

THE STUDY OF FACTORS AFFECTING CONSUMERS' PURCHASING
BEHAVIOR VIA ONLINE NETWORKS IN BANGKOK



THE STUDY OF FACTORS AFFECTING CONSUMERS' PURCHASING
BEHAVIOR VIA ONLINE NETWORKS IN BANGKOK

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The Graduate School of Bangkok University

In Partial Fulfillment
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Master of Business Administration

By
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ABSTRACT

In today's world of rat race, in order for brands to be successful and stand out, firms have to continuously invest in tactics that is beyond the traditional advertising and marketing which will enable them to have a strong presence and image online. In recent years, Thailand has grown considerably in the e-commerce market to become the second-largest online shopping market in Asean, and according to a study conducted by US-based consultancy Bain and Company and Facebook, showed that Thailand's online spending in 2018 totaled to \$4.4 billion and is only anticipated to increase further. Government-led initiatives, electronic payments, the expanding impact of younger generations of consumers, flexible delivery, social media usage and price are some of the most important reasons for it to become the fastest growing e-commerce market.

The purpose of this study is to explore the factors that affects the consumers' purchasing behavior via the online networks in Bangkok, where the theoretical framework was derived based on previous researchers. Analyzing the data using SPSS and SEM methodology, 400 respondents were selected from Bangkok by using the questionnaire. Questionnaire was used in the quantitative research as the research instrument and the proposed hypotheses were tested and analyzed using the Structural

Equation Modelling (SEM) in order to measure the latent variables. SEM methodology allowed the researcher to not only measure the latent variables but to also understand the correlation between the independent variables.

The five main hypotheses were that the individual variables (exogenous) significantly affects the dependent variable (endogenous). The 10 sub-hypotheses were to understand whether any correlation between the independent variables exists. The various analytical tests and goodness-of-fit measurement resulted in significant p-values for two main hypotheses out of five, where the consumers' perception of a product's performance significantly affects the consumers' purchasing behavior (PPP → PB) and the trust the consumers have in a brand significantly affects their decision behavior to purchase (BT → PB). The p-values for 9 sub-hypotheses out of 10 were significant. The results, the contradictions and affirmations with previous researchers is explained further in this research, along with implications and recommendations for further researchers and businesses to better understand the factors that significantly affects the consumers' purchasing behavior via the online networks.

Keywords: Online engagement community, website quality, perceived product's performance, brand relationship, brand trust, purchasing behavior, Structural Equation Modeling (SEM)

Approved: _____

Signature of Advisor

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CHAPTER 1

INTRODUCTION

This section of the chapter discusses the various factors that affects the consumers' purchasing behavior via the online networks. The key factors include online engagement community, website quality, perceived product's performance, brand relationship, brand trust and purchasing behavior, which are all latent variables since it cannot be measured. Background information of all variables, identifying research gap and problems, the objectives of the research and the scope of research, as well as the significance of the study is further discussed.

1.1 Background of the study

The digital age has consequently led consumers' perception of brands to evolve considerably (Fraile, 2018). According to Google, 82% of the customers, research products on their phones when making an in-store purchase (Spitfire, 2019). Traditionally, for brands to project an image, companies needed to have a combination of three basic elements: have good values, have a unique product, and display it via an eye catching advertising campaign (Fraile, 2018).

According to Suchit Leesa-Nguansuk (2020), a new study conducted by US-based consultancy Bain & Company and Facebook shows that in Asean, after Indonesia, Thailand is the second-largest online shopping market, whose online spending in 2018 totaled to \$4.4 billion and by 2025 could jump to \$21.4 billion, a rise of almost 5 times from 2018. Moreover, in 2018, 60% of the country's digital consumer population increased almost twice with 34 million from 21 million in 2017.

In today's world of rat race, in order for brands to be successful and stand out, firms have to continuously invest in tactics that is beyond the traditional advertising and marketing, that will aid them in forming an emotional attachment with consumers and on which both brand loyalty and perception depend on (Fraile, 2018). According to (Jang, Olfman, Ko, Koh, & Kim, 2008), an online brand community is often defined as a non-geographically bound community, specialized based upon the various social relationships among fans of a particular brand in cyberspace.

Moreover, the online community can be categorized into two major groups based on who controls it: communities that are built by the company of a brand and communities that are built by the consumers of a brand (Jang, Olfman, Ko, Koh, & Kim, 2008). Usually, strong negative emotions publicly expressed by the consumers spread in a highly dynamic way within and across the social media (Stephen, 2018). The continuous growth of the online networks such as the coupon sites or the mobile web or the various social networks, have managed to successfully transform consumers from just taking information from marketers to actively become distributors and creators of product opinion and information (BrandReport, 2011).

Furthermore, consumer experience and expertise is immediately facilitated by the availability of the smartphones and online networks (BrandReport, 2011). The significant changes in information exchange, information search behavior and interaction between consumers, users and companies, example (Hennig-Thurau, Thorsten, Hofacker, & Bloching, 2013) is led by the structure of the social network. As consumers are becoming more well-informed, the traditional path to purchase has been transformed due to the rise of the internet (Spitfire, 2019).

1.2 Statement of Research Problem

Tambyah (1996), regarding social or online brand-community integration, used the term “net komunitas” to describe how internet users search for a sense of involvement, dependence and community when they join online communities. Consumers’ sense of rewarded and being needed will be enhanced which associated highly with the significance of involvement (Chan, Zheng, Cheung, & Lee & Lee, 2014).

According to a research conducted by a number of university students in Malaysia examining the website’s quality affecting the consumers’ intention to purchase online, concluded that all constructs of website quality such as security, privacy and trust, reliability, website design and customer service, significantly affects the consumers’ purchasing behavior (Lee, Ariff, Zakuan, & Sulaiman, 2016).

Customer participation in social media brand communities, aids customers to (co)create rational value, functional value, entitativity value and emotional value, which in turn affects the brand relationship performance (Vargo & Lusch, 2004) (Payne, Storbacka, & Frow, 2008) (Payne, Storbacka, Frow, & Knox, 2009). Brand community integration is a multicomponent concept that includes customer relationships with companies, brands, customers and other products (Mcalexander, Schouten, & Koenig, 2002).

When people experience a sense of safety and meaningfulness, they are more likely to be motivated in order to take part in physically, emotionally and cognitively (Kahn, 1990). According to McKnight et al (2002), one’s trust in peer marketers and consumers reflects his or her belief in the benevolence, ability and moral of the trusted parties (in the context of SMBC). Chaudhuri & Holbrook (2001), concluded

from the results obtained from an aggregated data set for 107 brands from three separate survey of consumers and brand managers, that when the brand-and-product variables are controlled for, brand affect and brand trust combine to inadvertently determine frame of mind loyalty and purchase loyalty.

In this paper, the focus lies on the factors that have an influence on consumers' purchasing behavior through the online networks in Bangkok. For this study, factors such as the online engagement community, website quality, perceived product's performance, brand relationship and brand trust, has been focused on how it influences the consumers' purchasing decision. Moreover, these factors will further by analyzed to further understand the significant effect or if there is any significant correlation among the variables itself.

1.3 Research Objective

1. To investigate the effect of the online engagement community and website quality on the purchasing behavior of the consumers.
2. To examine how the consumers' perception of the product's performance affects their purchasing behavior.
3. To determine how brand relationship and brand trust affects consumers' purchasing behavior.
4. To investigate the correlation of online engagement community, website quality and how consumers perceive a product's performance.

5. To examine the correlation between the consumers' perception of the product's performance, brand relationship and brand trust.

Most previous researches have focused on customer shopping online related to attitude (Cheawkamolpat, 2009), for example, Thananuraksakul (2007), who studied about the behavior intention of Thai consumers affected by trust or even subjective norm, or other researches on the quality perceived of a virtual community, or various internet community forums, factors that encourages or discourages consumers from purchasing online (Changchit, Cutshall, Lonkani, Pholwan, & Pongwiritthon, 2018), or the uses for the internet, etc. Since there is a lack of research conducted using the SEM methodology investigating the various factors that affects the consumers' purchasing behavior online, especially in Bangkok, it is an interesting and important section of the population to study. Therefore, this research intends to explore the factors that contribute to the influence of the consumers' purchasing behavior and the effects of the social networks on consumers' purchasing behavior specifically in Bangkok, Thailand. For this study, an attempt has been made to propose a research model that explains how each of those factors of online networking sites affect consumers' purchasing behavior.

1.4 Scope of Research

Scope of Variables: five major independent variables (exogenous variables): Online Engagement community (OEC), Website Quality (WQ), Perceived Product's Performance (PPP), Brand Relationship (BR) and Brand Trust (BT) and one dependent variable (endogenous variable): Purchasing Behavior (PB), were used in this research.

Scope of Population: This research will focus on the responses from a target group of 400 individuals that purchase online on a daily basis, related to or intend to integrate online shopping in the near future in Bangkok, Thailand.

Scope of Data Analysis and interpretation for Hypothesis Testing: Spanning over the course of two months between January 2020 to February 2020, the data was collected, analyzed and tested for hypothesis.

Scope of Applied Research Methodology: This research focused primarily on Structural Equation Modeling (SEM) as well as Quantitative research technique.

1.5 Research Questions

1. What are the main factors that influences the consumers' purchasing decision via the social networks?
2. How is the consumers' purchasing behavior impacted by the online community engagement?
3. What is the relationship of the quality of the website on the purchasing behavior of the consumers?
4. What is the relationship of the perceived product's performance on the purchasing behavior of the consumers?
5. What kind of influence does consumers' relationship with brands have on the purchasing behavior?

6. How is the purchasing behavior impacted by the trust the consumers have on brands?
7. What is the relationship of the online community on the consumers' perception of the product's performance and vice versa?
8. How does the quality of a website impact the consumers' perception of the product's performance and vice versa?
9. What is the relationship of the perceived product's performance on brand relationship and vice versa?
10. How does the consumers' perception of the product's performance impact the consumers' trust on brands and vice versa?

1.3 Assumptions of the study

It is assumed that the sample knows how to access the online system when they want to purchase a product online.

It is assumed that the sample knows about the system of purchasing products via online.

It is assumed that the sample size was adequate to accurately conduct this research.

It is assumed that the data collected is valid for the study and that the way the data is collected and analyzed is valid for the research design of this study.

1.4 The Significance of Study

The major significance of the study is to understand how brands influence consumers in their purchasing behavior through the use of the online networks by effectively and efficiently communicating their brands and the availability of the promotions. The steps they utilize to deal with different problems and limitations or departments and still not have negative impact on its sales but rather have a positive effect on its sales and consumers' purchasing behavior.

This study will therefore be beneficial and help other service industries and shops to have a better understanding of how to deal with problems that can arise from different aspects such as new products to promotion campaigns to having a presence online. By understanding the problems beforehand, it provides other retailing industries a competitive advantage.

This research will also help other retailing businesses to understand that through different ways, specifically the social media, not only the performance of the company can increase but it can also be used as a tool to promote a positive brand image and motivate or encourage the consumers in actively putting in an effort to help achieve that. Moreover, this research will help other businesses in understanding the importance of having an online engagement community with their consumers in today's tech-savvy world.

The research will also help retailing or service industries that are currently having similar issues regarding the efficiency or with different problems by informing them of different strategies and steps that can be taken to deal with them. Finally, the research will also inform customers that on-going strategies and

promotions are used not only to increase companies' performance, but to also make customers more satisfied and enhance the customers' experience overall.

Moreover, it will also help other academics or individuals who are contemplating exploring research on similar topic as well as aid other researchers to better understand or to gain a different perspective about the various factors that can influence the consumers' purchasing behavior.

Conclusion

In today's digital age, the structure of the social network influences a consumer's purchasing behavior. The technologies of power that the users have at their disposal provides researchers significant insights on how to strengthen brands utilizing as well as the user's apparent influence on social media branding (Lund, Cohen, & Scarles, 2018). The digital age has enabled consumers to voice their opinions about their perception of the brands publicly and freely.

The virtual community or the online networks has provided an opportunity for businesses to develop, to take advantage of the usefulness of web marketing and to be able to have a closer, more understanding relationship with their customers by observing the market trends. It also enables companies to improve their image online by aiding to both the negative and positive feedback of the consumers who are members of the online communities.

For this paper, factors such as the online engagement community, website quality, perceived product's performance, brand relationship and brand trust, has been focused on how it influences the consumers' purchasing decision.

CHAPTER 2

LITERATURE REVIEW

In this section, alongside relevant previous research, a detailed explanation of each of the relevant independent and dependent variables, the correlation between each variables, the conceptual framework summarizing the variables, and the hypothesis related to the variables will be further discussed.

2.1 Background of the Variables

2.1.1. (i). Online Engagement Community (OEC)

According to Rheingold (1993), an internet community, also known as an online community, is a virtual community whose members interconnect with each other essentially via the internet. Moreover, the author observed that online communities, for many, may feel like home, consisting of a “family of invisible friends”. Online communities can gather around a mutual interest and be easily spread across multiple websites (Baym, 2007).

There are hundreds of SNSs (social networking sites) with a wide range of practices and interests with various technological affordances (Boyd & Ellison, 2007). Additionally, the cultures that emerge from these various sites are varied even though the features are consistent, helping strangers connect based on their political views, activities or shared interests (Boyd & Ellison, 2007). Moreover, these social media sites also vary in the extent to which they corporate communication and information tools, such as video/photo sharing, blogging and mobile connectivity (Boyd & Ellison, 2007).

Joshi (2015), Table 2.1 provides a broad classification of social media platforms (arranged in no particular order or feature preference):

Table 2.1: Categories and their examples of social media platforms

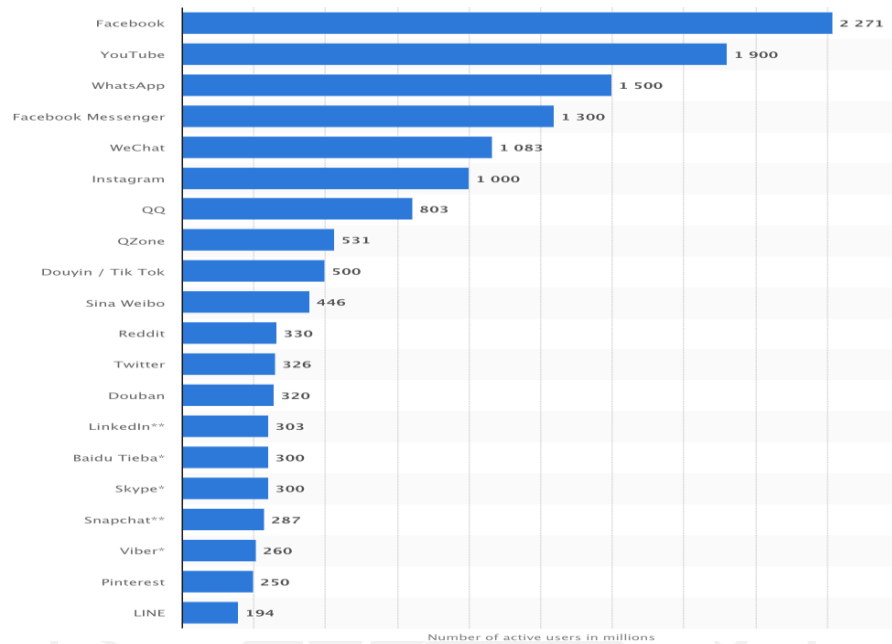
Type of Platforms	Examples
Text interaction and review	WhatsApp, Snapchat.com, Yelp.com
Personal space and entertainment	Facebook, Twitter, LinkedIn, Yammer.com
Audio and video	YouTube.com, 8tracks.com, Hubbub.com
Photography	Instagram, Flickr
Shopping	Amazon.com, BestBuy.com
Special topics	Runkeeper, interactive games, dating websites

Source: Joshi, Neha (2015) *A Quantitative Study of the Impact of Social Media Reviews on Brand Perception*

According to the author, the above social media platforms have allowed others and especially the millennial generation to become a part of their utmost personal opinions and interests (Joshi, 2015). Based on her findings for the population in USA, relevant to her research, YouTube is considered as the most favorite social networking website by a significant 53.6% of high school graduates, as compared to Netflix and Twitter that attract 39.3% and 36.9% of the online population respectively (Statista.com, 2019).

Another survey conducted for the most popular social network platforms worldwide, concluded Facebook as the market leader for social networks to exceed 1 billion monthly active users:

Figure I:

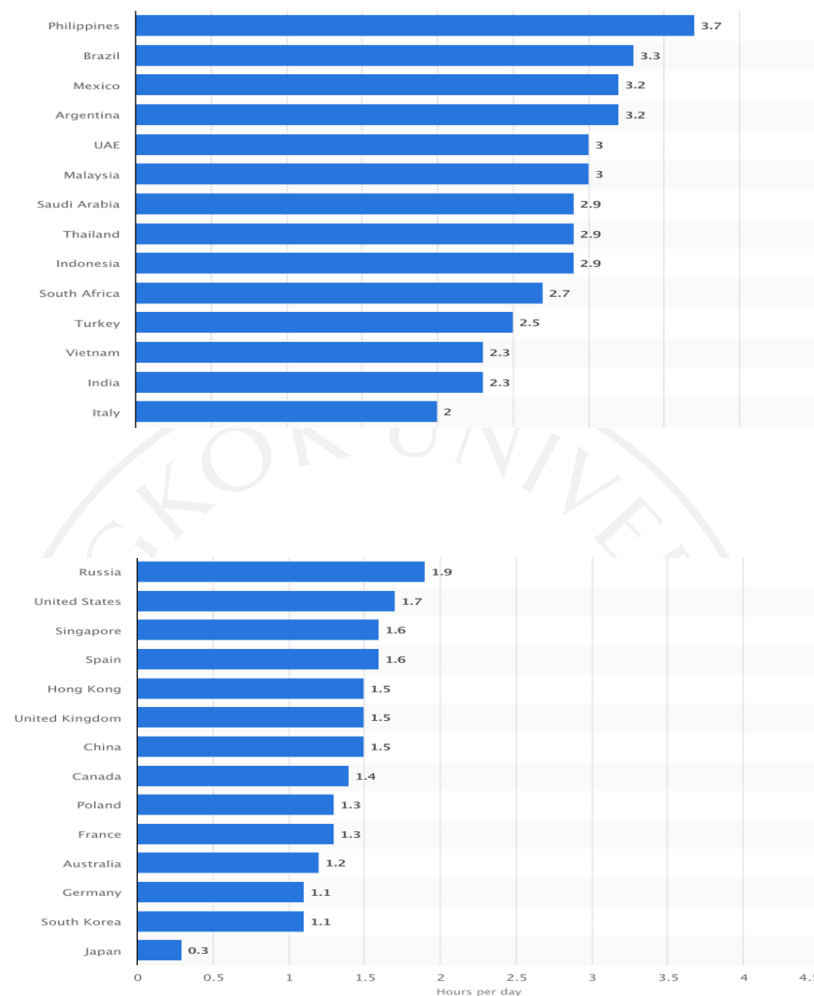


Source: The Statistics Portal: (2019): *Most popular social networks worldwide as of January 2019 ranked by number of active users (in millions)*

This statistics provides information as of January 2019 (“*Platforms have not published updated user figures in the past 12 months, figures may be out of date and less reliable*”), ranked by number of active accounts on the most popular social media platforms worldwide (Statista.com, 2019). With continuously expanding mobile possibilities and with high online user engagement rates, the multiple social networking is one of the most popular online activities (Statista.com, 2019).

Another survey of “Average numbers of hours per day spent by social media users on all social media channels as of 4th quarter 2015, by country” is as below:

Figure II:



Source: The Statistics Portal (2019): *Average numbers of hours per day spent by social media users on all social media channels as of 4th quarter 2015, by country*

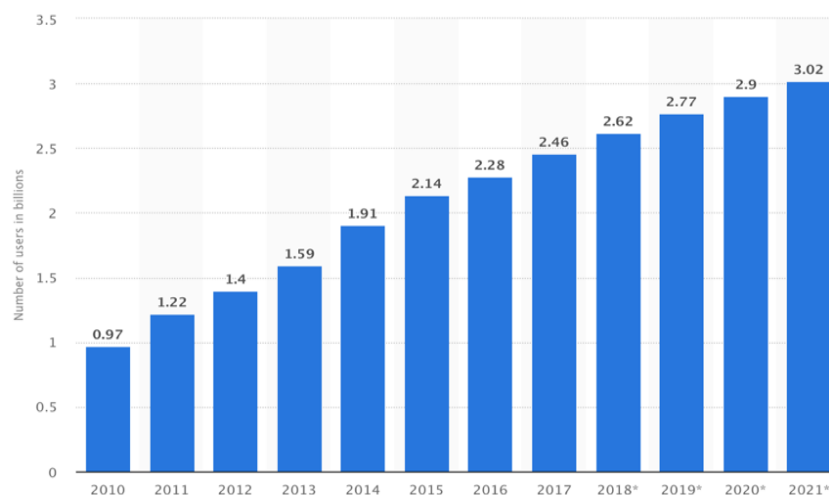
The above survey conducted among the age group of between 16-64 years, shows the average daily usage of social media platforms in the selected countries. The survey concluded that as of 2015, fourth quarter, Philippines ranked first among the social media users as the usage totaled to 3.7 hours per day as compared to users in Thailand who accessed social network for approximately 2.9 hours per day. Additionally, the social media usage in the United States amounted to 1.7

hours per day as compared to Japan that amounted to only 0.3 hours per day (Statista.com, 2019).

Even though many popular social networks began as mobile apps signifying the progressing trend of mobile first development, through various platforms, most of the social networks are accessible (Statista.com, 2019). Some few examples include Instagram, which was not only launched as mobile social messenger LINE, but as well as an iOS photo editing and discovery app, which before developing the service to include cross-platform compatibility as well as more social media components, began as a mobile chat app (Statista.com, 2019).

Social networking is positioned as one of the most popular online activities worldwide, as roughly 2.34 billion users, for at least once per month, were accessing social media networks, as of 2016 (Statista.com, 2019):

Figure III: Number of social media users worldwide from 2010 to 2021 (in billions)



© Statista 2019 |

Source: The Statistics Portal (2019): *Number of social media users worldwide from 2010 to 2021 (in billions)*

In 2017, from 2.46 billion social media users around the world, it was estimated that the figure will rise to about 2.77 billion users in 2019 (Statista.com, 2019). The survey noted that as mobile social networks and mobile device usage were increasingly gaining traction, the figures of roughly 2 billion online users that are using the social networks were expected to grow furthermore (Statista.com, 2019).

As both the online and the offline worlds become interlaced, making it easier by increasing mobile technologies such as smartphones and tablets (Adams, 2012), social media is regarded as a social revolution (Tiago & Verissimo, 2014).

2.1.1 (ii) Online Engagement Community (OEC) and Purchasing Behavior (PB)

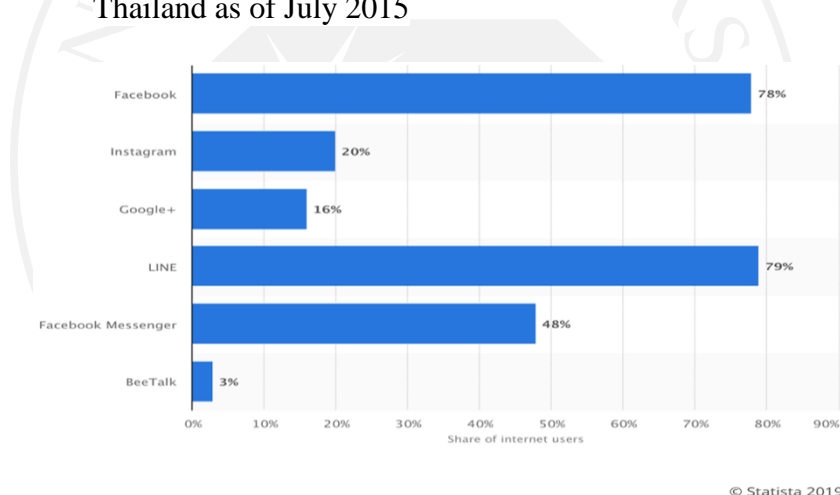
According to Lund et al. (2018), as brands are now co-built through unofficial or relaxed conversations by users who are mostly outside the marketers' control, the exposure of social media now requires a basic reevaluation of marketing practices. Moreover, even if at the initial stage, a manufactured profit-oriented story incorporates a brand, the consumers' opinions and personal experiences become engaged into the brand description, consequently decreasing, breaking apart or changing its identity (Lund, Cohen, & Scarles, 2018).

Another researcher, Wang et al. (2012), in order to comprehend how fellow communication via social media influences consumer decision making and as a result marketing strategies, applied consumer socialization theory in social media branding, and identified "socialization agents (peers)" within social media, who conveys attitudes, values, motivations, behaviors and norms to others through a social learning process, and concluded that purchase decision is effected both directly (conformity

with peers) and indirectly (reinforcing product involvement) by peer communication through online consumer socialization which the survey was conducted on 292 participants.

Furthermore, the Statistic Portal (2019) found that the Asian users spent an average of about 161 minutes on social media networks through smartphone every week. Another research conducted on the daily reach of leading social networks and mobile messenger apps in Thailand as of July 2015:

Figure IV: Daily reach of leading social networks and mobile messenger apps in Thailand as of July 2015



Source: The Statistics Portal (2019): *Daily reach of leading social networks and mobile messenger apps in Thailand as of July 2015*

This statistic was concluded after a survey conducted on 60,500 respondents among internet users sorted by daily reach in Thailand, July 2015, presents rankings of the most popular social media platforms and instant messaging networks. During the survey period, Facebook was accessed by about 78% of the

internet users on a daily basis. The most accepted social networks usually display strong user engagement or a high number of user accounts (Statista.com, 2019).

According to Spitfire (2019), 67% of customers read online reviews to help them make a purchase decision, and a whopping 82% of consumers research products on their mobile phones when making an in-store purchase. Furthermore, an online community can act as an information system where members can collaborate, give advice, post and comment on various discussions (Rheingold, 1993).

Therefore, from several sources such as expert, friends or business, the users can find relevant, detailed and reliable information which can ultimately give them a better understanding and improve their decisions (Othmani & Bouslama, 2015). Researchers Jayagopalan and Balakrishnan (2017), conducted a survey using Structural Equation Modeling (SEM), on their research about “Consumer Behavior towards Online Shopping: Structural Equation Modelling”, among female millennials in Chennai, India, using 105 sets of questionnaire for hypothesis testing, came to a conclusion that there is a positive relationship between the three parameters- consumer prudence, consumer shopping experience and consumer satisfaction.

Thus, the researcher hypothesizes the following:

Hypothesis1 (OEC→ PB):

H₁₀ : Customer participation in the online community does not affect the consumers’ purchasing behavior

H_{1a}: Customer participation in the online community significantly affects the consumers’ purchasing behavior

2.2 (i) Website Quality (WQ)

Hibah Khalil (2017) explained that in the World Wide Web, website quality is considered an indispensable concept which serves as an entry to contact loyal customers (in the context of e-loyalty). According to Parasuraman et al (1985); Gattorna and Walters (1996), with the users' expectations, perceived quality varies. Based on the findings of the various researchers such as Grose et al (1998), Vora (1998), Ranganathan and Ganapathy (2002), Moustakis et al. (2004), and various others, the concept of perceived quality of a website is multidimensional.

The values of the quality of a website as perceived by the users of the online community are the usefulness of the content, and the quality of the information itself on a website (Huizingh, 2000). Traditionally, one of the main dimensions of the perceived quality of a website is the quality of the information (Subramanian, Gunasekaran, Yu, & Cheng, 2014; Ho, C.B., & Lin, 2010; Katerattanakul & Siau, 1999; Strong, Lee, & Wang, 1997).

Researchers Loiacono et al. (2009), created a scale of measurement by which to measure the quality of a website, made up of 12 dimensions, such as integrity of information, communication, trust, response time, practicality, design, naturalness, clearness, invention, imaginativeness, emotional aspect, persistence of the image, the entireness of the online service and usefulness relative.

2.2.1 (ii) Website Quality (WQ) and Purchasing Behavior (PB)

At little or no cost, online consumers/shoppers can compare and search for offerings worldwide (Srinivasan, Anderson, & Ponnnavolu, 2002). Through the give-and-take among members, sharing product information has reduced unreliability

before a purchase where consumers opt to look on online communities for information related to a product (Srinivasan, Anderson, & Ponnnavolu, 2002). Individuals may form the choices and obtain active search information from multiple other alternatives, example, other shopping websites, that match their desires (Wang, Wang, Chen, & Chen, 2009).

