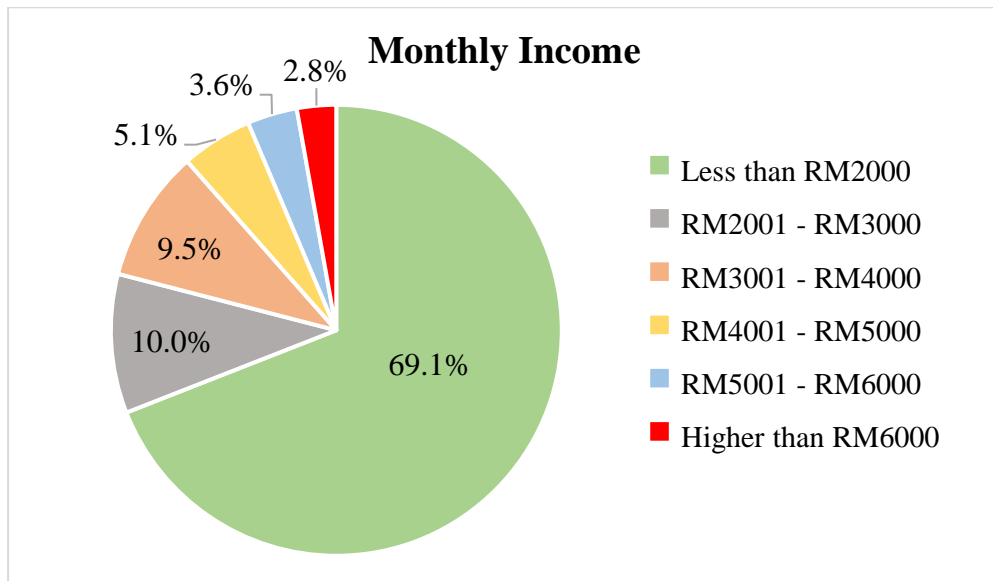
Source: Developed for the research

Table 4.5: Monthly Income

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	< RM2000	270	69.1	69.1	69.1
	RM2000 – RM3000	39	10.0	10.0	79.0
	RM3001 – RM4000	37	9.5	9.5	88.5
	RM4001 – RM5000	20	5.1	5.1	93.6
	RM5001 – RM6000	14	3.6	3.6	97.2
	> RM6000	11	2.8	2.8	100.0
	Total	391	100.0	100.0	

Source: Developed for the research

As shown in Figure 4.5 and Table 4.5, 270 respondents (69.1%) with income
of below RM2000 who accounted the highest proportion of the total sample.
While the lowest proportion is contributed by 2.8% or 11 respondents who
are having income of above RM6000. Moreover, there are 39 respondents
(10%) with income between RM2000 to RM3000. Furthermore, 37
respondents with income between RM3001 to RM4000 who made up 9.5%

of the sample. In addition, 20 respondents (5.1%) have monthly income between RM4001 to RM5000 per month. Lastly, 14 respondents (3.6%) with income between RM5001 to RM6000 participated in the study.

4.2.2 General Information

In this research, total of five questions were asked for the general information of the respondents under Section C of the questionnaire (General information). The questions include read online review experience, frequency of read online review, platform to read online review, read fake review experience, and the degree of online review's importance.

Figure 4.6: Have you ever read online reviews before purchasing a product?
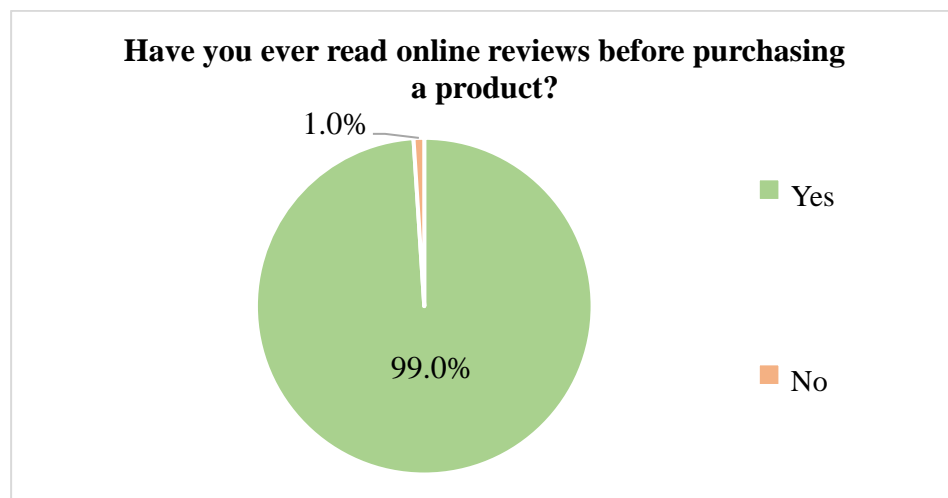
Source: Developed for the study

Table 4.6: Have you ever read online reviews before purchasing a product?

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Yes	387	99.0	99.0	99.0
	No	4	1.0	1.0	100.0
	Total	391	100.0	100.0	

Source: Developed for the study

According to Figure 4.6 and Table 4.6, showed that there are 99% of the respondents (387) have the experience of reading online review before purchase a product through online. However, 1% of the respondents (4) have no experience towards reading online reviews.

Figure 4.7: How often are you reading online reviews before purchase a product?

How often are you reading online reviews before purchase a product?

- Never
- Rarely
- Sometimes
- Quite often
- Very often

0.8%   3.6%   17.4%   40.4%   37.9%
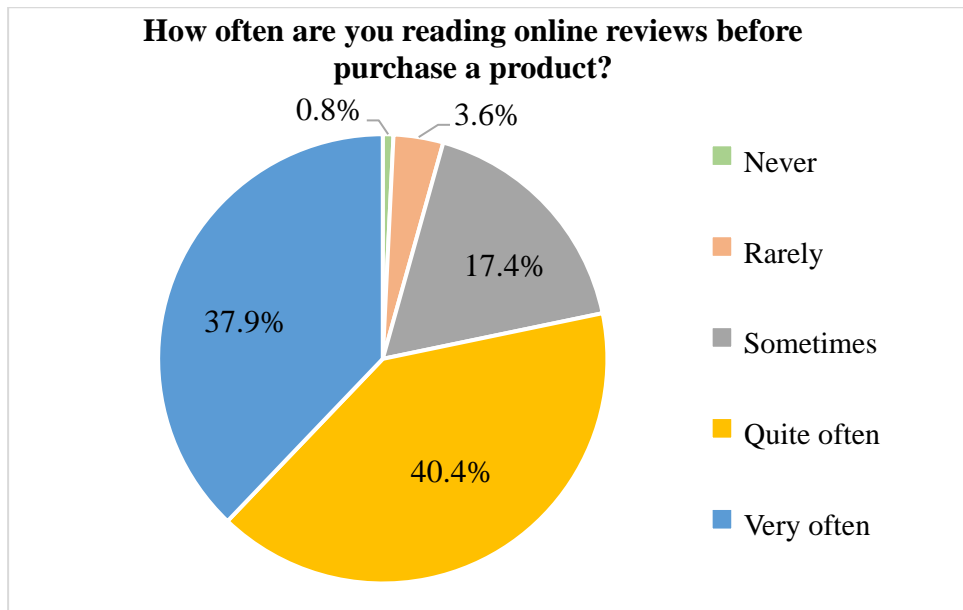
Source: Developed for the study

Table 4.7: How often are you reading online reviews before purchase a product?

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Never	3	0.8	0.8	0.8
	Rarely	14	3.6	3.6	4.3
	Sometimes	68	17.4	17.4	21.7
	Quite often	158	40.4	40.4	62.1
	Very often	148	37.9	37.9	100.0
	Total	391	100.0	100.0	

Source: Developed for the study

As shown in Figure 4.7 and Table 4.7, 40.4% or 158 respondents are quite often to read the online reviews before purchase a product, which made up the highest proportion of the total sample. In contrast, 3 respondents (0.8%) are never read online review before. Besides, 148 respondents (37.9%) are very often to read the online review, 68 respondents (17.4%) sometimes read online reviews, and 14 respondents (3.6%) rarely to read the online review before purchase a product.

Figure 4.8: When looking for product online reviews, what platform do you mostly choose?
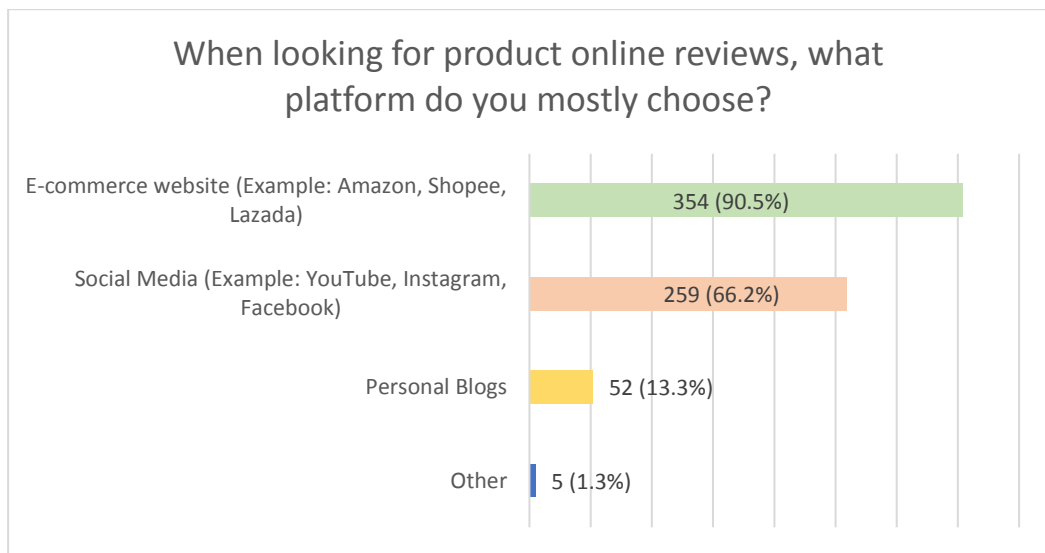
Source: Developed for the research

Table 4.8: When looking for product online reviews, what platform do you mostly choose?

		Frequency	Percentage (Out of 391 samples)	Valid Percentage
Valid	E-commerce website	354	90.5	90.5
	Social Media	259	66.2	66.2
	Personal blogs	52	13.3	13.3
	Other	5	1.3	1.3

Source: Developed for the research

Multiple answers are allowed to fill up in this question. Based on Figure 4.8 and Table 4.8, majority of the respondents (90.5%) will read the product's online reviews through E-commerce website, which involved 354 out of 391 respondents. Next, 259 respondents used social media platform to read online reviews, accounting for 66.2% of the total samples. Personal blogs, on the other hand, have been chosen by 52 respondents (13.3%) to read for online reviews. Lastly, 5 respondents (1.3%) chose other platforms, of which 4 respondents chose Xiao Hong Shu applications and 1 respondent chose the shop's official website.

Figure 4.9: Have you read fake online reviews before?
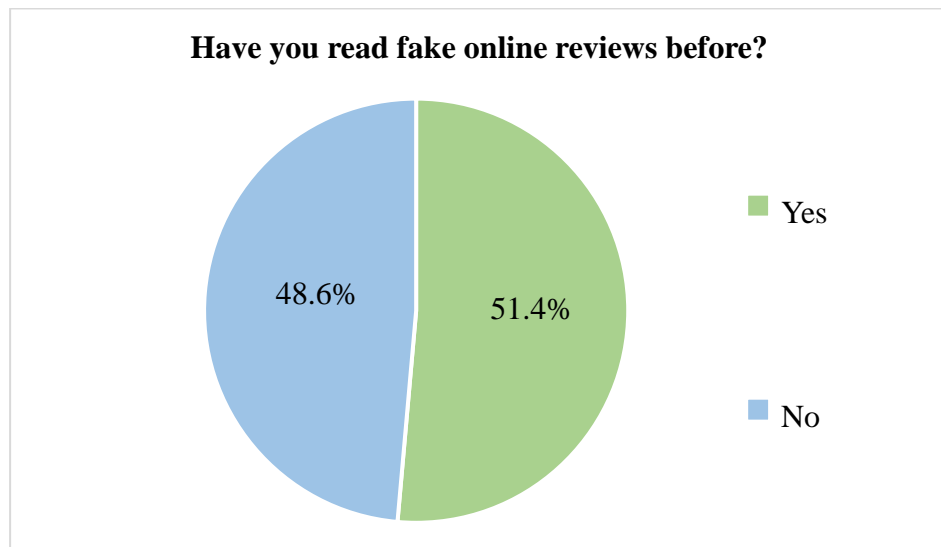
Sources: Developed for the research

Table 4.9: Have you read fake online reviews before?

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Yes	201	51.4	51.4	51.4
	No	190	48.6	48.6	100.0
	Total	391	100.0	100.0	

Source: Developed for the research

As indicated in Figure 4.9 and Table 4.9, there are 201 respondents (51.4%) had read fake online review when purchasing a product online, whereas 190 respondents (48.6%) have not experienced read fake online review.

Figure 4.10: How important are online product reviews for your purchase
decision?

How important are online product reviews for your purchase decision?

