THE CAUSAL MODEL OF FACTORS AFFECTING THAI CUSTOMER LOYALTY TOWARDS E-COMMERCE BUSINESS

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**A Dissertation Submitted in Partial
Fulfillment of the Requirements for the Degree of
Doctor of Philosophy (Communication Arts and Innovation)
The Graduate School of Communication Arts and Management
Innovation
National Institute of Development Administration
2017**

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ABSTRACT

Title of Dissertation	THE CAUSAL MODEL OF FACTORS AFFECTING THAI CUSTOMER LOYALTY TOWARDS E-COMMERCE BUSINESS
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Degree	Doctor of Philosophy (Communication Arts and Innovation)
Year	2017

This research utilizes the mixed method research with the objectives to develop and to examine the consistency between the causal model of factors affecting Thai customers loyalty towards e-commerce business and the empirical data, furthermore to explore the opinions of academics and online marketers in relating to the marketing communication factors influencing Thai customers loyalty to e-commerce business. The research method has been divided consecutively into two parts which are; Part 1: the quantitative research conducting survey methodology by employing the questionnaire in order to collect data from a sample group which were 360 Thai customers who had purchased products through e-commerce websites and to analyze the quantitative data by means of the structural equation modeling (SEM). Part 2: the qualitative research conducting the in-depth interview from 5 key informants of academics and online marketers. The quantitative research revealed that the model developed by the researcher has been consistent with the empirical data at the statistical significance level of 0.001, 0.05, and 0.1. The system quality factor has indirect effect on the customer loyalty towards e-commerce business through the customers' perceived value. Whereas, the product and service quality factor has indirect effect on the customer loyalty towards e-commerce business through the customers' perceived value and the customer satisfaction. Meanwhile, the qualitative research has been consistent with the quantitative research findings and moreover, has been discovered that the information factor influences Thai customers loyalty to e-commerce business.

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CHAPTER 1

INTRODUCTION

1.1 Research Background

The advancements on communication technology have resulted in large global digital communication networks connecting to different regions and countries into the same global movement. The creation of a new world called "online world," which is superimposed on the existing world apparently. The real world outside of this new world is called the "offline world." Over the internet, people connected in the online world are able to widely communicate to share their information, feelings, and ideas. In addition, they are able to quickly trade goods. This allows people to overcome spatial and temporal barriers that exist in the offline world. High-speed internet-based communication technology has generated a society with unlimitedly-expanded networks and this has had impacts on socio-economic activities in the current world called the "digital world" (Asawin Nedpogaeo, 2012: 82).

In this sense, digitalization has led to the globally-connected business networks, the globalized trade system, and the competition shifting from the domestic to the national and the global arena. World populations increasing access to digital communication networks as a result of internet diffusion has made a complete change to customer behaviors and global business patterns. One of empirical outcomes expeditiously transforms into a new economy or a digital economy, which is more profitable for different businesses and various countries. Information and communication technology (ICT) is a key factor in economic development in the digital age in terms of production, management, trade, and consumption. This has been resulted in big and small countries endeavoring to reconcile to this change, by accelerated strengthening their competencies to develop a competitive advantage in business on the global arena (Kamolrat Intaratat, 2014: 32).

Thailand has adapted itself by restructuring its economy into a digital economy employing "Thailand 4.0 model" by means of the public private partnership (PPP) and the coordination of cooperation from all sectors and parties to build the capacity to drive Thai business towards the global business under the government supports. It can be seen that the government policies focusing to promote exportation and investment in foreign countries, especially for small and medium enterprises (SME) and new Thai entrepreneurs or startups have become a main role. The aims are to allow them to sell products or services towards the global markets quickly and widely by means of "e-commerce", a system of selling and buying products and services using the internet. E-commerce helps buyers and sellers from different countries to directly trade in the online world. Under this model, e-commerce is a major digital industry of core technologies and target industries to be developed by the government. E-commerce is therefore the cornerstone that supports the government's digital economy policy, enables Thailand's business to reach the same level of other countries, and equips Thailand with international competitiveness in the digital era in the long run (Suvit Maesincee, 2015: 16-17; The Secretariat of the House of Representatives, 2016: 5).