Consumers, when searching for what they would like to purchase, may feel gratification when a particular shopping website provides product descriptions that are easily searched and accessed (Srinivasan, 2004) and searching techniques (Siddiqui, O'Malley, McColl, & Birthwistle, 2003). The interaction platform that the internet provides has enabled consumers to easily change among several shopping websites before making decisions (Hoffman & Novak, 1996).

To form an active relationship between sellers and consumers, information is becoming essential (SalaüN & Flores, 2001), given the remarkable and quickly growing amount of business that firms and consumers are managing online (Hoffman & Novak, 1996). Variety, content and design are some of the aspects of the quality of the information presented on websites (Huizingh, 2000), which enables to gain consumers' interest (Liu & Arnett, 2000), not only influences consumer attitudes and buying behavior (Page & Lepkowska-White, 2002), but can also help retain consumers (Lee, Jinwoo, & Jae, 2000).

According to Ranganathan and Ganapathy (2002), the purchase decision process of consumers is influenced by the information quality of a website, which allows them to discover and pick the product that best fulfills their needs. Another researcher, Hsu et al. (2012), used service quality, information and system as the three dimensions or features to measure website quality.

Based on the three dimensions, Khalil (2017), observed that these factors could be critical in assessing the website users' expectations and the purchase intentions or behavior of the consumers. Since the quality of information of ecommerce websites has a substantial effect on the purchase behavior of the consumers, researchers Ahn et al. (Ahn, Kim, Choi, & Cho, 2004), specified that it is of importance for the website to provide quality information in order to deliver a pleasant shopping experience and to aid them in making ideal purchasing decisions.

Researchers Semerádová and Weinlich (2020), applied Structural Equation Modeling (SEM) to test the validity of the research model as well as used Confirmatory Factor Analysis (CFA) to validate the research model, for their research on the factors of website quality that have a direct impact on online shopping behavior. Their study concluded that out of the 24 hypothetical relationships portrayed, only four were rejected that “go back” button, search bar, information detail and language quality had no significant impact on user experience with a website.

Therefore, the researcher hypothesizes:

Hypothesis2 (WQ → PB):

H2₀: The quality of the website does not affect the purchasing behavior of the consumers

H2_a: The quality of the website significantly affects the purchasing behavior of the consumers

2.3 (i) Perceived Product's Performance (PPP)

According to Aaker (2011), the customer's perception of the overall quality of a service or the quality of a product thereof, is defined as perceived quality, and thus is an intangible and general sense (Othmani & Bouslama, 2015). The consumer or the user decides the value of a service or of a product where each dimension may have a different perception of quality, and is therefore a subjective judgement built up in the mind of the consumer or the user (Yu, Al-Jadir, & Spaccapietra, 2005).

Researcher, Garwin (1984), suggests that there are seven dimensions to the perceived product quality, such as performance, features, the absence of defects (conformance with specifications), dependability, longevity, practicability and the "fit and finish", where performance being the main operating characteristics of the product. How consumers view a certain product's performance and how it is in level with their expectation is defined as perceived superiority (Saleem, Ghafar, Ibrahim, Yousuf, & Ahmed, 2015).

According to Zeithaml (1988), perceived quality has 4 aspects: it is a perception made usually within a consumer's stimulated set; instead of a specific quality or feature of a product, it is an increased level of abstraction; it is different from the actual or the objective quality; and it is a global evaluation which in some cases resembles attitude. Furthermore, Giordano (2006) defines perceived quality as "all sensitive and sensory impressions, as well as clues that seduce and attract attention at first glance interpreted by the client as a promise of quality giving him confidence, and which satisfies him".

The expectations consumers have related to a particular type of brand or product is dependent on the information received from a variety of different sources

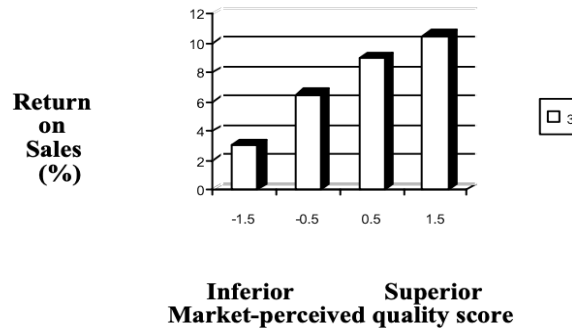
(Rolph & Joseph, 1972). The researchers further explained that since no two people have the same perception of their surroundings, no two individuals view a product in exactly the same way. Rolph and Joseph (1972), further explained that perception has four major sides, such as, it is organized in a manner to convey a meaning for the individual, it is influenced by personal factors (what the individual brings to the situation), it is selective, and it depends on advertising in consumer product evaluations (stimulus factors).

Tse & Wilton (1988), suggest that in the consumers' satisfaction evaluation process, consumers may use several types of expectations, but normative expectation and predictive expectation are the types usually referred to (Almsalam , 2014). The standards of service against which satisfaction is compared, that arises from the consumers' belief of the level of service that a particular service would provide is usually defined as predictive expectation (Churchill & Surprenant, 1982). Consumers desires or their ideal level of service are often formed as normative expectation (Almsalam , 2014).

2.3.1 (ii) Perceived Product's Performance (PPP) and Purchasing Behavior (PB)

According to Vantamay (2007), because consumers want to buy the best possible products available, they usually rely on the perceived quality of the brand. Moreover, delivering high quality to consumers, owners of successful brands are rewarded by receiving huge profits (Vantamay, 2007). Perceived quality, according to Aaker and Joachimsthaler (2000), is a distinct type of connection partially because it has been deductively shown to affect profitability and partially because it impacts brand affiliation:

Figure V: Market-perceived quality boosts margins



Source: Stobart, P. (1994). Brand power. London: MacMillan, p. 66

According to Festinger's assimilation theory (theory of cognitive dissonance), which suggests that any inconsistency between the actual product performance and the expectations will be reduced by the consumer altering his/her perception of the product to balance the expectations the consumer had of the product. Moreover, when the actual product performance is not in line with perceived expectations of a product, the consumer will end up judging it less favorable than when he/she had no previous expectations for the product (Rolph & Joseph, 1972), which will cause the consumer to magnify the differences, according to the contrast theory (Hovland, Harvey, & Sherif, 1957).

The consumers purchasing process is influenced by their view (quality, style, price) and preferences, and factors such as literary, individual, psychological and social factors impact their purchasing behavior (Saleem, Ghafar, Ibrahim, Yousuf, & Ahmed, 2015). Therefore, a higher level of service quality will result in a reduction in complaints, increased readiness to mention the product or service to someone else (positive word-of-mouth), customer loyalty and satisfaction and better rates of consumer retention (Levesque & McDougall, 1996).

The stage before the purchasing decisions in the purchasing decision process is the purchase behavior of the consumers (Schiffman & Kanuk, 2000). The consumers' attitudes can be used to anticipate their behavior, according to the theory of planned behavior as proposed by Ajzen (1991). Therefore, marketers are constantly evaluating the components of the marketing mix that may impact consumers' buying behavior, for instance, by analyzing the advertising strategy, brand or packing or even product concepts (Assael, 2004).

Consumers' purchasing behavior is influenced during the pre-purchase stage on which type of product or service or brand to buy (Almsalam, 2014). There are two types of perceived quality as defined by Fornell et al. (1996), such as service quality, which is the assessment of the latest utilization experience of the related service like the range of products and services, the conditions of the display products as well the level of customer service, and product quality, which is the assessment of the latest utilization experience of the related products.

Since companies can have a level of control over the quality of their products (Saleem, Ghafar, Ibrahim, Yousuf, & Ahmed, 2015). Llusar et al. (2001) suggested that perceived quality is considered as the source of satisfaction. As satisfaction is believed to be the most vital constructs in marketing (Erevelles & Leavitt, 1992), it is a good indicator of purchase behavior (switching behavior, purchase intention, repurchase and brand choice) (Oliver, 1993; McQuitty, Finn, & Wiley, 2000).

Researchers Behjati et al. (2012), conducted a research on 200 respondents, representing a 73.5% response rate, analyzed the data using Structural Equation Modeling (SEM) and SPSS and Confirmatory Factor Analysis (CFA), showed that attitude, trust and faithfulness and perceived behavioral control had no significant

relationship on online purchasing behavior while perceived reliability and subjective norm had significant relationship on online purchasing behavior.

Therefore, the researcher hypothesizes the following:

Hypothesis3 (PPP → PB):

H3₀: A positive perception of the product's performance does not affect the consumers' purchasing behavior

H3_a: A positive perception of the product's performance significantly affects the consumers' purchasing behavior

2.4 (i) Brand Relationship (BR)

Consumer brand relationship was greatly studied by Fournier (1998) and investigated twenty different types of consumer relationships with a brand, which are as follows: “average marriage, causal/friendship/buddies, committed partnership, marriage of convenience, compartmentalized friendship, best friendships, kinships, childhood friendship, courtships, rebound/avoidance-driven relationships, flings, enmities, dependences, enslavements and secret affairs”. Researchers Kim, Lee & Lee (2005) developed measures of consumer brand relationship under five dimensions, such as, emotional intimacy, self-connective attachment, behavioral commitment, satisfaction and trust.

Moreover, different concepts are often researched in consumer brand relationship context, such as, brand passion (Albert, Merunka , & Valette-Florence, 2013) brand attachment (Loureiro, 2012; Belaid & Temessek, 2011), brand commitment (Kang, Tang, & Fiore, 2014; Loureiro, 2012; Walsh, Page Winterich, &

Mittal, 2010; Shaari, Salleh, & Hussin, 2012), brand love (Albert, Merunka , & Valette-Florence, 2013), self-brand connection (Cheng, White, & Chaplin, 2012; Escalas & Bettman, 2005), and brand trust (Albert, Merunka , & Valette-Florence, 2013; Loureiro, 2012; Ong & Zien, 2016).

Another researcher, Ahuvia (2005), explored the activities, objects, and the possessions that the consumers adore and describes the importance and role of loved activities and objects in shaping social relationships with brands. Numerous different models, concepts, perspectives and theories have been presented since the start of consumer brand relationship research to better comprehend and describe how consumers establish their relationship with the brands (Fetscherin & Heinrich, 2014).

2.4.1 (ii) Brand Relationship (BR) & Purchasing Behavior (PB)

Carroll and Ahuvia (2006), based on the brand-consumer relationship paradigm, propose that brand love is composed of 5 dimensions, namely, affection, favorable evaluation of the brand, passion, favorable emotions in response to the brand, and expression of love for the brand. Consumers can have genuine feelings of love toward an object and visualizes the love as having two dimensions: real and desired incorporation (Ahuvia, 1993).

This love in turn is made up of 6 dimensions, such as, self-related cognitions, attitude strength, perceived functional quality, negative affect, positive affect, satisfaction and loyalty (Batra, Ahuvia, & Bagozzi, 2008). Another researcher, Albert et al. (2008), more recently, projected two main components of brand love (which are also found in interpersonal love literature), such as, the six first order dimensions

(memories, intimacy, dream, pleasure, idealization and uniqueness) and two second order dimensions which are passion and affection.

Several studies such as Richins (1994); Schouten & McAlexander (1995); Price et al. (2000); Ahuvia (2005); Yuksel et al. (2010), insinuate that emotional attachment is formed between human beings and destinations, places, special objects, destinations, animals, and brands and even human brands or celebrities (Thomson, 2006). Other researchers, Thomson, MacInnis and Park (2005), in consumer research, recognized a higher-order emotional attachment construct that consists of three factors, namely, connection, passion and affection.

According to Brakus et al. (2009), the approving brand experiences, over a period of time, grows bonds with the consumers that aid in differentiating the brand from competitors and ultimately affects consumer loyalty and satisfaction. Consumers are anxious with attaining pleasant experiences in making their purchase decisions (Schmitt, 1999). Numerous studies, in fact, have exhibited that brand experiences affect brand loyalty and commitment (Iglesias, Singh, & Batista-foguet, 2011; Lee & Kang, 2013), attitude towards a brand and the intention to purchase (Zarantonello & Schmitt, 2010).

The branding concepts such as brand personality, brand satisfaction, brand loyalty and brand trust, have been researched in relation to consumer-brand relationship (Loureiro, 2012). The expression “customer loyalty”, in consumer research, is usually measured by evaluations such as the “repeat purchase” (behavioral indicators), “intention to continue buying the same product”, or “willingness to recommend the product to others” (reflecting product advocacy, attitudinal measures)

and “intention to buy more of the same product” (Rauyruen & Miller, 2007; Loureiro & Kastenholz, 2011).

The effects of consumer brand relationships on the overall quality of the connection evolved between the brands and their consumers were also investigated by many researchers (Nobre, 2011). A positive result of strong brand relationships were discovered by researchers (Cheng, White, & Chaplin, 2012), such as, positive word-of-mouth (Albert, Merunka, & Valette-Florence, 2013; Fetscherin & Heinrich, 2014; Hudson, Roth, Madden, & Hudson, 2015), brand evaluation (Kim, Park, & Kim, 2013), brand forgiveness (Cheng, White, & Chaplin, 2012), brand extension (Kim, Park, & Kim, 2013), brand commitment (Albert & Merunka, 2013), brand loyalty (Fetscherin & Heinrich, 2014; Loureiro, Ruediger, & Demetris, 2012; Valta, 2013) and purchase intention (Fetscherin & Heinrich, 2014; Lee & Kang, 2013).

Researchers Arisman and Risana (2019), applied Structural Equation Modeling (SEM) and purposive sampling techniques to analyze the data collected from 148 respondents, in Indonesia, and concluded that brand preference had a significant influence on the formation of millennial shopping styles and the results also indicated that status consciousness proved to be an predecessor of brand status and brand preferences.

The researcher thus hypothesizes that:

Hypothesis4 (BR → PB):

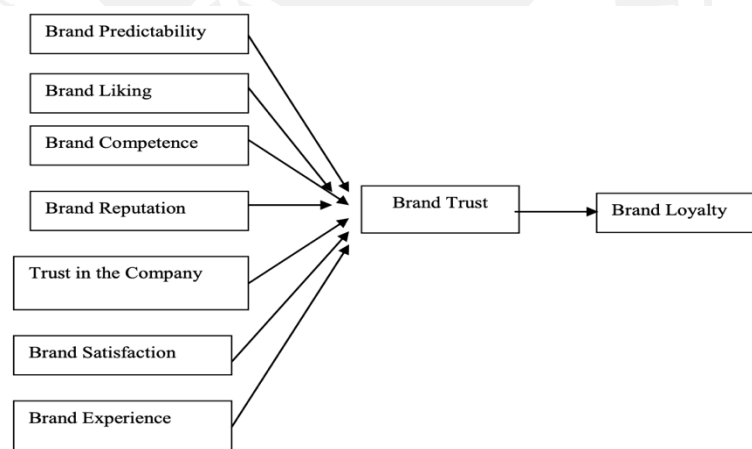
H₄₀: A positive brand relationship does not affect the consumers’ decision behavior to purchase

H_{4a}: A positive brand relationship significantly affects the consumers’ decision behavior to purchase

2.5 (i) Brand Trust (BT)

From the concept of relationship marketing, the theoretical concept of brand trust originates (Rai & Medha, 2013; Morgan & Hunt, 1994; Parasuraman, Valerie, & Berry, A conceptual model of service quality and its implications for future research, 1985). Rai and Medha (2013); Atkinson and Rosenthal (2014), observed that trust is the belief of the means involved in a business and the risk related with the behavior and expectation. According to Ekelundand & Sharma (2001), organizational trust and personal trust are the two categories of trust, where trust could be measured by determining the benefit and the attribute of a brand (Assael, 1998).

Figure VI: Consumer's Trust in a Brand and the Link to Brand Loyalty



Source: Lau, Geok Theng and Sook Han Lee (2000): *Consumer's Trust in a Brand and the Link to Brand Loyalty*. Journal of Market Focused Management. 4, pp 341-370

The above conceptual model lists the characteristics of brand trust, such as, brand predictability, brand liking, brand competence, brand reputation, brand

satisfaction, and brand experience that ultimately leads to brand loyalty (Setyawan, Kussudiyarsana, & Imronudin, 2015). For consumers to expect a brand with complete trust in every usage is the predictability of a brand (Lau & Lee, 2000). According to the same researchers, in consumers' goods marketing, a consumer will trust a brand, if he or she actually likes it, which is where brand liking occurs when the particular product of a brand appeals to the consumer more than the other brands (Setyawan, Kussudiyarsana, & Imronudin, 2015).

In the e-commerce surrounding, trust plays an important role (Wang, Wang, Chen, & Chen, 2009); Reichheld and Schefter (2000); Stewart (2002); Harris and Goode (2004), on their research on online exchanges have argued that in order to build online loyalty, business to consumer (B2C) online websites need to first generate consumers' trust in the operational abilities and in the procedural strictness of the companies' websites. In doing so, the intangible sense or the "lack of touch" in online exchanges can be reduced (Reichheld & Schefter, 2000; Stewart, 2002; Harris & Goode, 2004).

2.5.1 (ii) Brand Trust (BT) & Purchasing Behavior (PB)

According to Huizingh (2000), the information quality that includes design, content and variety, can gain consumers' interest (Liu & Arnett, 2000), which helps to influence the consumers' purchasing behavior and attitudes (Page & Lepkowska-White, 2002), which ultimately leads to retaining of the consumers (Lee, Jinwoo, & Jae, 2000).

In virtual communities, this kind of interest sharing or social exchange, which has been confirmed by various studies, increases consumer loyalty (Hagel &

Armstrong, 1999; Kardaras, Karakostas, & Papathanassiou, 2003; Gruen, Osmonbekov, & Czaplewski, 2006). According to Hung and Li (2007), an e-WOM may ease selective buying customized to the consumer's specific needs or cause a consumer's variety striving and excessive buying behavior.

Furthermore, Ekelund and Sharma (2001), divided consumer's trust into two categories: personal trust and organizational trust. The main dimension of organizational trust is belief (Morgan & Hunt, 1994). When a consumer's expectation is in parallel with his or her purchase decision, the consumer will be satisfied. (Lin & Sun, 2009). In the context of hospitality industry, in a study done by Tepeci (1999), the researcher showed a straight effect of satisfaction to loyalty. According to Setyawan et al (2015), a consumer satisfied with a brand will result in a repeat of purchasing decision.

Morgan & Hunt (1994), explained that a key characteristic of successful long-term relationships in the purchase behavior is the preservation and progress of trust which is at the center of the brand. According to Chaudhuri & Holbrook (2001), purchase behavior highlights the conservation of vital and valuable relationships and the continuing process that are formed on the existence of trust. A hypothesis developed by Delgado-Ballester & Munuera-Aleman (2005), "as an expression of successful relationships between customers and brands", it is assumed that "the emergence of brand trust affects purchasing behavior".

Researchers Effendi et al. (2019) conducted a research on "Trust identification and smartphone purchase decisions" specifically Samsung products, using Structural Equation Modeling (SEM). Their research aimed to analyze the relationship between brand awareness, perceived value, perceived quality, trust and purchasing decisions.

Based on the analysis employing the SEM method and quantitative method, the results indicated that both brand awareness and perceived value had a significant influence on trust, but perceived quality had no significant influence on trust, while brand awareness, perceived value and perceived quality had a significant influence on purchasing decisions.

Therefore, the researcher hypothesizes the following:

Hypothesis5 (BT→ PB):

H5₀: A consumer's trust in a brand does not affect their decision behavior to purchase

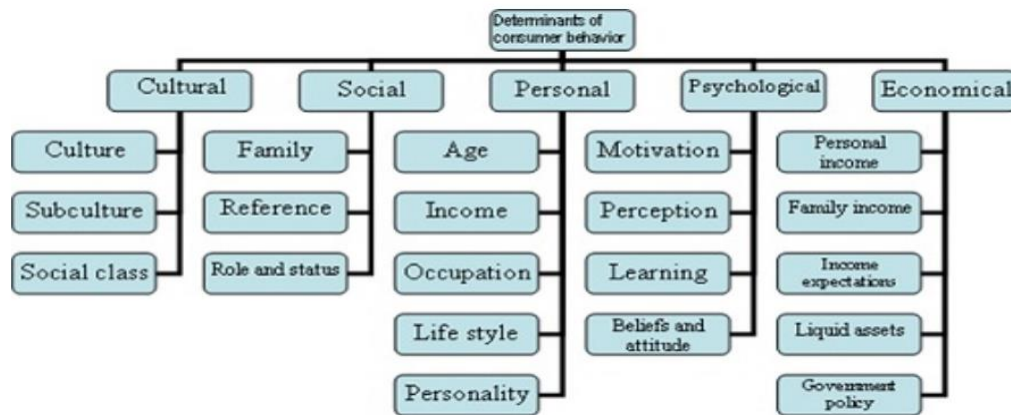
H5_a: A consumer's trust in a brand significantly affects their decision behavior to purchase

2.6 (i) Purchasing Behavior (PB)

The selection, purchase and the use of services and goods for the satisfaction of the consumers' needs or wants is referred to as the consumer buying behavior (Ramya & Ali, 2016). A number of psychological and internal factors influences the consumers' buying behavior, where motivation and perception is considered as the most important factors (Ramya & Ali, 2016).

An overview of the product is formed through the consumers' perspective to a number of some of the brands (Hawkins, Best, & Coney, 2004). Various factors such as the brand, shopping habits or purchasing behavior as well other forces such as cultural, social, personal, psychological and economic factors impacts the consumer's decision making process behavior (Ramya & Ali, 2016):

Figure VII: Factors Affecting Consumer Buying Behavior



Source: N Ramya and Dr. SA Mohamed Ali (2016): *Factors Affecting Consumer Buying Behavior*

Sociological, psychological, and economical factors influences the consumers' decision and their behavior (Nawaz, Vveinhardt, & Ahmed, 2014). According to Assael (2004); Hawkins, Best & Coney (2004) and Schiffman & Kanuk (2000), several factors influences the consumers' purchasing decision, such as, the culture (as well as the sub-culture and social class), which is the most substantial in the behavior of the consumers and has the most influence; the other factor that affects the consumers' responses is social measurement; another factor that affects the consumer on what is purchased is the personal measurement, for example, the stage and age of the life cycle, the self-concept, income, occupation, lifestyle and personality; and the psychological measurements, which includes motivation, perception, learning, beliefs and attitudes that affects the selection of consumer purchases.

According to Blackwell et al. (2006), there are seven stages in the consumer buying decision process, namely, the recognition of a need (need recognition), information search, alternatives during the pre-purchase evaluation, buying, use, post-

purchase evaluation and disinvestment. Involvement and risk are some of the other factors that usually influences the aim to purchase or a purchase, according to the researchers' (Blackwell, Miniard, & Engel, 2006) consumer decision making process model. A few other researchers' perspective on the factors affecting consumer behavior:

Table 2.2: Trends of Economic and Management

Author	Factor	Samples
Kotler	Cultural	Culture, Subculture, Social class
	Social	Reference groups, Family, Roles and Status
	Personal	Age and Lifecycle stage, Occupation, Economic situation, Lifestyle, Personality and Self-concept
	Psychological	Motivation, Perception, Learning, Beliefs and Attitudes
Brassington Frances, Stephen Pettit	Individual	Personality, Perception, Motivation, Attitude
	Situational	Socio-cultural, Technological, Economic/ Competitive, Political/ Regulatory
	Group influences	Social Class, Culture/ Subculture, Reference Groups, Family
	Marketing mix	Price, Product, Place, Promotion
Thomas C. Kinneer, Kenneth L. Bernhardt, Kathleen A. Krentler	Demographic	Age, Education, Income, Race, Material status, Household size, Gender
	Marketing mix	Product, Place, Price, Promotion
	Internal/Psychological	Motivation, Perception, Learning, Personality, Attitudes
	External/ Social	Culture, Social class, Reference groups, Family
	Situational Physical	Surroundings, Social surroundings, Temporal perspective, Task definition, Antecedent states

Source: Trends of Economic and Management, Volume 3, Number 4

The consumers' buying behavior is an ongoing process with various stages from the pre-purchase to the purchase issues and the post-purchase (Solomon, 2013). Another study defined consumer behavior as the study about the components influencing the utilization along with environmental and personal causes wrapping features of behavior, knowledge and impacts of pre-purchase activities as well as post-purchase involvements through the steps of "evaluating, acquiring, utilizing and

disposing” of services and goods by the consumers (Deekshitha, Kumar, & Pradeep, 2017).

A study by Voss & Parasuraman (2003), suggest that during the pre-purchase evaluation, the consumers’ purchase predisposition is initially influenced by price instead of quality. However, price had no inclinations on the impression of the quality of pre-purchase or post-purchase, even if detailed high quality information was provided (Voss & Parasuraman, 2003).

According to Roszkowska-Holysz (2013), purchasing decision is highly influenced by the income of the consumers as it affects their attitude and lifestyle. Before purchasing, consumers usually examine the price and the quality of the product (Nguyen & Gizaw, 2014). The two types of price classified are perceived price which is what the consumers consider of the price in association to the quality of the product itself, and the objective price which is the real price of the product (Donald, Lichtenstein, & Scot, 1989).

Since the key to the success of businesses is to understand the attitudes and behavior of their consumers, the patterns of purchase decisions and buying behavior are continuously analyzed by marketing personnel in order to be able to predict future trends (Kumar, John, & Senith, 2014).

2.7 Correlation between the Variables

Based on previous researchers, the following sub-hypothesis will also be discussed in order to understand the relationship between the variables as well to analyze the correlation among the variables.

2.7.1 (i) Online Engagement Community (OEC) and Website Quality (WQ)

Researchers Srinivasan et al. (2002), defined online communities as a platform where consumers are given the ability and the opportunity to share opinions among themselves through chat rooms and comment links that are sponsored by the online firms. A crucial exchange mechanism between consumers and websites is provided by the quality of the information, which enables the consumers to satisfy their needs by looking for information online and may depend on the quality of the information of the websites (Wang, Wang, Chen, & Chen, 2009).

In order to benefit from potential and positive word-of-mouth and to know the market trends (Bickart & Schindler, 2001), and in order to increase sales, companies can take advantage of the virtual communities (Brown, Tilton, & Woodside, 2002). The behavior of the users has been influenced by the speedy development of the online communities by enabling to have a more substantial experience (Othmani & Bouslama, 2015). To improve the competitiveness of a company, the quality of the website communities shall be ensured by the “community manager” (Othmani & Bouslama, 2015).

Positive e-WOM (ecommerce word of mouth) among community members is the result of the accumulation of the information of shared information exchange behavior in website-supported online communities, that motivates the individuals in

accessing the online community (Kardaras, Karakostas, & Papathanassiou, 2003; Lau & Ng, 2001), which ultimately leads to members recommending and sharing their own personal experiences with a service or of products among other members. (Gruen, Osmonbekov, & Czaplewski, 2006).

Moreover, social media should not be considered as different from the offline world as it is now a new means for communication with family, friends, and organizations alike (Lund, Cohen, & Scarles, 2018). Therefore, social media is now making it easier for a “democratization of a media production and a power shift towards consumers” who can create and issue content through multiple communication channels where marketers are not welcomed (Peters, Chen, Kaplan, Ognibeni, & Pauwels, 2013; Kietzmann, Hermkens, McCarthy, & Silvestre, 2011; DesAutels, 2011).

Othmani & Bouslama (2015) in their article of Perceived Quality of a Virtual Community and Its Components: An Exploratory Investigation, concluded that the dimensions of the perceived quality of the virtual communities has five dimensions, namely: the popularity of the particular virtual community, quality of content, interactivity, the quality of the members that formed the community, and safety:

Figure VIII: Dimensions of the Perceived Quality of a Virtual Community



Source: (Othmani & Bouslama, 2015): *Perceived Quality of a Virtual Community and Its Components: An Exploratory Investigation*.

The above framework shows the characteristics of the quality of a website (Othmani & Bouslama, 2015). According to McMillan & Hwang (2002), three approaches can be used to define interactivity, such as the perception of a user of an information exchange process or as a technological process or simply as a process of interchanging messages. According to Ghose & Wenyu (1998), on social networks, interactivity is more about the collective exchange between two or more users (Mahmoud & Auter, 2009).

In a study of “Perceived Quality of a Virtual Community and Its Components: An Exploratory Investigation” by Othmani & Bouslama (2015), 80% of the respondents cited that the quality of the members of a virtual community is the essential dimension of perceived quality:

Table 2.3: The Quality of Members

Examples of verbatim	Percentage of respondents	Coverage
"A good virtual community is represented by experts who are serious, helpful, present known belonging to our frame of reference..."	80%	16 encoded references [18.43 % Cover]

Source: Othmani & Bouslama; June 2015: *Perceived Quality of a Virtual Community and Its Components: An Exploratory Investigation*.