- Very unimportant: 2.8%
- Unimportant: 1.8%
- Neutral: 10.5%
- Important: 43.2%
- Very important: 41.7%
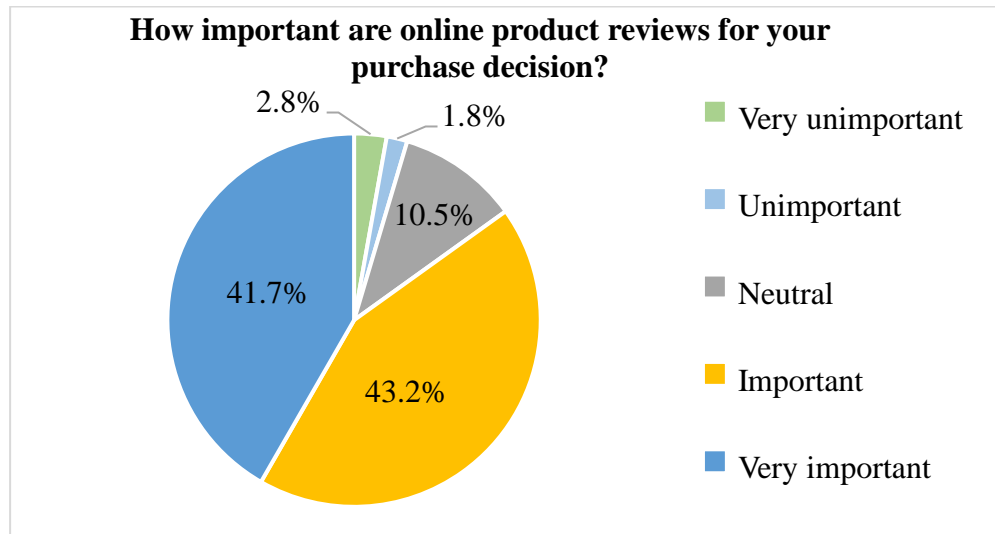
Source: Developed for the research

Table 4.10: How important are online product reviews for your purchase
decision?

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Very unimportant	11	2.8	2.8	2.8
	Unimportant	7	1.8	1.8	4.6
	Neutral	41	10.5	10.5	15.1
	Important	169	43.2	43.2	58.3
	Very important	163	41.7	41.7	100.0
	Total	391	100.0	100.0	

Source: Developed for the research

Based on Figure 4.10 and Table 4.10, majority of the respondents considered online reviews are important for their purchase decision, which consists of 169 respondents (43.2%). On the other hand, 7 respondents (1.8%) believed that online reviews are unimportant in their decision-making, accounting for the lowest proportion of samples. Besides, there are 163 respondents (41.7%) considered online reviews very important to them.

Next, 41 respondents (10.5%) think that online reviews are neutral to them when making purchase decision. Lastly, 11 respondents (2.8%) considered that online reviews are very unimportant for their purchase decision.

4.2.3 Central Tendencies Measurement of Constructs

The mean score on the 5-ordinal scale of Perceived Information Quality, Information Quantity, Review Credibility, Review Valence and Purchase Intention is revealed in this section using the measure of central tendencies. All the constructs are measured on 5-point Likert scale from strongly disagree to strongly agree.
[1=Strongly Disagree (SD); 2=Disagree(D); 3=Neutral(N);4=Agree(A); 5=Strongly Agree(SA)]

4.2.3.1 Perceived Information Quality

According to Table 4.11 shown, the statement of "The online reviews is helpful" had the highest mean value of 4.27 whereby 41.4% of respondents are strongly agree with this statement. In contrast, the statement of "In general, the qualities of each online reviews are high" had the lowest mean score of 3.78, with 1.5% of respondents strongly disagree and 25.6% of respondents strongly agree with this statement. Besides, statement of "the online reviews are understandable" showed the second highest mean value of 4.15. Moreover, "the online reviews have sufficient reasons for supporting the opinions" statement with the mean value of 4.09 and the statement of "The online reviews are clear" had 3.89 mean score.

Table 4.11: Perceived Information Quality (Central Tendencies Measurement)

Statement	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Standard Deviation	Rank
The online reviews are clear.	1.3	3.0	20.5	55.8	19.4	3.89	0.791	4
The online reviews are understandable.	1.0	0.8	13.8	50.6	33.8	4.15	0.759	2
The online reviews are helpful.	0.3	2.3	8.7	47.3	41.4	4.27	0.737	1
The online reviews have sufficient reasons for supporting the opinions.	0.3	2.8	16.6	48.6	31.7	4.09	0.783	3
In general, the qualities of each online reviews are high.	1.5	7.2	28.6	37.1	25.6	3.78	0.960	5

Source: Developed for the research

4.2.3.2 Information Quantity

As Table 4.12 shown, "The quantity of online reviews information is great, inferring that the product has good sales", had the highest mean score of 4.27, with 43.7% of respondents strongly agree with this statement. Conversely, statement of "Number of reviews does promise that the review quality is good" had the lowest mean value, which is 3.88 with 2.8% of respondents strongly disagree and 30.2% of respondents strongly agree with this statement. Moreover, "Highly ranking and recommendation, inferring that the product has good reputations" statement showed the mean score of 4.26 and the statement of "The numbers of online reviews are large, inferring that the product is popular" had the mean value of 4.25 in the study.

Table 4.12: Information Quantity (Central Tendencies Measurement)

Statement	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Standard Deviation	Rank
The numbers of online reviews are large, inferring that the product is popular.	0.8	1.8	12.3	42.2	43.0	4.25	0.796	3
The quantity of online reviews information is great, inferring that the product has good sales.	0.5	1.8	11.3	42.7	43.7	4.27	0.771	1
Highly ranking and recommendation, inferring that the product has good reputations.	0.3	3.1	10.2	42.5	44.0	4.26	0.786	2
Number of reviews does promise that the review quality is good.	2.8	6.9	19.7	40.4	30.2	3.88	1.008	4

Source: Developed for the research

4.2.3.3 Review Credibility

Table 4.13 showed the highest mean score of this variable is the statement of "A customer shares sincere reviews on the website regarding the product" with the mean score of 4.07, which have 30.2% of respondents strongly agree with the statement. While the statement "Reviews on the website regarding the products are accurate" had the lowest mean score at 3.88, with 22% of respondents strongly agree and 4.9% disagree with this statement. Furthermore, the statement "I trust in the online reviews on the website" had the mean score of 4.02, which is the second highest in this variable. Apart from these, the statement of "Reviews regarding

the products on the website are credible" had mean score at 4.00, and the statement of "Reviews regarding the products on the website are trustworthy" had mean score at 3.96.

Table 4.13: Review Credibility (Central Tendencies Measurement)

Statement	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Standard Deviation	Rank
Reviews regarding the products on the website are credible.	0	2.3	21.0	51.4	25.3	4.00	0.746	3
Reviews regarding the products on the website are trustworthy.	0.8	3.1	23.5	44.5	28.1	3.96	0.842	4
I trust in the online reviews on the website.	0.3	2.0	22.0	46.8	28.9	4.02	0.784	2
Reviews on the website regarding the products are accurate.	0	4.9	23.8	49.4	22.0	3.88	0.800	5
A customer shares sincere reviews on the website regarding the products.	0	2.3	18.4	49.1	30.2	4.07	0.758	1

Source: Developed for the research

4.2.3.4 Review Valence

In accordance with Table 4.14, there are 47.8% of the respondents strongly agree with the statement of "The rating of products by 5-stars rating system has allowed me to find well-rated products", which had the highest mean value at 4.36. On the other hand, the statement "The rating of products by 5-stars rating system has

allowed me to find products that satisfy my needs" had the lowest mean score at 4.14 whereby 32.7% of respondents strongly agree and 0.5% of respondents strongly disagree with this statement. Moreover, the statement "The rating of products by 5-stars rating system has allowed to me get a quick overview of products" had the second highest mean score at 4.25 and the statement of "The rating of products by 5-stars rating system has increased the number of alternative products that are interesting to me" had the mean value of 4.18.

Table 4.14: Review Valence (Central Tendencies Measurement)

Statement	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Standard Deviation	Rank
The rating of products by 5-stars rating system has increased the number of alternative products that are interesting to me.	0.5	1.0	12.5	51.4	34.5	4.18	0.725	3
The rating of products by 5-stars rating system has allowed me to find products that satisfy my needs.	0.5	2.3	13.0	51.4	32.7	4.14	0.761	4
The rating of products by 5-stars rating system has allowed me to find well-rated products.	0.3	1.0	9.2	41.7	47.8	4.36	0.712	1
The rating of products by 5-stars rating system has allowed to me get a	0	1.3	13.6	44.5	40.7	4.25	0.731	2

quick overview of products.								

Source: Developed for the research

4.2.3.5 Purchase Intention

As shown in Table 4.15, the statement "Online reviews about products do influence my buying intention towards that products" had highest mean value (4.37) with 46.8% of respondents strongly agree with the statement. While the lowest mean score statement is "I intend to try the product discussed in the online reviews" which with 4.05 mean score because there are only 28.4% strongly agree and 0.5% of respondents strongly disagree with the statement. Adding on, "When I buy a product online, the reviews presented make me confident in purchasing the product" statement had the mean value at 4.31 which is the second highest. In addition, the statement "I will consider buying the product after I read online reviews" had the mean score of 4.29 as well as the statement "After reading online review, it makes me desire to buy the product" had the mean score at 4.26. Lastly, the statement "In the future, I intend to buy the product discussed in the online reviews" had the mean value at 4.14 in this study.

Table 4.15: Purchase Intention (Central Tendencies Measurement)

Statement	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Standard Deviation	Rank
After reading online review, it makes me desire to buy the product.	0	2.3	10.5	45.8	41.4	4.26	0.737	4
I will consider buying the product after I read online reviews.	0.3	0.8	9.2	49.4	40.4	4.29	0.684	3
I intend to try the product discussed in the online reviews.	0.5	2.8	15.9	52.4	28.4	4.05	0.774	6
In the future, I intend to buy the product discussed in the online reviews.	0.8	0.8	15.6	49.1	33.8	4.14	0.758	5
When I buy a product online, the reviews presented make me confident in purchasing the product.	0.3	1.0	9.0	46.5	43.2	4.31	0.699	2
Online reviews about products do influence my buying intention towards that products.	0	0.8	7.9	44.5	46.8	4.37	0.663	1

Source: Developed for the research

4.3 Scale Measurement

Cronbach's Alpha reliability test is adopted in present study to determine the internal reliability and consistency of data gathered.

4.3.1 Internal Reliability Test

Table 4.16: Summary of Reliability Test

No.	Constructs	Cronbach's Alpha	Number of Items	Strength of Association
1	Perceived Information Quality	0.762	5	Acceptable
2	Information Quantity	0.707	4	Acceptable
3	Review Credibility	0.824	5	Good
4	Review Valence	0.789	4	Acceptable
5	Purchase Intention	0.803	6	Good

Source: Developed for the research

In present study, SPSS version 26.0 software was used to conduct the reliability test. As Table 4.16 shown, Review Credibility has the highest internal consistency reliability with Cronbach's Alpha of 0.824 (Good). Conversely, Information Quantity has the lowest internal reliability with 0.707 (Acceptable) of Cronbach's Alpha values. In addition, Perceived Information Quality and Review Valence have Cronbach's alpha values of 0.762 (Acceptable) and 0.789 (Acceptable) respectively. Adding on, the dependent variable, purchase intention, has the Cronbach's alpha value of 0.803 (Good) which has the second highest reliability.

Overall, the internal reliability of all constructs in present study are trustworthy and consistent because the Cronbach's Alpha values of all variables are greater than 0.7. As a result, all measurement scales items used in this study have a good internal reliability and consistency.

4.4 Inferential Analysis

4.4.1 Pearson Correlation Analysis

All the variables were used in Pearson correlation analysis to determine the strength of the relationship between the independent variables and the dependent variable. This study had adopted confidence level of 95% (p-value=0.05) to examine the relationships among variables that indicate positive or negative association as well as the Pearson's correlation coefficient(r) value determine how strong the relationship was among the variables. Table 4.17 showed the correlation matrix that indicated the relationship among five variables. Further, Table 4.18 shows the rules of thumb for interpreting Pearson correlation results.

Table 4.17: Pearson Correlation Analysis

		Perceived Information Quality (PIQ)	Information Quantity (INQ)	Review Credibility (RC)	Review Valence (RV)	Purchase Intention (PI)
PIQ	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	391				
INQ	Pearson Correlation	.450**	1			
	Sig. (2-tailed)	.000				
	N	391	391			
RC	Pearson Correlation	.582**	.562**	1		
	Sig. (2-tailed)	.000	.000			
	N	391	391	391		
RV	Pearson Correlation	.467**	.540**	.465**	1	
	Sig. (2-tailed)	.000	.000	.000		
	N	391	391	391	391	
PI	Pearson Correlation	.432**	.489**	.471**	.543**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	391	391	391	391	391

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

* Correlation is significant at the 0.05 level (2-tailed).

Source: Developed for the research

P = 0.000

Table 4.18: Rules of Thumb of Pearson Correlation

Pearson Correlation Range	Correlational Strength
0.00 - 0.20	Negligible
0.21 – 0.35	Weak
0.36 – 0.67	Moderate
0.68 – 0.90	Strong
0.91 – 1.00	Very Strong

Source: Prion, S., & Haerling, K. A. (2014). Making sense of methods
and measurement: Pearson product-moment correlation coefficient.
Clinical simulation in nursing, 11(10), 587-588.