Up to this point, e-commerce is an acquisition process of website-based technology for commercial facilitation, through which operators offer their products or services on the internet. E-commerce also includes the processes of exchanging, selling & buying, paying, and delivering goods to customers. It reduces procedures and costs and allows for more profitability to business. Customers could quickly select and buy products or services via a desktop, laptop computer, or other communication devices connecting to the internet, e.g. a tablet, mobile phone, and smartphone (Aguah & Tucci, 2003: 28; Chaffey, 2007: 15; Kleindl, 2003: 9; Pawoot Pongvitayapanu, 2007: 31).

In this regard, the e-commerce market or the online market in Thailand has enjoyed a constantly rapid growth over the last 2-3 years, manifesting the increased awareness of e-commerce amongst Thais. This is a result of the government policies to drive Thai society into a digital economy. Large corporations and small-scale operators have become more interested in running their businesses in this market. Consequently, there have been an augmented utilization of smartphones and internet access including the widespread popularity of online financial transactions. Furthermore, in the digital age, customers prefer to shop online than buying in stores and e-commerce is a key

factor contributing to an increase in the gross domestic product (GDP), thus making Thailand's digital economy highly profitable (Thairath 2016, May 2).

According to a survey exhibited, the volume of Thai e-commerce business in 2015 was totally 2,245,147.02 million baht, representing 43.47 percent of the total product and service sales. The volume enjoyed 10.41 percent increasing from 2014 and it was forecasted that the growth would reach at least 12.42 percent in 2016. Concerning the value of e-commerce by business segments in 2015, the highest volume belonged to the business to business (B2B), totally of 1,334,809.46 million baht, representing 59.45 percent of the total e-commerce value in 2015. This was followed by the business to customer (B2C), of 509,998.39 million baht, representing 22.72 percent, and the business to government (B2G), of 400,339.17 million, representing 17.83 percent (Ministry of Digital Economy and Society, 2016: 29-30).

Furthermore, the value of the B2C e-commerce in Thailand had the highest growth in all ASEAN countries, tending to enjoy a leapfrog growth in comparison to other businesses. In 2015, it grew by 23.87 percent over 2014 and it was expected to grow by 43.00 percent in 2015. The B2B and B2G e-commerce expanded from 2014 by only 8.15 and 3.30 percent, respectively. Hence it was expected that the growth for B2B and B2G e-commerce in 2016 would represent 3.50 and 3.21 percent, respectively (Thansettakij 2016, September 29: 18).

Accordingly, since websites are now a popular trade channel for the Thai business sector, in this research, I have chosen six websites of B2C e-commerce in terms of e-tailing offering products directly to customers such as cosmetics, food, books, desktops and laptop computers, smartphones, stationeries, home appliances and decorations, etc. These websites had been ranked by Ystats.com, an online marketing research company, as top 6 websites of B2C e-commerce in Thailand with the highest number of visitors (visit or purchase) in the year 2016. They consisted of www.lazada.co.th, www.11street.co.th, www.online.advice.co.th, www.jib.co.th, www.central.co.th, and www. shoponline.tescolotus.com

By investigating this point, this research will explore the structure of an e-commerce site which is composed of five key elements: (1) Web store, which displays all information of the store, including the search engine, trade policy, and company profile, (2) Shopping cart system – when customers order goods, the list of goods

ordered will appear on the shopping cart page, with calculated payments, (3) Payment system, such as bank transfer and payment by credit card, (4) Transportation system, which deals with delivering goods to the consumer's address, and (5) Order tracking system – when an order is completed, customers will receive an order number, through which they could check the goods status, e.g. delivery in process, place, and received.