A study done by Othmani & Bouslama (2015), had 65% of the respondents who agreed that it is vital for virtual communities to have useful, relevant, rich and reliable quality content. Since the users online freely voice their opinions and create

the content in virtual communities, the user's understanding of the quality of information in virtual communities may be inherently dissimilar than that in traditional websites (Othmani & Bouslama, 2015).

Furthermore, researchers Kardaras et al. (2003) noted that in website-supported online communities, the give-and-take information exchange behavior encourages individual interest and causes consumers to increase the gathering of the information in accessing the online community. A positive e-WOM is obtained due to this mutuality process (Lau & Ng, 2001). Additionally, members of a community who refer a website's product to other members are more likely to buy that product for their own personal needs (Eisingerich & Bell, 2007).

Researchers Ray, Kim and Morris (2014), in their research "The Central Role of Engagement in Online Communities". proposed that engagement is the key to active participation in sociotechnical environments. The results that were analyzed using Structural Equation Modeling (SEM) indicated that from a sense of engagement, members essentially contribute to and revisit an online community.

From this, the researcher can hypothesize that:

Hypothesis6 (OEC ↔ WQ):

H₆₀: There is no correlation between online engagement community and the quality of the website

H_{6a}: There exists a significant correlation between online engagement community and the quality of the website

2.7.2 (ii) Online Engagement Community (OEC) & Perceived Product's Performance (PPP)

In a social media community, the social surrounding consists participants of the host brand, the extent of participation among customers and the significance given to the particular group by customers, can influence powerful entitativity perceptions (Carlson, Rahman, Voola, & De Vries, 2018). Ever since evidences has suggested that firms and customers can attain greater levels of value through customer participation (CP), both managerial and academic practice in CP in brand experiences is increasingly gaining attention (Payne, Storbacka, & Frow, 2008)(Payne, Storbacka, Frow, & Knox, 2009)(Merz, Zarantonello, & Grappi, 2018).

Discovery from previous customer participation literature explain that allowing increased levels of customer participation benefits customers through customized brand experiences and improved quality, which ultimately enables consumers to have stronger relational bonds and more control over their brand experiences (Chan, Yum, & Lam, 2010; Yim, Chan, & Lam, 2012).

Customer participation (CP) in brand experiences is achieving growing in both academic and managerial practice as affirmation indicates that customers and firms can obtain greater levels of value through CP (Payne, Storbacka, & Frow, 2008)(Payne, Storbacka, Frow, & Knox, 2009)(Merz, Zarantonello, & Grappi, 2018).

However, other researchers, such as Vantamay (2007), which is related to their topic of research, observed that in general, there are two different types of factors usually discussed among marketing academics, which are the intrinsic values, such as the physical attributes of a product (color, aroma, size, or flavor), and the extrinsic attributes, when it comes to the perceived quality of a product:

Figure IX: Model of the effect of price, brand, and store name on product evaluation



Source: Dodds, W. B., Monroe, K. B., & Grewal, D. (1991). Effects of price, brand, & store information on buyers product evaluations. *Journal of Marketing Research*, 28(3), p. 308

The above model shows the results of the perceived product quality: it not only affects the perceived value, the profitability, brand equity, market share or the brand power, it also affects the consumers' purchasing behavior (Vantamay, 2007). Furthermore, according to Schiffman & Kanuk (2000), studies show that with the variation in the consumer perceptions of the intrinsic marketing attributes which are associated with those products, the quality of the product perceived by the consumers also varies. But, the external attributes (retail store image, country of origin, manufacturer's image, or brand image) of the product are often used as a basis to evaluate the quality of the product (Schiffman & Kanuk, 2000).

Researchers Chen, Sun, Yan and Wen (2020), conducted research to explore the effects of perceived sustainability on rational and emotional customer engagement (CE) in the online shopping environment in China. Applying Partial Least Squares (PLS) approach-based Structural Equation Modeling (SEM) method, their results indicated that perceived sustainability positively affects "the two CE

orientations through influencing short-and long-term transactional attitudes (satisfaction and commitment).

From this the researcher hypothesizes the following:

Hypothesis7 (OEC ↔ PPP):

H7₀: There is no correlation between the online engagement community and how consumers perceive a product's performance

H7_a: There exists a significant correlation between the online engagement community and how consumers perceive a product's performance

2.7.3 (iii) Online Engagement Community (OEC) and Brand Relationship (BR)

The content generated by the users of the online community who take part to solve their problems or to increase their knowledge which can ultimately affect the overall image of the online community is considered as one of the main characteristics of virtual communities (Hsu, Ju, Yen, & Chang, 2007).

Rheingold (1993), defined virtual communities as a gathering that appears in the computer network when there is mixture of an adequate number of members competent to share feelings and to execute discussions sufficient to form “webs of personal relationships”. Researchers Mata and Quesada (2013), defined online communities as collection of individuals who share mutual interests and goals and communicate and interact via the internet.

According to Mahmoud and Auter (2009), online social media networks is more represented by a collaborative exchanges or interactivity between two or more users. Among a number of other studies, Ghose and Dou (1998), in their research “Interactive Functions and Their Impacts on the Appeal of Internet Presence Sites”,

also noted that in large firms, interactivity with the consumers helps to build a good relationship. Moreover, it also enables the consumers to have more freedom in exchanging messages (Liu & Shrum, 2002).

A positive impact on the attitudes of the users can be achieved through interaction (Wu, 1999). Interactivity was cited to be an important quality in an online community by 70% of the respondents in survey conducted by Othmani & Bouslama (2015) on “Perceived Quality of a Virtual Community and Its Components: An Exploratory Investigation.”

In order to allow co-creation of value with customers, it has become essential for firms to use digitalized platforms of engagement to ease customer participation (Ramaswamy & Ozcan, 2016). Studies examining customer participation in various social media platforms confirm that customers who are interactive participate in collaborative behaviors and idea generation such as shared ideas and knowledge to support a particular brand hence forming their brand experiences (Alexander & Jaakkola, 2016; Carlson, Rahman, Voola, & De Vries, 2018; Gong, 2018; Piyathanasan, Mathies, Patterson, & Ruyter, 2018).

Othmani & Bouslama (2015), observed that not only in the activities of organizations but even in the privacy of individuals, virtual communities are now regarded as an important part of modern society. Strong relationships are formed when the consumers are linked through the financing of online communities by shopping websites (Pitta & Fowler, 2005).

Gong (2018) conducted the research in South Korea (98) and the United states (99) yielding 197 valid response using convenience sampling. The respondents were from firm-managed online smartphone brand communities in those two countries. The

results from his research provided research-based evidence that cultural value orientations influence customer brand engagement behavior.

From this the researcher hypothesizes that:

Hypothesis8 (OEC \leftrightarrow BR):

H8₀: There is no correlation between the online engagement community and the relationship the customer has with a brand

H8_a: There exists a significant correlation between the online engagement community and the relationship the customer has with a brand

2.7.4 (iv) Online Engagement Community (OEC) and Brand Trust (BT)

Joshi (2015), observed that primarily, social media networks attracts the responsiveness of the millennial generation. Norén (2011), defined millennials as the individuals having born between 1977 and 1992, according to the 2010 Pew Research report. For the millennial generation, the numerous social network channels have become an integral and indivisible part of every stage of their lives (Joshi, 2015). For example, in 2015, a Pew research conducted a report that informs that from 2005 to 2015, there was a 7% significant rise in the usage of social media. Furthermore, 65% of the individuals who use social media are adults (Perrin, 2015).

Some social networks display and highlight user-generated content, others such as Facebook and Google+, are greatly based on interactions between family and friends through features like social games and status or photo sharing, beyond the social or local boundaries, while other networks, like Tumble or Twitter, are highly focused on fast communications (Statista.com, 2019). Users on multiple

social networks not only enables them to connect with other people but also with their celebrities and their favorite brands (Statista.com, 2019).

Joshi (2015), further explained that as social network develops into a more advanced tool for global reach and interaction, many companies and individuals alike are using it to their benefit by leveraging their influence. Content creators and companies selling the product being reviewed leverage social media platforms to increase their reach to the target audience (Joshi, 2015). The researcher noted that companies are beginning to have group of individuals or professionals (social media experts), who come together to evaluate, plan and apply any or all social media initiatives in a time-bound manner.

Moreover, the researcher, Joshi (2015), observed that marketers are eager to investigate new practices to enhance their brand's social network presence to continuously progress with the evolving markets. The recent developments in economics, arts, and technology have considerably enhanced the reach and usability of the various social media networks (Joshi, 2015). The author additionally explained that brand managers that disclose brand information to the audience must measure the effectiveness of the various channels in order to acquire the attention of a vast audience.

The consumer's opinion of a brand is the reputation of a brand (Lau & Lee, 2000), which is associated with brand credibility on whether the quality provided by the brand is as promised (Erdem, Swait, & Louviere, 2002). According to Erdem and Swait (1998), the extent of trustworthiness of an information in a brand is brand credibility.

Furthermore, researchers, Lei and Li (2014); Lau and Lee (2000), explained that the ability of a brand to fulfill their consumers' needs and to solve their problems is known as the competence of a brand. Setyawan et al. (2015), in the context of brand trust, if a brand is able to fulfill the consumer's needs, the consumer will begin to trust the brand. Based on brand intention and brand reliability to the consumer, brand trust will develop (Ballester & Aleman, 2001).

Eisingerich and Bell (2007), observed that members of a community are more likely to purchase a product recommended by other members. Doney and Cannon (1997), interactions between the shopping websites and the consumers, provides the consumers proof whether the company will fulfill its assurance and also enables the consumers to assess the goodness and trustworthiness of the online presence of a firm.

Another research conducted by Limpasirisuwan and Donkwa (2017) to test a model of members' loyalty to online brand communities and the impact of the perceived values on members' loyalty through mediator variables which include community satisfaction and community trust. Using a systematic random sampling technique, their sample size was 512 respondents who were active participants of Facebook fan pages for automobile brands in Thailand. Applying Structural Equation Modeling (SEM) for the analysis of their data collected, the results indicated that members' loyalty was not impacted by their trust but by their satisfaction. Additionally, value factors were crucial for the improvement of members' satisfaction with online brand communities, where a high degree of satisfaction with online brand communities resulted in a greater trust in the communities.

From this the researcher hypothesizes the following:

Hypothesis9 (OEC ↔ BT):

H9₀: There is no correlation between the online engagement community and the trust the customer has in a brand

H9_a: There exists a significant correlation between the online engagement community and the trust the customer has in a brand

2.7.5 (i) Website Quality (WQ) & Perceived Product's Performance (PPP)

Straub & Watson (2001), for an internet enabled business, website is a crucial user interface, and therefore, it is critical to evaluate what the consumers would need from the website and the properties of a website quality.

Fung & Lee (1999), and various other researchers, who have studied how the characteristics of a website quality affects the perceptions of the users, have observed that in the online shopping context, purchasing behavior or the intention of the consumers is significantly impacted by the quality of a website, while some other researchers have found a positive relationship between company trust and website quality (McKnight, Choudhury, & Kacmarc, 2002).

Carman (1990), observed that the dimensions of the service quality is often shared by the consumers in various sub-dimensions. In order to measure the perception of the quality perceived by the consumers, SITEQUAL was developed by Yoo and Donthu (2001). The concept of perceived quality according to the authors has four dimensions, such as, the site appearance (creativity, color, etc.), ease of use, efficiently responding in a timely manner and interactivity with the users or consumers of the brand, availability of the information, and safety.

A research conducted by Hsu, Chang and Chen (2012), in the context of travel agency, to explore whether perceived flow and perceived playfulness would mediate the relationships among purchase intention, website quality and customer satisfaction used Structural Equation Modeling (SEM) to analyze the data. The results confirmed that website quality affects perceived flow and customers' perceived playfulness which in turn would influence their purchase intention and satisfaction.

From this, the researcher hypothesizes that:

Hypothesis10 (WQ \leftrightarrow PPP):

H10₀: There is no correlation between website quality and how consumers perceive a products' performance

H10_a: There exists a significant correlation between website quality and how consumers perceive a product's performance

2.7.6 (ii) Website Quality (WQ) and Brand Relationship (BR)

Customer participation (CP) in brand experiences is gaining increasing attention in both academic and managerial practice as evidence suggests that customers and firms can achieve greater levels of value through CP (Payne, Storbacka, & Frow, 2008; Payne, Storbacka, Frow, & Knox, Co-creation: Diagnosing the brand relationship experience, 2009; Merz, Zarantonello, & Grappi, 2018).

A website with high-quality content and design will make online consumers think that a particular site is trustworthy which makes consumers with higher content gratification believe that the information that is provided by a shopping website is reliable (Bliemel & Hassanein, 2007; Wang & Emurian, 2005; Gummerus, Liljander, Pura, & Riel, 2004).

Some researchers, such as Guohua (1999), have shown that interactivity can have a relatively positive influence on the attitudes of the users. As recognized by numerous studies, in large firms, interactivity aids to build a good relationship with customers (Ghose & Wenyu, 1998). Consumers opt to search for information related to a product which has ultimately changed the interaction between consumers, buyers and sellers of the online communities and which before a purchase decision, has reduced the uncertainty through the sharing of related information of a product among the respected members (Srinivasan, 2004).

From this, the researcher hypothesizes the following:

Hypothesis11(WQ \leftrightarrow BR):

H11₀: There is no correlation between website quality and the relationship the consumers have with a brand

H11_a: There is a significant correlation between website quality and the relationship the consumers have with a brand

2.7.7 (iii) Website Quality (WQ) and Brand Trust (BT)

According to researchers Grose et al. (1998); Vora (1998); Ranganathan and Ganapathy (2002); Moustakis et al. (2004), the concept of the perceived quality of a website is multidimensional. The perceived quality changes with the user's expectations, as shown by the majority of these studies (Parasuraman, Valerie, & Berry, 1985; Gattorna & Walters, 1996). On the basis of perceptions, communications and interactions, the concept of perceived quality was designed (Barnes & Vidgen, 2001).

As the quality of the information should be an important factor for a website, as per the researchers Keen et al. (2000), content gratification may be experienced when individuals who become aware of a particular site-related information content, such as the online store product information, and become engaged with the content from a particular website (Stafford, Stafford, & Schkade, 2004).

Therefore, consumers with higher content gratification, may be convinced that the information given by a particular shopping website is trustworthy, more so with high-quality website design and content that make online consumers feel that a specific site is reliable, example, (Bliemel & Hassanein, 2007; Wang & Emurian, 2005; Gummerus, Liljander, Pura, & Riel, 2004).

When expert product information is provided for a particular community by a particular shopping website, this expert information may be mutually shared by the members of the community (Wang, Wang, Chen, & Chen, 2009), which in turn reduces members' uncertainty towards the product by this information exchange behavior (Thorbjørnsen, Supphellen, Nysveen, & Pedersen, 2002), and guides them to view an overall value in the offering of the firm's products (Gruen, Osmonbekov, & Czaplewski, 2006). Slowly, an aura of understanding and mutual trust is promoted by such behavior, not only between the members and website itself, but also between the members in the community (Hagel & Armstrong, 1999).

Othmani and Bouslama (2015), concluded that the quality of the members who form an online community is the main dimension of perceived quality quoted by 80% of the respondents. Results obtained from a data (restricted to consumer evaluations within a specific country context) that was collected from 370 Australian consumers who shopped across product various categories at a variety of e-retailers,

specify that consumers are influenced to a higher levels of trust, positive word of mouth, better overall e-service quality perceptions, and as well as website loyalty when an e-retail website is viewed to deliver an innovative experience (O'Cass & Carlson, 2012).

Another researcher, Ying-Feng Kuo (2003), analyzed the data collected from college students of three major universities in Taiwan concluded in his research of “A study on service quality of virtual community websites”, that information safety and online quality is positively related to the overall service loyalty, customer loyalty and ultimately customer satisfaction. With the continuous increased use of technology, Kuan, Bock, & Vathanophas (2008), and many other researchers, have tried to comprehend the effects of the website quality on customer satisfaction.

For a research related to hotel industry, a chain hotel in Taiwan, a study conducted by researchers Chang, Kuo, Hsu and Cheng (2014), to investigate the correlation among website brand, website quality, perceived value, perceived trust and purchase intention, employing Structural Equation Modeling (SEM) technique, the results indicated that purchase intention is positively influenced by perceived trust and perceived trust is positively influenced by website quality.

From this, the researcher hypothesizes that:

Hypothesis12 (WQ ↔ BT):

H12₀: There is no correlation between website quality and consumers' trust in a brand

H12_a: There exists a significant correlation between website quality and consumers' trust in a brand

2.7.8 (i) Perceived Product's Performance (PPP) & Brand Relationship (BR)

Regarding brands as partners, consumers develop relationships with various brands (Loureiro, 2012). Brands provide symbolic meaning and cultural and social value, which according to the same researcher is beyond the utilitarian benefits (Loureiro, 2012). Moreover, the love for a brand alters the influence “of attitude strength on loyalty” (Batra, Ahuvia, & Bagozzi, 2008).

In order to evaluate the quality perceived by the customers, a Gap’s Model and a SERVQUAL scale (“five dimensions which comprise a 22-item instrument to measure customers’ expectations and perceptions) is provided by the North-American School. Another study done by De Chernatony and Riley (1998), consider that the brand presents 12 brand theme definitions and the brand as a multidimensional construct: company, logo, image, identity, personality, legal instrument, adding value, risk reducer, value system, shorthand, relationship and evolving.

Fournier’s (1998) was introduced on the relationship theory associated to brands, based on the increasing integration of human characters in brand building and on the above discussion. The researcher presented a brand relationship quality model that was the crowning point to create the research field of the consumer brand relationship. The brand relationship quality model, according to the author, has 6 powerful sides relationships, such as, commitment, self-connection, intimacy, interdependence, brand partner quality and love and passion.

Grace & O’Cass (2004) to inspect brand experiences in a service branding context, carried out empirical studies and discovered three critical consumer experiences in service branding, such as, employee behaviors, servicescape and service performance. Ismail et al. (2011), therefore, deducted that brand experience is

a multidimensional structure consisting of an emotional aspect, a relational aspect, a sensorial aspect, a lifestyle aspect, a pragmatic aspect and a cognitive aspect.

Chang and Chieng (2006), describes that brand experiences are the responses of consumers to “brand related to stimuli during the encounter” or as occurrences that usually stem from engaging in the event and/or from direct examination (Schmitt, 1999). Five types of experiences were discovered by Schmitt (1999) to assist experimental marketing: act, relate sense, think and feel experiences. Brakus et al. (2009), in another study, discerned four dimensions of brand experiences, such as, intellectual, sentimental, sensory and behavioral exposures.

Researchers Snoj, Pisnik and Mumel (2004) conducted a research in Slovenia on mobile phone users to explore perceived product quality and perceived risk as well as the relationships among perceived quality, perceived risk and perceived value. Applying Structural Equation Modeling (SEM) using LISREL 8.0, the results indicated significant relationships among the concepts researched.

According to Berry (2000), mainly in the service context, it becomes progressively tough to differentiate a brand from competitors formed on just serviceable benefits. Through meaningful consumer and brand actions, the quality of the relationship between a consumer and a brand evolves, where their actions weaken, strengthen, form the quality of such relationship or even dissolve the relationship (Fournier, 1998).

From this, the researcher hypothesizes the following:

Hypothesis13 (PPP ↔ BR):

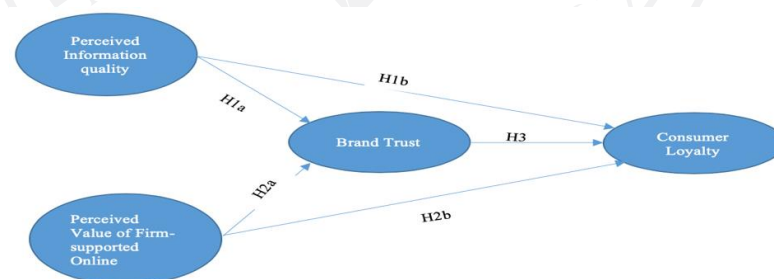
H13₀: There is no correlation between consumers’ perception of a product’s performance and their relationship with the brand

H13_a: There exist a significant correlation between consumers' perception of a product's performance and their relationship with the brand

2.7.9 (ii) Perceived Product's Performance (PPP) & Brand Trust (BT)

When the consumers' needs are satisfied by experiencing a consumption or use of a product or service, they believe that a specific website corresponds to their expectations and which therefore, increases their readiness to visit it again (Wang, Wang, Chen, & Chen, 2009). According to Doney and Cannon (1997), based on repeated exchanges between the shopping websites and the consumers, provides the online consumers with confirmation that the specific firm will deliver on its promises, and it also enables the consumers to evaluate the goodness and the trustworthiness of an online firm.

Figure X: Conceptual Model of Online Community and Trust



Source: Wang et al.; 2009: *Information Quality, Online Community and Trust: A Study of Antecedents to Shoppers' Website Loyalty*

The above research framework shows the relationship between quality of the information and online communities as predecessors of consumer trust which ultimately affects consumer loyalty towards Business-to-Consumer (B2C) websites

(Wang, Wang, Chen, & Chen, 2009). Furthermore, consumers search for information and opinions on online communities, in order to have a belief in the trustworthiness of a particular firm's products or services and eventually build increased loyalty towards the firm's website (Wang, Wang, Chen, & Chen, 2009).

Through a particular shopping website, consumers prefer to purchase but base their liking and get active search information from different options, such as other shopping websites to complement their expectations (Wang, Wang, Chen, & Chen, 2009). The researchers further explained that as consumers become more engaged with the content from a particular website, they may have content gratification (Stafford, Stafford, & Schkade, 2004).

When consumers have a higher content gratification, they believe, that especially with a high-quality website design and content, the information provided by a particular website is reliable which ultimately makes the online consumers feel that the website is trustworthy (Bliemel & Hassanein, 2007; Wang & Emurian, 2005; Gummerus, Liljander, Pura, & Riel, 2004).

In the context of environmentally friendly electronics in Thailand, researchers Marakanon and Panjakajornsak (2017) used perceived risk, perceived quality, customer loyalty and customer trust as their constructs to obtain data from 420 consumers. The data analyzed using Structural Equation Modeling (SEM) and Confirmatory Factor Analysis (CFA), resulted that perceived quality had an indirect effect on customer loyalty via customer trust, while perceived risk and customer trust had a direct effect on customer loyalty, and perceived quality had direct effects on perceived risk and customer trust.

From this, the researcher hypothesizes that:

Hypothesis14 (PPP \leftrightarrow BT):

H14₀: There is no correlation between consumers' perception of a product's performance and their trust in a brand

H14_a: There exists a significant correlation between consumers' perception of a product's performance and their trust in a brand

2.7.10 (i) Brand Relationship (BR) and Brand Trust (BT)

As defined by Kotler (2003), brand is a design, name, symbol or sign or even the combination of all which differentiates a service or a product from the competitors or its identification. Assael (1998), proposed a concept that a cognitive component of the behavior is brand trust, which could be measured by deciding the benefit and quality of a brand.

Personal trust and organizational trust are the two categories of trust as defined by Ekelund and Sharma (2001), where personal trust is a part of brand trust. Researchers Ekelund and Sharma (2001); Tezinde et al (2001); Morgan and Hunt (1994); Alam and Yasin (2010), observed that the mediating variables in the company's relationship with their customer(s) are commitment and trust.

Commitment, satisfaction and trust are the crucial factors that effects the "relational constructs" between the customer and the company, as observed by Sahin et al., (2011) and Verhoef et al., (2002). Moreover, according to several researchers such as Tezinde et al (2001); Lassoued and Hobbs (2015) and Joo (2015), satisfaction, trust, brand and commitment are some of the several factors that affect customer loyalty.

Additionally, when a customer's expectations are in par with their purchase decision, satisfaction occurs (Lin & Sun, 2009), which is a result of a subjective evaluation when an alternative brand was chosen and which surpasses a customer's expectations (Lau & Lee, 2000). Brand trust will in turn become strong due to the brand satisfaction, as shown by the researcher Ballester and Aleman (2001).

Researchers Zhang et al. (2020), conducted the survey Beijing, using Structural Equation Modeling (SEM) and Confirmatory Factor Analysis (CFA) on 383 respondents with an 89% response rate, to test the impact of brand relationship types on brand loyalty, concluded that a meaningful brand relationship significantly predicts brand trust and brand loyalty.

From this, the researcher hypothesizes the following:

Hypothesis15 (BR \leftrightarrow BT):

H15₀: There is no correlation between the relationship the consumers have with a brand and their trust in a brand

H15_a: There exists a significant correlation between the relationship the consumers have with a brand and their trust in a brand

2.8 Conclusion

Howard Rheingold (1993), in his book of *The Virtual Community*, explained that a social network of individuals is a virtual community who interact through specific social media possibly extending over political and geographical boundaries in order to follow shared goals or interests. Individuals who wish to be a part of the internet community need to have an internet connection and usually have to become a member through a specific site (Rheingold, 1993).

Social interactions in the online world can literally be anywhere with anyone and no longer have to be based on vicinity (Preece, Maloney-Krichmar, & Diane, 2005). The same journal further explained that ethnography (systematic study of people and cultures) is attempted by many researchers to comprehend how people express themselves, what they do, what attracts or motivates them, how people conduct themselves, what they do in online spaces and why instead of to participate, some of the individuals prefer to observe.

Since the social media has become the mainstream, not only consumer behavior and expectations have changed but also marketing methods have evolved. The attention of the industry and academic research have been attracted by the social networking sites (SNSs) interested by their reach and affordance (Boyd & Ellison, 2007). The change in technology has revealed an “enormous barrage of social stimulation” that has moved to a stage of saturation which significantly changes the individuals’ experiences of others and self (Gergen, 1991; Tambyah, 1996).

For the modern society, whether in the activities of organizations or in the seclusion of individuals, virtual communities are now deemed as an important

component (Othmani & Bouslama, 2015). The researchers further explained that given the differences between the virtual communities and the traditional websites, also the structures of perception of quality and the rapid maturation of the information engineering, has also evolved.

According to Keen et al. (2000), the quality of the information should be an important factor for a website. Consumers can get interested by the information quality that is presented on websites, which includes content, design and variety (Huizingh, 2000), which can help retain consumers (Lee, Jinwoo, & Jae, 2000), by influencing the consumer buying behavior and attitudes (Page & Lepkowska-White, 2002).

Researchers, Olshavsky & Miller (1972), observed that advertisers commonly believe that a slight positive exaggeration in promotion of a product will lead to the positive influence of the quality of the product as perceived by the consumers. They concluded from their research on the effects of both exaggeration and subtlety on product ratings that understatement resulted in less favorable ratings and overstatement resulted in more favorable ratings (Oishavsky & Miller, 1972).

When brands become meaningful in consistent with a group of reference such as celebrities, friends, sport, professional sport, brand communities, and/or in relation to their own self, consumers incline to form connections (Carroll & Ahuvia, 2006; Kaufmann, Loureiro, Basile, & Vrontis, 2012). However, when consumers are unfamiliar with a brand, negative information becomes important and when consumers approve a brand, positive information is relevant (Ahluwalia, Unnava, & Burnkrant, 2001).

Oliver (1980; Oliver R. , Whence consumer loyalty?, 1999), analyzed the relationship between brand loyalty and brand satisfaction by proposing the customer dissatisfaction/ satisfaction (D/CS) paradigm. After analyzing the relationship between loyalty and satisfaction, it concluded that satisfaction is a required step in loyalty generation. Social media has considerably increased the power of indirect marketing (word of mouth), which gives businesses an opportunity to strengthen the relationship with their consumers, which can ultimately lead to customer loyalty (Spitfire, 2018).

Aaker (1997), stated that the consumers' reflection of a memory of a product is the brand image as perceived by the consumers or which that portrays a positive image which is relevant and easy to be remembered by the public where a positive brand image will help to create unique characteristics of the brand that will lead to customer retention (Schiffman & Kanuk, 2000).

Before making a decision to purchase a product, consumers contemplate some characteristics of a product (Schiffman & Kanuk, 2000). According to Brown (1952) and Cunningham (1956), brand loyalty was interpreted to be a subset of repeat purchase behavior. The purchase decision process of consumers is influenced by the information quality, which enables them to select and locate the products that satisfies their needs (Ranganathan & Ganapathy, 2002).

2.9 Conceptual Framework

Based on previous researchers, related literature, and the help of the researcher's advisor, the following conceptual framework was developed to study the factors that affects the consumers' purchasing behavior via the online networks.