As the Table 4.17 showed, p-value of all variables were 0.000 which is
lower than 0.05. Thus, null hypothesis for all variables were rejected and
there is significant relationship between each independent variables and
dependent variable.

Based on the result shown in Table 4.17, perceived information quality has
correlation coefficient(r) of 0.432. Also, the p-value is 0.000. Since p-value
is less than 0.05, hence, there is moderate positive correlation between
perceived information quality and purchase intention.

According to Table 4.17, the result of information quantity showed the p-
value is 0.000. So, findings shows that there is moderate positive correlation
between information quantity and purchase intention, with r = 0.489.

As shown in Table 4.17, p-value of review credibility is 0.000 which is less than 0.05. Hence, the results also reveals that there is moderate positive correlation between review credibility and purchase intention, with $r = 0.471$.

Table 4.17 shows the r value of review valence is 0.543 which has the strongest correlation with purchase intention. Also, the p-value is 0.000 (<0.05). Thence, there is moderate positive correlation between review valence and purchase intention.

4.4.2 Multiple Linear Regression Analysis

Multiple regression analysis on perceived information quality, information quantity, review credibility and review valence towards purchase intention are shown as below:

Table 4.19: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.619ᵃ	.383	.377	.40356

a. Predictors: (Constant), Mean_RV, Mean_RC, Mean_PIQ, Mean_INQ

Source: Developed for the research

Based on Table 4.19, correlation coefficient (R=0.619) implies that there is positive relationship between the independent variables and purchase intention. Adding on, the value of R Square is 0.383. This reveals that about 38.3% of the dependent variable (Purchase Intention) is influenced by all independent variables which are perceived information quality, information

quantity, review credibility and review valence. Meanwhile, the remaining 61.7% of purchase intention can be interpreted through other factors. As a result, future research is required to determine other additional online review factors that influence the purchase intention in Malaysia.

Table 4.20: ANOVA[a]

Model		Sum of squares	df	Mean Square	F	Sig.
1	Regression	39.085	4	9.771	59.997	.000[b]
	Residual	62.865	386	.163		
	Total	101.950	390			

a. Dependent Variable: Mean_PI

b. Predictors: (Constant), Mean_RV, Mean_RC, Mean_PIQ, Mean_INQ

Source: Developed for the research

In accordance with Table 4.20, it shows that the F-value is 59.997 and the significant level is 0.000 (p-value = 0.000). The higher the F-value in ANOVA, indicated that the higher variation between sample means with the variation within the samples. Hence, the higher the F-value, result in lower the p-value. Since p-value is less than 0.05, thus H_0 is rejected and H_1 is accepted. As a result, it proven that all independent variables are statistically significant in purchase intention in Malaysia.

Table 4.21: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
	(Constant)	1.487	.181		8.227	.000
	Mean_PIQ	.097	.045	.110	2.145	.033
1	Mean_INQ	.146	.043	.177	3.367	.001
	Mean_RC	.134	.046	.158	2.910	.004
	Mean_RV	.288	.045	.322	6.438	.000

a. Dependent Variable: Mean_PI

Source: Developed for the research

As Table 4.21 shown, all independent variables have positive correlation with dependent variable, because the p-values are less than 0.05.

Adding on, importance of the factors can be identified using standardized beta values in Table 4.21. The greater the beta value, the more important it is. Among all the independent variables, review valence is the strongest influence on purchase intention where standardized beta is equal to 0.322. Then followed by information quantity (0.177), review credibility (0.158) and the least important factor, perceived information quality (0.110).

In addition, the following linear equation is formed:

Purchase Intention = 1.487 + 0.097 (Perceived Information Quality) + 0.146 (Information Quantity) + 0.134 (Review Credibility) + 0.288 (Review Valence)

According to the equation formed, the regression coefficient of perceived information quality is 0.097. This reveals that one unit increase in perceived information quality will increase 0.097 units of purchase intention while others remain constant. Moreover, regression coefficient of information quantity is 0.146. This means that the level of purchase intention will increase 0.146 units when information quantity increases one unit while other remain unchanged. Furthermore, regression coefficient of review credibility is 0.134, thus the level of purchase intention will rise 0.134 unit when review credibility increased one unit while other remain constant. In addition, the regression coefficient of review valence is 0.288, which means the level of purchase intention will increase 0.288 units when review valence increased one unit while others remain unchanged.

4.4.3 Multicollinearity Analysis

Table 4.22: Multicollinearity analysis

Model		Collinearity Statistics	
1		Tolerance	VIF
	(Constant)		
	Mean_PIQ	.607	1.647
	Mean_INQ	.581	1.722
	Mean_RC	.541	1.848
	Mean_RV	.637	1.570

a. Dependent Variable: Mean_PI

Source: Developed for the research

According to VIF rule of thumb, if VIF value more than 5 and the tolerance value lower than 0.2, indicated that multicollinearity problems may exist (Johnston, Jones and Manley, 2018). When VIF value higher than 10 and

the tolerance value is lower than 0.1, indicated that there is a serious collinearity problem (Johnston et al., 2018).

However, based on Table 4.22, multicollinearity problem did not exist. Hence, it reveals that the independent variable is not correlated with one or more of other independent variable in this study.

4.4.4 Test of Significant

A test of significant was performed when implementing multiple regression analysis. The result is shown below:

Table 4.23: Test of Significant

Construct	Significant value
Perceived Information Quality	.033
Information Quantity	.001
Review Credibility	.004
Review Valence	.000

Source: Developed for the research

Hypothesis 1

$H_0 =$ There is no relationship between Perceived Information Quality in online reviews and Purchase Intention in Malaysia.

$H_1 =$ There is a relationship between Perceived Information Quality in online reviews and Purchase Intention in Malaysia.

Reject H_0 if $p<0.05$

Based on findings shown in Table 4.23, p-value is 0.033. Since p-value is less than 0.05, thus H_0 is rejected and H_1 is accepted, which indicates that there is relationship significant positive relationship between Perceived Information Quality and Purchase Intention.

Hypothesis 2

$H_0 =$ There is no relationship between Information Quantity in online reviews and consumers' Purchase Intention in Malaysia.

$H_1 =$ There is a relationship between Information Quantity in online reviews and consumers' Purchase Intention in Malaysia.

Reject H_0 if $p<0.05$

According to Table 4.23, the result showed the p-value is 0.001. Thence, H_1 is accepted because the p-value is less than 0.05. This reveals that there is a significant positive relationship between Information Quantity and Purchase Intention.

Hypothesis 3

H_0 = There is no relationship between Review Credibility in online reviews and consumers' Purchase Intention in Malaysia.

H_1 = There is a relationship between Review Credibility in online reviews and consumers' Purchase Intention in Malaysia.

Reject H_0 if $p<0.05$

As shown in Table 4.23, p-value is 0.004 which is less than 0.05. Hence, the H_0 is rejected and H_1 is accepted. Thus, there is a significant positive relationship between Review Credibility and Purchase Intention.

Hypothesis 4

H_0 = There is no relationship between Review Valence in online reviews and consumers' Purchase Intention in Malaysia.

H_1 = There is a relationship between Review Valence in online reviews and consumers' Purchase Intention in Malaysia.

Reject H_0 if $p<0.05$

As shown in Table 4.23, p-value is 0.000 which is less than 0.05. Hence, the H_1 is accepted. This showed that there is a significant positive relationship between Review Valence and Purchase Intention in present study.

4.5 Conclusion

In this chapter, descriptive analysis was conducted to analyse and summarise the respondents' demographic profile and general information. Other than that, the internal reliability of all variables has been tested by using Cronbach's alpha. Furthermore, inferential analysis has been measured by using Pearson Correlation Analysis and Multiple Linear Regression Analysis to determine the significant relationship between independents variables and dependent variable. Moreover, Multicollinearity analysis was implemented. In Chapter 5, further detailed discussion and findings will be carried out as well as draw conclusion of the study.

CHAPTER 5: DISCUSSIONS, CONCLUSION AND IMPLICATIONS

5.0 Introduction

This chapter will summarise the results that was interpreted in prior chapter and discuss about major findings of the research. Besides, this chapter will draw a conclusion for the research questions and research hypothesis. Furthermore, limitations that faced by the researcher throughout the process of conducting research project will be pointed out and the researcher will provide recommendations for future research purpose.

5.1 Summary of Statistical Analyses

Result and interpretation that explained in previous chapter will be concluded in this part, which involves respondents' demographic profile, Pearson Correlation analysis and Multiple Regression analysis.

5.1.1 Descriptive Analysis

In present research, total of 391 valid respondents with usable information were gathered.

In term of respondents' demographic profile, majority of the respondents were female (53.2%). Moreover, the largest proportion of respondent's age range was 18-22 years old (46.3%). Besides, 275 respondents (70.3%) are Chinese which accounted for the highest proportion. In addition, majority of respondents are students that involved 265 respondents. Furthermore, respondents whose monthly income falls below RM2000 have the highest percentage with 69.1%

In term of general information, most of the respondents have the experiences of reading online reviews before purchase a product. Adding on, 158 respondents with 40.4% are quite often to read the online reviews. When it comes to the platform for reading online reviews, majority of the respondents read the online reviews through e-commerce website such as Shopee, Lazada and Amazon. In the perspective of the experience of reading fake reviews, 201 respondents had the experience of reading fake reviews. Besides, 169 respondents with 43.2% believed that online reviews are important to them.

5.1.2 Central Tendencies Measurement of Construct

Based on the questionnaires of evaluation the Perceived Information Quality variable, the statement with highest mean is "The online reviews are helpful"

with the highest mean of 4.27. Besides that, in term of the variable of Information Quantity, statement with highest mean (4.27) is "The quantity of online reviews information is great, inferring that the product has good sales". Apart from that, for the variable of Review Credibility, statement with highest mean of 4.07 is "A customer shares sincere reviews on the website regarding the products". Other than that, variable of Review Valence has the highest mean (4.36) of the statement, which is "The rating of products by 5-stars rating system has allowed me to find well-rated products".

In terms of the dependent variable, which is purchase intention, the statement with highest mean (4.37) is "Online reviews about products do influence my buying intention towards that products".

5.1.3 Scale Measurement

In the present study, scale measurement is measured by Cronbach's Alpha reliability test. Based on Table 4.16, the outcome of reliability test revealed that all measurement scales items employed in the study are more than 0.7 of Cronbach's Alpha value, which indicated that all measurement scales items used in this study have a good internal reliability and consistency.

5.1.4 Inferential Analysis

5.1.4.1 Pearson Correlation Analysis

This study had adopted 95% of confidence level (p=0.05) to examine the association among variables as how the researcher calculated for sample size.

Result reveals that all independent variables were significantly positive relationship with purchase intention with the p-value of lower than 0.05. Review Valence (r=0.543) had the strongest influences on purchase intention.

5.1.4.2 Multiple Linear Regression Analysis

Based on the result showed in SPSS software, the value of adjusted R square is 0.383 which indicated that there is 38.3% of consumers' purchase intention is influenced by Perceived Information Quality, Information Quantity, Review Credibility, and Review Valence. Meanwhile, the remaining 61.7% of variance in purchase intention could be explored by including more possible factors in future studies.

Next, based on ANOVA, significant level is 0.000 which lower than p=0.05. Thence, there are significant relationships between all independent variables and dependent variable. Furthermore, Review Valence has the highest standardized beta value of 0.322, which

indicated that it is the most important variable in the study. Apart from that, no multicollinearity problem in the regression model.

In addition, the regression equation for the model is:

Purchase intention = 1.487 + 0.097(PIQ) + 0.146(INQ) + 0.134(RC) + 0.288(RV)

5.2 Discussion of Major Findings

Table 5.1: Summary of Hypotheses, Results, and Determinations

Hypothesis	Result		Determination
	p-value	β-value	
H$_1$ = There is a relationship between Perceived Information Quality in online reviews and consumers' Purchase Intention in Malaysia.	0.033 (p < 0.05)	0.110	Supported
H$_2$ = There is a relationship between Information Quantity in online reviews and consumers' Purchase Intention in Malaysia.	0.001 (p < 0.05)	0.177	Supported
H$_3$ = There is a relationship between Review Credibility in online reviews and consumers' Purchase Intention in Malaysia.	0.004 (p < 0.05)	0.158	Supported
H$_4$ = There is a relationship between Review Valence in online reviews	0.000	0.322	Supported

and consumers' Purchase Intention in Malaysia.	(p < 0.05)		

Source: Developed for the research

5.2.1 Relationship between Perceived Information Quality and Purchase Intention

H_1 = There is a relationship between Perceived Information Quality in online reviews and consumers' Purchase Intention in Malaysia.

With β value of 0.110 and p-value of 0.033, perceived information quality has positive relationship with consumers' purchase intention. Therefore, **H_1 was supported in the present study.**

Result generated from this study is consistent with the result done by the prior researchers that had been mentioned in CHAPTER 2 such as the study of Halim, Rianto and Hebrard (2020). Halim et al. (2020) revealed that perceived information quality has positively relationship with purchase intention among Instagram users in Jakarta. Adding on, this study also in line with the research conducted by Liao, Huang and Liu (2021). In study of Liao et al. (2021), findings showed that there is a positive relationship between perceived information quality and online purchase intention in Taiwan. This clearly indicated that the consumers' purchase intention will be increased if the perceived information quality of online reviews is high and helpful. Similarly, the result was supported by Wirani, Diniputri and Romadhon (2020) study. Researcher indicated when consumers are purchasing on online platform, one of the requirements is access to high-quality information.