Despite the online shopping behavior among customers and the higher growth rate of e-commerce business, especially B2C business, a survey on the online shopping behavior of Thai internet users in 2015 revealed that an intention to buy online products or services in the future were of some obstacles that prevent a certain number of customers from the online shopping, i.e. fraud, no chance to see actual products, and a complicated ordering process, representing 38.9 percent, 32.7 percent, and 12.0 percent, respectively. The main reason for this was customers' lack of trust in sellers, product quality, delivery system, payment security, and privacy. In addition, customers usually receive products or services that are not as good as advertised, which causes bad attitudes towards e-commerce purchasing, which may affect their decision-making towards next purchases (Chaiwat Phithakraktham, 2013: 106; Doolin, Dillion, Thomson, & Corner, 2005: 66-67; Kuhlmeier & Knight, 2005: 463; Ministry of Information and Communication Technology, 2015: 10; Ratima Ngamsanga, 2000: 160; Sirikun Hosathitkun, 2000: 124).

Moreover, a number of Thai e-commerce operators are now encountering specialized personnel deficiency and a lack of understanding about operating business within the internet regime. They mostly perform their businesses without the intention on marketing communication and public relations' engagement (Ministry of Digital Economy and Society, 2016: 77-79). Therefore, to be successful in a business in Thailand via an e-commerce channel, apart from marketing and specific characteristics of the internet, they need to have an adequate knowledge and comprehension about the principles of marketing communication through the internet, since the sales of goods or services do not end up with having a website. Operators will need to expand their services, by identifying how to conduct marketing communication to enhance customer awareness of, trust in, and decision-making to buy their products or services through a website, as well as to build customer loyalty (Chang & Zhu, 2007; Natthachak Trisattayawet, 2004: 3; Querida Khotcharee, 2013: 233; Rage, 2007: 7).

In this light, e-customer loyalty is crucial to e-commerce business because loyal customers result in the increased market shares and profits in the long run. To run a business, customer satisfaction alone is not adequate; factors with greater importance are customer trust in and customer loyalty in a business. Customers will spread words of mouth about brands of products or services which gained their trust and loyalty as well as repeat purchasing them (Kim & Park, 2005: 110; Maizatul & Nader, 2014: 228; Siwarit Pongsakornrungsilp, 2004: 29; Supaporn Polnikorn, 2005: 45; Thongchai Suntiwong, 2006: 75).

Nowadays, online customers have a greater variety of choices to choose from an e-commerce expansion, lead to intense market competition involved large and small entrepreneurs in offering products or services over the internet to outperform their competitors for responding to customer needs. Adversely, customer loyalty in a particular business might be affected – if customers do not prefer a product or service, they will immediately discontinue it and search for a more satisfying one. This has brought about the issue of customer retention in e-commerce business (Chaiyaset Promsri, 2006: 61; Chuchai Smithikrai, 2010: 29; Gong-min, 2010: 49; Islam, Khadem, & Sayem, 2012: 215; Pritsana Phetcharaburanin, 2013: 40; Reichheld & Schefter, 2000: 107; Schiffman & Kanuk, 2007: 128).

As mentioned, the relevant e-commerce business issues are currently faced by operators of marketing communication. These issues have impacts on the purchase decision-making and e-customer loyalty. The role of marketing communication is not limited to "promotion," which is the fourth "P" in the marketing mix: 4Ps. Communication plays an important role in the e-commerce business from the beginning – from product design, setting prices, selecting distribution channels, advertising, public relations, purchases, to after-sales services. All of these rely on communication, as a tool to convey information to create customer awareness and customer loyalty (Kanyaporn Uppathamwiphanon, 2013: 6; Natta Changchutoe, 2012: 72).

Up to now, marketing communication is a crucial instrument to fortify e-customer loyalty in e-commerce business, especially in B2C e-commerce business in Thailand, where markets for the business are tending to enjoy a leapfrog growth. However, there has been no concept or study on marketing communication models for building e-customer loyalty in Thai e-commerce business apparently. Hence, in this

research, the concepts of communication were integrated with the e-commerce marketing context including the concepts of e-customer behavior and the relevant research in order to develop marketing communication variables that affect Thai customer loyalty and to develop the causal model of factors affecting customer loyalty towards B2C e-commerce business in Thailand. The main principle is served as a guideline for operators or people concerned for formulating e-commerce marketing communication strategies that are appropriate, efficient, and in line with Thai e-customers' needs.

1.2 Research Problems

1) What are the causal factors that affect Thai customer loyalty towards e-commerce business?