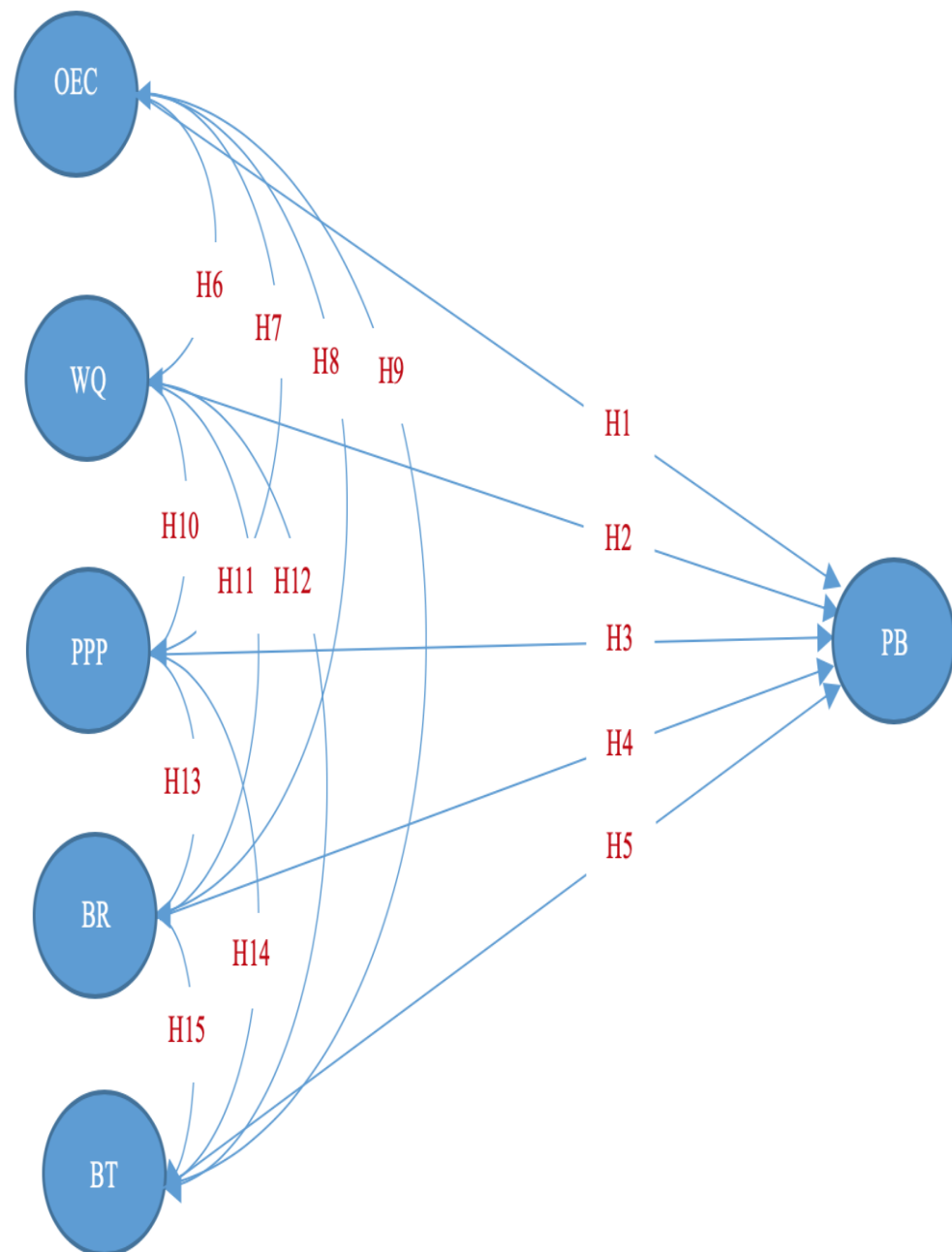


Figure XI: Hypothesized Conceptual Model. The round shapes represent latent (observed) variables.

2.10 List Of Hypotheses

Table 2.4: List of Main Hypotheses:

Main Hypotheses
Hypothesis1 (OEC → PB): H1o: Customer participation in the online community does not affect the consumers' purchasing behavior H1a: Customer participation in the online community significantly affects the consumers' purchasing behavior
Hypothesis2 (WQ → PB): H2o: The quality of the website does not affect the purchasing behavior of the consumers H2a: The quality of the website significantly affects the purchasing behavior of the consumers
Hypothesis3 (PPP → PB): H3o: A positive perception of the product's performance does not affect the consumers' purchasing behavior H3a: A positive perception of the product's performance significantly affects the consumers' purchasing behavior
Hypothesis4 (BR → PB): H4o: A positive brand relationship does not affect the consumers' decision behavior to purchase H4a: A positive brand relationship significantly affects the consumers' decision behavior to purchase
Hypothesis5 (BT → PB): H5o: A consumer's trust in a brand does not affect their decision behavior to purchase H5a: A consumer's trust in a brand significantly affects their decision behavior to purchase

Table 2.5: List of Sub-Hypothesis:

Sub-Hypotheses (Correlation)
Hypothesis6 (OEC ↔ WQ): H6o: There is no correlation between online engagement community and the quality of the website H6a: There exists a significant correlation between online engagement community and the quality of the website
Hypothesis7 (OEC ↔ PPP): H7o: There is no correlation between the online engagement community and how consumers perceive a product's performance H7a: There exists a significant correlation between the online engagement community and how consumers perceive a product's performance

(Continued)

Table 2.5 (Continued): List of Sub-Hypothesis:

Sub-Hypotheses (Correlation)
Hypothesis8 (OEC ↔ BR): H8 ₀ : There is no correlation between the online engagement community and the relationship the customer has with a brand H8 _a : There exists a significant correlation between the online engagement community and the relationship the customer has with a brand
Hypothesis9 (OEC ↔ BT): H9 ₀ : There is no correlation between the online engagement community and the trust the customer has in a brand H9 _a : There exists a significant correlation between the online engagement community and the trust the customer has in a brand
Hypothesis10 (WQ ↔ PPP): H10 ₀ : There is no correlation between website quality and how consumers perceive a products' performance H10 _a : There exists a significant correlation between website quality and how consumers perceive a product's performance
Hypothesis11 (WQ ↔ BR): H11 ₀ : There is no correlation between website quality and the relationship the consumers have with a brand H11 _a : There is a significant correlation between website quality and the relationship the consumers have with a brand
Hypothesis12 (WQ ↔ BT): H12 ₀ : There is no correlation between website quality and consumers' trust in a brand H12 _a : There exists a significant correlation between website quality and consumers' trust in a brand
Hypothesis13 (PPP ↔ BR): H13 ₀ : There is no correlation between consumers' perception of a product's performance and their relationship with the brand H13 _a : There exist a significant correlation between consumers' perception of a product's performance and their relationship with the brand
Hypothesis14 (PPP ↔ BT): H14 ₀ : There is no correlation between consumers' perception of a product's performance and their trust in a brand H14 _a : There exists a significant correlation between consumers' perception of a product's performance and their trust in a brand
Hypothesis15 (BR ↔ BT): H15 ₀ : There is no correlation between the relationship the consumers have with a brand and their trust in a brand H15 _a : There exist a significant correlation between the relationship the consumers have with a brand and their trust in a brand

2.11:

Table 2.6: This table illustrates the effects among the independent and dependent variables which are based upon the previous researches and studies

Relationships	Previous Researches and Studies
1. Online Engagement Community and Purchasing Behavior	1. (Srinivasan S. , 2004) 2. (Eisingerich & Bell, 2007) 3. (Hung & Li, 2007) 4. (Wang, Yu, & Wei, 2012)
2. Website Quality and Purchasing Behavior	1. (Ranganathan & Ganapathy, 2002) 2. (Siddiqui, O'Malley, McColl, & Birthwistle, 2003) 3. (Kuan, Bock, & Vathanophas, 2008) 4. (Lee, Ariff, Zakuan, & Sulaiman, 2016)
3. Perceived Product's Performance and Purchasing Behavior	1. (Chaudhuri & Holbrook, 2001) 2. (Llusar, Camison, & Tena, 2001) 3. (Assael, 2004) 4. (Saleem, Ghafar, Ibrahim, Yousuf, & Ahmed, 2015)
4. Brand Relationship and Purchasing Behavior	1. (Richins, 1994) 2. (Ahuvia A. C., 2005) 3. (Thomson, MacInnis, & Park, 2005) 4. (Lee & Kang, 2013)
5. Brand Trust and Purchasing Behavior	1. (Morgan & Hunt, 1994) 2. (Lau & Lee, 2000) 3. (Yuksel, Yuksel, & Bilim, 2010) 4. (Zarantonello & Schmitt, 2010)
6. Online Engagement Community and Website Quality	1. (Lau & Ng, 2001) 2. (Kardaras, Karakostas, & Papathanassiou, 2003) 3. (Srinivasan, Anderson, & Ponnnavolu, 2002) 4. (Peters, Chen, Kaplan, Ognibeni, & Pauwels, 2013)
7. Online Engagement Community and Perceived Product's Performance	1. (Boyd & Ellison, 2007) 2. (Joshi, 2015) 3. (Othmani & Bouslama, 2015) 4. (Piyathananan, Mathies, Patterson, & Ruyter, 2018)

(Continued)

Table 2.6 (Continued): This table illustrates the effects among the independent, mediate and dependent variables which are based upon the previous researches and studies

8. Online Engagement Community and Brand Relationship	<ol style="list-style-type: none"> 1. (Hagel & Armstrong, 1999) 2. (Gruen, Osmonbekov, & Czaplewski, 2006) 3. (Loureiro S. M., 2012) 4. (Lund, Cohen, & Scarles, 2018)
9. Online Engagement Community and Brand Trust	<ol style="list-style-type: none"> 1. (Erdem, Swait, & Louviere, 2002) 2. (Lau & Lee, 2000) 3. (Perrin, 2015) 4. (Setyawan, Kussudiyarsana, & Imronudin, 2015)
10. Website Quality and Perceived Product's Performance	<ol style="list-style-type: none"> 1. (Katerattanakul & Siau, 1999) 2. (Huizingh, 2000) 3. (Hsu, Chang, & Chen, 2012) 4. (Khalil, 2017)
11. Website Quality and Brand Relationship	<ol style="list-style-type: none"> 1. (Bliemel & Hassanein, 2007) 2. (Guohua, 1999) 3. (Merz, Zarantonello, & Grappi, 2018) 4. (Payne, Storbacka, & Frow, 2008)
12. Website Quality and Brand Trust	<ol style="list-style-type: none"> 1. (Lee, Jinwoo, & Jae, 2000) 2. (Page & Lepkowska-White, 2002) 3. (Gummerus, Liljander, Pura, & Riel, 2004) 4. (Wang, Wang, Chen, & Chen, 2009)
13. Perceived Product's Performance and Brand Relationship	<ol style="list-style-type: none"> 1. (Churchill & Surprenant, 1982) 2. (De Chernatony & Riley, 1998) 3. (Chang & Chieng, 2006) 4. (Loureiro, Ruediger, & Demetris, 2012)
14. Perceived Product's Performance and Brand Trust	<ol style="list-style-type: none"> 1. (Stafford, Stafford, & Schkade, 2004) 2. (Wang & Emurian, 2005) 3. (Bliemel & Hassanein, 2007) 4. (Atkinson & Rosenthal, 2014)
15. Brand Relationship and Brand Trust	<ol style="list-style-type: none"> 1. (Doney & Cannon, 1997) 2. (Brakus, Schmitt, & Zarantonello, 2009) 3. (Iglesias, Singh, & Batista-foguet, 2011) 4. (Albert & Merunka, 2013)

CHAPTER 3

METHODOLOGY

3.1 Issues of the study

In this section, the selected research methodology, a detailed explanation of the population and sample size, the method used to approach the samples, the method used to collect the data from the samples, the kind of research tool used for data collection, the validity and the reliability of the content, and statistical tools such as descriptive and Structural Equation Modeling (SEM) used for the analysis of the data will be further discussed.

3.1 Research Strategy

Structural Equation Modeling (SEM) or often called Linear Structural Relations (LISREL) models is applied in this research to analyze the hypotheses and the relationships or correlations among the variables (Shadfar & Malekmohammadi, 2013), as it enables the researcher to understand which observed variables are a good indicator (significant) of the latent variables as well as test the overall theory which are usually formulated by path diagrams using arrows and linear regression equations.

Furthermore, path diagrams come from the methodology of path analysis which was developed more than 70 years ago by a biometrician Sewall Wright (1921-1934) (Nachtigall, Kroehne, Funke, & Steyer, 2003). The relationship between the latent variables and measurement models representing the relationship between the latent variables and their observable or manifest indicators is what consists of a structural model (Nachtigall, Kroehne, Funke, & Steyer, 2003).

In order to attain the purpose of this study, a quantitative research technique along with SEM (also known as causal modeling or analysis of covariance structures) has been used, which includes common factor analysis, the general linear model and many common conventional techniques (Arbuckle, 2005). Approved by the expertise, all the related theories were applied in order to construct the questionnaire which was used as the research instrument. The samples of the research were selected from the population which the methodology used for conducting the research about the Factors Affecting the Consumers' Purchasing Behavior Via the Online Networks in Bangkok. The respondents in Bangkok included people who had a well understanding of or the direct experiences of using online networks specified by this study. Furthermore, the samples online were selected at random in order to avoid biased opinion and convenience and the purposive sampling method.

According to Kline (2001), in SEM, there are two broad classes of variables: latent and observed (also known as manifest variables), where observed variables represents the data which have been entered and collected scores in a data file which can either be ordinal, categorical and continuous, while all latent variables are continuous which SEM deals with. Furthermore, in SEM, latent variables usually correspond to factors or hypothetical constructs, which are explanatory variable to consider a sequence that is not directly observable (Kline, 2001).

Since, the factors, online engagement community, website quality, perceived products' performance, brand relationship, brand trust and purchasing behavior, related to this study are all observable and cannot be directly measured, they can be classified as latent variables. Descriptive and Structural Equation Modeling (SEM)

were the statistical techniques used for the data interpretation and analysis. As mentioned above, the details described above are as follows:

3.2 Research Tool for Data Collection

The questionnaire was designed as the research instrument by the researcher by applying the explanations of the data analysis between the online networks and consumers' purchasing behavior. Quantitative approach was used to carry out the data analysis to ensure that the various hypothesis were covered by applying the statistical methods as well as to enhance the reliability and the validity of the data discovered and based on the evidences of the previous research findings and related theories. The questionnaire which consisted of 3 parts were as follows:

Part 1: The closed-ended demographic questions consisted of gender, age, marital status, level of education, professional status and monthly income.

Table 3.1: Scale and level of Measurement for Demographic

Variable	Scale of Measurement	Level of Measurement
1. What is your gender?	Nominal Scale	1). Male 2). Female
2. What is your age? (Years)	Ordinal Scale	1). 16 to 23 years 2). 24–29 years old 3). 30-39 years old 4). 40-49 years old 5). Equal and over 50 years old

(Continued)

Table 3.1 (Continued): Scale and level of Measurement for Demographic

Variable	Scale of Measurement	Level of Measurement
3. What is your marital status?	Nominal Scale	1). Single 2). Married 3). Divorced/ Widowed
4. What is your level of education?	Nominal Scale	1). High School 2). Bachelor Degree 3). Master Degree 4). Doctorate Degree 5). Others, please specify
5. What is your professional status (occupation)?	Nominal Scale	1). Private employee 2). Self-Employed 3). Searching for job 4). Housewife 5). Retired 6). Student 7). Others, please specify
6. What is your monthly income?	Ordinal Scale	1). Less than and equal to 15,000 baht 2). 15,001–30,000 baht 3). 30,001–50,000 baht 4). 50,001–100,000 baht 5). 100,001–150,000 baht 6). 150,001– 200,000 baht 7). 200,001–500,000 baht 8). More than 500,000 baht

Part 2: The close-ended questions related to the usage of the internet focuses on how often the online networks are used, what influences the individual to purchase online, how many times the individual shops online, the kind of online networks being used to make purchases online, how much money is spent while purchasing through the online networks, how much time is spent networking, and for how long has the individual been purchasing products online. It focuses on the consumer purchasing behavior via the online networks.

Table 3.2: Scale and level of Measurement of Consumers' Purchasing Behavior

Variable	Scale of Measurement	Level of Measurement
2.1 If you do not follow a page or are part of a specific group, would you like to partake in the following future?	Nominal Scale	1). Yes 2). No
2.2 What factor(s) influences you to purchase online through the social networks?	Nominal Scale	1). Recommendation of a friend 2). Promotion/Sale 3). Trendy 4). Convenient 5). Support a brand/product 6). Influenced by a celebrity 7). Online reviews 8). Others, please specify
2.3 How many times per week do you shop online?	Nominal Scale	1). Once a week or more 2). 2-3 times a month 3). Once a month 4). Every few months 5). Rarely/Never 6). Others, please specify

(Continued)

Table 3.2 (Continued): Scale and level of Measurement of Consumers' Purchasing Behavior

Variable	Scale of Measurement	Level of Measurement
2.4 Which of the following online network(s) do you use for purchasing your products online?	Nominal Scale	1). Lazada 2). Shopee 3). Tops 4). Central 5). Tesco Lotus 6). Homepro 7). Uniqlo 8). Robinson 9). Jdcentral 10). Others, please specify
2.5 How long have you been purchasing product(s) online?	Ordinal Scale	1). Less than 1 month 2). 1 - 4 months 3). 5 - 8 months 4). 9 - 12 months 5). 1 to 2 years 6). Others, please specify
2.6 What do you normally purchase online?	Nominal Scale	1). Food 2). Clothes and Accessories 3). Electronics and Gadgets 4). Books 5). Videogames 6). Others, please specify

(Continued)

Table 3.2 (Continued): Scale and level of Measurement of Consumers' Purchasing Behavior

Variable	Scale of Measurement	Level of Measurement
2.7 How much would you spend on a product(s) or brand(s) while purchasing online?	Ordinal Scale	1). Less than or equal to 1,000 baht 2). 1,001-2,500 baht 3). 2,501- 4,000 baht 4). 4,001-5,500 baht 5). 5,501-7,000 baht 5). More than 7,000 baht
2.8 How long do you spend every day using your social networking sites?	Ordinal Scale	1). Less than or equal to 60 minutes 2). 1 hour -2 hours 3). 2 hours to 4 hours 4). 4 hours to 6 hours 5). 24 hours/7 days a week 6). Others, please specify

9: The close-ended questions about the perceived performance of a product(s) or brand(s) consisted of five statements which are as follows:

9.1 I find that the comments and the feedbacks of the groups I am part of influences my view on the product or brand

9.2 I find that the quality of the website affects how I view the product or brand

9.3 I find that my relationship with a product or brand is related to its performance or quality

9.4 I perceive that the price of a product or brand is related to the performance or value of that product or brand

9.5 I find that the performance of a new product or brand influences me to purchase it

10: The close-ended questions about the trust or base to purchase product(s) or brand(s) via the online networks consisted of five statements which are as follows:

10.1 I get influenced by the feedbacks of the online groups that I am part of or follow

10.2 I get coupons or great deals which encourages me to purchase online

10.3 I find that the quality of the website helps to understand the reliability of a new product or brand

10.4 I am well aware of the product or brand that I am going to purchase online

10.5 I want to experience the whole process of purchasing via the online networks

11: The close-ended questions about the consumers' purchasing behavior consisted of five statements which are as follows:

11.1 I find that purchasing product(s) via the online networks is useful

11.2 I find that the product(s) or brand(s) I prefer are easily available online

11.3 I find that purchasing my preferred product(s) or brand(s) via the online networks is convenient

11.4 I can purchase the product(s) or brand(s) online at a reduced price

11.5 I feel independent by being able to make purchases online

Part 3:

Table 3.3: Scale and level of Measurement for All Variables

Variable	Scale of Measurement	Level of Measurement
1. Online Engagement Community (OEC)	Interval Scale	1= Strongly Disagree 2= Slightly Disagree 3= Neutral 4= Slightly Agree 5= Strongly Agree
2. Website Quality (WQ)	Interval Scale	1= Strongly Disagree 2= Slightly Disagree 3= Neutral 4= Slightly Agree 5= Strongly Agree
3. Perceived Product's Performance (PPP)	Interval Scale	1= Strongly Disagree 2= Slightly Disagree 3= Neutral 4= Slightly Agree 5= Strongly Agree
4. Brand Relationship (BR)	Interval Scale	1= Strongly Disagree 2= Slightly Disagree 3= Neutral 4= Slightly Agree 5= Strongly Agree

(Continued)

Table 3.3 (Continued): Scale and level of Measurement for All Variables

Variable	Scale of Measurement	Level of Measurement
5. Brand Trust (BT)	Interval Scale	1= Strongly Disagree 2= Slightly Disagree 3= Neutral 4= Slightly Agree 5= Strongly Agree
6. Purchasing Behavior (PB)	Interval Scale	1= Strongly Disagree 2= Slightly Disagree 3= Neutral 4= Slightly Agree 5= Strongly Agree

Regarding part 3, all 6 elements of the variables were rated by respondents on 5 point Likert-type scale for measuring the statistical mean range for mean interpretation which is as follows:

Each question measured from Number 1 with the opinion “Strongly Disagree” to number 5 with the opinion “Strongly Agree”.

Strongly Disagree	= 1 point
Slightly Disagree	= 2 points
Neutral	= 3 points
Slightly Agree	= 4 points
Strongly Agree	= 5 points

$$\text{Range} = \frac{\text{Maximum} - \text{minimum}}{\text{Scale Level}}$$

$$= \frac{5-1}{5} = 0.80$$

Table 3.4: The range of interpretation

Range	Interpretation
1.00 - 1.80	Strongly disagree
1.81 - 2.61	Slightly disagree
2.62 - 3.42	Neutral
3.43 - 4.23	Slightly Agree
4.24 - 5.00	Strongly Agree

Measurement of Research Tool

The structured questionnaire is a pre-formulated set of questions developed with the help of the advisor and experts, and choices for answers which enables the respondents to select the answers as per their opinion. In order to test the above hypotheses, for measuring the constructs, a set of scales has been formed, either taken from developed scales in the literature or derived from the literature.

3.3 Reliability and Validity Assessment

The two important characteristics in the questionnaire are reliability and content validity to ensure that the respondents have a common understanding of the questionnaire which in turn will help them to respond based on fact in addition to statistical reliability of the questionnaire.

1. Content Validity

The comments of the three specialists who are specialized in this field were examined in order to measure the content validity. The mean value of the three specialists' opinions toward each statement of the questionnaire were considered to calculate the validity. For this present study, the value of the validity was official. According to those comments, the statements of questions in the questionnaire were developed (Cronbach, 1951). The author submitted the questionnaire to three qualified experts in related field:

- 1). Dr. Dongcheol Terry Heo, Assistant Professor, The Institute for Knowledge and Innovation Southeast Asia (IKI-SEA), Bangkok University.
- 2). Mr. Nadim Xavier Salhani, Chief Executive Officer, Mudman Public Company Limited.
- 3). Dr. Sumas Wongsunopparat, Advisor, Bangkok University.

The Index of Item=Objective Congruence (IOC) method was used to calculate the consistency between objectives and questions or content and objective as well as to verify the consistency of questions.

$$IOC = \frac{\sum R}{N}$$

Where:

IOC = Consistency between questions and objectives or objective and content

$\sum R$ = Total assessment points given from all qualified experts

N = Number of qualified experts

As shown below, to assess each question of the questionnaire, there are three levels of assessment:

- +1/1 means that the question is consistent with the objective of the questionnaire
- 0 means that the question may or may not be (unsure) consistent with the objective of the questionnaire
- -1 means that question is inconsistent with the objective of the questionnaire

Table 3.5: Content Validity

No.	Expert 1			Expert 2			Expert 3			Total Scores ΣR	IOC $\frac{\Sigma R}{N}$	Data Analysis
	-1	0	1	-1	0	1	-1	0	1			
OEC1			✓			✓			✓	3	1	Acceptable
OEC2			✓			✓			✓	3	1	Acceptable
OEC3			✓			✓			✓	3	1	Acceptable
OEC4			✓			✓			✓	3	1	Acceptable
WQ1			✓			✓		✓		2	0.66	Acceptable
WQ2			✓			✓			✓	3	1	Acceptable
WQ3			✓			✓			✓	3	1	Acceptable
WQ4			✓			✓			✓	3	1	Acceptable
PPP1			✓			✓			✓	3	1	Acceptable
PPP2			✓			✓			✓	3	1	Acceptable
PPP3			✓			✓			✓	3	1	Acceptable
PPP4			✓			✓			✓	3	1	Acceptable

(Continued)

Table 3.5 (Continued): Content Validity

No.	Expert 1			Expert 2			Expert 3			Total Scores	IOC	Data Analysis
	-1	0	1	-1	0	1	-1	0	1	ΣR	$\frac{\Sigma R}{N}$	
BR1			✓			✓			✓	3	1	Acceptable
BR2			✓			✓			✓	3	1	Acceptable
BR3			✓			✓			✓	3	1	Acceptable
BR4			✓			✓			✓	3	1	Acceptable
BT1			✓			✓			✓	3	1	Acceptable
BT2			✓			✓			✓	3	1	Acceptable
BT3			✓			✓			✓	3	1	Acceptable
BT4			✓			✓		✓		3	0.66	Acceptable
PB1			✓			✓			✓	3	1	Acceptable
PB2			✓		✓				✓	2	0.66	Acceptable
PB3			✓			✓			✓	3	1	Acceptable
PB4			✓			✓			✓	3	1	Acceptable

$$IOC = \frac{\Sigma R}{N}$$

Where:

IOC = Consistency between questions and objectives or objective and content

ΣR = Total assessment points given from all qualified experts

N = Number of qualified experts

$$IOC = \frac{22.9}{24} = 0.95$$

The value has to be 0.5 or above in order to be accepted for the consistency index value. For this present research, the value of IOC was 0.95. Therefore, the content of the

2. Reliability

In order to measure the reliability of the questionnaire, the value of Cronbach's alpha coefficient was conducted. When the value of the alpha is between 0.7-1.00, the questionnaire would be approved. (Cronbach, 1951; Olorunniwo, Hsu, & Udo, 2006). A pretest sampling of 30 people was conducted online, who were not in the group of samples for this current study. The table below shows the criteria of the range of values for an acceptable reliability value (Taber, 2018):

Table 3.6: Criteria of Cronbach's Alpha Coefficient

Cronbach's Alpha coefficient	Reliability Level	Desirability Level
0.80-1.00	Very High	Excellent
0.70-0.79	High	Good
0.50-0.69	Medium	Fair
0.30-0.49	Low	Poor
Less than 0.30	Very Low	Unacceptable

Each part of the questionnaire had accepted value of the Cronbach's alpha coefficient as illustrated in Table 3.4. As indicated by the results, the questionnaire had an acceptable reliability value which was equal to or more than 0.7 (Cronbach, 1951; Olorunniwo, Hsu, & Udo, 2006) for the pre-test sample of 30 respondents, and

as suggested by Craig and Moores (2006), all the values of the actual sample size (n=400) is above 0.65, and is therefore, considered consistent and reliable.

Table 3.7: The Cronbach's Alpha coefficient reliability value for each factor

Statements of each part	Alpha coefficient (N= 30)	Alpha coefficient (N= 400)	Accepted/ Not accepted
Online Engagement Community	0.808	0.732	Accepted
Website Quality	0.898	0.873	Accepted
Perceived Product's Performance	0.726	0.686	Accepted
Brand Relationship	0.912	0.837	Accepted
Brand Trust	0.783	0.744	Accepted
Consumers' Purchasing Behavior	0.845	0.764	Accepted
Total value	0.907	0.901	Accepted

The above table shows the results of the Cronbach's Alpha for all factors conducted based on 30 pre-test samples, and 400 sample size. The Cronbach's Alpha value for the 30 pilot samples for Online Engagement Community is 0.808, Website Quality is 0.898, Perceived Product's Performance is 0.726, Brand Relationship is 0.912, Brand Trust is 0.783 and Consumers' Purchasing Behavior is 0.845 respectively. The reliability of the entire set of questionnaires is very high as seen by the total value of the Cronbach's Alpha result which is 0.907.

3.4 Population and Sample

Target Population

The population, with a sample size of 400, as the participants of the study is selected at random to ensure unbiased information is obtained. The participants were

selected online via the online networks such as Facebook, WhatsApp, Line and Messenger as well as face to face distribution in Bangkok University Rama 4 campus as a target population.

Sampling Method

The samples were majorly approached via the online networks as well face-to-face and were classified as the users who are aware of the such networks when purchasing a product or brand online. Convenience sampling or non-probability sampling method was selected as it allows to choose participants who are easy to approach in order to take part in this present research.