Perceived information quality can be explained by completeness, correctness, usability, reliability and clarity of information (Chen and Chang, 2018). Online review serves as a primary information source for consumers to make their purchase decision. Zheng, Zhao and Stylianou (2013) stated that high-quality information helps consumers to obtain helpful information, and thus increase their purchase intention. A good-quality information can guarantee for the loyalty of consumers (Wei et al., 2018). As a result, review quality becomes important factor because the consumers want to minimize their risk when purchasing the product through online by relying on the product information from online reviews to judge the products as they cannot touch, feel and see the products physically (Sutanto and Aprianingsih, 2016). In addition, Bataineh (2015) proved the higher the review quality will lead to higher the consumer intention to purchase the products reviewed. When consumers feel that the online reviews are valid, they will believe that the information is helpful and beneficial (Yusuf and Busalim, 2018). As Table 4.11 showed, the findings of this study revealed the highest mean statement of perceived information quality is "The online reviews are helpful", thus this result has supported by Yusuf and Busalim (2018).

5.2.2 Relationship between Information Quantity and Purchase Intention

H_2 = There is a relationship between Information Quantity in online reviews and consumers' Purchase Intention in Malaysia.

Referring to β value of 0.177 and p-value of 0.001, information quantity was the second most crucial determinants in purchase intention. Hence, **H_2 was supported in this study**.

Based on study done by Zhou, Liu and Tang (2013) as mentioned in CHAPTER 2, researchers found that a positive effect between information quantity of online consumer reviews and purchase intention with p-value of lower than 0.05. Ismagilova et al. (2020) study also reveals that there is a positive relationship between information quantity and purchase intention with correlation coefficient (r) of 0.388 and p-value of 0.008. Volume of information in online platform makes the information more visible when customers seek for it, because the information volume demonstrates the product or service's popularity (Ismagilova et al., 2020). Additionally, findings of this study are also in line with the previous study done by Huyen and Costello (2017). Huyen and Costello (2017) found that information quantity has direct and strong effect on consumer's purchase intention ($\beta=0.289$; $p=0.001$). Thus, high number of reviews would help people to have stronger confidence towards the product (Huyen and Costello, 2017).

Arora and Sharma (2018) highlighted that large volume of information uploaded by other customers will increases confidence in purchasing decisions while also lowering the danger of mistakes and risk exposure. This is because huge number of reviews are often seen as the item being purchased by many consumers, therefore, the product is seen as popular and prominent (Arora and Sharma, 2018; Bataineh, 2015). From the finding of present study, 43.7% of respondents were strongly agreed with the statement, "the quantity of online reviews information is great, inferring that the product has good sales". Other than that, study by Kevin et al. (2020) also found that number of reviews can meet consumer information demands, boosting confidence and reducing uncertainties.

5.2.3 Relationship between Review Credibility and Purchase Intention

H_3 = There is a relationship between Review Credibility in online reviews and consumers' Purchase Intention in Malaysia.

Referring to Table 5.1, result reveals that review credibility has the positive relationship with purchase intention, with β value of 0.158 and p-value (0.004). Therefore, **H_3 was supported.**

Findings of this study have supported by past study of Thomas et al. (2019), which reveals that there is significant positive relationship between review credibility and purchase intention in Germany. Moreover, present study also corresponds to the research done by Tee (2017) which examine the impact of review credibility on purchase intention in Malaysia. Tee (2017) discovered that the review credibility has strong effect on purchase intention with β value of 0.447, t-value of 5.426 and p-value of 0.000. Since the consumers have access to a variety of sources of information, thus the compared information from reviews was widely regarded as trustworthy(Tee,2017). Other than that, past study of Shukla and Mishra (2021) found that there is a positive impact of review credibility towards purchase intention (r=0.489; t-value=3.745; p-value=0.000). Consumers may believe that the reviews are based on facts and personal experiences of previous consumers, thus they will think the reviews are credible (Shukla and Mishra, 2021). Referring to Table 4.13 in this study, statement of "a customer shares sincere reviews on the website regarding the products" has the highest mean for review credibility constructs. Therefore, this indicated that consumers trust the previous consumer will shares sincere reviews based on their own personal experiences, and it supported by Shukla and Mishra (2021). Furthermore, study of Mosa (2021) found that review

credibility has a moderate positive effect association with purchase intention in Iraqi among Facebook users.

Rizaldi et al. (2020) demonstrated that consumers will be more likely to accept the trusted sources of reviews since they establish a sense of trustworthiness, which increase purchase intention. Past studies revealed that consumer reviews are more convincing and understandable than expert or company evaluations, because that the past consumer reviews offer the consumers with information based on their real product experience which increases the level of trustworthiness (Kim, Maslowska and Malthouse, 2018; Li, Huang, Tan and Wei,2013). As a result, review credibility is an essential factor that might influence buying intentions.

5.2.4 Relationship between Review Valence and Purchase Intention

H_4 = There is a relationship between Review Valence in online reviews and consumers' Purchase Intention in Malaysia.

Based on Table 5.1, review valence was the most important review determinants in purchase intention with β value of 0.322 and p-value of 0.000. **Thus, H_4 was supported**.

Findings from present study are consistent with Van Lohuizen and Trujillo-Barrera (2020), which has mentioned in CHAPTER 2. The researchers found that review valence has significant positive effect on purchase intention in service industry. Besides that, present study also consistent with

study of Cheong et al. (2020), which demonstrated that there is significant correlation between review valence and online purchase intention towards electronic products with p-value of 0.0355 and correlation coefficient of 0.145*. Negative reviews are the most persuasive consumer feedback since the consumers immediately spell out some critical drawbacks of the product, however, negative reviews will decrease the purchase intention (Cheong et al, 2020). Apart from this, prior study of Sutanto and Aprianingsih (2016) also consistent with this study's finding, which revealed that there is positive association between review valence and purchase intention towards premium cosmetic product in Indonesia. Adding on, based on the Table 4.14, the statement of "The rating of products by 5-stars rating system has allowed me to find well-rated products" has the highest mean for review valence construct in this study, and it was supported by Karabas, Kareklas, Weber and Muehling (2021). Karabas et al. (2021) study highlighted that the star-rating of product has highly direct impact to purchase intention, because star-rating system allows the consumers to seek for high-rated products.

Review valence is an effective indicator of consumers' opinions, which enhances the products' awareness with relatively scarce information (Wang and Kim, 2021). Positive review will increase the likelihood of making a purchase (Sutanto and Aprianingsih, 2016). While, bad review will decrease buying intention, and consumer will look for other brand product's reviews that has favourable feedback (Cheong et al, 2020; Lopez and Sicilia, 2014). Hence, review valence is regarded a major feature of online consumer reviews that influence consumer decision making because of its positive/negative nature. If there are large number of negative reviews or low five-star rating towards the product, it means larger risk perception which lead to the consumer will reduce their purchase intention (Yang et al., 2016). According to a study by Elwalda and Lu (2016) has concluded that the review valence has a large impact on sales as well as it is a strong predictor of sales. Therefore, review valence has the strongest influences on purchase intention.

In short, all research objectives and research questions were met. As a result, researcher can conclude there is a moderate positive relationship between all independents variables and dependent variables.

5.2.5 Consumers Perspective Towards Fake Reviews

As problem statement showed in CHAPTER 1, there are possible existence of fake online reviews which is inconsistent with the true evaluations of the products or services. According to Kingdom Digital Solution (2018) stated Malaysia's online platform has numerous fake reviews posted. From the finding of this study, as Table 4.9 showed, 201 respondents (51.4%) had experienced reading fake online review because they received the products which is incompatible with the online review. However, majority of the respondents still thinks that online reviews is important to them (43.2% of respondent thinks reviews is important; 41.7% of respondents thinks it is very important) as shown in Table 4.10.

According to study of Goswami et al. (2017), demonstrated that when the researchers asked about respondents' perceptions towards fake reviews, respondents did not appear to be troubled by fake review, even they had experienced in reading fake reviews. Nevertheless, consumers acknowledged that online reviews should be taken with a grain of salt, which indicating certain scepticism (Menfors and Fernstedt, 2015). This indicated that consumer will not fully trust the reviews, however they will still rely on the reviews. This is because the online review is the main source for them to get more accurate product information, because they cannot see and touch the products physically, hence they can only rely on reviews to make for

purchase decisions (Sutanto and Aprianingsih, 2016). Menfors and Fernstedt (2015) stated that this is a fairy perplexing behaviour because the respondents are aware of the existence of fake reviews but still claim to believe it. One possible reason for consumers' trusting behaviour is that they create their own strategies to make their overall assessment of online review trustworthiness. Thus, review factors that tested in this study were the elements for consumers to judge the trustworthiness of the online reviews.

5.3 Implication of the Study

5.3.1 Theoretical Implications

Present research figured out the perceived information quality, information quantity, review credibility and review valence had significant positive relationship with purchase intention in Malaysia. All the independent variables only contributed 38.3% of variation in purchase intention. To provide more thorough explanation for the variance, future researchers are advised to include other factors. As there are lack of previous studies on consumers' purchase intention affected by online reviews in Malaysia, hence, this research also provide some theoretical knowledge of consumer behaviour towards the online reviews.

5.3.2 Managerial Implications

Knowing that consumers are the businesses' most valuable asset, hence, how to win consumers' hearts and stimulate them to spend more will be the key concern for online businesses. With the quick changes and fierce competition in Malaysia's e-commerce industry, the ability to understand the consumer behaviour and meet the consumers' needs and wants is critical for online businesses to maintain their positions. Hence, practitioners can effectively design appropriate **consumer retention strategy and marketing tools** by managing reviews to increase purchase intention.

In term of practical implications, this research provides several insights for online businesses about how to motivate the purchase intention of consumers. In this research, **review valence** is the highest influences on the consumers' purchase intention compared to other three elements. Result illustrated that it is crucial that practitioners should be aware of their product's review valence on both company's website and third-party sites. Online businesses must understand that higher average rating of product can enhance their sales. This is because review valence plays crucial role in consumer decision-making as the positive reviews may increase purchase intention of consumers while negative reviews destroy buying intention. Thereby, online businesses can better shape the online reviews easily with this knowledge, to meet consumers' needs. Undeniable, practitioners may encounter the negative reviews when doing online business which may result in undermine business image and drive the customer away. Hence, researcher recommends that practitioners can respond to negative review immediately and solve the issues with consumers. Most of the firms may overlook unfavourable reviews and lack procedures for dealing with them successfully, and caused consumers tend to substitute products with low switching cost. To be honest, it is a good idea to respond both positive and negative feedback since it is the most important factors. According to the

research by Otar (2018), proved that businesses that reply to more than 20% of reviews will generate 33% more income than average firms. Moreover, be professionalism with fast responses will help the business go a long way and become sustainable.

Other than that, this research also demonstrated that **information quantity** is the second most important elements affect consumers' buying intention (β-value=0.177). From the standpoint of information quantity, online consumers believed that large number of online reviews indicated higher degree of popularity. Practitioners can grow their business's reputation by motivating the consumers to comment towards their products, because other consumers will search for reviews to gain a sense of a company's reputation and actual product information. However, it is crucial for practitioners to remember that large number of low-quality reviews may not help in business. It is recommended that practitioners can inform the consumers about they able to earn money on Shopee application (Figure 5.1) by leaving reviews or provide some other rewards (discount) to consumers as well. In short, this study contributes knowledges to practitioners about the larger the information quantity of reviews in their online store will lead to an increase in purchase intention because they think the product has a good sale and popular.

Figure 5.1: Review Reward Criteria
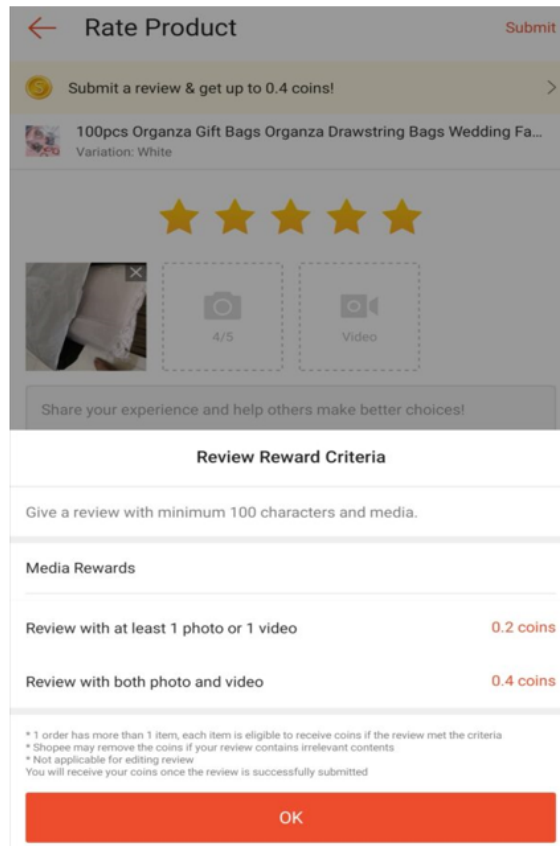
Source: Hustler. (2020) How to make money on Shopee without selling
anything. Retrieved from https://thriftyhustler.com/earn/make-
money-shopee/

Review Credibility is the third determinants for consumers' purchase
intention (β-value=0.158). As the nature of online reviews focuses on the
source credibility of reviews, it is crucial for practitioners to ensure the
trustworthiness of each review, without fake review exists. Hence, online
businesses need to ensure review credibility to meet consumers' expectation,
without use reviews to spread fake information for self-interested purposes
which will decrease consumers' trust. Since consumers may read online
reviews for their online purchase decisions, hence, a reliable, sincere, and
truthful review will enhance purchase intention which may increase sales.
This is because that when a buyer lack of first-hand experience, their

purchase decisions are typically affected by the opinions of other consumers. With this knowledge, practitioner can create strategies to increase credibility. Practitioners is recommended to use the customers' testimonials to boost the credibility by collecting the testimonials from social media, surveys or online reviews.