Sample Size

As a pretest sampling in order to test the reliability, selected participants for this study are samples of 30 users, who use the online networks daily for purchasing products or brands. After obtaining the results with an acceptable value for each factor to be above 0.7, an appropriate sample size had to be determined. In Structural Equation Modeling (SEM), it is critical to determine the appropriate sample size. However, since there has been no apparent agreement in the literature regarding an adequate sample size for SEM technique, it has been recommended by many researchers to use 5/10 cases per parameters or a sample size of at least 200 (Kline, 2001).

According to James Stevens' Applied Multivariate Statistics for the Social Sciences (2009), a good general rule for sample size is 15 cases per predictor in a standard ordinary least squares multiple regression analysis. Moreover, Bentler and

Chou (1987), noted that in SEM analysis, researchers may go as low as five cases per parameter estimate but only if the data has no outlying cases, are normally distributed or has no missing data (perfectly well-behaved). Rather than per measured variable, researchers Bentler and Chou (1987) mention five cases per parameter estimate.

Furthermore, Loehlin (1992), using Confirmatory Factor Analysis models reports the results of Monte Carlo simulation, concludes that for this class of model with two to four factors, the investigator should plan on collecting at least 100 cases, and if possible, with 200 being better. In particular, standard errors-SEM program standard errors are computed under the assumption of large sample sizes, and therefore, consequences of using smaller samples include more convergence failures since the software cannot reach a satisfactory solution, or improper solutions including negative error variance estimates for measured variables and lowered accuracy of parameter estimates. Which is why it is important to acknowledge that the Bentler and Chou (1987) and Stevens' (2009) recommendations fit in at approximately minimum 15 cases per measured variable, and measured variables usually have at least one path coefficient associated with another variable in the analysis, and a residual term or variance estimate.

As referred to by Jackson (2003) as well, concerning the relation between the model complexity and the sample size, as the $N:q$ rule, and is applicable when maximum likelihood (ML) is used as the estimation method. ML is the most often used method in SEM, and as suggested by Jackson (2003), *“researchers think about minimum sample size in terms of the ratio cases (N) to the number of model parameter that require statistical estimates (q). An ideal sample size-to-parameters ratio would be 20:1. For example, if a total of $q= 10$ model parameter require*

statistical estimates, then an ideal minimum sample size would be 20 x 10, or N= 200. Less ideal would an N:q ratio of 10:, which for the example just given for q= 10 would be a minimal sample size of 10 x 10, or N= 100. As the N:q ratio decreases below 10:1 (e.g., N= 50, for a 5:1 ratio), so does the trustworthiness of the results.”

Based on the above suggestions, the researcher computes the size of the sample as follows:

For latent variables, there are 24 measured variables in this research.

24 (measured variables) x 10 (respondents per measured variables) = 240 respondents

As the researcher is testing sub-hypotheses to explore the correlations among individual variables, to make up for missing data or additional parameters or complexity, as trial and error, 10 additional individuals per hypothesis are used:

15 (hypotheses) x 10 (respondents per hypothesis) = 150, which resulted in a total of 390 respondents. Therefore, as its sample size, the researcher used 400 respondents.

Since a sample size of 400 usually gives the statistical accuracy of $\pm 5\%$ and is often considered as the most effective, a sample size of 400 individuals who purchase products online, who are located in Bangkok, was carried out for this research. SEM was used to assign the samples of 400 respondents, all of which is calculated from the research population derived from the number of people, all of whom have had a well understanding of or the direct experience of using the stratified/convenience/ quota/ purposive sampling method(s).

The medium through which 30 samples (pre-test) of the questionnaire were distributed and the data collected are illustrated in Table 3.8:

Table 3.8: The locations of Data Collection

Locations	Quota (n=5)
Facebook	5
Messenger	15
WhatsApp	5
Line	5
Total value	30

3.5 Statistical Tools for Data Analysis

The data collected was analyzed using the SPSS Statistics and SEM.

The statistical tools used for the analysis of the data are as follows:

1. Descriptive Statistics

1.1. Frequency counting and percentage ratio were used to measure the demographic data including gender, age, status, educational background, occupation, and income.

1.2 Standard deviation and the value of mean were used to measure the respondents' attitudes towards independent and dependent variables of this research.

A summary of the descriptive statistics for the analysis of the data of each variable is illustrated in Table 3.9:

Table 3.9: Summary of the Descriptive Statistics for Data Analysis

Variable	Type of Variable	Descriptive Statistics
Demographic	Independent	Percentage/Frequency
Online Engagement Community	Independent	Mean and Standard Deviation
Website Quality	Independent	Mean and Standard Deviation
Perceived Product's Performance	Independent	Mean and Standard Deviation
Brand Relationship	Independent	Mean and Standard Deviation
Brand Trust	Independent	Mean and Standard Deviation
Consumer's Purchasing Behavior	Dependent	Mean and Standard Deviation

2. Structural Equation Modeling (SEM)

In order to analyze the relationship between the independent variables and the dependent variable, Structural Equation Model (SEM) technique was used. Tabachnick & Fidell (1996) further mentioned that SEM can test the theoretical relationship among or between the observed variables and/ or latent variables, can estimate as well as combine the factor and regression analysis.

According to Shadfar & Malekmohammadi (2013), SEM is built upon two steps: fitting the structural model and validating the measurement model, where the former is attained essentially through path analysis with latent variables and the latter is attained essentially through confirmatory factor analysis. Moreover, SEM, which in proposition permits the structural relationship between observed (latent) variables to be correctly evaluated by generally stating a corresponding model and clearly capturing unreliability of measurement in the model by using data collected to estimate the value of free parameters and build variables that cannot be measured

directly (observed/latent variables), with the initial theoretical model (Shadfar & Malekmohammadi, 2013).

Additionally, the researchers Shadfar & Malekmohammadi (2013), further explained the advantages of SEM that it allows for more flexible assumptions, rather than testing the individual coefficients, it allows the overall testing of the model, the ability to model error terms, to reduce the error of measurement by having multiple indicators per latent variable by using confirmatory factor analysis. The strategy of comparing alternative models to assess relative model fit by SEM makes it more powerful (Garson, 2011).

In this study, such relationship was further proposed in each hypothesis. The Structural Equation Model (SEM) helps analyze the relationship between variables, while at the same time analyzing relationships in the inner model and the outer model. Since SEM is also a path analytical method that shows the path links among the variables in the conceptual model, the estimates of the parameters as well as estimates a series of casual relationships, it also assesses the relationships and handles the multiple relationships (Hair, Anderson, Tatham, & Black, 1995).

3.6 Data Collection

Two types of data collection were for this study, which are, primary data and secondary data:

Primary Data

Using survey questionnaire for selected networking sites in Bangkok, Thailand, primary data is gained. Questionnaires were distributed on various social networks, such as, Line, Facebook, WhatsApp and Messenger.

Secondary Data

Secondary data were collected through several different sources such as websites, academic journals, published books, other thesis report and research articles.

3.7 Data Collection Process

For the research topic “Factors affecting consumers’ purchasing behavior via online networks in Bangkok”, the data collection process was based on practical data, since the data collection time was set within two months, during the month of January 2020 to February 2020. The questionnaire was distributed online through the various networking sites, like, Facebook, Line, WhatsApp and Messenger, as well as face to face distribution in Bangkok University Rama 4 campus as a target population in order to get unbiased responses.

Chapter 4 will further explain the tests, the hypothesis and the final model of the research topic.

CHAPTER 4

RESEARCH FINDINGS AND DATA ANALYSIS

This section of the research, along with an analysis of the practical study presents the practical study of the research. By using the framework of references from previous researchers and articles, and method given in research methodology regarding the research tool employed for this research, the analysis of the research will be shown. In addition, SPSS and SEM analysis were used to analyze the data such as the description, correlation, prediction and mediation effect.

The result of this study will be presented in four parts:

Part 1: Model Fit using numerous goodness-of-fit indicators to assess a model.

Part 2: Hypothesis testing for the systematic results using SEM which is used to assess, specify, estimate and present the model in an intuitive path diagram to show the hypothesized correlation among variables (Arbuckle, 2005).

Part 3: By using the percentage and frequency, the information of the samples' demographic.

Part 4: By using mean (\bar{X}) and standard deviation (S.D.), the analysis of the effects among online engagement community, website quality, perceived product's performance, brand relationship, brand trust and purchasing behavior.

Symbols used for Data Analysis

CMIN/DF = Chi-square to df ratio (also called normed chi-square)

AGFI = Adjusted Goodness-of-Fit

IFI	= Incremental Fit Index (IFI)
CFI	=Comparative Fit Index to evaluate the measure for a model fit
RMSEA	= Root Mean Square Error of Approximation for evaluation of the fit indices
S.E.	= Standard Error
C.R.	= Critical Ratio (estimate/ standard error)
P	= Probability value for the null hypothesis
\bar{X}	= mean value for samples
S.D.	= standard deviation from samples

4.1 Measurement of Model Fit

By using the Confirmatory Factor Analysis (CFA), the validity of the measurement model can be analyzed to be satisfactory (Paswan, 2009). CFA gives quantitative measures that assess the reliability and validity of a proposed theoretical model (Shadfar & Malekmohammadi, 2013), as it helps to evaluate the construct validity and reliability of the specified measurement model (Ibid) and examines the Goodness-Of-Fit (GOF).

To assess a model, in reference to model fit, numerous researchers use several goodness-of-fit indicators (Shadfar & Malekmohammadi, 2013). The validity of the overall model and the hypothesized relationships among the variables can be analyzed by using the SEM method, which can be measured by multiple indicators for correlated independents, multiple latent independents, latent dependents, nonlinearities, measurement error, modeling of interactions, correlated error terms,

etc. (Shadfar & Malekmohammadi, 2013). In order to know whether a good fit exists, ranges of acceptable scores, types of data, or the wellness of different indices with different sample sizes are the major factors to decide.

For one-time analysis, generally, TLI, CFI, and RMSEA are preferred (Schreiber, A., F. K., E. A., & J., 2006). However, for this research, some common fit indices are as follows: chi-square of df ratio (CMIN/DF), Normed Fit Index (NFI), TLI (or Non-Normed Fit Index NNFI), Incremental Fit Index (IFI), Comparative Fit Index (CFI) and Root Mean Square Error of Approximation (RMSEA):

Table 4.1.1: CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	62	607.841	238	.000	2.554
Saturated model	300	.000	0		
Independence model	24	4016.724	276	.000	14.553

NPAR is the number of distinct parameter (q) being estimated, CMIN is the minimum value of discrepancy (chi-square statistics χ^2), DF is the number of degree of freedom for testing the model ($df = d = p - q$; where p is the number of sample moments and q is the number of distinct parameters), and P is a “p-value” for testing the hypothesis that the model fits perfectly in the population. Chi-square to df ratio, also called normed chi-square, normal chi-square, relative chi-square CMIN/DF, is the chi-square index divided by degree of freedom (Shadfar & Malekmohammadi, 2013):

$$\chi^2 = \chi^2 / df$$

For an acceptable model, the relative chi-square should be in 2:1 or 3:1 range (Carmines & J. P. , 1981), and Kline (1998) says 3 or less is acceptable. Some researchers, such as Schumacker & Lomax (2004), to consider a model an adequate fit, have allowed values as high as 5, while others such as, Ullman (2006), insist the relative chi-square should be 2 or less to reflect a good fit. Another researcher, Paswan (2009), said that though a value below 2 is ideal (or preferred), values between 2-5 is considered acceptable. From this, the CMIN/DF (relative chi-square) default model (measurement model) value of this research is considered acceptable since it has a value of 2.554 (Table 4.3).

The chi-square test may be misleading by four ways as discussed by Garson (2011), which is why other fit tests, such as IFI, TLI, CFI, RMSEA, and a reasonable sample size (>200), should also be considered in order to avoid modifying the model or accepting it blindly:

Table 4.1.2: RMIR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	.071	.886	.856	.703
Saturated model	.000	1.000		
Independence model	.276	.328	.269	.301

According to Kline (2005), Root Mean Square residual (RMR) is measured based upon the scales of each indicator and hence becomes difficult to interpret. As an alternative to chi-square test, the Goodness-of-Fit statistic (GFI) was created by

Joreskog and Sorbom, which measures the amount of variance that is considered for by the estimated population covariance (Tabachnick & Fidell, 2007). Now, there aren't any preferred indices of goodness-of-fit (GFI) and no longer reported and recommended by Sharma et al (2005) that it should not be used regarding GFI and AGFI (Adjusted Goodness-of-Fit statistic) since the tests can give negative values while the cutoff for both is > 0.90 (Shadfar & Malekmohammadi, 2013). As can be seen in Table 4.4 the value which was analyzed by SEM, of GFI is 0.886 and therefore, could not pass the cutoff value. However, researchers Joreskog and Sorbom (1988), have accepted the AGFI value to be ≥ 0.80 to have a good fit model, and therefore the value of AGFI derived for this research is 0.856, and is considered a good model fit. The Parsimony Goodness-of-Fit Index (PGFI) was developed by Mulaik et. al. (1989), which is based upon the GFI by adjusting the loss of degrees of freedom, and no threshold levels have been recommended for this indice.

Table 4.1.3: Baseline Comparison

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.849	.825	.902	.885	.901
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

For this research, NFI, RFI, IFI, TLI AND CFI are shown in Table 4.5. One which did not need to make chi-square assumptions, as an alternative to CFI, Normed Fit Index (NFI) was developed (Shadfar & Malekmohammadi, 2013), where the value

varies from 0-1, with 1 being a ideal fit. The NFI for this research is 0.849. As explained by Shadfar & Malekmohammadi (2013), compared to the uncorrelated variables that are measured (null model), NFI reflects the proportion by which the researcher's model fit improves.

The range for Relative Fit Index, also known as RFI that is close to 1 indicates a good fit, although it is not guaranteed to vary from 0-1 (Shadfar & Malekmohammadi, 2013), and the value for this model is 0.825 which is quite close to 1. Moreover, Incremental Fit Index (IFI) is favored by some researchers since it is relatively independent of sample size and should have a value that is ≥ 0.90 for the model to be accepted. The value of IFI for this research is 0.902 and is therefore considered acceptable.

Another researcher, Marsh et al. (1988) & (1996) also found Non-Normed Fit Index (NFI), also known as Tucker-Lewis Index (TLI), to be relatively independent of the sample size, and the value close to 1 indicates a good fit (Shadfar & Malekmohammadi, 2013). Moreover, researchers, Hu and Bentler (1999), more recently have suggested the cutoff for TLI to be ≥ 0.95 which is widely accepted and for a good model fit example, by (Schumacker & Lomax, 2004). However, rarely there are some authors who have used the TLI cutoff to be as low as 0.80 (Shadfar & Malekmohammadi, 2013) since its value tends to be lower than GFI (which for this research is 0.886), and the TLI value for this research is 0.88.

The Comparative Fit Index (CFI), also known as the Bentler Comparative Fit Index, value should be ≥ 0.90 for the model to be accepted which shows that “90% of the covariation in the data can be reproduced by the given model, and CFI close to 1 shows a very good fit ((Schumacker & Lomax, 2004). The CFI value for this research is 0.901 and is therefore considered a good fitting model.

Table 4.1.4: RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.062	.056	.069	.001
Independence model	.184	.179	.189	.000

Root Mean Square Error of Approximation (RMSEA), also called discrepancy per degree or RMSE, is a popular measure of fit since it does not need to compare with a null model (Shadfar & Malekmohammadi, 2013), and even though it overestimates goodness of fit for very small sample sizes, it is one of the measurements of fit indexes that is less affected by sample size ((Fan, Thompson, & Wang, 1999)). Hu & Bentler (1999) have suggested the cutoff for RMSEA to be ≤ 0.06 for a good model fit as well as researchers Schumacker & Lomax (2004) agree the value to be ≤ 0.05 for a good model fit. However, the same researchers also explained that if the value of RMSEA is ≤ 0.08 it is considered an adequate fit (Schumacker & Lomax, 2004) (Hu & Bentler, 1990). As further explained by Shadfar & Malekmohammadi (2013), that RMSEA is usually analyzed with its confidence intervals and in a well-fitting model, the lower (90%) confidence limit includes 0 or is

very close to 0, and the upper limit is < 0.08 . The value of RMSEA for this research is 0.062 with LO 90 0.56 and HI90 0.068, and is therefore, considered a good fit.

In summary, the measurement of fit indexes used which yielded an adequate or a good fit for this research are as follows:

Table 4.1.5: Measurement Findings of Model Fit Analysis Summary

Fit Indices					
Fit Measures	CMIN/DF	AGFI	IFI	CFI	RMSEA
Scale for good Model fit	2-5	≥ 0.80	≥ 0.90	≥ 0.90	≤ 0.08
Derived Default Model Values	2.554	0.856	0.902	0.901	0.062
Interpretation	Adequate Fit	Good Fit	Good Fit	Good Fit	Good Fit

As seen from Table 4.1.5, the ranges of values and the interpretation, the model for this research is considered a good fitting model.

4.2 The Systematic Results For Hypothesis Testing

This part of the research findings presents the effects between the independent (exogenous variables) and dependent variable (endogenous variable) such as the online engagement community, website quality, perceived product's performance, brand relationship, brand trust and purchasing behavior. In order to analyze the effects of these variables, SEM analysis is used. The unstandardized estimates model shows regression weights and covariance. The findings are presented in Table 4.2.1:

Table 4.2.1: Regression Weights (Group number 1- Default model)

Structural Paths			Estimate	S.E.	C.R.	P	Label
PB	<---	OEC	1.000				
PB	<---	WQ	.861	.486	1.772	.076	
PB	<---	PPP	-4.154	1.587	-2.618	.009	
PB	<---	BR	.306	.180	1.695	.090	
PB	<---	BT	2.404	.742	3.241	.001	
OEC4	<---	OEC	1.000				
OEC3	<---	OEC	1.314	.146	9.028	***	
OEC2	<---	OEC	1.294	.147	8.830	***	
OEC1	<---	OEC	1.215	.136	8.911	***	
WQ4	<---	WQ	1.000				
WQ3	<---	WQ	1.123	.072	15.683	***	
WQ2	<---	WQ	1.169	.073	16.115	***	
WQ1	<---	WQ	1.194	.071	16.757	***	
PPP4	<---	PPP	1.000				
PPP3	<---	PPP	1.054	.132	8.014	***	
PPP2	<---	PPP	1.491	.387	3.855	***	
PPP1	<---	PPP	1.044	.138	7.583	***	
BR4	<---	BR	1.000				
BR3	<---	BR	1.359	.087	15.652	***	
BR2	<---	BR	1.319	.087	15.190	***	
BR1	<---	BR	.763	.070	10.876	***	
BT4	<---	BT	1.000				
BT3	<---	BT	.947	.080	11.900	***	
BT2	<---	BT	1.096	.088	12.427	***	
BT1	<---	BT	.745	.083	8.949	***	
PB1	<---	PB	1.000				
PB2	<---	PB	.916	.080	11.434	***	
PB3	<---	PB	.942	.079	11.990	***	
PB4	<---	PB	.956	.084	11.343	***	

“***” represents p-value < 0.01

Regression weights represents the effect of one or more variables on another variable (Byrne, 2006). The parameter estimate is significant at $p \leq 0.05$, and therefore, the hypothesis Online Engagement Community (OEC) has no significant effect consumer's Purchasing Behavior (PB), Website Quality (WQ) has no significant effect on consumer's Purchasing Behavior (PB), The hypothesis Perceived Product's Performance (PPP) significantly effects consumer's Purchasing Behavior (PB), while Brand Relationship (BR) has no effect on consumer's purchasing Behavior (PB) and Brand Trust (BT) significantly effects Consumer's Purchasing Behavior.

Figure XII: Proposed Conceptual Model

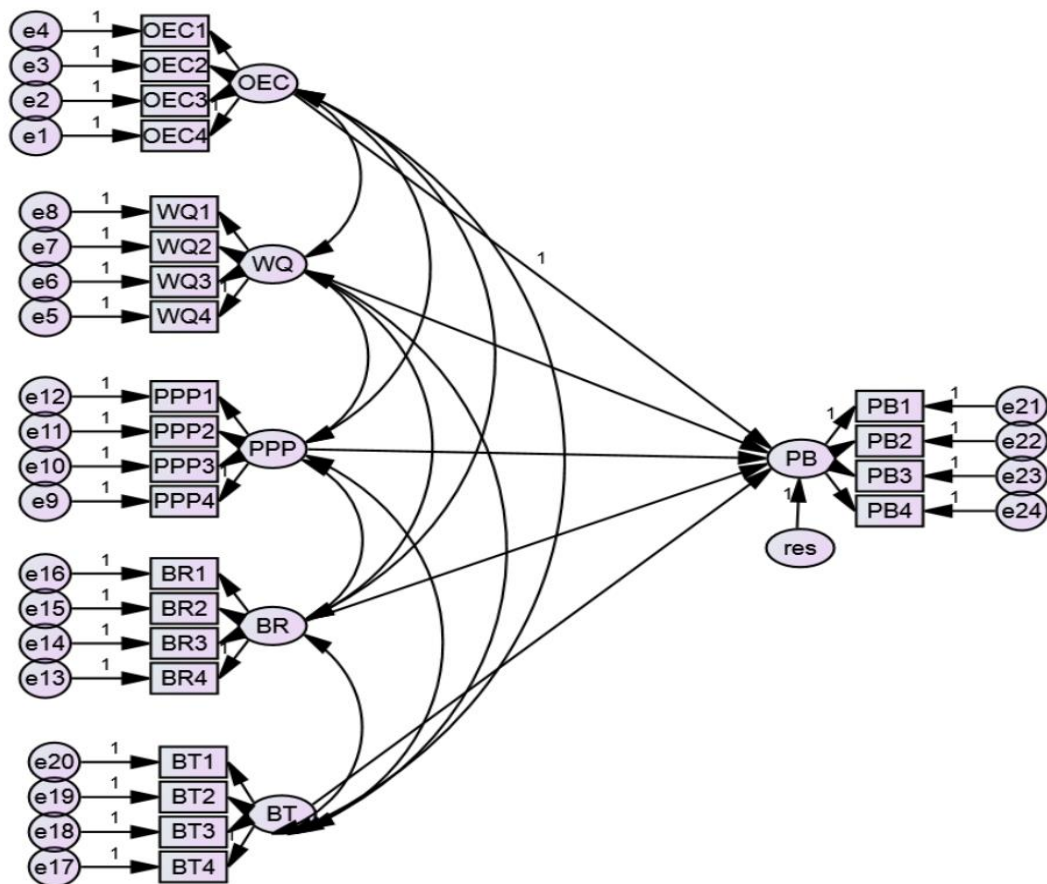
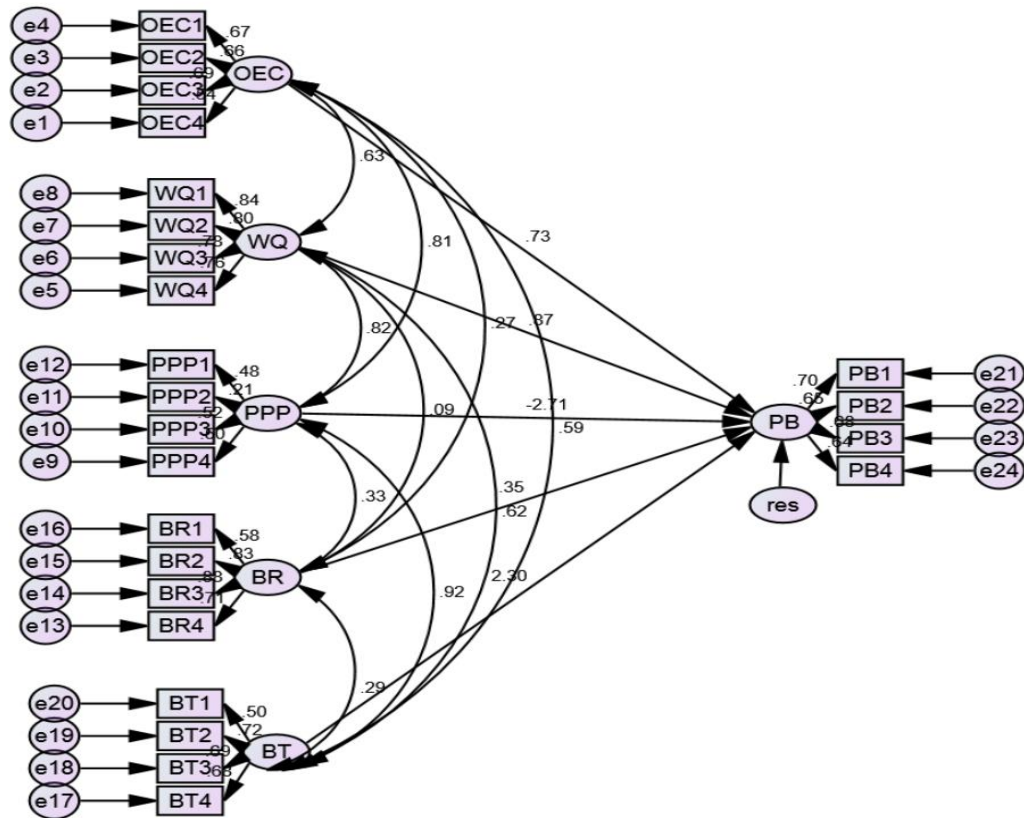


Figure XIII: Path Diagram of SEM Model with parameter estimates (regression weights)



The round shapes represent latent variables (factors, constructs, etc.)

The square shapes represent observed variables (also called manifest variables)

Single direct arrow represents direct path which indicates that the variable at the origin of the arrow has some influence or significance on the target variable

Curved double headed arrows (or bidirectional) represents co-variation path or indicates a correlation linking the two variables where the modelling process estimates the value.

“e” represents the error terms (unexplained variance which is not explained by the model) or measurement of error (random).

The numbers represent the regression coefficients

Table 4.2.2: Covariances: (Group number 1 – Default model)

	Estimate	S.E.	C.R.	P	Label
OEC <--> WQ	.204	.029	6.912	***	
WQ <--> PPP	.234	.031	7.426	***	
PPP <--> BR	.108	.027	4.005	***	
BR <--> BT	.138	.032	4.350	***	
OEC <--> PPP	.169	.027	6.317	***	
PPP <--> BT	.248	.033	7.428	***	
OEC <--> BR	.101	.025	3.963	***	
OEC <--> BT	.179	.028	6.330	***	
WQ <--> BR	.045	.029	1.526	.127	
WQ <--> BT	.259	.033	7.751	***	

Table 4.2.3: Hypothesis Testing for SEM Model

Main Hypotheses	Structural Path	SEM Output Model				Result
		Estimate	S.E.	C.R.	P	
Hypothesis1: H1 ₀ : Customer participation in the online community does not affect the consumers' purchasing behavior H1 _a : Customer participation in the online community significantly affects the consumers' purchasing behavior	OEC → PB	1.000				Insignificant
Hypothesis2: H2 ₀ : The quality of the website does not affect the purchasing behavior of the consumers H2 _a : The quality of the website significantly affects the purchasing behavior of the consumers	WQ → PB	.861	.486	1.772	.076	Insignificant
Hypothesis3: H3 ₀ : A positive perception of the product's performance does not affect the consumers' purchasing behavior H3 _a : A positive perception of the product's performance significantly affects the consumers' purchasing behavior	PPP → PB	-4.154	1.587	-2.618	.009	Significant
Hypothesis4: H4 ₀ : A positive brand relationship does not affect the consumers' decision behavior to purchase H4 _a : A positive brand relationship significantly affects the consumers' decision behavior to purchase	BR → PB	.306	.180	1.695	.090	Insignificant
Hypothesis5: H5 ₀ : A consumer's trust in a brand does not affect their decision behavior to purchase H5 _a : A consumer's trust in a brand significantly affects their decision behavior to purchase	BT → PB	2.404	.742	3.241	.001	Significant

Table 4.2.4: Sub Hypotheses Testing for SEM Model

Sub-Hypotheses Covariance	Structural Path	SEM Output Model				Result
		Estimate	S.E.	C.R.	P	
Hypothesis6: H6 ₀ : There is no correlation between online engagement community and the quality of the website H6 _a : There exists a significant correlation between online engagement community and the quality of the website	OEC ↔ WQ	.204	.029	6.912	***	Significant
Hypothesis7: H7 ₀ : There is no correlation between the online engagement community and how consumers perceive a product's performance H7 _a : There exists a significant correlation between the online engagement community and how consumers perceive a product's performance	OEC ↔ PPP	.169	.027	6.317	***	Significant
Hypothesis8: H8 ₀ : There is no correlation between the online engagement community and the relationship the customer has with a brand H8 _a : There exists a significant correlation between the online engagement community and the relationship the customer has with a brand	OEC ↔ BR	.101	.025	3.963	***	Significant
Hypothesis9: H9 ₀ : There is no correlation between the online engagement community and the trust the customer has in a brand H9 _a : There exists a significant correlation between the online engagement community and the trust the customer has in a brand	OEC ↔ BT	.179	.028	6.330	***	Significant
Hypothesis10: H10 ₀ : There is no correlation between website quality and how consumers perceive a products' performance H10 _a : There exists a significant correlation between website quality and how consumers perceive a product's performance	WQ ↔ PPP	.234	.031	7.426	***	Significant
Hypothesis11: H11 ₀ : There is no correlation between website quality and the relationship the consumers have with a brand H11 _a : There is a significant correlation between website quality and the relationship the consumers have with a brand	WQ ↔ BR	.045	.029	1.526	.127	Insignificant
Hypothesis12: H12 ₀ : There is no correlation between website quality and consumers' trust in a brand H12 _a : There exists a significant correlation between website quality and consumers' trust in a brand (WQ ↔ BT)	WQ ↔ BT	.259	.033	7.751	***	Significant
Hypothesis13: H13 ₀ : There is no correlation between consumers' perception of a product's performance and their relationship with the brand H13 _a : There exist a significant correlation between consumers' perception of a product's performance and their relationship with the brand	PPP ↔ BR	.108	.027	4.005	***	Significant
Hypothesis14: H14 ₀ : There is no correlation between consumers' perception of a product's performance and their trust in a brand H14 _a : There exists a significant correlation between consumers' perception of a product's performance and their trust in a brand	PPP ↔ BT	.248	.033	7.428	***	Significant
Hypothesis15: H15 ₀ : There is no correlation between the relationship the consumers have with a brand and their trust in a brand H15 _a : There exist a significant correlation between the relationship the consumers have with a brand and their trust in a brand	BR ↔ BT	.138	.032	4.350	***	Significant

Note: ***= p-value < 0.001

4.3 The Analysis of Samples' Demographic Information

This part of the research findings presents the respondents' personal data including gender, age, status, level of education, professional status, monthly income, and the second part which is related to the usage of the internet focuses on what influences the individual to purchase online, how many times the individual shops online, the kind of online networks being used to make purchases online, for how long has the individual been purchasing products online, what is normally being purchased online, how much money is spent while purchasing through the online networks, how much time is spent networking, how the consumers perceive the performance of a product online, the reason or the basis which urges the respondents to make a purchase online, and the reason for the consumers' repurchase decision. Frequency counting and percentage ratio are the statistical techniques used for data analysis and the findings are presented in Table 4.3.1-4.3.17 as follows:

Part 1:

Table 4.3.1: Frequency and Percentage of Demographic Data: Gender

Gender	Frequency	Percentage
Male	194	48.5%
Female	206	51.5%
Total	400	100%

In this research, the majority of the respondents are females with total number equaled to 206 respondents (51.5%) and male 194 respondents (48.5%).

Table 4.3.2: Frequency and Percentage of Demographic Data: Age

Age	Frequency	Percentage
16-23	258	64.5%
24-29	60	15.0%
30-39	53	13.3%
40-49	17	4.3%
Equal and over 50	12	3.0%
Total	400	100%

The majority of the samples' age are between 16-23 years old which equaled to 258 respondents (64.5%) followed by age between 24-29 years old having 60 respondents (15%), age between 30-39 years old with 53 respondents (13.3%), age between 40-49 years old with 17 respondents (4.3%) and age equal to and over 50 years old with 12 respondents (3%). Therefore, the results showed that the majority of consumers purchasing online are youth.

Table 4.3.3: Frequency and Percentage of Demographic Data: Status

Status	Frequency	Percentage
Single	355	88.8%
Married	40	10.0%
Divorced/Widowed	5	1.3%
Total	400	100%

The majority of the samples' status is single which amounted to 355 respondents (88.8%), followed by being married which totaled 40 respondents (10%) and divorced or widowed which totaled 5 respondents (1.3%). Therefore, the results showed that the majority of consumers purchasing online are single.

Table 4.3.4: Frequency and Percentage of Demographic Data: Level of Education

Level of Education	Frequency	Percentage
High School	55	13.8%
Bachelor's Degree	259	64.8%
Master's Degree	64	16.0%
Doctorate Degree	14	3.5%
Others (Please specify)	8	2.0%
Total	400	100%

The majority of the samples' level of education is a bachelor's degree which equaled to 259 respondents (64.8%), master's degree 64 respondents (16%), high school degree with 55 respondents (13.8%), followed by doctorate degree with 14 respondents (3.5%). Therefore, the results showed that the majority of consumers purchasing online have a bachelor's degree .

Table 4.3.5: Frequency and Percentage of Demographic Data: Professional Status

Professional Status	Frequency	Percentage
Private employee	77	19.3%
Self Employed	46	11.5%
Searching for job	7	1.8%
Housewife	15	3.8%
Retired	3	0.8%
Student	236	59.0%
Others (Please specify)	16	4.0%
Total	400	100%

The majority of the samples' professional status are just students which amounted to a whopping 236 respondents (59%), followed by private employee with 77 respondents (19.3%), and only 3 respondents were retired (0.8%), where 4% of the respondents were either teachers or working housewives, etc. Therefore, the results showed that the majority of consumers purchasing online are students either still in high school, or doing their bachelors, diploma, or even master's.

Table 4.3.6: Frequency and Percentage of Demographic Data: Monthly Income

Monthly Income	Frequency	Percentage
Less than and equal to 15,000 baht	149	37.3%
15,001-30,000 baht	134	33.5%
30,001-50,000 baht	66	16.5%
50,001-100,000 baht	33	8.3%
100,001-150,000 baht	8	2.0%
150,001-200,000 baht	6	1.5%
200,001-500,000 baht	2	0.5%
More than 500,000 baht	2	0.5%
Total	400	100%

The majority of the samples' monthly income is less than and equal to 15,000 baht with 149 respondents (37.3%), followed closely with 134 respondents earning between 15,001-30,000 baht monthly (33.5%), with only 4 respondents earning more than 200,000 baht per month. Therefore, the results showed that the monthly income of the majority of consumers purchasing online is less than and equal to 15,000 baht.

As can be seen from the above analysis, the distribution of the respondents had more females who were single between the age of 16-23 with at least a bachelor's degree and were still students and therefore, only had a monthly income of less than and equal to 15,000 baht.

Part 2: Table 4.3.7: Frequency and Percentage of Consumer Behavior: Interested in taking part or following a page/group in the future

Interested in taking part or following a page/group in the future	Frequency	Percentage
Yes	340	85%
No	60	15%
Total	400	100%

The majority of samples. 340 respondents (85%) are interesting in taking part in a page or specific group, with only 15% (60 respondents) who are not particularly interested.

Table 4.3.8: Frequency and Percentage of Consumer Behavior: Factors influencing to purchase through the social networks

Factors influencing to purchase through the social networks	Frequency	Percentage
Recommendation of a friend	115	28.7%
Promotion/Sale	145	36.3%
Trendy	20	5.0%
Convenient	57	14.2%
Support a brand/product	12	3.0%
Influenced by a celebrity	6	1.5%
Online reviews	40	10.0%
Others (Please specify)	5	1.3%
Total	400	100%

The majority of the samples' factor that influences them to purchase through the social networks is due to promotion or sale with 145 respondents (36.3%), and 115 respondents (28.7%) are also influenced if it is recommended by a friend, and surprisingly only 1.5% (6 respondents) are influenced by a celebrity to purchase something online. Therefore, the results showed that the factor that influences majority of the consumers to purchase via the online networks is promotion/sale.

Table 4.3.9: Frequency and Percentage of Consumer Behavior: Number of times shopped online

Number of times shopped online	Frequency	Percentage
Once a week or more	102	25.5%
2-3 times a month	126	31.5%
Once a month	65	16.3%
Every few months	58	14.5%
Rarely/Never	42	10.5%
Others (Please specify)	7	1.8%
Total	400	100%

The majority of the samples shop online at least 2-3 times a month with 125 respondents (31.5%), and followed very closely by 102 respondents (25.5%) who shop at least once a week or more, while 10% (42 respondents) have never even shopped online. Therefore, the results showed that number of times the respondents shop online is 2-3 times a month.

Table 4.3.10: Frequency and Percentage of Consumer Behavior: The online networks used to purchase products online

The online networks used to purchase products online	Frequency	Percentage
Lazada	176	44.0%
Shopee	112	28.0%
Tops	2	0.5%
Central	24	6.0%
Tesco Lotus	5	1.3%
Homepro	2	0.5%
Uniqlo	20	5.0%
Robinson	1	0.3%
Jdcentral	1	0.3%
Others (Please specify)	57	14.2%
Total	400	100%

The majority of the samples' choose Lazada as the network to purchase products online with 176 respondents (44%), followed by Shopee with 112 respondents (28%), other channels such as eBay, Amazon, or other internal channels with 57 respondents (14.2%), Central with 24 respondents (6%), Uniqlo with 20 respondents (5%), Tesco Lotus with 5 respondents (1.3%), tops and Homepro each with 2 respondents (0.5% each), and Robinson and Jdcentral both with 1 respondent (0.3% each). Therefore, the results showed that majority of the samples chose Lazada as their online network to purchase products online.

Table 4.3.11: Frequency and Percentage of Consumer Behavior: Since when the products are being purchased online

Since when the products are being purchased online	Frequency	Percentage
Less than a month	95	23.8%
1-4 months	70	17.5%
5-8 months	38	9.5%
9-12 months	18	4.5%
1-2 years	125	31.3%
Others (Please specify)	54	13.5%
Total	400	100%

The majority of the samples have started purchasing products online since 1-2 years with 125 respondents (31.3%), those who have been purchasing for less than a month with 95 respondents (23.8%) and 54 respondents (13.5%) have been purchasing for more than 2 years. Therefore, the results showed that the majority of the respondents have been purchasing products for 1-2 years.

Table 4.3.12: Frequency and Percentage of Consumer Behavior: The kind of products normally purchased online

Kind of products normally purchased online	Frequency	Percentage
Food	80	20.0%
Clothes and Accessories	150	37.5%
Electronics and Gadgets	58	14.5%
Books	22	5.5%
Videogames	33	8.3%
Others (Please specify)	57	14.2%
Total	400	100%

The majority of the samples purchase clothes and accessories with 150 respondents (37.5%), only about 80 respondents (20%) purchase food, with only 5.5% (22 respondents) from the sample purchased books. Therefore, the results showed that the majority of the consumers who shop online purchase clothes and accessories.

Table 4.3.13: Frequency and Percentage of Consumer Behavior: Money spent purchasing online

Money spent purchasing online	Frequency	Percentage
Less than or equal to 1,000 baht	160	40.0%
1,001-2,500 baht	96	24.0%
2,501-4,000 baht	82	20.5%
4,001-5,500 baht	18	4.5%
5,501-7,000 baht	20	5.0%
More than 7,000 baht	24	6.0%
Total	400	100%

The majority of the samples' money spent online is less than or equal to 1,000 baht with 160 respondents (40%), while 96 respondents (24.0%) spend between 1,001-2,500 baht, followed closely by 20.5% (82 respondents) spending between 2,501-4,000 baht, and only 4.5% (18 respondents) spend between 4,001-5,501 baht. Therefore, the results showed that the majority of the samples spent less than or equal to 1,00 baht while shopping online.

Table 4.3.14: Frequency and Percentage of Consumer Behavior Time spent every day using the social networking sites

Time spent every day using the social networking sites	Frequency	Percentage
Less than or equal to 60 minutes	62	15.5%
1-2 hours	107	26.8%
2-4 hours	69	17.3%
4-6 hours	138	34.5%
24 hours/7 days a week	20	5.0%
Others (Please specify)	4	1.0%
Total	400	100%

The majority of the samples spend an average of 4-6 hours (34.5%) of their time every day using the social networking sites, 107 respondents (26.8%) spending 1-2 hours daily, and 1% (4 respondents) don't use social networks every day. Therefore, the results showed that the majority of the respondents of Bangkok spend between 1-6 hours every day using their social networks.

Table 4.3.15: Frequency and Percentage of Consumer Behavior: How the performance of a product or brand is perceived online

How the performance of a product or brand is perceived online	Frequency	Percentage
I find that the comments and the feedbacks of the groups I am part of influences my view of the product or brand.	152	38.0%
I find that the quality of the website affects how I view the product or brand	89	22.3%
I find that my relationship with a product of brand is related to its performance or quality	65	16.3%
I perceive that the price of a product or brand is related to the performance or value of that product or brand	72	18.0%
I find that the performance of a new product or brand influences me to purchase it	22	5.5%
Total	400	100%

The majority of the samples are influenced by the comments and the feedbacks of the groups they are part of which influences their view on a product or

brand with 152 respondents (38.0%), with 65 respondents (16.3%) agree that their relationship with a product or brand is related to the quality or its performance, with only 5.5% (22 respondents) are influenced to purchase a product or brand due to the performance of it. Therefore, the results showed that majority of the samples are influenced by comments of the online community that they are part of as well as the quality of the website.

Table 4.3.16: Frequency and Percentage of Consumer Behavior: The reason which urges the respondents to make a purchase online

The reason which urges the respondents to make a purchase online	Frequency	Percentage
I get influenced by the feedbacks of the online groups that I am part of or follow	109	27.3%
I get coupons or great deals which encourages me to purchase online	84	21.0%
I find that the quality of the website helps to understand the reliability of a new product or brand	109	27.3%
I am well aware of the product or brand that i am going to purchase online	86	21.5%
I want to experience the whole process of purchasing via the online networks	12	3.0%
Total	400	100%

The majority of the samples base their decision to purchase via the online networks because they are influenced by the feedbacks of the online community or groups they are part of as well as the quality of the websites that helps them to understand the reliability of a new product or brand with 109 respondents each (27.3%), and only 3% (12 respondents) purchase products online because they want to experience it . Therefore, the results showed that the majority of the samples are

influenced by the quality of the website where the information is provided as well as the feedbacks of the groups they are part of before they purchase any products or brands via the online networks.

Table 4.3.17: Frequency and Percentage of Consumer Behavior: The reason to purchase online again

The reason to purchase online again	Frequency	Percentage
I find that purchasing product(s) via the online networks is useful	106	26.5%
I find that the product(s) or brand(s) I prefer are easily available online	107	26.8%
I find that purchasing my preferred product(s) or brand(s) via the online networks is convenient	104	26.0%
I can purchase the product(s) or brand(s) online at a retail price	58	14.5%
I feel independent by being able to purchase online	25	6.3%
Total	400	100%

The majority of the samples will purchase products online again because it is easily available online 107 respondents (26.8%), because it is useful 106 respondents (26.5%), convenient 104 respondents (26%), with 55 respondents (14.5%) because it could be purchased at a retail price, and 25 respondents (6.3%) feel independent if they purchase online. Therefore, the results showed that the majority of the respondents shop online because it easily available online, is useful and convenient.

4.4 The Analysis of Online Engagement Community, Website Quality, Perceived Product's Performance, Brand Relationship, Brand Trust and Purchasing Behavior

The average range interpretation that is presented in chapter (3) will be used for the interpretation and analysis of online engagement community, website quality, perceived product's performance, brand relationship, brand trust and purchasing behavior as follows:

Average range of 1.00-1.80 refers to strongly disagree

Average range of 1.81-2.61 refers to slightly disagree

Average range of 2.62-3.42 refers to neutral

Average range of 3.43-4.23 refers to slightly agree

Average range of 4.24-5.00 refers to strongly agree

All the substances are related on a 5-point Likert-scale by the respondents. Each question scaled from Number 1 with the statement "Strongly Disagree" to number 5 with the statement "Strongly Agree". The score (weight) are set in each level which is presented in chapter (3) as follows:

Strongly Disagree	= 1 point
Slightly Disagree	= 2 points
Neutral	= 3 points
Slightly Agree	= 4 points
Strongly Agree	= 5 points

Table 4.4.1: The Mean (\bar{X}), Standard Deviation (S.D.) and Interpretation of Online Engagement Community

Online Engagement Community (OEC)	\bar{X}	S.D.	Interpretation
2.1 I tend to get influenced by the comments and the feedbacks of the online communities I am part of.	3.78	0.873	Slightly Agree
2.2 I enjoy exploring online networks for reviews and latest trends.	3.74	0.947	Slightly Agree
2.3 I generally tend to purchase based on the feedbacks from the online networks.	3.69	0.920	Slightly Agree
2.4 I am generally more curious about the influence of virtual communities on products or brands.	3.43	0.898	Slightly Agree
Total	3.66	0.677	Slightly Agree

The data represented in table 4.2.1, it is found that majority of the people in Bangkok, Thailand, slightly agree that they tend to get influenced by the comments and the feedbacks of the online communities they are part of (\bar{X} =3.78, S.D.= 0.873) and they enjoy exploring the online networks for reviews and latest trends (\bar{X} = 3.74, S.D.= 0.947), where \bar{X} = 3.69, S.D. = 0.920) slightly agree that they tend to purchase based on the feedbacks from the online networks and slightly agree on being more curious about the influence of virtual communities on products or brands (\bar{X} =3.43, S.D.= 0.898). Overall, it was found that most people in Bangkok, slightly agree on the influence of online engagement community when purchasing products online (\bar{X} = 3.66, S.D. = 0.677).

Table 4.4.2: The Mean (\bar{X}), Standard Deviation (S.D.) and Interpretation of Website Quality

Website Quality (WQ)	\bar{X}	S.D.	Interpretation
3.1 A good quality website will help me to understand the performance of my preferred product or brand.	4.05	0.950	Slightly Agree
3.2 Utilizing a good quality website can make it easier for me to understand the related activities of my product or brand.	3.95	0.966	Slightly Agree
3.3 Good quality website can increase my trust of the effectiveness of my preferred product or brand.	4.01	0.952	Slightly Agree
3.4 A good quality website makes it easier for me to purchase a product or brand.	3.98	0.875	Slightly Agree
Total	3.99	0.797	Slightly Agree

The data represented in table 4.2.2, it is found that majority of the people in Bangkok, Thailand, slightly agree that a good quality website will help them to understand the performance of their preferred product or brand (\bar{X} =4.05, S.D.= 0.950) and a good quality website can increase their trust of the effectiveness of their preferred product or brand (\bar{X} =4.01, S.D.=0.952), where \bar{X} = 3.98, S.D. = 0.875) slightly agree that good quality website makes it easier for them to purchase a product or brand and slightly agree that utilizing a good quality website can make it easier for them to understand the related activities of their product or brand (\bar{X} =3.95, S.D.= 0.966). Overall, it was found that most people in Bangkok, slightly agree on the effects of website quality when purchasing products online (\bar{X} = 3.99, S.D. = 0.797).

Table 4.4.3: The Mean (\bar{X}), Standard Deviation (S.D.) and Interpretation of Perceived Product's Performance

Perceived Product's Performance (PPP)	\bar{X}	S.D.	Interpretation
4.1 My perception of a product's performance is based on how popular it is.	3.59	0.935	Slightly Agree
4.2 Positive eWOM changes my perception of a product's performance.	3.64	0.855	Slightly Agree
4.3 Unique features of a product adds value to my perception of a product's performance.	3.74	0.869	Slightly Agree
4.4 The price of a product influences my perception of the product's performance	3.87	0.856	Slightly Agree
Total	3.71	0.628	Slightly Agree

The data represented in table 4.2.3, it is found that majority of the people in Bangkok, Thailand, slightly agree that the price of a product influences their perception of the product's performance (\bar{X} =3.87, S.D.= 0.856) and (\bar{X} = 3.74, S.D. = 0.869) slightly agree that unique features of a product adds value to their perception of a product's performance, where (\bar{X} = 3.64, S.D.= 0.855) slightly agree that positive eWOM changes their perception of a product's performance since their perception of a product's performance is based on how popular it is (\bar{X} =3.59, S.D.= 0.935). Overall, it was found that most people in Bangkok, slightly agree on the influence on the influence of their perception on a product's performance when purchasing products online (\bar{X} = 3.71, S.D. = 0.628).

Table 4.4.4: The Mean (\bar{X}), Standard Deviation (S.D.) and Interpretation of Brand Relationship

Brand Relationship (BR)	\bar{X}	S.D.	Interpretation
5.1 People who affect my behavior think that I should purchase a product or brand that they prefer.	3.52	1.001	Slightly Agree
5.2 It is important that my friends like the product(s) or brand(s) that I purchase online.	3.29	1.215	Neutral
5.3 I like to know purchasing which preferred product(s) or brand(s) online make good impressions on my friends.	3.33	1.179	Neutral
5.4 If a popular product or brand has become a trend among people around me, I would consider using it.	3.49	1.071	Slightly Agree
Total	3.41	0.917	Neutral

The data represented in table 4.2.4, it is found that majority of the people in Bangkok, Thailand, slightly agree that people who affect their behavior think that they should purchase a product or brand that they prefer (\bar{X} =3.52, S.D.= 1.001) and slightly if a popular product or brand has become a trend among people around them, they would consider using it (\bar{X} = 3.49, S.D.= 1.071). However, it is found that people in Bangkok are neutral in knowing purchasing which preferred product(s) or brand(s) online make good impressions on their friends (\bar{X} = 3.33, S.D. = 1.179), and are neutral about the importance of their friends in liking the product(s) or brand(s) that they purchase online (\bar{X} =3.29, S.D.= 1.215). Overall, it was found that most people in Bangkok, are neutral about the influence of their relationship with brands when purchasing products online (\bar{X} = 3.76, S.D. = 0.976).

Table 4.4.5: The Mean (\bar{X}), Standard Deviation (S.D.) and Interpretation of Brand Trust

Brand Trust (BT)	\bar{X}	S.D.	Interpretation
6.1 My trust in a product or brand is very good compared with that of my friends.	3.65	0.936	Slightly Agree
6.2 I tend to purchase product(s) or brand(s) that I trust.	4.07	0.953	Slightly Agree
6.3 I generally pay much attention when purchasing a product or brand.	3.92	0.868	Slightly Agree
6.4 I only purchase the product(s) or brand(s) that I trust online.	3.95	0.921	Slightly Agree
Total	3.90	0.692	Slightly Agree

The data represented in table 4.2.5, it is found that majority of the people in Bangkok, Thailand, slightly agree that they tend to purchase product(s) or brand(s) that they trust (\bar{X} =4.07, S.D.= 0.953) and slightly agree on only purchasing the product(s) or brand(s) that they trust online (\bar{X} = 3.95, S.D.= 0.921), where they

slightly agree on paying much attention when purchasing a product or brand ($\bar{X}= 3.92$, S.D. = 0.868) and feel (slightly agree) that their trust in a product or brand is very good compared with that of their friends ($\bar{X}=3.65$, S.D.= 0.936). Overall, it was found that most people in Bangkok, slightly agree on the influence of their trust in a brand when purchasing products online ($\bar{X} = 3.90$, S.D. = 0.692).

Table 4.4.6: The Mean (\bar{X}), Standard Deviation (S.D.) and Interpretation of Purchasing Behavior

Purchasing Behavior (PB)	\bar{X}	S.D.	Interpretation
7.1 Purchasing product(s) or brand(s) via the online network would be convenient.	3.98	0.936	Slightly Agree
7.2 Purchasing online would be a wise use of money.	3.69	0.932	Slightly Agree
7.3 I generally purchase if the price of a good product or brand online is affordable.	4.01	0.909	Slightly Agree
7.4 Overall, I like purchasing products online.	3.96	0.981	Slightly Agree
Total	3.91	0.719	Slightly Agree

The data represented in table 4.2.6, it is found that majority of the people in Bangkok, Thailand, slightly agree that they generally purchase if the price of a good product or brand online is affordable ($\bar{X}=4.01$, S.D.= 0.909) while slightly agreeing that purchasing product(s) or brand(s) via the online network would be convenient ($\bar{X}= 3.98$, S.D.=3.936), where $\bar{X}= 3.96$, S.D. = 0.981) slightly agree that they generally like purchasing products online since slightly agreeing that purchasing online would be a wise use of money ($\bar{X}=3.69$, S.D.= 0.932). Overall, it was found that most people in Bangkok, Slightly agree on the influence of their purchasing behavior when purchasing products online ($\bar{X} = 3.91$, S.D. = 0.719).

CHAPTER 5

CONCLUSION AND DISCUSSION

In this final section, the research findings and the analysis showed in the previous chapter in regards to “The Study of Factors That Affects The Consumers’ Purchasing Behavior Via the Online Networks” will be further discussed based on the research findings, objectives of the research, as well as previous researches, literature and articles. The empirical results of the findings are further provided in detail as well as the summary of the analytical results using SEM for hypothesis testing will be further discussed in detail.

5.1 Research Findings and Conclusion

This research investigated the factors or the independent (exogenous) variables such as the online engagement community (OEC), website quality (WQ), perceived product’s performance (PPP), brand relationship (BR) and brand trust (BT) on the dependent (endogenous) variable, consumers’ purchasing behavior (PB). Employing the quantitative methodology to conduct a questionnaire for 400 respondents in Bangkok, who have purchased online using the various online networks are concluded in three parts: demographics, consumer behavior, and the effects of the independent (exogenous) variables on dependent (endogenous) variable.

5.2 The Conclusion of Hypothesis Results

The purpose of this research was to study the factors that affects the consumers' purchasing behavior and to explore the five main hypotheses and 10 sub-hypotheses that were analyzed using SPSS and SEM. The research objectives are as follows:

1. To investigate the effect of the online engagement community and website quality on the purchasing behavior of the consumers.
2. To examine how the consumers' perception of the product's performance affects their purchasing behavior.
3. To determine how brand relationship and brand trust affects consumers' purchasing behavior.
4. To investigate the effect of online engagement community and website quality on how consumers perceive a product's performance and vice versa.
5. To examine how the consumers' perception of the product's performance affect brand relationship and brand trust and vice versa.

The above research questions led to the various main hypotheses and sub-hypotheses and the analysis of those assumptions are as follows:

In hypothesis testing, it is crucial to find the likelihood of the sample result of a probability called the p-value, where a high p-value means that the sample result will lead to the retention of null hypothesis, and a low p-value means that the sample

result will lead to the rejection of the null hypothesis (statistically significant), and the criteria in null hypothesis is called α (alpha) where a p-value of 0.05 is almost always set (Paul, Jhangiani, & I-Chant, 2013).

Hypothesis1 (OEC→ PB):

H₁₀ : Customer participation in the online community does not affect the consumers' purchasing behavior

H_{1a}: Customer participation in the online community significantly affects the consumers' purchasing behavior

Single arrow represents direct path which indicates that the variable at the origin of the arrow (OEC) has some influence or significance on the target variable (PB).

The significance level of p-value should be ≤ 0.05 for the proposed hypothesis to have a significant effect. In order to calculate the probability of the above hypothesis, the statistical test was carried out using SEM to observe the sample results, which resulted in the level of statistical significance p-value > 0.05 . Since the statistical analysis shows the significance level that is above the cut-off value, we cannot reject the null hypothesis H₁₀ that customer participation in the online community does not affect the consumers' purchasing behavior. The result of this study contradicts with the previous research conducted by Wang et. al. (2012) who concluded that purchase decision is effected both directly and indirectly by peer communication through online consumer socialization.

Hypothesis2 (WQ → PB):

H2₀: The quality of the website does not affect the purchasing behavior of the consumers

H2_a: The quality of the website significantly affects the purchasing behavior of the consumers

Single arrow represents direct path which indicates that the variable at the origin of the arrow (WQ) has some influence or significance on the target variable (PB).

In order to calculate the probability of the above hypothesis, the statistical test was carried out using SEM to observe the sample results, which resulted in the level of statistical significance $p\text{-value} = 0.076$, which is above the cut-off value ($p \leq 0.05$), and therefore, we cannot reject the null hypothesis H2₀ that the quality of the website does not affect the purchasing behavior of the consumers. The result of this study is not consistent with the research conducted by Semerádová and Weinlich (2020) concluded that out of the 24 hypothetical relationships portrayed, only four were rejected: “go back” button, search bar, information detail and language quality had no significant impact on user experience with a website.

Hypothesis3 (PPP → PB):

H3₀: A positive perception of the product’s performance does not affect the consumers’ purchasing behavior

H3_a: A positive perception of the product’s performance significantly affects the consumers’ purchasing behavior

Single arrow represents direct path which indicates that the variable at the origin of the arrow (PPP) has some influence or significance on the target variable (PB).