Noted that findings of present study also reflected **perceived information quality** of reviews has significant impact on consumers' purchase intention in Malaysia (β-value=0.110). Since perceived information quality of review influence purchasing decisions, thence, practitioners can leverage the existing reviews with excellent quality as part of company's business communications. This is because high-quality reviews can increase online review persuasiveness, thus triggered purchase intention. An improved information quality leads to buyers can have a better decision-making before purchase the product through online. More high-quality information in reviews, resulting in more confidence of consumers because it can reduce risk for consumers. Practitioners could consider enhancing the information quality in online reviews by eliminate the fake reviews and rearrange the reviews accordingly, to bring convenience for consumer to read through. High-quality review can assist buyers choose between competing items and guiding them to the best alternatives for their needs. As a conclusion, enhancing the information quality helps in the realisation of the utility and hedonic goals of consumers, as well as the realisation of purchasing behaviour (Liu, Song, Yang, Cheng and Li, 2020).

5.4 Limitations of the Study

Nevertheless, there are several limitations that can be enhance as it had affected the outcome of study.

Firstly, demographic profile of respondents in this study is lacking in diversity. Based on study of Khan, Conroy and Ahmad (2012), demonstrated that age, sex and race are examples of research units that may be over-selected or under-stated. Due to the limited time, this research used convenience sampling methods to increase the chances to approach respondents from different demographic background, but the sample gathered cannot truly represent each subgroup in Malaysia. Hence, it is quite challenging in produce a more comprehensive conclusion. As majority of the respondents participated in this study are Chinese which has 275 respondents (70.3%) among the race group, hence, the result of this study might be fewer representative due to the sample distribution is not average. This led to the result of this study tends to Malaysia Chinese buying behaviour. It is possible that various cultures have different spending behavior (Liu et al., 2020). Another example is 265 respondents of this study are students (67.8%). Although the effects of race, age and other respondent demographic profile on purchase intention are not the primary objective of this study, however, due to the data obtained revealed an imbalance in the amount of each subgroup, this study was unable to conduct additional statistical tests to determine whether consumers' purchase intention are related to those subgroups.

Secondly, the risk of bias when respondents are chosen depending on their availability. Since the current study employed convenience sampling as a sample strategy. Despite of its benefits of saving time and money, there may include possible biasness because the respondents are picked based on their availability. Moreover, due to the time restriction to conduct this study, the research was conducted through online distribution of questionnaires, and it was kind of self-

administrated questionnaire, which means that the respondents will take their responsibility to read and complete the questionnaires without any assistance from interviewer/researcher, to allow the study conducted more effectively. However, the ability of respondents to comprehend and interpret the questions is uncertainty, which might lead to biased responses and less accurate findings.

Thirdly, there is a limitation in terms of gathering data from only few limited areas. Due to time and expense restrictions, it was difficult to reach sufficient number of target respondents in different states in Malaysia. Meanwhile, tracking and categorizing the respondents' location is considerably very difficult in this research. Thus, there is a likelihood that majority of the respondents are from only several limited areas and there is no guarantee that every state in Malaysia will have respondents participated in current research. Hence, generalizing the data acquired to the entire population in Malaysia is unsuitable since every state may have different buying behaviour and different perceptions towards online reviews. So, this study could not fully represent the purchasing behaviour of Malaysian.

Beyond that, independent variables tested in current research is only limited to four, which consists of perceived information quality, information quantity, review credibility and review valence. Since these four independent variables only explained about 38.3% of the dependent variable (Purchase Intention). In addition to these four independent variables, other 61.7% of possible contributing review factors may also impact the individual's purchase intention in Malaysia. The absence of other possible independent or mediating variables may hamper the ability of researcher to obtain reasonably in-depth results.

It is important to highlight that the limitations are acknowledged, however, they do not detract from the significance of the findings. Instead, they only serve merely as platforms for future research.

5.5 Recommendations for Future Study

Several recommendations have been suggested to enhance the quality of future studies.

Firstly, it is recommended that data to be collected that consists of balance amount for each subgroup and is disseminated throughout a larger geographic area in order to obtain more comprehensive results. To make the distribution sample more equal, future researchers should not approach the same group of respondents, but rather focus on another group of respondents where they are deficient. Further, future researchers are advised to reserve more time for distribution of questionnaire, therefore the researchers have sufficient time to seek for more suitable and qualified respondents. By this, findings are likely to be more reliable and accurate by distributing the questionnaire equally, because it is answered by each different groups of respondents since Malaysia is a multicultural country.

Apart from that, the researchers are advised to adopt probability sampling method for the future studies. This is because that the differences between sample results and population equivalent values could be computed. Thence, the future researchers could collect more accurate findings since all the targeted respondents in a big area are sampled. Probability sampling can result in higher quality findings because it provides an unbiased representation of the population in Malaysia. In addition, nature of respondents may influence accuracy of the result. Since the self-administrated questionnaire may cause the uncertainty of respondent's ability to comprehend the question, therefore, multi-lingual questionnaire could be adopted to enhance their understanding in reading the languages which they are more familiar with such as Bahasa Malaysia, Mandarin and Tamil. By doing this, respondents can provide more accurate answer which eliminates language obstacles. Additionally, for the future researchers who intend to have in-depth understanding about this relevant topic, it is advised that to utilize qualitative research which allow

the respondents to share their ideas and perspective towards the online reviews, to overcome the limitation of closed-ended questions with fixed alternative in this research.

Subsequently, it is recommended that to include additional questions in questionnaire to ask the respondents to indicate which state they are from, making it easier to categorize respondents based on their location. Besides, it is advisable that do not distribute hard questionnaires to different states which is very time consuming, especially when creating large samples. Adding on, it is recommended that future studies can compare the purchase intentions of consumers from different states to study whether there are any differences.

Beyond that, additional variables can be tested for more-in-depth investigation. It is suggested that future researchers take other possible independent or mediating variables into consideration which are not included in present study but are important in the assessment of purchase intention such as review timeliness or customer trust. The R^2 in current study is 0.383, indicated that there are more reviews factors that can be studied to better explain the influence of online reviews towards purchase intention in Malaysia. By doing so, an even more comprehensive framework regarding the impact of online reviews affect purchase intention can be developed.

5.6 Conclusion

In short, present study has successfully reached the research objectives, which is to investigate the relationship between Perceived Information Quality, Information Quantity, Review Credibility and Review Valence in online reviews towards consumers' purchase intention in Malaysia. Findings revealed that all independent

variables have positive relationship with the dependent variable. To sum up, Review Valence has the strongest impact among all variables with β value (0.322) and p-value of 0.000. Consequently, from the managerial view, Review Valence is the most crucial review factor that will influence individual's purchase intention before purchase product through online. Furthermore, results addressed that all independents variable act as the significant predictors in affecting consumers' purchase intention. Thus, practitioners must place priority in continuously ensuring that consumers have an excellent purchase experience and enjoy a great deal. The limitations and recommendations of present study have been clearly identified.

Although there is limited prior research about the influence of online review in Malaysia context, however, it has become more common for people to purchase products online due to trend of e-commerce business are growing rapidly. It is still a long journey to develop an in-depth understanding towards this area in our country. Therefore, present study motivates more future researchers in exploring this topic to figure out more relevant independent variables to explain purchase intention.

REFERENCES

AL-Hassani, H. Q. M. H., Khakimova, N., & Alfadaa, F. I. (2020). The factors affecting online purchase intention among university students in Malaysia: A quantitative study during COVID-19. *Journal of Critical Reviews*, *7*(16), 3464-3477.

Allanson, R. E., & Notar, C. E. (2020). Statistics as measurement: 4 scales/levels of measurement. *Education Quarterly Reviews, 3*(3).

Allen, M. (2017). Coding of data. *The SAGE encyclopedia of communication research method.* SAGE publications.

Al Zoubi, J. Z., & Hashem, T. N. (2015). Information Quality and its Impact on the Marketing Performance in Industrial Jordanian Corporations-Field Study. *International Journal of Business, Humanities and Technology,* 5(5), 48-56.

Apuke, O. D. (2017). Quantitative research methods: A synopsis approach. *Kuwait Chapter of Arabian Journal of Business and Management Review*, *33*(5471), 1-8.

Arora, L., & Sharma, B. K. (2018). Influence of review quality, review quantity and review credibility on purchase intention in the context of high involvement products. *European Journal of Applied Business Management, 4*(4), 25-40.

Asiamah, N., Mensah, H. K., & Oteng-Abayie, E.F. (2017). General, target, and accessible population: Demystifying the concepts for effective sampling. *The Qualitative Report, 22*(6), 1607-1622.

Bataineh, A. Q. (2015). The impact of perceived e-WOM on purchase intention: The mediating role of corporate image. *International Journal of Marketing Studies, 7*(1), 126.

Bhardwaj, P. (2019). Types of sampling in research. *Journal of the Practice of Cardiovascular Sciences, 5*(3), 157-163.

Bilgen, I., & Zoghi, F. S. (2017). A research on the impact of ewom source credibility and personal innovativeness on online shopping intention in Turkish customers. *Journal of Management Marketing and Logistics*, *4*(2), 143-151.

BrightLocal. Ltd. (2020). *Local consumer review survey 2020*. Retrieved November 16, 2021, from https://www.brightlocal.com/research/local-consumer-review-survey/

Chakraborty, U. (2019). The impact of source credible online reviews on purchase intention: The mediating roles of brand equity dimensions. *Journal of Research in Interactive Marketing, 13*(2), 142-161.

Chen, C., & Li, X. (2020). The effect of online shopping festival promotion strategies on consumer participation intention. *Industrial Management & Data Systems, 120*(12), 2375-2395.

Chen, C. C., & Chang, Y. C. (2018). What drives purchase intention on Airbnb? Perspectives of consumer reviews, information quality, and media richness. *Telematics and Informatics*, *35*(5), 1512-1523.

Cheong, J. W., Muthaly, S., Kuppusamy, M., & Han, C. (2020). The study of online reviews and its relationship to online purchase intention for electronic products among the millennials in Malaysia. *Asia Pacific Journal of Marketing and Logistics, 32*(7), 1519-1538.

Chih, W. H., Hsu, L. C., & Ortiz, J. (2020). The antecedents and consequences of the perceived positive eWOM review credibility. *Industrial Management & Data Systems*.

Chiou, J. S., Hsiao, C. C., & Chiu, T. Y. (2018). The credibility and attribution of online reviews: differences between high and low product knowledge consumers. *Online Information Review, 42*(5), 630-646.

Claessens, M. (2015, March 07). *The buyer black box – buyer's characteristics – factors influencing the consumer buying behaviour*. Retrieved November 23, 2021, from https://marketing-insider.eu/buyer-black-box/

Combes, S. (2019, September 19). An introduction to sampling methods. *Scribbr*. Retrieved March 19, 2022, from https://www.scribbr.com/methodology/sampling-methods/

Cui, Y., Niu, J., & Guo, R. (2015). Effects of negative online reviews on consumers' attitudes and behavioral intentions toward online products. *Economic Management Journal*, *4*(4), 75-83.

Daalmans, J. (2018). Constraint simplication for data editing of numerical variables. *Journal of Official Statistics, 34*(1), 27-39.

Dachyar, M., & Banjarnahor, L. (2017). Factors influencing purchase intention towards consumer-to-consumer e-commerce. *Intangible Capital*, *13*(5), 946-966.

Dalati, S. (2018). Measurement and Measurement Scales. *Modernizing the Academic Teaching and Research Environment*, 79-96.

Danish, R. Q., Hafeez, S., Ali, H. F., Shahid, R., & Nadeem, K. (2019). Impact of online consumer reviews on hotel booking intentions: The case of Pakistan. *European Scientific Journal ESJ*, *15*(7), 144-159.

Daoud, J. I. (2017). Multicollinearity and regression analysis. *Journal of Physics: Conference Series, 949*(1), 1-6.

Dhahak, K., & Huseynov, F. (2020). The Impact of Online Consumer Reviews (OCR) on Online Consumers' Purchase Intention. *Journal of Business Research-Turk, 12*(2), 990-1005.

Digitalinfluencelab. (2021). *Malaysia Digital Marketing Statistics 2021*. Retrieved November 16, 2021, from https://digitalinfluencelab.com/malaysia-digital-marketing-statistics-2020-2021/

DJS Research Ltd. (2022). *Element sampling*. Retrieved March 19, 2022, from https://www.djsresearch.co.uk/glossary/item/Element-Sampling

Eberstadt, G. (2017, October 05). *Ratings and reviews and the psychology of popularity.* Retrieved November 23, 2021, from https://www.mytotalretail.com/article/ratings-and-reviews-and-the-psychology-of-popularity/

Elfil, M., & Negida, A. (2017). Sampling methods in clinical research; an educational review. *Emergency, 5*(1).