In order for the null hypothesis to be rejected, the statistical p-value has to be <0.05 . To calculate the probability of the above hypothesis, the statistical test was carried out using SEM to observe the sample results, which resulted in the level of statistical significance p-value = 0.009. Therefore, we can reject the null hypothesis H_{3_0} that a positive perception of the product's performance does not affect the consumers' purchasing behavior, and accept the alternative hypothesis H_{3_a} that a positive perception of the product's performance significantly effects the consumers' purchasing behavior. The result of this study is not consistent with the research conducted by Behjati et al (2012), where their results indicated that attitude, trust and faithfulness and perceived behavioral control had no significant relationship on online purchasing behavior while perceived reliability and subjective norm had significant relationship on online purchasing behavior.

Hypothesis4 (BR \rightarrow PB):

H_{4_0} : A positive brand relationship does not affect the consumers' decision behavior to purchase

H_{4_a} : A positive brand relationship significantly affects the consumers' decision behavior to purchase

Single arrow represents direct path which indicates that the variable at the origin of the arrow (BR) has some influence or significance on the target variable (PB).

The significance level of p-value should be < 0.05 for the proposed hypothesis to have a significant effect. In order to calculate the probability of the above hypothesis, the statistical test was carried out using SEM to observe the sample results, which resulted in the level of statistical significance p-value = 0.90. Since the statistical analysis shows the significance level that is above the cut-off value, we cannot reject the null hypothesis H_{4_0} that a positive brand relationship does not affect the consumers' decision behavior to purchase. The result of this study contradicts with research conducted by Arisman and Risana (2019) who concluded that brand preference had a significant influence on the formation of millennial shopping styles.

Hypothesis5 (BT → PB):

H_{5_0} : A consumer's trust in a brand does not affect their decision behavior to purchase

H_{5_a} : A consumer's trust in a brand significantly affects their decision behavior to purchase

Single arrow represents direct path which indicates that the variable at the origin of the arrow (BT) has some influence or significance on the target variable (PB).

In order for the null hypothesis to be rejected, the statistical p-value has to be < 0.05 . To calculate the probability of the above hypothesis, the statistical test was carried out using SEM to observe the sample results, which resulted in the level of statistical significance p-value = 0.001. Therefore, we can reject the null hypothesis H_{5_0} that a consumer's trust in a brand does not affect their decision behavior to purchase and accept the alternative hypothesis H_{5_a} that a consumer's trust in a brand significantly affects their decision behavior to purchase. The result of this study is

consistent with researchers Effendi et al (2019), whose results indicated that while brand awareness and perceived value had a significant influence on trust it also had a significant influence on purchasing decisions.

Sub-Hypotheses (Correlation)

Hypothesis6 (OEC ↔ WQ):

H₆₀: There is no correlation between online engagement community and the quality of the website

H_{6a}: There exists a significant correlation between online engagement community and the quality of the website

Double headed arrows (or bidirectional) represents co-variation path or indicates a correlation linking the two variables.

To calculate the probability of the above sub-hypothesis, the statistical test was carried out using SEM to observe the sample results, which resulted in a significant level of statistical p-value. Therefore, we can reject the null hypothesis H₆₀ that there is no correlation between online engagement community and the quality of the website, and accept the alternative hypothesis H_{6a} that there exists a significant correlation between online engagement community and the quality of the website.

The result of this study is consistent with research conducted by Ray, Kim & Morris (2014) which resulted that from a sense of engagement, members essentially contribute to and revisit an online community.

Hypothesis7 (OEC ↔ PPP):

H₇₀: There is no correlation between the online engagement community and how consumers perceive a product's performance

H7_a: There exists a significant correlation between the online engagement community and how consumers perceive a product's performance

Double headed arrows (or bidirectional) represents co-variation path or indicates a correlation linking the two variables.

To calculate the probability of the above sub-hypothesis, the statistical test resulted in a significant level of statistical p-value which was analyzed using SEM. Hence, we can reject the null hypothesis H7₀ that there is no correlation between the online engagement community and how consumers perceive a product's performance and accept the alternative hypothesis H7_a that there exists a significant correlation between the online engagement community and how consumers perceive a product's performance. The result of this study is consistent with research conducted in China by researchers Chen, Sun, Yan & Wen (2020) whose results indicated that perceived sustainability affects rational and emotional customer engagement.

Hypothesis8 (OEC ↔ BR):

H8₀: There is no correlation between the online engagement community and the relationship the customer has with a brand

H8_a: There exists a significant correlation between the online engagement community and the relationship the customer has with a brand

Double headed arrows (or bidirectional) represents co-variation path or indicates a correlation linking the two variables.

The statistical test was carried out using SEM to observe the sample results in order to calculate the probability of the above sub-hypothesis which resulted in a significant level of statistical p-value. Therefore, we can reject the null hypothesis H8₀

that there is no correlation between the online engagement community and the relationship the customer has with a brand and accept the alternative hypothesis H_{8a} that there exists a significant correlation between the online engagement community and the relationship the customer has with a brand. The result of this study is consistent with a research conducted in South Korea and United States by researcher Gong (2018) which resulted in empirical evidence that cultural value orientations influence customer brand engagement behavior.

Hypothesis9 (OEC \leftrightarrow BT):

H_{9_0} : There is no correlation between the online engagement community and the trust the customer has in a brand

H_{9_a} : There exists a significant correlation between the online engagement community and the trust the customer has in a brand

Double headed arrows (or bidirectional) represents co-variation path or indicates a correlation linking the two variables.

In order to calculate the probability of the above sub-hypothesis, the sample results were observed by analyzing the statistical test that was carried out using SEM and resulted in a significant level of statistical p-value. Hence, we can reject the null hypothesis H_{9_0} that there is no correlation between the online engagement community and the trust the customer has in a brand and accept the alternative hypothesis H_{9_a} that there exists a significant correlation between the online engagement community and the trust the customer has in a brand. . The result of this study is consistent with research conducted in Thailand for automobile by researchers Limpasirisuwan &

Donkwa (2017), whose results concluded that a high degree of satisfaction with online brand communities resulted in a greater trust in the communities.

Hypothesis10 (WQ \leftrightarrow PPP):

H10₀: There is no correlation between website quality and how consumers perceive a products' performance

H10_a: There exists a significant correlation between website quality and how consumers perceive a product's performance

Double headed arrows (or bidirectional) represents co-variation path or indicates a correlation linking the two variables.

To calculate the probability of the above sub-hypothesis, the statistical test was carried out using SEM to observe the sample results, which resulted in a significant level of statistical p-value. Therefore, we can reject the null hypothesis H10₀ that there is no correlation between website quality and how consumers perceive a products' performance and accept the alternative hypothesis H10_a that there exists a significant correlation between website quality and how consumers perceive a product's performance. The result of this study is consistent with research conducted by Hsu, Chang and Chen (2012), and the results confirmed that website quality affects perceived flow and customers' perceived playfulness which in turn would influence their purchase intention and satisfaction.

Hypothesis11 (WQ \leftrightarrow BR):

H11₀: There is no correlation between website quality and the relationship the consumers have with a brand

H11_a: There is a significant correlation between website quality and the relationship the consumers have with a brand

Double headed arrows (or bidirectional) represents co-variation path or indicates a correlation linking the two variables.

To calculate the probability of the above sub-hypothesis, the statistical test resulted in an insignificant level of statistical p-value which was analyzed using SEM. Hence, we cannot reject the null hypothesis H11₀ that there is no correlation between website quality and the relationship the consumers have with a brand. The result of this study is not in line with previous researches conducted by researchers Bliemel & Hassanein (2007), Wang & Emurian (2005), Gummerus, Liljander, Pura, & Riel (2004) that consumers with higher content gratification believe that the information that is provided by a shopping website is reliable and as recognized by numerous studies, in large firms, interactivity aids to build a good relationship with customers (Ghose & Wenyu, 1998).

Hypothesis12 (WQ ↔ BT):

H12₀: There is no correlation between website quality and consumers' trust in a brand

H12_a: There exists a significant correlation between website quality and consumers' trust in a brand

Double headed arrows (or bidirectional) represents co-variation path or indicates a correlation linking the two variables.

The statistical test was carried out using SEM to observe the sample results in order to calculate the probability of the above sub-hypothesis which resulted in a significant level of statistical p-value. Therefore, we can reject the null hypothesis

H12₀ that there is no correlation between website quality and consumers' trust in a brand and accept the alternative hypothesis H12_a that there exists a significant correlation between website quality and consumers' trust in a brand. The result of this study is consistent with research conducted in Taiwan by researchers Chang, Kuo, Hsu and Cheng (2014) where the results indicated that perceived trust is positively influenced by website quality.

Hypothesis13 (PPP ↔ BR):

H13₀: There is no correlation between consumers' perception of a product's performance and their relationship with the brand

H13_a: There exist a significant correlation between consumers' perception of a product's performance and their relationship with the brand

Double headed arrows (or bidirectional) represents co-variation path or indicates a correlation linking the two variables.

In order to calculate the probability of the above sub-hypothesis, the sample results were observed by analyzing the statistical test that was carried out using SEM and resulted in a significant level of statistical p-value. Hence, we can reject the null hypothesis H13₀ that there is no correlation between consumers' perception of a product's performance and their relationship with the brand and accept the alternative hypothesis H13_a that there exist a significant correlation between consumers' perception of a product's performance and their relationship with the brand. The result of this study is consistent with research conducted on mobile phone users by researchers Snoj, Pisnik and Mumel (2004), whose research resulted in significant relationships among the concepts researched on perceived product quality and

perceived risk as well as the relationships among perceived quality, perceived risk and perceived value.

Hypothesis14 (PPP \leftrightarrow BT):

H14₀: There is no correlation between consumers' perception of a product's performance and their trust in a brand

H14_a: There exists a significant correlation between consumers' perception of a product's performance and their trust in a brand

Double headed arrows (or bidirectional) represents co-variation path or indicates a correlation linking the two variables.

To calculate the probability of the above sub-hypothesis, the statistical test was carried out using SEM to observe the sample results, which resulted in a significant level of statistical p-value. Therefore, we can reject the null hypothesis H14₀ that there is no correlation between consumers' perception of a product's performance and their trust in a brand, and accept the alternative hypothesis H14_a that there exists a significant correlation between consumers' perception of a product's performance and their trust in a brand. The result of this study is consistent with research conducted on electronics in Thailand by researchers Marakanon and Panjakajornsak (2017) whose research resulted that perceived quality had an indirect effect on customer loyalty via customer trust.

Hypothesis15 (BR \leftrightarrow BT):

H15₀: There is no correlation between the relationship the consumers have with a brand and their trust in a brand

H15_a: There exist a significant correlation between the relationship the consumers have with a brand and their trust in a brand

Double headed arrows (or bidirectional) represents co-variation path or indicates a correlation linking the two variables.

The statistical test was carried out using SEM to observe the sample results in order to calculate the probability of the above sub-hypothesis which resulted in a significant level of statistical p-value. Therefore, we can reject the null hypothesis H15₀ that there is no correlation between the relationship the consumers have with a brand and their trust in a brand and accept the alternative hypothesis H15_a that there exists a significant correlation between the relationship the consumers have with a brand and their trust in a brand. The result of this study is in line (consistent) with research conducted in Beijing by researchers Zhang et al. (2020), concluded that a meaningful brand relationship significantly predicts brand trust and brand loyalty.

5.3 The Conclusion of Demographic Information of Samples

Part 1: This segment was deducted using frequency and percentage on IBM-SPSS which is as follows:

Table 5.3.1: Summary of Demographic Profile of Respondents (n=400)

Demographic		Frequency	Percentage
			100%
Gender:	Male	194	48.5%
	Female	206	51.5%

(Continued)

Table 5.3.1 (Continued): Summary of Demographic Profile of Respondents (n=400)

Demographic		Frequency	Percentage 100%
Age:	16-23	258	64.5%
	24-29	60	15.0%
	30-39	53	13.3%
	40-49	17	4.3%
	Equal and over 50	12	3.0%
Status:	Single	355	88.8%
	Married	40	10.0%
	Divorced/Widowed	5	1.3%
Level of Education:	High School	55	13.8%
	Bachelor's Degree	259	64.8%
	Master's Degree	64	16.0%
	Doctorate Degree	14	3.5%
	Others (Please specify)	8	2.0%
Professional Status:	Private employee	77	19.3%
	Self Employed	46	11.5%
	Searching for job	7	1.8%
	Housewife	15	3.8%
	Retired	3	0.8%
	Student	236	59.0%
	Others (Please specify)	16	4.0%

(Continued)

Table 5.3.1 (Continued): Summary of Demographic Profile of Respondents (n=400)

Demographic	Frequency	Percentage 100%
Monthly Income: Less than and equal to 15,000 baht	149	37.3%
15,001-30,000 baht	134	33.5%
30,001-50,000 baht	66	16.5%
50,001-100,000 baht	33	8.3%
100,001-150,000 baht	8	2.0%
150,001-200,000 baht	6	1.5%
200,001-500,000 baht	2	0.5%
More than 500,000 baht	2	0.5%

As can be seen from the above analysis, the distribution of the majority of 400 respondents had more females who were single between the age of 16-23 with at least a bachelor's degree and were still students and therefore, only had a monthly income of less than and equal to 15,000 baht.

5.3.2 Part 2: This segment which is related to the consumer behavior was also deducted using frequency and percentage on IBM-SPSS which is as follows:

Table 5.3.2: Summary of Consumer Behavior Profile of Respondents (n=400)

Consumer Behavior	Frequency	Percentage
		100%
Interested in taking part or following a page/group in the future?		
Yes	340	85%
No	60	15%
Factors influencing to purchase through the social networks:		
Recommendation of a friend	115	28.7%
Promotion/Sale	145	36.3%
Trendy	20	5.0%
Convenient	57	14.2%
Support a brand/product	12	3.0%
Influenced by a celebrity	6	1.5%
Online reviews	40	10.0%
Others (Please specify)	5	1.3%
Number of times shopped online:		
Once a week or more	102	25.5%
2-3 times a month	126	31.5%
Once a month	65	16.3%
Every few months	58	14.5%
Rarely/Never	42	10.5%
Others (Please specify)	7	1.8%

(Continued)

Table 5.3.2 (Continued): Summary of Consumer Behavior Profile of Respondents
(n=400)

Consumer Behavior	Frequency	Percentage 100%
The online networks used to purchase products online:		
Lazada	176	44.0%
Shopee	112	28.0%
Tops	2	0.5%
Central	24	6.0%
Tesco Lotus	5	1.3%
Homepro	2	0.5%
Uniqlo	20	5.0%
Robinson	1	0.3%
Jdcentral	1	0.3%
Others (Please specify)	57	14.2%
Since when the products are being purchased:		
Less than a month	95	23.8%
1-4 months	70	17.5%
5-8 months	38	9.5%
9-12 months	18	4.5%
1-2 years	125	31.3%
Others (Please specify)	54	13.5%

(Continued)

Table 5.3.2 (Continued): Summary of Consumer Behavior Profile of Respondents
(n=400)

Consumer Behavior	Frequency	Percentage 100%
Kind of products normally purchased online:		
Food	80	20.0%
Clothes and Accessories	150	37.5%
Electronics and Gadgets	58	14.5%
Books	22	5.5%
Videogames	33	8.3%
Others (Please specify)	57	14.2%
Money spent purchasing online		
Less than or equal to 1,000 baht	160	40.0%
1,001-2,500 baht	96	24.0%
2,501-4,000 baht	82	20.5%
4,001-5,500 baht	18	4.5%
5,501-7,000 baht	20	5.0%
More than 7,000 baht	24	6.0%
Time spent every day using the social networking sites:		
Less than or equal to 60 minutes	62	15.5%
1-2 hours	107	26.8%
2-4 hours	69	17.3%
4-6 hours	138	34.5%
24 hours/7 days a week	20	5.0%
Others (Please specify)	4	1.0%

(Continued)

Table 5.3.2 (Continued): Summary of Consumer Behavior Profile of Respondents
(n=400)

Consumer Behavior	Frequency	Percentage 100%
How the performance of a product or brand is perceived online:		
The comments and the feedbacks of the groups I am part of influences my view of the product or brand.	152	38.0%
The quality of the website affects how I view the product or brand	89	22.3%
My relationship with a product of brand is related to its performance or quality	65	16.3%
The price of a product or brand is related to the performance or value of that product or brand	72	18.0%
The performance of a new product or brand influences me to purchase it	22	5.5%
The reason which urges the respondents to make a purchase online:		
I get influenced by the feedbacks	109	27.3%
I get coupons or great deals	84	21.0%
I find that the quality of the website helps to understand the reliability of a new product or brand	109	27.3%
I am well aware of the product or brand		
I want to experience the whole process of purchasing via the online networks	86	21.5%
	12	3.0%
The reason to purchase online again:		
Useful	106	26.5%
Easily available online	107	26.8%
Convenient	104	26.0%
Retailed price	58	14.5%
Feel independent	25	6.3%

As can be seen from the above analysis, the distribution of the majority of 400 respondents were interested in taking part in a group or page in the future (if they are not already a part of it), purchase products because of promotion/sale, at least 2-3 times a month by choosing Lazada as their purchasing channel, has been less than a month since they have been purchasing and usually buy clothes or accessories. Since majority of the respondents are still students, they spend less than or equal to 1,000 baht per month, even though they spend 4-6 a day using their social networking sites, and their view on a product or brand is influenced by the feedbacks or comments of the group they are part of or the quality of the website that helps them to understand the reliability of a new product or brand, and their main reason to purchase online or to continue purchasing online is because it is easily available online.

5.4 The Conclusion of Purchasing Behavior via the Online Community, Website Quality, Perceived Product's Performance, Brand Relationship and Brand Trust

Part 3: This segment which is related to the interpretation and analysis of the independent variables and dependent variable as deducted using Mean (\bar{X}) and Standard Deviation (S.D.) on IBM-SPSS which is as follows:

Table 5.4.1: Summary of Independent variables and Dependent variable Profile of Respondents (n=400)

Independent and Dependent Variables	\bar{X}	S.D.	Interpretation
Online Engagement Community (OEC):			
I get influenced by the comments and the feedbacks	3.78	0.873	Slightly Agree
Website Quality (WQ):			
A good quality website will help me to understand the performance of a product or brand.	4.05	0.950	Slightly Agree
Perceived Product's Performance (PPP):			
The price of a product influences my perception of the product's performance	3.87	0.856	Slightly Agree
Brand Relationship (BR):			
People who affect my behavior think that I should purchase a product or brand that they prefer.	3.52	1.001	Slightly Agree
Brand Trust (BT):			
I tend to purchase product(s) or brand(s) that I trust.	4.07	0.953	Slightly Agree
Purchasing Behavior (PB):			
I generally purchase if the price of a good product or brand online is affordable.	4.01	0.909	Slightly Agree

As can be seen from the above analysis, the distribution of the majority of 400 respondents slightly agree that they get influenced by the comments and the feedbacks of the online community that they are part of while a good quality website helps them to understand the performance of a product/brand as its price influences their perception of the product's performance and they tend to purchase the products or brands they trust and if the price of good product or brand is affordable.

5.5 Discussion

Based on previous researchers and articles and journals, the purpose of this study was to explore whether the independent factors such as online engagement community (OEC), website quality (WQ), perceived product's performance (PPP), brand relationship (BR) and brand trust (BT) has an effect on the dependent variable, purchasing behavior (PB) via the online networks. The details of the results of the hypotheses for the research "The Study of Factors that Affects the Consumers' Purchasing Behavior Via the Online Networks in Bangkok" are discussed below:

A survey conducted by Spitfire (2019) concluded that when making an in-store purchase, a whopping 82% of the consumers research products on mobiles phones and to help them make a purchase decision, 67% of the customers read online reviews. Moreover, researchers Wang et. al. (2012) conducted a survey of 292 participants to investigate peer communication via social media websites and purchase decision as outcome, concluded that purchase decision is effected both directly and indirectly by peer communication through online consumer socialization.

However, the results collected and analyzed for this research which was conducted in Bangkok on 400 respondents, resulted in an insignificant statistical p-value which indicates that the null hypothesis $H1_0$ cannot be rejected that the customer participation in the online engagement community significantly effects the consumers' purchasing behavior ($H1: OEC \rightarrow PB$).

Srinivasan (2004), observed that when consumers search the products they want to purchase, a website that can be accessed and includes product descriptions

that are easily searched ends up making the consumers relief, which helps to gain consumers' interests (Liu & Arnett, 2000), and can also influence their attitudes and buying behavior (Page & Lepkowska-White, 2002). Structural Equation Modeling (SEM) was used by researchers Semerádová and Weinlich (2020) to test the validity of the research model as well as used Confirmatory Factor Analysis (CFA) to validate the research model conducted in Switzerland, portrayed 24 hypothetical relationships, out of which only four were rejected: "go back" button, search bar, information detail and language quality had no significant impact on user experience with a website.

However, the results collected and analyzed for this research which was conducted in Bangkok on 400 respondents, resulted in an insignificant statistical p-value which indicates that the null hypothesis H_{20} cannot be rejected that the quality of the website significantly effects the purchasing behavior of the consumers (H_2 : $WQ \rightarrow PB$).

Consumers usually rely on the perceived quality of the brand when they want to buy the best available products (Vantamay, 2007), which successful brands are achieving by delivering high quality to consumers. Additionally, consumers' purchasing process is influenced by individual, social and psychological factors as well as influenced by their view and preferences (Saleem, Ghafar, Ibrahim, Yousuf, & Ahmed, 2015). Almsalam (2014) noted that during the pre-purchase stage, consumer's purchasing behavior is influenced. Researchers Fornell et al. (1996) defined two types of perceived quality: service quality, which is the assessment of the latest utilization experience of the related service like the range of products and

services, the conditions of the display products as well the level of customer service, and product quality, which is the assessment of the latest utilization experience of the related products. Researchers Behjati et al (2012), conducted a survey, in Malaysia, using SEM and their results indicated that attitude, trust and faithfulness and perceived behavioral control had no significant relationship on online purchasing behavior while perceived reliability and subjective norm had significant relationship on online purchasing behavior.

Based on the results collected and analyzed for this research that was conducted in Bangkok on 400 respondents, which resulted in a significant statistical p-value (0.009) which indicates that the null hypothesis H_{3_0} was rejected and an alternative hypothesis H_{3_a} supports that a positive perception of the product's performance significantly effects the consumers' purchasing behavior ($H_3: PPP \rightarrow PB$).

Since consumers are anxious with attaining pleasant experiences in making their purchase decisions (Schmitt, 1999), the approving brand experiences, over a period of time, grows bonds with the consumers that aid in differentiating the brand from competitors and ultimately affects consumer loyalty and satisfaction (Brakus, Schmitt, & Zarantonello, 2009). A positive result of strong brand relationships and purchase intention were discovered by researchers Lee & Kang (2013) on their study "The effect of brand personality on brand relationship, attitude and purchase intention with a focus on brand community" and Fetscherin & Heinrich (2014) on their study of "Consumer brand relationships: A research landscape". Moreover, another survey conducted in Indonesia by researchers Arisman and Risana (2019), applying SEM and

purposive sampling technique, concluded that brand preference had a significant influence on the formation of millennial shopping styles and the results also indicated that status consciousness proved to be an predecessor of brand status and brand preferences.

However, the results collected and analyzed for this research which was conducted in Bangkok on 400 respondents, resulted in an insignificant statistical p-value which indicates that the null hypothesis H_{4_0} cannot be rejected that a positive brand relationship significantly effects the consumers' decision behavior to purchase ($H_4: BR \rightarrow PB$).

In virtual communities, interest sharing or social exchange, which has been confirmed by various studies, increases consumer loyalty (Hagel & Armstrong, 1999; Kardaras, Karakostas, & Papathanassiou, 2003; Gruen, Osmonbekov, & Czaplewski, 2006) and consumers' interested can be gained (Liu & Arnett, 2000), through the information quality that includes design, content and variety (Huizingh, 2000), which helps to influence the consumers' attitudes and purchasing behavior (Page & Lepkowska-White, 2002). Moreover, a hypothesis was developed by Delgado-Ballester & Munuera-Aleman (2005) that "as an expression of successful relationships between customers and brands", it is assumed that "the emergence of brand trust affects purchasing behavior". Other researchers, such as, Effendi et al (2019), conducted research in Indonesia using SEM and quantitative method and their results indicated that both brand awareness and perceived value had a significant influence on trust, but perceived quality had no significant influence on trust, while

brand awareness, perceived value and perceived quality had a significant influence on purchasing decisions.

Based on the results collected and analyzed for this research that was conducted in Bangkok on 400 respondents, which resulted in a significant statistical p-value (0.001) which indicates that the null hypothesis $H5_0$ was rejected and an alternative hypothesis $H5_a$ supports that a consumer's trust in a brand significantly effects their decision behavior to purchase ($H5: BT \rightarrow PB$).

According to researchers Wang, Wang, Chen, & Chen (2009), through a crucial exchange mechanism between consumers and websites is provided by the quality of the information, which enables the consumers to satisfy their needs by looking for information online and may depend on the quality of the information of the websites. Companies can take advantage of the virtual communities in order to increase sales (Brown, Tilton, & Woodside, 2002), and to benefit from potential and positive word-of-mouth and to know the market trends (Bickart & Schindler, 2001). SEM technique was applied by researchers Ray, Kim & Morris (2014) to conduct their research which resulted that from a sense of engagement, members essentially contribute to and revisit an online community.

Based on the results collected and analyzed for this research that was conducted in Bangkok on 400 respondents, which resulted in a significant statistical p-value which indicates that the null hypothesis $H6_0$ was rejected and an alternative hypothesis $H6_a$ supports that there exists a significant correlation between the online engagement community and the quality of the website ($H6: OEC \leftrightarrow WQ$).

Discovery from previous customer participation literature explain that allowing increased levels of customer participation benefits customers through customized brand experiences and improved quality, which ultimately enables consumers to have stronger relational bonds and more control over their brand experiences (Chan, Yum, & Lam, 2010; Yim, Chan, & Lam, 2012). Furthermore, in a social media community, the social surrounding consists participants of the host brand, the extent of participation among customers and the significance given to the particular group by customers, can influence powerful entitativity perceptions (Carlson, Rahman, Voola, & De Vries, 2018). Researchers Chen, Sun, Yan & Wen (2020) applied PLS and SEM technique for their research about online shopping environment conducted in China and their results indicated that perceived sustainability affects rational and emotional customer engagement.

Based on the results collected and analyzed for this research that was conducted in Bangkok on 400 respondents, which resulted in a significant statistical p-value which indicates that the null hypothesis $H7_0$ was rejected and an alternative hypothesis $H7_a$ supports that there exists a significant correlation between online engagement community and how consumers perceive a product's performance ($H7: OEC \leftrightarrow PPP$).

In large firms, interactivity with the consumers helps to build a good relationship as noted by researchers Ghose and Dou (1998), in their research "Interactive Functions and Their Impacts on the Appeal of Internet Presence Sites". Othmani & Bouslama (2015), observed that not only in the activities of organizations but even in the privacy of individuals, virtual communities are now regarded as an

important part of modern society. Strong relationships are formed when the consumers are linked through the financing of online communities by shopping websites (Pitta & Fowler, 2005). A research conducted in South Korea and United States by researcher Gong (2018), using convenience sampling for online smartphone brand communities, resulted in empirical evidence that cultural value orientations influence customer brand engagement behavior.

Based on the results collected and analyzed for this research that was conducted in Bangkok on 400 respondents, which resulted in a significant statistical p-value which indicates that the null hypothesis H_{8_0} was rejected and an alternative hypothesis H_{8_a} supports that there exists a significant correlation between customer interaction in the online engagement community and the relationship the customer has with a brand ($H_8: OEC \leftrightarrow BR$).

The consumer's opinion of a brand is the reputation of a brand (Lau & Lee, 2000), which is associated with brand credibility on whether the quality provided by the brand is as promised (Erdem, Swait, & Louviere, 2002) and members of a community are more likely to purchase a product recommended by other members (Eisingerich & Bell, 2007). interactions between the shopping websites and the consumers, provides the consumers proof whether the company will fulfill its assurance and also enables the consumers to assess the goodness and trustworthiness of the online presence of a firm (Doney & Cannon, 1997). Another research conducted by Limpasirisuwan & Donkwa (2017) using SEM for their analysis for active participants of Facebook fan pages for automobile brands in Thailand, concluded that members' loyalty was not influenced by their trust but by their

satisfaction and additionally, value factors were important for the enhancement of members' satisfaction with online brand communities, where a high degree of satisfaction with online brand communities resulted in a greater trust in the communities.