Elwalda, A., & Lu, K. (2016). The impact of online customer reviews (OCRs) on customers' purchase decisions: An exploration of the main dimensions of OCRs. *Journal of customer Behaviour*, *15*(2), 123-152.

Eyisi, D. (2016). The usefulness of qualitative and quantitative approaches and methods in researching problem-solving ability in science education curriculum. *Journal of Education and Practice*, *7*(15), 91-100.

Fang, Y. H. (2014). Beyond the credibility of electronic word of mouth: Exploring eWOM adoption on social networking sites from affective and curiosity perspectives. *International Journal of Electronic Commerce*, *18*(3), 67-102.

Fernandus, F., & Legowo, N. (2020). The effect of website design, website security, information quality, and perceived ease of use on customer satisfaction and online purchase intention in Indonesia E-Commerce in Jakarta. *International Journal of Advanced Trends in Computer Science and Engineering, 9*(2), 1696-1703.

Fincham, J. E. (2008). Response rates and responsiveness for surveys, standards, and the Journal. *American journal of pharmaceutical education, 72*(2).

Fong, S. W. L., Kian, T. P., Fern, Y. S., & Quan, S. L. (2018). The impact of online consumer review to online hotel booking intention in Malaysia. *International Journal of Supply Chain Management*, *7*(2), 140-145.

Freddie. (2020, October 03). Demographic profile of customers read online reviews to make purchase decision. Retrieved November 15, 2021, from https://reviewmonitoring.com/demographic-profile-of-customers-who-read-online-reviews-to-make-a-purchase-decision/

Fu, X., Bin, Z., Xie, Q., Liuli, X., & Yu, C. (2011). Impact of quantity and timeliness of EWOM information on consumer's online purchase intention under C2C environment. *Asian Journal of Business Research*, *1*(2), 37-52.

Gaille, L. (2020, February 24). 15 advantages and disadvantages of convenience sampling. Retrieved April 10, 2022, from https://vittana.org/15-advantages-and-disadvantages-of-convenience-sampling

Gobi, N., & Rathinavelu, A. (2019). Analyzing cloud based reviews for product ranking using feature based clustering algorithm. *Cluster Computing*, *22*(3), 6977-6984.

Gogoi, P. (2020). Application of SPSS programme in the field of social science research. *International Journal of Recent Technology and Engineering, 8*(5), 2424-2427.

Goswami, K., Park, Y., & Song, C. (2017). Impact of reviewer social interaction on online consumer review fraud detection. *Journal of big data*, *4*(1), 1-19.

Goswami, S. (2015). Analysing effects of information overload on decision quality in an online environment. *Journal of Management Research*, *15*(4), 231-245.

Guetterman, T. C. (2019). Basics of statustics for primary care research. *Family medicine and community health, 7*(2).

Guo, J., Shan, S., & Yulei, L. (2020). What Factors Influence Customers' Purchase Intentions in Travel-Related Social Commerce?. *Proceedings of The 20th International Conference on Electronic Business*. 456-467.

Halim, E., Rianto, A., & Hebrard, M. (2020, August). The Impact of Marketing
Influencer and Information Quality to Purchase Intention of Instagram
Users. *2020 International Conference on Information Management and
Technology (ICIMTech)*, 794-799.

Han, X., Qu, J., & Zhang, T. (2019). Exploring the impact of review valence,
disease risk, and trust on patient choice based on online physician
reviews. *Telematics and Informatics*, *45*, 1-10.

Hanjaya, M., Kenny, K., & Gunawan, F. (2019). Understanding factors
influencing consumers online purchase intention via mobile app: perceived
ease of use, perceived usefulness, system quality, information quality, and
service quality. *Marketing Instytucji Naukowych i Badawczych (MINIB)*,
32(2), 175-206.

Hasanov, J., & Khalid, H. (2015). The impact of website quality on online
purchase intention of organic food in Malaysia: A WebQual model
approach. *Procedia Computer Science*, *72*, 382-389.

Hayes, A. (2021, March 30). Multiple linear regression (MLR). *Investopedia.*
Retrieved March 23, 2022, from
https://www.investopedia.com/terms/m/mlr.asp#:~:text=The%20goal%20
of%20multi

Hayes, A. (2022, March 04). Descriptive statistics. *Investopedia*. Retrieved March
22, 2022, from
https://www.investopedia.com/terms/d/descriptive_statistics.asp

Hidayat, S., Wibowo, W., Gunawan, Y. L., Dewi, G. C., & Wijayaningtyas, M.
(2021). Factors Influencing Purchase Intention of Healthcare Products
During the COVID-19 Pandemic: An Empirical Study in
Indonesia. *Journal of Asian Finance, Economics and Business*, *8*(6), 337-
345.

Hossain, M. A. (2019). Effects of uses and gratifications on social media use: The
Facebook case with multiple mediator analysis. *PSU Research Review, 3*(1),
16-28.

Hsieh, J. K., & Li, Y. J. (2020). Will you ever trust the review website again? The importance of source credibility. *International Journal of Electronic Commerce*, *24*(2), 255-275.

Hustler, T. (2020, October 21). How to make money on Shopee without selling anything. Retrieved April 08, 2022, from https://thriftyhustler.com/earn/make-money-shopee/

Huyen, T. T., & Costello, J. (2017). Quality versus quantity: an investigation into electronic word of mouth's influence on consumer buying intention. *Journal of Promotional Communications*, *5*(2).

Ismagilova, E., Slade, E. L., Rana, N. P., & Dwivedi, Y. K. (2020). The effect of electronic word of mouth communications on intention to buy: A meta-analysis. *Information Systems Frontiers*, *22*(5), 1203-1226.

Jager, J., Putnick, D. L., & Bornstein, M. H. (2017). More than just convenient. The scientific merits of homogenous convenience samples. *Monographs of the Society for Research in Child Development, 82*(2), 13-30.

Janse, R. J., Hoekstra, T., Jager, K. J., Zoccali, C., Tripepi, G., Dekker, F. W., & Van Diepen, M. (2021). Conducting correlation analysis: Important limitations and pitfalls. *Clinical Kidney Journal, 14*(11), 2332-2337.

Jarrah, M. A. A. (2018). The use of social media as a marketing tool for purchase adaption and purchase intention to improve competitive advantage. *International Journal of Trade, Economics and Finance*, *9*(5), 203-209.

Jiang, G., Liu, F., Liu, W., Liu, S., Chen, Y., & Xu, D. (2021). Effects of information quality on information adoption on social media review platforms: Moderating role of perceived risk. *Data Science and Management*, *1*(1), 13-22.

Johansen, K. V., & Hovland, F. L. (2012). Social communication: the impact of online customer reviews on purchase intention. *BI Norwegian School of Management*.

Johnson, D. (2022, March 08). What is data analysis? Research | Types| Methods | Techniques. Retrieved March 22, 2022, from https://www.guru99.com/what-is-data-analysis.html

Johnston, R., Jones, K., & Manley, D. (2018). Confounding and collinearity in regression analysis: a cautionary tale and an alternative procedure, illustrated by studies of British voting behaviour. *Quality & quantity*, *52*(4), 1957-1976.

Kabir, S. M. S. (2016, July). *Method of data collection* (1st ed.). Bangladesh: Book Zone Publication.

Kalish, C. W., & Thevenow-Harrison, J. T. (2014). Descriptive and inferential problems of induction: Toward a common framework. *Psychology of learning and motivation, 61*, 1-39.

Kanagal, N. B. (2016). An extended model of behavioural process in consumer decision making.*International Journal of Marketing Studies, 8*(4), 87-93.

Karabas, I., Kareklas, I., Weber, T. J., & Muehling, D. D. (2021). The impact of review valence and awareness of deceptive practices on consumers' responses to online product ratings and reviews. *Journal of Marketing Communications*, *27*(7), 685-715.

Kaur, P., Dhir, A., Chen, S., Malibari, A., & Almotairi, M. (2020). Why do people purchase virtual goods? A uses and gratification (U&G) theory perspective. *Telematics and Informatics*, *53*, 1-11.

Kenton, W. (2021, October 06). Analysis of Variance (ANOVA). *Investopedia*. Retrieved March 23, 2022, from https://www.investopedia.com/terms/a/anova.asp#:~:text=Analysis%20of %20variance%2C%20or%20ANOVA,the%20dependent%20and%20indep endent%20variables.

Kevin, A., Wahab, Z., & Shihab, M. S. (2020). The Impact of Online Consumer Reviews Dimension on Online Purchase Intentions In Tokopedia. *International Journal of Scientific and Research Publications*, *10*(1), 387-393.

Kim, J. H. (2019). Multicollinearity and misleading statistical results. *Korean journal of anesthesiology, 72*(6), 558-569.

Kim, S. J., Maslowska, E., & Malthouse, E. C. (2018). Understanding the effects of different review features on purchase probability. *International Journal of Advertising, 37*(1), 29-53.

Kingdom Digital Solution Sdn. Bhd. (2018, June 21). *Fake online reviews on the rise: A marketing strategy for online retailers?*. Retrieved November 16, 2021, from https://www.kingdomdigital.com.my/fake-online-reviews-rise-marketing-strategy-online-retailers

Knight, G. P. (2018). A survey of some important techniques and issues in multiple regression. *New methods in reading comprehension research*, 13-30.

Kordrostami, E. (2016). *Valence or Volume? Maximizing Online Review Influence Across Consumers, Products, and Marketing*. Unpublished doctoral dissertation, Old Dominion University.

Lackermair, G., Kailer, D., & Kanmaz, K. (2013). Importance of online product reviews from a consumer's perspective. *Advances in economics and business*, *1*(1), 1-5.

Leong, C. M., Loi, A. M. W., & Woon, S. (2021). The influence of social media eWOM information on purchase intention. *Journal of Marketing Analytics*, 1-13.

Lkhaasuren, M., & Nam, K. D. (2018). The effect of electronic word of mouth (eWOM) on purchase intention on Korean cosmetic products in the Mongolian Market. *Journal of International Trade & Commerce*, *14*(4), 161-175.

Li, Z., Zhang, Y., Xia, W., & Chen, K. (2019). What makes a helpful online review when information overload exists?. *The eighteenth wuhan international conference on E-E business strategy*.

Li, M., Huang, L., Tan, C. H., & Wei, K. K. (2013). Helpfulness of online product reviews as seen by consumers: Source and content features. *International Journal of Electronic Commerce*, *17*(4), 101-136.

Liao, H. L., Huang, Z. Y., & Liu, S. H. (2021). The effects of negative online reviews on consumer perception, attitude and purchase intention: Experimental investigation of the amount, quality, and presentation order of eWOM. *Transactions on Asian and Low-Resource Language Information Processing*, *20*(3), 1-21.

Lim, W. M., & Ting, D. H. (2012). E-shopping: An analysis of the uses and gratifications theory. *Modern Applied Science*, *6*(5), 48-63.

Liu, B., Song, M., Yang, G., Cheng, S., & Li, M. (2020). Stimulus organism response model based analysis on consumers' online impulse buying behaviour. *The International Journal of Electrical Engineering & Education*, 1-15.

Liu, Z., Lei, S. H., Guo, Y. L., & Zhou, Z. A. (2020). The interaction effect of online review language style and product type on consumers' purchase intentions. *Palgrave Communications*, *6*(1), 1-8.

Lo, A. S., & Yao, S. S. (2019). What makes hotel online reviews credible? An investigation of the roles of reviewer expertise, review rating consistency and review valence. *International Journal of Contemporary Hospitality Management, 31*(1), 41-60.

López, M., & Sicilia, M. (2014). Determinants of E-WOM influence: The role of consumers' internet experience. *Journal of theoretical and applied electronic commerce research*, *9*(1), 28-43.

Lowe, N. K. (2019). What is a pilot study?. *Journal of Obstetric, Gynecologic & Neonatal Nursing*, *48*(2), 117-118.

Machdar, N. M. (2019). The effect of information quality on perceived usefulness and perceived ease of use. *Business and Entrepreneurial Review*, *15*(2), 131-146.

Mao, Z. E., Jones, M. F., Li, M., Wei, W., & Lyu, J. (2020). Sleeping in a stranger's home: A trust formation model for Airbnb. *Journal of Hospitality and Tourism Management*, *42*, 67-76.

Martínez-Mesa, J., González-Chica, D. A., Duquia, R. P., Bonamigo, R. R., & Bastos, J. L. (2016). Sampling: How to select participants in my research study?. *Brazilian Society of Dermatology*, *91*(3), 326-330.

Martins, J., Costa, C., Oliveira, T., Gonçalves, R., & Branco, F. (2019). How smartphone advertising influences consumers' purchase intention. *Journal of Business Research*, *94*, 378-387.

Maslowska, E., Malthouse, E. C., & Bernritter, S. F. (2017). Too good to be true: the role of online reviews' features in probability to buy. *International Journal of Advertising*, *36*(1), 142-163.

Mayzlin, D., Dover, Y., & Chevalier, J. (2014). Promotional reviews: An empirical investigation of online review manipulation. *American Economic Review*, *104*(8), 2421-55.

McCombes, S. (2019, February 22). *How to write a literature review*. Scribbr. Retrieved November 18, 2021, from https://www.scribbr.com/dissertation/literature-review/

McLeod, S. (2019). *What a p-value tells you about statistical significance.* Retrieved March 23, 2022, from https://www.simplypsychology.org/p-value.html#:~:text=A%20p%2Dvalue%20less%20than,and%20accept%20the%20alternative%20hypothesis.

Mclntyre, M. H., Kless, A., Hein, P., Field, M., & Tung, J. Y. (2020). Validity of the cold pressor test nd pain sensitivity questionnaire via online self-administration. *Plos one, 15*(4).

Memon, M. A., Cheah, J. H., Ramayah, T., Ting, H., Chuah, F., & Cham, T. H. (2020). Sample size for survey research: Review and recommendations. *Journal of Applied Structural Equation Modeling*, *4*(2), 1-20.

Menfors, M., & Fernstedt, F. (2015). *Consumer trust in online reviews: a communication model perspective.*

Middleton, F. (2019, July 03). *Reliability vs validity in research | differences, types and examples*. Retrieved March 22, 2022, from https://www.scribbr.com/methodology/reliability-vs-validity/

Milan, G. S., Bebber, S., De Toni, D., & Eberle, L. (2015). Information quality, distrust and perceived risk as antecedents of purchase intention in the online purchase context. *Journal of Management Information System and E-Commerce*, *2*(2), 111-129.

Mirabi, V., Akbariyeh, H., & Tahmasebifard, H. (2015). A study of factors affecting on customers purchase intention. *Journal of Multidisciplinary Engineering Science and Technology (JMEST)*, *2*(1), 267-273.

Mishra, P., Pandey, C. M., Singh, U., & Gupta, A. (2018). Scales of measurement and presentation of statistical data. *Annals of cardiac anaesthesia*, *21*(4), 419.

Mohajan, H. K. (2017). Two criteria for good measurements in research: Validity and reliability. *Annals of Spiru Haret University Economic Series, 17*(4), 59-82.

Morwitz, V. (2014). Consumers' purchase intentions and their behavior. *Foundations and Trends® in Marketing*, *7*(3), 181-230.

Mosa, R. A. (2021). The impact of advertising credibility on purchase intentions: An empirical study among Iraqi Facebook users. *European Journal of Business and Management Research*, *6*(5), 228-234.

Muda, M., & Hamzah, M. I. (2021). Should I suggest this YouTube clip? The
impact of UGC source credibility on eWOM and purchase
intention. *Journal of Research in Interactive Marketing, 15*(3), 441-459.

Mujtaba, B. G. (2008). Interpersonal change through the" inside-out-approach":
exercising the freedom to choose our responses during conflict and
stressful situations. *RU International Journal*, *2*(1), 1-12.

Nam, C., Dong, H., & Lee, Y. A. (2017). Factors influencing consumers' purchase
intention of green sportswear. *Fashion and Textiles*, *4*(1), 1-17.

Nawi, F. A. M., Tambi, A. M. A., Samat, M. F., & Mustapha, W. M. W. (2020).
A review on the internal consistency of a scale: the empirical example of
the influence of human capital investment on Malcom Baldridge quality
principles in Tvet institutions. *Asian People Journal (APJ), 3*(1), 19-29.

Obilor, E. I., & Amadi, E. C. (2018). Test for significance of Pearson's correlation
coefficient. *International Journal of Innovative Mathematics, Statistics &
Energy Policies, 6*(1), 11-23.

OECD. (2013, June 11). *Data checking*. Retrieved March 22, 2022, from
https://stats.oecd.org/glossary/detail.asp?ID=3399#:~:text=Data%20checki
ng%20is%20an%20activity,%22%20and%20%22erroneous%20data%22.

Ombea. (2020, August 27). 5-point likert scale: The key to easily understand your
audience. Retrieved March 22, 2022,
https://www.ombea.com/resources/articles/5-point-likert-scale-the-key-to-
easily-understanding-your-audience

Otar, C. (2018, October 05). How review sites can affect your business (and what
you can do about it). *Forbes*. Retrieved April 08, 2022, from
https://www.forbes.com/sites/forbesfinancecouncil/2018/10/05/how-
review-sites-can-affect-your-business-and-what-you-can-do-about-
it/?sh=6869b5c8266a

Polit, D. F., & Beck, C. T. (2017). *Nursing research: Generating and assessing evidence for nursing practice* (10th ed.). Philadelphia, PA: Lippincott Williams & Wilkins.

Prastiwi, S. K., & Iswari, P. W. (2019). The roles of trust within information quality and price to engage impulsive buying behaviour to generate customer's repurchase intention: A case of M-Commerce in Indonesia (GoFood). *Knowledge E Social Sciences*, 446-462.

Prion, S., & Haerling, K. A. (2014). Making sense of methods and measurement: Pearson product-moment correlation coefficient. *Clinical simulation in nursing, 11* (10), 587-588.

Qiu, M. (2017). *No Picture No Truth?: the influence of review format and review valence on Chinese consumers' purchase intention,* Unpublished doctoral dissertation, University of Twente.

Ridzuan, F., & Zainon, W. M. N. W. (2019). A review on data cleansing methods for big data. *Procedia Computer Science, 161*(3), 731-738.

Rizaldi, H., Suliyanto, S., & Suwandari, L. (2020). The effect of souce credibile online reviews on purchase intention the mediating roles of brand awareness. *International Conference on Rural Development and Enterpreneurship 2019 : Enhancing Small Busniness and Rural Development Toward Industrial Revolution 4.0, 5*(1), 885-890.

Rusdiana, A., Suroso, A., & Suwandari, L. (2020). The Effect of e-WOM Source Credibility on Purchase Intentions with Consumer Involvement as a Moderating Variable. *International Conference on Rural Development and Enterpreneurship 2019 : Enhancing Small Busniness and Rural Development Toward Industrial Revolution 4.0*, *5*(1), 848-861.

Sahut, J. M., Laroche, M., & Braune, E. (2021). Antecedents and consequences of fake reviews: A marketing approach. *Journal of Business Research*.

Saiful. (2011). Importance or quality sample size. Retrieved March 19, 2022, from http://www.uniteforsight.org/global-health-university/importance-of-quality-sample-size

Salehi-Esfahani, S., & Ozturk, A. B. (2018). Negative reviews: Formation, spread, and halt of opportunistic behavior. International Journal of Hospitality Management, *74*, 138-146.

Salkind, N. J. (2010). Primary data source. *The SAGE Encyclopedia of Communication research methods.* Retrieved March 19, 2022, from https://methods.sagepub.com/reference/encyc-of-research-design/n333.xml

Salminen, J., Kandpal, C., Kamel, A. M., Jung, S. G., & Jansen, B. J. (2021). Creating and detecting fake reviews of online products. *Journal of Retailing and Consumer Services*, *64,* 1-15.

Sathiyaseelan, M. (2015). Research instruments. *Indian Journal of Continuing Nursing Education*, *16*(2), 57-60.

Saunders, M., Lewis, P., & Thornhill, A. (2007). *Research methods for business student* (4th ed.). England: Business Students 4th edition Pearson Education Limited.

Schreck, J. L., & Chin, M. G. (2019, November). Online product reviews: Effects of star ratings and valence on review perception among those high and low in need for cognition. *Proceedings of the Human Factors and Ergonomics Society 2019 Annual Meeting, 63*(1), 401-405.

Shan, Y. (2016). How credible are online product reviews? The effects of self-generated and system-generated cues on source credibility evaluation. *Computers in Human Behavior*, *55*, 633-641.

Shukla, A., & Mishra, A. (2021). Effects of visual information and argument concreteness on purchase intention of consumers towards online hotel Booking. *SAGE,* 1-11.

Shukla, T. (2018). *Data processing*. Retrieved March 22, 2022, from
https://www.researchgate.net/publication/324797992_Data_Processing

Siedlecki, S. L. (2020). Understanding descriptive research designs and methods.
Clinic Nurse Specialist, 34(1), 8-12.

Sutanto, M. A., & Aprianingsih, A. (2016). The effect of online consumer review
toward purchase intention: A study in premium cosmetic in Indonesia.
*Journal International Conference on Ethics of Business, Economics, and
Social Science*, 218-330.

Swatzell, K. E., & Jennings, P. R. (2007) Descriptive research: The nuts and bolts.
Journal of the American Academy of Pas, 20(7).

Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting
research instrument in science education. *Research in science education,
48*(6), 1273-1296.

Taherdoost, H. (2016). Sampling methods in research methodology; how to
choose a sampling technique for research. *International Journal of
Academic Research in Management (IJARM), 5*(2), 18-27.

Tan, J. (2020). Malaysian netizens spend nearly 20 hours online per week.
Marketing magazine. Retrieved November 15, 2021, from
https://marketingmagazine.com.my/categories/digital/7303--malaysian-
netizens-spend-nearly-20-hours-online-per-week-the-most-time-spent-
with-any-media-

Tata, S. V., Prashar, S., & Gupta, S. (2020). An examination of the role of review
valence and review source in varying consumption contexts on purchase
decision. *Journal of Retailing and Consumer Services*, *52*, 1-10.

Tee, X. H. (2017). The effect of source credibility on consumers' purchase
intention in Malaysia online community. *Journal of Arts and Social
Sciences*, *1*(1), 12-20.

Thomas, M. J., Wirtz, B. W., & Weyerer, J. C. (2019). Determinants of online review credibility and its impact on consumers' purchase intention. *Journal of Electronic Commerce Research*, *20*(1), 1-20.

Tighe, D. (2021). Number of reviews online shoppers read before making a purchasing decision 2019-2021. *Statista*. Retrieved November 15, 2021, from https://www.statista.com/statistics/1020836/share-of-shoppers-reading-reviews-before-purchase/

Togas, P. T., Kindangen, P., & Tumbuan, W. J. (2019). The influence of online review on online hotel booking intention in Manado. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, *7*(3), 3189-3198.

University of the west of England. (2021). *Person's correlation coefficient*. Retrieved March 23, 2022, from http://learntech.uwe.ac.uk/da/default.aspx?pageid=1442

Van Lohuizen, A. W., & Trujillo-Barrera, A. (2020). The Influence of online reviews on restaurants: The roles of review valence, platform, and credibility. *Journal of Agricultural & Food Industrial Organization*, *18*(2), 1-23.

Vommey, C. (2019, April 19). *What is uses and gratifications theory? Definition and examples*. Retrieved November 23, 2021, from https://www.thoughtco.com/uses-and-gratifications-theory-4628333

Von Helversen, B., Abramczuk, K., Kopeć, W., & Nielek, R. (2018). Influence of consumer reviews on online purchasing decisions in older and younger adults. *Decision Support Systems*, *113*, 1-10.

Wandoko, W., Panggati, I. E., & Sukmaningsih, D. W. (2020, August). Developing e-loyalty toward online retailer from e-WOM, reputation, information quality and e-trust. *2020 International Conference on Information Management and Technology (ICIMTech)*, 238-243.

Wang, Y., & Kim, J. (2021). Interconnectedness between online review valence, brand, and restaurant performance. *Journal of Hospitality and Tourism Management*, *48*, 138-145.

Wei, Y., Wang, C., Zhu, S., Xue, H., & Chen, F. (2018). Online purchase intention of fruits: Antecedents in an integrated model based on technology acceptance model and perceived risk theory. *Frontiers in psychology*, *9*, 1-11.

Wirani, Y., Diniputri, L., & Romadhon, M. S. (2020, June). Investigating the influence of information quality, information seeking, and familiarity with purchase intentions: A perspective of Instagram users in Indonesia. *2020 8th International Conference on Information and Communication Technology (ICoICT)*, 1-6.

Wu, J. H., Peng, L., Li, Q., & Chen, Y. C. (2016). Falling in love with online shopping carnival on singles' day in China: A uses and Gratifications perspective. *IEEE/ACIS 15th International Conference on Computer and Information Science (ICIS)*, 1-6.

Xiao, A., Yang, S., & Iqbal, Q. (2019). Factors affecting purchase intentions in generation Y: an empirical evidence from fast food industry in Malaysia. *Administrative Sciences*, *9*(1), 1-16.

Yang, J., Sarathy, R., & Walsh, S. M. (2016). Do review valence and review volume impact consumers' purchase decisions as assumed?. *Nankai Business Review International*.

Yusuf, A. S., & Busalim, A. H. (2018). Influence of e-WOM engagement on consumer purchase intention in social commerce. *Journal of Services Marketing*, *32*(4), 493–504.

Zhang, J., Zheng, W., & Wang, S. (2020). The study of the effect of online review on purchase behavior: Comparing the two research methods. *International Journal of Crowd Science, 4*(1), 73-86.

Zhang, K. Z., Cheung, C. M., & Lee, M. K. (2014). Examining the moderating effect of inconsistent reviews and its gender differences on consumers' online shopping decision. *International Journal of Information Management*, *34*(2), 89-98.

Zhang, L., Wu, L., & Mattila, A. S. (2016). Online reviews: The role of information load and peripheral factors. *Journal of Travel Research*, *55*(3), 299-310.

Zheng, Y., Zhao, K., & Stylianou, A. (2013). The impacts of information quality and system quality on users' continuance intention in information-exchange virtual communities: An empirical investigation. *Decision support systems, 56*, 513-524.

Zhong, M., Qu, X., Chen, Y., Liao, S., & Xiao, Q. (2021). Impact of factors of online deceptive reviews on customer purchase decision based on machine learning. *Journal of Healthcare Engineering*.