Based on the results collected and analyzed for this research that was conducted in Bangkok on 400 respondents, which resulted in a significant statistical p-value which indicates that the null hypothesis $H9_0$ was rejected and an alternative hypothesis $H9_a$ supports that there exists a significant correlation between customer interaction in the online community and the trust the customer has in a brand ($H9: OEC \leftrightarrow BT$).

For an internet enabled business, website is a crucial user interface, and therefore, it is critical to evaluate what the consumers would need from the website and the properties of a website quality (Straub & Watson, 2001). SITEQUAL was developed by Yoo and Donthu (2001) in order to measure the perception of the quality perceived by the consumers and has four dimensions, such as, the site appearance (creativity, color, etc.), ease of use, efficiently responding in a timely manner and interactivity with the users or consumers of the brand, availability of the information, and safety. SEM technique was used as an analysis for a research (in the context of travel agency) conducted by Hsu, Chang and Chen (2012), and the results confirmed that website quality affects perceived flow and customers' perceived playfulness which in turn would influence their purchase intention and satisfaction.

Based on the results collected and analyzed for this research that was conducted in Bangkok on 400 respondents, which resulted in a significant statistical

p-value which indicates that the null hypothesis $H10_0$ was rejected and an alternative hypothesis $H10_1$ supports that there exists a significant correlation between website quality and how consumers perceive a product's performance ($H10: WQ \leftrightarrow PPP$).

Consumers opt to search for information related to a product which has changed the interaction between consumers, buyers and sellers of the online communities and which before a purchase decision, has reduced the uncertainty through the sharing of related information of a product among the respected members (Srinivasan, 2004), as consumers with higher content gratification believe that the information that is provided by a shopping website is reliable (Bliemel & Hassanein, 2007; Wang & Emurian, 2005; Gummerus, Liljander, Pura, & Riel, 2004) and as recognized by numerous studies, in large firms, interactivity aids to build a good relationship with customers (Ghose & Wenyu, 1998).

However, the results collected and analyzed for this research which was conducted in Bangkok on 400 respondents, resulted in an insignificant statistical p-value which indicates that the null hypothesis $H11_0$ cannot be rejected that there is no correlation between website quality and the relationship the consumers have with a brand ($H11: WQ \leftrightarrow BR$).

A website with high-quality content and design will make online consumers think that a particular site is trustworthy which makes consumers with higher content gratification believe that the information that is provided by a shopping website is reliable and trustworthy (Bliemel & Hassanein, 2007; Wang & Emurian, 2005; Gummerus, Liljander, Pura, & Riel, 2004). Information safety and online quality is

positively related to the overall service loyalty, customer loyalty and ultimately customer satisfaction which was analyzed and concluded by Ying-Feng Kuo (2003) in his research of “A study on service quality of virtual community websites”, from the data collected from college students of three major universities in Taiwan. Furthermore, applying SEM technique for a research (related to hotel industry) conducted by Chang, Kuo, Hsu and Cheng (2014), the results indicated that purchase intention is positively influenced by perceived trust and perceived trust is positively influenced by website quality.

Based on the results collected and analyzed for this research that was conducted in Bangkok on 400 respondents, which resulted in a significant statistical p-value which indicates that the null hypothesis H_{12_0} was rejected and an alternative hypothesis H_1 supports that there exists a significant correlation between the quality of the website and consumers' trust in a brand ($H_{12}: WQ \leftrightarrow BT$).

It has become progressively tough to differentiate a brand (mainly in the service context) from competitors formed on just serviceable benefits as observed by researcher Berry (2000). Furthermore, researchers Grace & O'Cass (Grace & O'Cass, 2004) discovered three critical consumer experiences in service branding, such as, employee behaviors, servicescape and service performance. Additionally, brand experience is a multidimensional structure consisting of an emotional component, a relational component, a sensorial component, a lifestyle component, a pragmatic component and a cognitive component as deducted by Ismail et al. (2011). Through meaningful consumer and brand actions, the quality of the relationship between a consumer and a brand evolves, where their actions weaken, strengthen, shape the

quality of such relationship or even dissolve the relationship (Fournier, 1998). A research in Slovenia on mobile phone users to explore perceived product quality and perceived risk as well as the relationships among perceived quality, perceived risk and perceived value was conducted by researchers Snoj, Pisnik and Mumel (2004), applying SEM using LISREL 8.0, resulted in significant relationships among the concepts researched.

Based on the results collected and analyzed for this research that was conducted in Bangkok on 400 respondents, which resulted in a significant statistical p-value which indicates that the null hypothesis $H13_0$ was rejected and an alternative hypothesis $H13_a$ supports that there exists a significant correlation between consumers' perception of a product's performance and their relationship with the brand ($H13: PPP \leftrightarrow BR$).

As consumers become more engaged with the content from a particular website, they may have content gratification (Stafford, Stafford, & Schkade, 2004) and consumers have a higher content gratification, they feel that the website is trustworthy (Bliemel & Hassanein, 2007; Wang & Emurian, 2005; Gummerus, Liljander, Pura, & Riel, 2004). . Furthermore, consumers search for information and opinions on online communities, in order to have a belief in the trustworthiness of a particular firm's products or services and eventually build increased loyalty towards the firm's website (Wang, Wang, Chen, & Chen, 2009). For a research conducted on electronics in Thailand, researchers Marakanon and Panjakajornsak (2017) applied SEM and CFA for their research analysis which resulted that perceived quality had an indirect effect on customer loyalty via customer trust, while perceived risk and

customer trust had a direct effect on customer loyalty, and perceived quality had direct effects on perceived risk and customer trust.

Based on the results collected and analyzed for this research that was conducted in Bangkok on 400 respondents, which resulted in a significant statistical p-value which indicates that the null hypothesis $H14_0$ was rejected and an alternative hypothesis $H14_a$ supports that there exists a significant correlation between consumers' perception of a product's performance and their trust in a brand ($H14: PPP \leftrightarrow BT$).

The concept that a cognitive component of the behavior is brand trust, which could be measured by deciding the benefit and quality of a brand was proposed by Assael (1998). The mediating variables in the company's relationship with their customer(s) are commitment and trust, as observed by researchers Ekelund and Sharma (2001); Tezinde et al (2001); Morgan and Hunt (1994); Alam and Yasin (2010), where brand trust will in turn become strong due to the brand satisfaction, as shown by the researchers Ballester and Aleman (2001). Researchers Zhang et al. (2020), conducted the survey Beijing, using Structural Equation Modeling (SEM) and Confirmatory Factor Analysis (CFA) concluded that a meaningful brand relationship significantly predicts brand trust and brand loyalty.

Based on the results collected and analyzed for this research that was conducted in Bangkok on 400 respondents, which resulted in a significant statistical p-value which indicates that the null hypothesis $H15_0$ was rejected and an alternative hypothesis $H15_a$ supports that there exists a significant correlation between

relationship the consumers have with a brand and their trust in a brand (H_{40} : $BR \leftrightarrow BT$).

5.6 Managerial Implications

The major significance of the study is to understand how brands influence consumers in their purchasing behavior through the use of the online networks in Bangkok by effectively and efficiently communicating their brands. The results from this research showed that two independent variables significantly effects the dependent variable. The statistical tests conducted using SEM indicated that perceived product's performance and brand trust significantly effects the consumers' purchasing behavior in Bangkok.

Companies, brands need to focus more on building a positive and strong relationship with its customers which will enable them to reach potential buyers successfully. The digital age has enabled consumers to voice their opinions about their perception of the brands publicly and freely where the technologies of power that the users have at their disposal provides researchers significant insights on how to strengthen brands utilizing as well as the user's apparent influence on social media branding (Lund, Cohen, & Scarles, 2018). In the managerial implication of the research, it is a crucial strategy for brands to have a competitive edge.

Moreover, companies can improve their image online by aiding to both the negative and positive feedback of the consumers who are members of the online communities by taking advantage of the usefulness of web marketing and to be able to have a closer, more understanding relationship with their customers by observing the

market trends which will give businesses an opportunity to develop and adapt to the constant demands and changes. It will also help other retailing businesses to understand that through different ways, specifically the social media, not only the performance of the company can increase but it can also be used as a tool to promote a positive brand image and motivate or encourage the consumers in actively putting in an effort to help achieve that.

In order for marketers to achieve influence, they must use “technologies of power” as termed by Foucault (1977), which are techniques employed in the viable operation of power which can be used by groups and individuals in social media to have an effect on others. Additionally, technologies of power allows social groups and individuals to trigger engagement and have influence within their social networks as well as establish social interactions (Lund, Cohen, & Scarles, 2018).

Since the social media has become the mainstream, not only consumer behavior and expectations have changed but also marketing methods have evolved. The attention of the industry and academic research have been attracted by the social networking sites (SNSs) interested by their reach and affordance (Boyd & Ellison, 2007). Social media has considerably increased the power of indirect marketing (word of mouth), which gives businesses an opportunity to strengthen the relationship with their consumers, which can ultimately lead to customer loyalty (Spitfire, 2018). Therefore, marketers and managers can focus on the above key factors to meet the needs and expectations of their customers.

5.7 Limitations and Recommendations for future research

For the purpose of this research, Quantitative technique and SPSS and SEM was utilized as the research tool and research instrument. The limitations within a quantitative study relies on numerical descriptions and generalizes the results by measuring the responses and the views of the sample population to explain a phenomena (Leedy, 1993), and the limitations are therefore, assumed to be:

1. **Contextual detail:** Since it is able to test hypothesis, it provides less detail on motivation, attitude and behavior.
2. **False representation:** Based on the responses of the participating subjects, the results of the data collected might reflect the view of the researcher instead of the participants.
3. **Language barriers:** Not being a native speaker of Thai, this may cause problems with misunderstandings during interviews or the respondents might not be able to interpret certain words in the questionnaire correctly or as per their understanding.
4. **Knowledge of culture:** As a complete non-Thai researcher, the perceptions of the researcher may be different from the participants. This could lead to bias opinions or misunderstandings during interviews.

The limitations within an SEM is that even though fit indices are a useful guide, with respect to substantive theory, a structural model should also be examined. According to Jöreskog & Sörbom (1988); Tomarken and Waller (2003); Reisinger and Mavondo (Reisinger & Mavondo, 2006), parts of the model may fit poorly even though the fit indices may point to a good-fitting model.

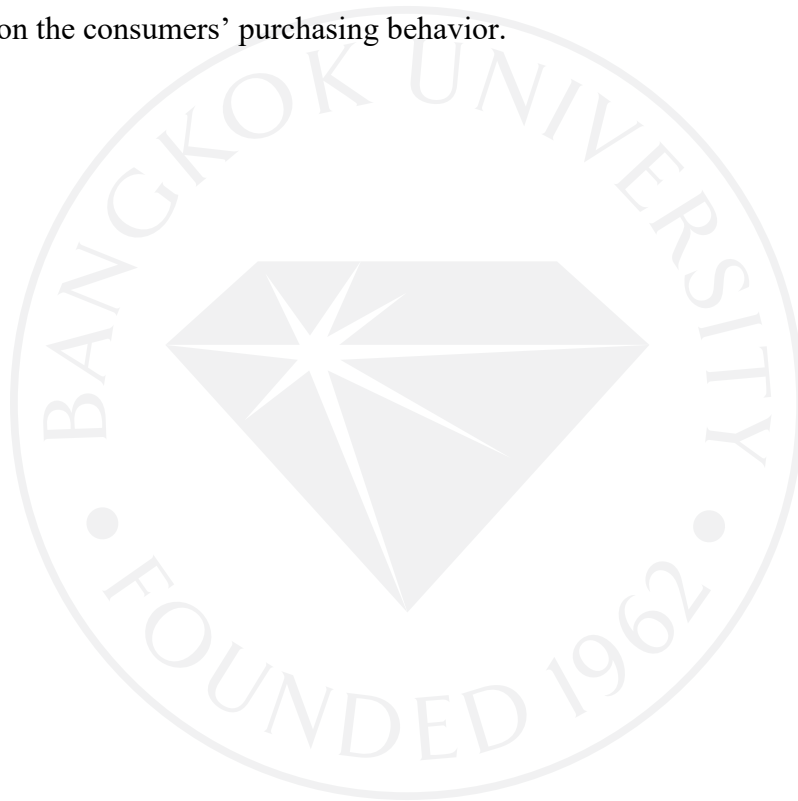
Past literatures have not identified the exact studied concepts of interest in this research. Even though this model fits the data well, researchers should try to test and rule out like alternative models (non-equivalent and equivalent models). Further research would benefit to extend the evaluation and to further test the theory developed in this research. In-depth exploration and more methodological work to capture the impact and outcomes of the factors in this research.

This study will therefore be beneficial and help other service industries and shops to have a better understanding of how to deal with problems that can arise from different aspects such as new products to promotion campaigns to having a presence online. By understanding the problems before hand, it enables other retailing industries a competitive advantage.

The research will also help retailing or service industries that are currently having similar issues regarding the efficiency or with different problems by informing them of different strategies and steps that can be taken to deal with them. Finally, the research will also inform customers that on-going strategies and promotions are used not only to increase companies' performance, but to also make customers more satisfied and enhance the customers' experience overall.

Although the results of this study contradicts with some of the results of the previous researchers, it can assumed that the reason for this is due to different sample sizes or the population studied is different. Moreover, it can also be due to different studied variables for this particular research compared to previous researchers. Future

researchers could possibly yield different results as well if different variables are studied or if a mediate variable is added, or more observed variables are included in the latent variable. Different methods can be further used to analyze the data or different statistical analysis within the same methodology could further be tested. It may also be beneficial for further research if other social networks not covered in this research could be explored to understand if it has any significant, positive or negative impact on the consumers' purchasing behavior.



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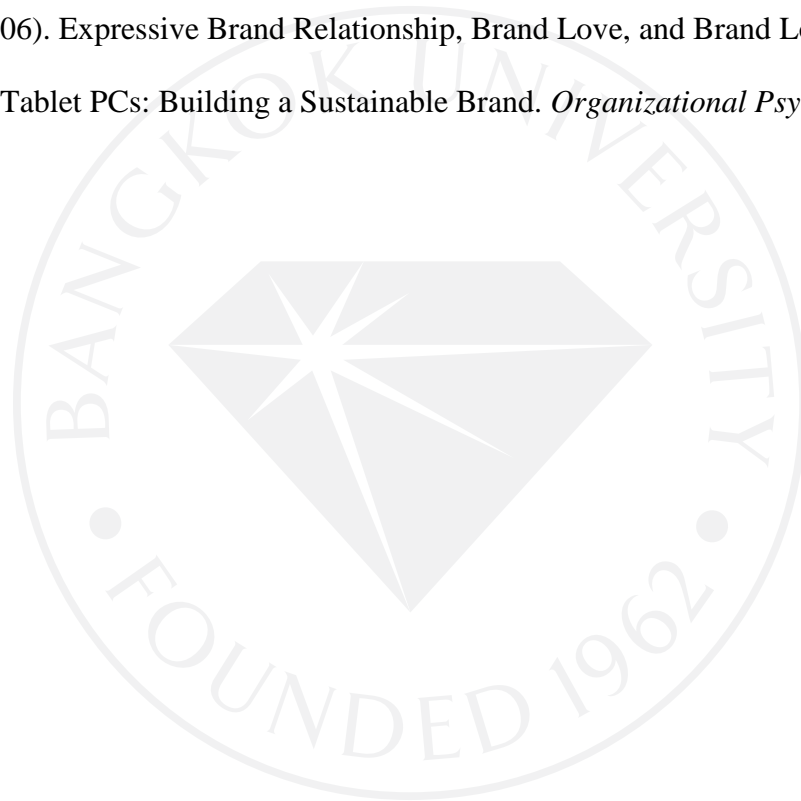
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Appendix A: Content Validity

The Index of Item=Objective Congruence (IOC) method was used to calculate the consistency between objectives and questions or content and objective as well as to verify the consistency of questions.

$$IOC = \frac{\sum R}{N}$$

Where:

IOC = Consistency between questions and objectives or
objective and content

$\sum R$ = Total assessment points given from all qualified experts

N = Number of qualified experts

As shown below, to assess each question of the questionnaire, there are three levels of assessment:

- +1/1 means that the question is consistent with the objective of the questionnaire
- 0 means that the question may or may not be (unsure) consistent with the objective of the questionnaire
- -1 means that question is inconsistent with the objective of the questionnaire

No.	Expert 1			Expert 2			Expert 3			Total Scores ΣR	IOC $\frac{\Sigma R}{N}$	Data Analysis
	-1	0	1	-1	0	1	-1	0	1			
OEC1			✓			✓			✓	3	1	Acceptable
OEC2			✓			✓			✓	3	1	Acceptable
OEC3			✓			✓			✓	3	1	Acceptable
OEC4			✓			✓			✓	3	1	Acceptable
WQ1			✓			✓		✓		2	0.66	Acceptable
WQ2			✓			✓			✓	3	1	Acceptable
WQ3			✓			✓			✓	3	1	Acceptable
WQ4			✓			✓			✓	3	1	Acceptable
PPP1			✓			✓			✓	3	1	Acceptable
PPP2			✓			✓			✓	3	1	Acceptable
PPP3			✓			✓			✓	3	1	Acceptable
PPP4			✓			✓			✓	3	1	Acceptable
BR1			✓			✓			✓	3	1	Acceptable
BR2			✓			✓			✓	3	1	Acceptable
BR3			✓			✓			✓	3	1	Acceptable
BR4			✓			✓			✓	3	1	Acceptable
BT1			✓			✓			✓	3	1	Acceptable
BT2			✓			✓			✓	3	1	Acceptable
BT3			✓			✓			✓	3	1	Acceptable
BT4			✓			✓		✓		3	0.66	Acceptable
PB1			✓			✓			✓	3	1	Acceptable
PB2			✓		✓				✓	2	0.66	Acceptable
PB3			✓			✓			✓	3	1	Acceptable
PB4			✓			✓			✓	3	1	Acceptable

$$IOC = \frac{\sum R}{N}$$

Where:

IOC = Consistency between questions and objectives or objective and content

$\sum R$ = Total assessment points given from all qualified experts

N = Number of qualified experts

$$IOC = \frac{22.9}{24}$$

$$= 0.95$$

The value has to be 0.5 or above in order to be accepted for the consistency index value. For this present research, the value of IOC was 0.95. Therefore, the content of the validity was acceptable.

Appendix B: Questionnaire

Title of Thesis Research: The study of factors that affects the consumers' purchasing behavior via the online networks in Bangkok.

The objective of this questionnaire is to collect data for research in Master of Business Administration, Bangkok University. The result of this research will benefit future research as well as help companies to further improve their image online. Therefore, cooperation from the respondents in this regard is needed. Thank you.

This questionnaire is composed of 3 parts: Demographic data, consumer behavior and purchasing behavior.

Part 1: Demographic Information

Instruction: Please answer the following question and put ✓ in ☐ that matches you most. Please select ONLY ONE answer for each question.

1. Gender

- ☐ 1) Male
- ☐ 2(Female

2. Age

- ☐ 1(16 to 23
- ☐ 2(24-29
- ☐ 3(30-39
- ☐ 4(40-49
- ☐ 5) 50+

3. Status

- ☐ 1(Single
- ☐ 2(Married
- ☐ 3 (Divorced/ Widowed

4. Level of education

- ☐ 1(High School
- ☐ 2(Bachelor Degree
- ☐ 3(Master Degree
- ☐ 4(Doctorate Degree
- ☐ 5) Others, please specify.....

5. Professional Status

- ☐ 1) Private employee
- ☐ 2) Self-Employed
- ☐ 3(Searching for job
- ☐ 4 (Housewife
- ☐ 5(Retired
- ☐ 6 (Student
- ☐ 7(Others, please specify.....

6. Monthly income (baht)

- ☐ 1(Less than and equal to 15,000
- ☐ 2 (15,001–30,000

- ☐ 3 (30,001–50,000
- ☐ 4) 50,001-100,000
- ☐ 5) 100,001–150,000
- ☐ 6) 150,001– 200,000
- ☐ 7 (200,001–500,000
- ☐ 8 (More than 500,000

PART II: This questionnaire focuses on consumer purchasing behavior via the online networks

7. If you do not follow a page or are part of a specific group, would you like to partake in the following future?

- ☐ 1(Yes
- ☐ 2(No

8. What factor influences you to purchase online through the social networks?

- ☐ 1(Recommendation of a friend
- ☐ 2) Promotion/Sale
- ☐ 3) Trendy
- ☐ 4(Convenient
- ☐ 5(Support a brand/product
- ☐ 6(Influenced by a celebrity
- ☐ 7 (Online reviews
- ☐ 8(Others, please specify.....

9. How many times per week do you shop online?

- ☐ 1(Once a week or more
- ☐ 2(2-3 times a month
- ☐ 3(Once a month
- ☐ 4(Every few months
- ☐ 5(Rarely/Never
- ☐ 6 (Others, please specify

10. Which of the following online network do you use for purchasing your products online?

- ☐ 1 (Lazada
- ☐ 2 (Shopee
- ☐ 3(Tops
- ☐ 4 (Central
- ☐ 5(Tesco Lotus
- ☐ 6 (Homepro
- ☐ 7(Uniqlo
- ☐ 8(Robinson
- ☐ 9 (Jdcentral
- ☐ 10(Others, please specify.....

11. How long have you been purchasing products online?

- ☐ 1(Less than 1 month
- ☐ 2(1 - 4 months

- ☐ 3(5 - 8 months
- ☐ 4(9 - 12 months
- ☐ 5(1 to 2 years
- ☐ 6 (Others, Please Specify

12. What do you normally purchase online?

- ☐ 1(Food
- ☐ 2(Clothes and Accessories
- ☐ 3(Electronics and Gadgets
- ☐ 4(Books
- ☐ 5(Videogames
- ☐ 6(Others, Please Specify

13. How much would you spend on a product or brand while purchasing online?

- ☐ 1(Less than or equal to 1,000 baht
- ☐ 2(1,001-2,500 baht
- ☐ 3(2,501- 4,000 baht
- ☐ 4 (4,001-5,500 baht
- ☐ 5(5,501-7,000 baht
- ☐ 6(More than 7,000 baht

14. How long do you spend every day using your social networking sites?

- ☐ 1(Less than or equal to 60 minutes
- ☐ 2(1 hour -2 hours

- ☐ 3(2 hours to 4 hours
- ☐ 4(4 hours to 6 hours
- ☐ 5(24 hours/7 days a week

15. How do you perceive the performance of a product(s) or brand(s) online?

- ☐ 1 (The comments and the feedbacks influences my view on the product or brand
- ☐ 2(The quality of the website affects how I view the product or brand
- ☐ 3(My relationship with a product or brand is related to its performance or quality
- ☐ 4(The price of a product or brand is related to its performance or value
- ☐ 5(The performance of a new product or brand influences me to purchase it

16. How do you base your decision to purchase via the online networks?

- ☐ 1 (I get influenced by the feedbacks
- ☐ 2(I get coupons or great deals
- ☐ 3 (The quality of the website helps me to understand the reliability of a new product or brand
- ☐ 4(I am well aware of the product or brand
- ☐ 5(I want to experience the whole process of purchasing via the online networks

17. Why do you think you will purchase products online again?

- ☐ 1 (Useful

☐ 2(Easily available online

☐ 3 (Convenient

☐ 4(Reduced price

☐ 5(Feel independent

PART III:

Please mark every question with only one ✓ in the box that most corresponded to your opinion.

Agreeable Level				
1	2	3	4	5
Strongly Disagree	Slightly Disagree	Neutral	Slightly Agree	Strongly Agree

		Agreeable Level				
		Strongly Agree	Slightly Agree	Neutral (3)	Slightly Disagree	Strongly Disagree
		(5)	(4)		(2)	(1)
Online Engagement Community (OEC/OC)						
1	I get influenced by the comments and the feedbacks					
2	I enjoy exploring online					

		Agreeable Level				
		Strongly	Slightly	Neutral	Slightly	Strongly
		Agree (5)	Agree (4)	(3)	Disagree (2)	Disagree (1)
	networks for reviews and latest trends. (interaction)					
3	I purchase products based on the feedbacks					
4	I am curious about the influence of virtual communities on products or brands. (celebrity influence)					
Website Quality (WQ)						
1	A good quality website will help me to understand the performance of a product or brand.					
2	A good quality website can make it easier for me to understand the activities of a product or brand.					
3	Good quality website can increase my trust of the					

		Agreeable Level				
		Strongly	Slightly	Neutral	Slightly	Strongly
		Agree (5)	Agree (4)	(3)	Disagree (2)	Disagree (1)
	effectiveness of a product or brand					
4	A good quality website makes it easier for me to purchase a product or brand					
Perceived Product's Performance (PPP)						
1	My perception of a product's performance is based on how popular it is (popularity)					
2	Positive eWOM changes my perception of a product's performance (e-Word-Of-Mouth)					
3	Unique features of a product adds value to my perception of a product's performance (features)					
4	The price of a product					

		Agreeable Level				
		Strongly	Slightly	Neutral	Slightly	Strongly
		Agree (5)	Agree (4)	(3)	Disagree (2)	Disagree (1)
	influences my perception of the product's performance (price)					
Brand Relationship (BR)						
1	People who affect my behavior think that I should purchase a product or brand that they prefer. (preference)					
2	It is important that my friends like the product or brand that I purchase online. (attachment)					
3	I like to know purchasing which product or brand online make good impressions on my friends. (brand usage)					
4	If a product or brand has become a trend or popular					

		Agreeable Level				
		Strongly	Slightly	Neutral	Slightly	Strongly
		Agree (5)	Agree (4)	(3)	Disagree (2)	Disagree (1)
	among people around me, I would consider using it. (brand recognition)					
Brand Trust (BT)						
1	My trust in a product or brand is very good compared to my friends. (brand delight)					
2	I tend to purchase a product or brand that I trust. (belief)					
3	I generally pay attention when purchasing a product or brand. (predictability)					
4	I only purchase the product or brand that I trust online. (loyalty)					
Purchasing Behavior (PB)						
1	Purchasing a product or brand via the online					

		Agreeable Level				
		Strongly	Slightly	Neutral	Slightly	Strongly
		Agree (5)	Agree (4)	(3)	Disagree (2)	Disagree (1)
	network would be convenient.					
2	Purchasing online would be a wise use of money.					
3	I generally purchase if the price of a good product or brand online is affordable.					
4	Overall, I like purchasing products online.					

18. Please suggest any other factors that can positively affect consumers' purchasing behavior via the online networks. Provide your reason(s).

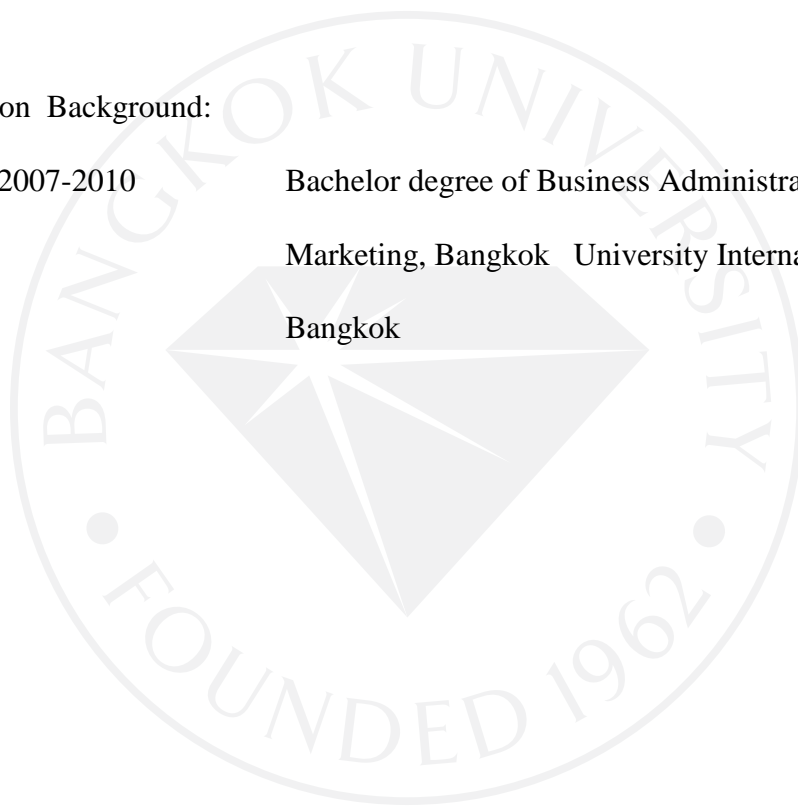
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