Zhou, M., Liu, M., & Tang, D. (2013). Do the characteristics of online consumer reviews bias buyers' purchase intention and product perception? A perspective of review quantity, review quality and negative review sequence. *International Journal of Services Technology and Management 11*, *19*(4), 166-186.

Zhu, L., Li, H., Wang, F. K., He, W., & Tian, Z. (2020). How online reviews affect purchase intention: a new model based on the stimulus-organism-response (SOR) framework. *Aslib Journal of Information Management, 72*(4), 463-488.

Ziegele, M., & Weber, M. (2015). Example, please! Comparing the effects of single customer reviews and aggregate review scores on online shoppers' product evaluations. *Journal of Consumer Behaviour*, *14*(2), 103-114.

Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2013). *Business research method*. Cengage learning.

APPENDICES

Appendix A: Types of Fixed-alternative Questions

Types of Fixed – Alternative Question	Example
Multiple choice questions	Have you ever read online reviews before purchasing a product? ☐ Yes ☐ No
Frequency-determinant	How often are you reading online reviews before purchase a product? ☐ Never ☐ Rarely ☐ Sometimes ☐ Quite often ☐ Very often
Checklist	When looking for product online reviews, what platform do you mostly choose? (Multiple answers are possible) ☐ E-commerce website (Example: Amazon, Shopee, Lazada) ☐ Social Media (Example: YouTube, Instagram, Facebook) ☐ Personal blogs ☐ Other: _____

Source: Developed for the research

Appendix B: Sources of Questions

Variables	Sources	Original Questions	Modified Questions
Purchase Intention	Arora, L., & Sharma, B. K. (2018). Influence of review quality, review quantity and review credibility on purchase intention in the context of high involvement products. *European Journal of Applied Business Management, 4*(4), 25-40.	1. After reading an online review, it makes me desire to buy the product. 2. I will consider buying the product after I read online reviews. 3. I intend to try the product discussed in the online reviews. 4. In the future, I intend to buy the product discussed in the online reviews. 5. When I buy a product online, the reviews presented on the website make me confident in purchasing the product. 6. Online reviews about products don't influence my buying intention towards that products.	1. After reading an online review, it makes me desire to buy the product. 2. I will consider buying the product after I read online reviews. 3. I intend to try the product discussed in the online reviews. 4. In the future, I intend to buy the product discussed in the online reviews. 5. When I buy a product online, the reviews presented on the website make me confident in purchasing the product. 6. Online reviews about products do influence my buying intention towards that products.

Perceived Information Quality	Arora, L., & Sharma, B. K. (2018). Influence of review quality, review quantity and review credibility on purchase intention in the context of high involvement products. *European Journal of Applied Business Management, 4*(4), 25-40.	1. The online reviews are clear. 2. The online reviews are understandable. 3. The online reviews are helpful. 4. The online reviews have sufficient reasons for supporting the opinions. 5. In general, the qualities of each online review are high.	1. The online reviews are clear. 2. The online reviews are understandable. 3. The online reviews are helpful. 4. The online reviews have sufficient reasons for supporting the opinions. 5. In general, the qualities of each online review are high.
Information Quantity	Arora, L., & Sharma, B. K. (2018). Influence of review quality, review quantity and review credibility on purchase intention in the context of high involvement products. *European Journal of Applied Business Management, 4*(4), 25-40.	1. The numbers of online reviews are large, inferring that the product is popular. 2. The quantity of online reviews information is great, inferring that the product has good sales. 3. Highly ranking and recommendation, inferring that the product has good reputations. 4. Number of reviews doesn't promise that the review quality is good	1. The numbers of online reviews are large, inferring that the product is popular. 2. The quantity of online reviews information is great, inferring that the product has good sales. 3. Highly ranking and recommendation, inferring that the product has good reputations. 4. Number of reviews does promise that the review quality is good

Review Credibility	Arora, L., & Sharma, B. K. (2018). Influence of review quality, review quantity and review credibility on purchase intention in the context of high involvement products. *European Journal of Applied Business Management, 4*(4), 25-40.	1. Reviews regarding high involvement products on the website are credible. 2. Reviews regarding high involvement products on the website are trustworthy. 3. I trust in the online reviews on the website regarding high involvement products. 4. Reviews on the website regarding high involvement products are accurate. 5. A customer shares sincere reviews on the website regarding high involvement products.	1. Reviews regarding the products on the website are credible. 2. Reviews regarding the products on the website are trustworthy. 3. I trust in the online reviews on the website. 4. Reviews on the website regarding the products are accurate. 5. A customer shares sincere reviews on the website regarding the products.
Review Valence	Thomas, M.J., Wirtz, B.W., & Wegerer, J.C. (2019). Determinants of online review credibility and its impact on consumer's purchase intention. *Journal of Electronic Commerce Research, 20*(1), 1-20.	1. The rating of products by means of stars has increased the number of alternative products that are interesting to me. 2. The rating of products by means of stars has allowed me to find products that satisfy my needs. 3. The rating of products by means of stars has allowed me to find well-rated products 4. The rating of products by means of stars has allowed to me get a quick overview of products.	1. The rating of products by 5-stars rating system has increased the number of alternative products that are interesting to me. 2. The rating of products by 5-stars rating system has allowed me to find products that satisfy my needs. 3. The rating of products by 5-stars rating system has allowed me to find well-rated products. 4. The rating of products by 5-stars rating system has allowed to me get a quick overview of products.

Appendix C: Summary of the Research

Research Objective	Research Question	Hypothesis	Outcome
To investigate the relationship between perceived information quality of online reviews and consumers' purchase intention in Malaysia	Is there a relationship between perceived information quality of online reviews and consumers' purchase intention in Malaysia?	There is a relationship between Perceived Information Quality in online reviews and consumers' purchase intention in Malaysia.	Supported
To investigate the relationship between information quantity of online reviews and consumers' purchase intention in Malaysia.	Is there a relationship between information quantity of online reviews and consumers' purchase intention in Malaysia?	There is a relationship between Information Quantity in online reviews and consumers' purchase intention in Malaysia.	Supported
To investigate the relationship between review credibility of online reviews and consumers' purchase intention in Malaysia.	Is there a relationship between review credibility of online reviews and consumers' purchase intention in Malaysia?	There is a relationship between review credibility in online reviews and consumers' purchase intention in Malaysia.	Supported

To investigate the relationship between review valence of online reviews and consumers' purchase intention in Malaysia.	Is there a relationship between review valence of online reviews and consumers' purchase intention in Malaysia?	There is a relationship between review valence in online reviews and consumers' purchase intention in Malaysia.	Supported

Source: Developed for the research

Appendix D: Questionnaire

UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF ACCOUNTANCY AND MANAGEMENT

BACHELOR OF INTERNATIONAL BUSINESS (HONOURS)

Questionnaire: An Empirical Investigation on The Influence of Online Reviews
Affects the Individual's Purchase Intention in Malaysia

Dear Respondents,

My name is Ong Wei Chi, a year 3 undergraduate student pursuing Bachelor of International Business (Honours) in Universiti Tunku Abdul Rahman (UTAR). I am currently conducting research on "An empirical investigation on the influence of online reviews affects the individual's purchase intention in Malaysia". I sincerely hope that you could do a favor to fill up this questionnaire for my academic purpose.

The aim of conducting this study is to examine the influence of online reviews on purchase intention in Malaysia in terms of perceived information quality, information quantity, review credibility and review valence. This questionnaire consists of 4 sections, which are Section A, B, C, and D. Section A is used to screen for the respondents who are valid to fill up the following section of the questionnaire. Section B includes 5 demographic questions required the respondents to provide. Section C consists of 5 general questions regarding online reviews that required the respondents to fill up, followed by Section D has a couple of questions that regarding the one dependent variable and four independent variables of this research.

The survey will take approximately 10 to 15 minutes to answer. Your responses are important for me to complete this research. Thank you for your willingness to participate in this questionnaire. I deeply appreciate your cooperation and time in participating in this questionnaire.

If you have any further enquire, please do not hesitate to contact me through email at weiichi1212@1utar.my. I assure you that all answers provided by you will be kept PRIVATE and CONFIDENTIAL and to be used solely for academic purposes only.

SECTION A (SCREENING)

Please tick the most suitable option given. You are allowed to tick only **ONE** option for the following question unless specified otherwise.

1. Do you use e-commerce website or social media platforms for purchase products?

   ☐ Yes, please continue to next section.

   ☐ No. Thank you for your participation. You may end this survey.

SECTION B (DEMOGRAPHIC PROFILE)

General Instruction: Please tick only **ONE** answer for each question below.

1. Age Range

   ☐ Below 18 years old

   ☐ 18 – 22 years old

   ☐ 23 – 27 years old

   ☐ 28 – 32 years old

   ☐ Above 32 years old

2. Gender

   ☐ Male

   ☐ Female

3. Race

   ☐ Malay

   ☐ Chinese

   ☐ Indian

   ☐ Others: _____

4. Occupation Status

☐ Student

☐ Employed

☐ Unemployed

☐ Household

☐ Employer

☐ Others: _____

5. Monthly Income

☐ Less than RM2000

☐ RM2001 – RM3000

☐ RM3001 – RM4000

☐ RM4001 – RM5000

☐ RM5001 – RM6000

☐ Higher than RM6000

SECTION C (GENERAL INFORMATION)

General Instruction: Please tick **ONE** answer for each question below.

1. Have you ever read online reviews before purchasing a product?

☐ Yes

☐ No

2. How often are you reading online reviews before purchase a product?

☐ Never

☐ Rarely

☐ Sometimes

☐ Quite often

☐ Very often

3. When looking for product online reviews, what platform do you mostly choose? (Multiple answer are possible)

☐ E-commerce website (Example: Amazon, Shopee, Lazada)

☐ Social Media (Example: YouTube, Instagram, Facebook)

☐ Personal blogs

☐ Other: _____

4. Have you read fake online reviews before?

☐ Yes

☐ No

5. How important are online product reviews for your purchase decision?

☐ Very unimportant

☐ Unimportant

☐ Neutral

☐ Important

☐ Very important

SECTION D (CONSTRUCTS MEASUREMENT)

General instruction: This section is seeking for your opinion regarding the influences of online reviews affects the purchase intention in Malaysia. Respondents are asked to indicate the extent to which you are agree or disagree with each statement using 5-Point Likert scale measurement. Please tick **ONE** answer indicates the extent to which you agree or disagree with each of following statements.

[1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree]

Perceived Information Quality	
Question	**Strongly Disagree – Strongly Agree**
1. The online reviews are clear.	☐ ☐ ☐ ☐ ☐
2. The online reviews are understandable.	☐ ☐ ☐ ☐ ☐
3. The online reviews are helpful.	☐ ☐ ☐ ☐ ☐
4. The online reviews have sufficient reasons for supporting the opinions.	☐ ☐ ☐ ☐ ☐
5. In general, the qualities of each online reviews are high.	☐ ☐ ☐ ☐ ☐
Information Quantity	
Question	**Strongly Disagree – Strongly Agree**
1. The numbers of online reviews are large, inferring that the product is popular.	☐ ☐ ☐ ☐ ☐
2. The quantity of online reviews information is great, inferring that the product has good sales.	☐ ☐ ☐ ☐ ☐
3. Highly ranking and recommendation, inferring that the product has good reputations.	☐ ☐ ☐ ☐ ☐
4. Number of reviews does promise that the review quality is good	☐ ☐ ☐ ☐ ☐
Review Credibility	
Question	**Strongly Disagree – Strongly Agree**
1. Reviews regarding the products on the website are credible.	☐ ☐ ☐ ☐ ☐
2. Reviews regarding the products on the website are trustworthy.	☐ ☐ ☐ ☐ ☐
3. I trust in the online reviews on the website.	☐ ☐ ☐ ☐ ☐
4. Reviews on the website regarding the products are accurate.	☐ ☐ ☐ ☐ ☐

5. A customer shares sincere reviews on the website regarding the products.	☐ ☐ ☐ ☐ ☐

Review Valence	
Question	**Strongly Disagree – Strongly Agree**
1. The rating of products by 5-stars rating system has increased the number of alternative products that are interesting to me.	☐ ☐ ☐ ☐ ☐
2. The rating of products by 5-stars rating system has allowed me to find products that satisfy my needs.	☐ ☐ ☐ ☐ ☐
3. The rating of products by 5-stars rating system has allowed me to find well-rated products.	☐ ☐ ☐ ☐ ☐
4. The rating of products by 5-stars rating system has allowed to me get a quick overview of products.	☐ ☐ ☐ ☐ ☐

Purchase Intention	
Question	**Strongly Disagree – Strongly Agree**
1. After reading online review, it makes me desire to buy the product.	☐ ☐ ☐ ☐ ☐
2. I will consider buying the product after I read online reviews.	☐ ☐ ☐ ☐ ☐
3. I intend to try the product discussed in the online reviews.	☐ ☐ ☐ ☐ ☐
4. In the future, I intend to buy the product discussed in the online reviews.	☐ ☐ ☐ ☐ ☐
5. When I buy a product online, the reviews presented make me confident in purchasing the product.	☐ ☐ ☐ ☐ ☐
6. Online reviews about products do influence my buying intention towards that products.	☐ ☐ ☐ ☐ ☐

Thank you for your time to fill up this questionnaire.