2) Is the causal model of factors affecting Thai customer loyalty towards e-commerce business developed in this research consistent with the empirical data? If yes, how?

3) How do academics and online marketers have any opinions in marketing communication factors influencing Thai customer loyalty towards e-commerce business?

1.3 Research Objectives

1) To develop the causal model of factors affecting Thai customer loyalty towards e-commerce business

2) To examine the consistency between the causal model of factors affecting Thai customer loyalty towards e-commerce business and the empirical data.

3) To explore the opinions of academics and online marketers in relating to the marketing communication factors influencing Thai customer loyalty towards e-commerce business.

1.4 Research Hypothesis

The causal model of factors affecting Thai customer loyalty towards e-commerce business developed in this research is consistent with the empirical data.

1.5 Scope of the Research

The research, "The causal model of factors affecting Thai customer loyalty towards e-commerce business," by employing questionnaire to collect data from sample group of 360 respondents which had been conducted during August to September in 2017. These samples were Thai customers who shopped via more than one e-commerce site and shopped via one e-commerce site on a regular basis for at least three times a year. It had to be one of B2C e-commerce websites in Thailand which were ranked top 6 in 2016 for their purchases or visits, by www.Ystats.com, an online marketing research company. They consisted of www.lazada.co.th, www.11street.co.th, www.online.advice.co.th, www.jib.co.th, www.central.co.th, and www.shoponline.tescolotus.com (Zhang, 2017). This also included of the in-depth interviews employing the semi-structures interview methodology of 5 academics and online marketers in January 2018.

1.6 Operational Definitions

1) The causal model – A structural equation modeling exhibits the causal relationship among variables based on applicable concepts, theories, and researches. It is statistically tested to identify its consistency with the empirical data. In this research, the causal model of factors affecting Thai customer loyalty towards an e-commerce business was developed based on the review of pertinent concepts, theories, and researches. A test was conducted to identify the consistency between the model and the empirical data by means of statistics. Consequently, the different variables in the model were studied in terms of their direct and indirect effects.

2) E-commerce – E-commerce refers to a process of using website-based technology for commercial facilitation, through which operators offer their products or services on the internet. E-commerce also includes the processes of exchanging, selling & buying, paying, and delivering goods to customers. It reduces procedures and costs as well as allows for more profitability to business. Customers could quickly select and buy products or services via their desktops, laptop computers, or other communication devices that connect to the internet, e.g. a tablet, mobile phone, and smartphone.

3) E-commerce business – Six websites of B2C e-commerce in terms of e-tailing offer products directly to customers such as cosmetics, food, books, desktops and laptop computers, smartphones, stationeries, home appliances and decorations, etc. These websites had been ranked by Ystats.com, an online marketing research company, as top 6 websites of B2C e-commerce in Thailand with the highest number of visitors (visit or purchase) in the year 2016. They consisted of www.lazada.co.th, www.11street.co.th, www.online.advice.co.th, www.jib.co.th, www.central.co.th, and www. shoponline.tescolotus.com.

4) E-commerce website – A business-to-customer trade channel on the internet. The structure of an e-commerce site is composed of five key elements: (1) Web store, which displays all information of the store, including the search engine, trade policy, and company profile, (2) Shopping cart system – when customers order goods, the list of goods ordered will appear on the shopping cart page, with calculated payments, (3) Payment system, such as bank transferring and credit card payment, (4) Transportation system, which deals with delivering goods to the consumer's address, and (5) Order tracking system – when an order is completed, customers will receive an order number, through which they could check the goods status, e.g. delivery in process, place, and received**.**

5) Customer – Thai customers having experience of e-commerce purchasing more than one website who repeatedly purchase any goods from a certain B2C e-commerce website at least three times per year, namely www.lazada.co.th, www.11street.co.th, online.advice.co.th, www.jib.co.th, www.central.co.th, and shoponline.tescolotus.com

6) Causal factors – Factors that have effect on customer loyalty in an e-commerce business, inferred the concepts of marketing communication factors of e-commerce business as the guideline for developing causal variables. They comprise of: (1) Source: Brand image, (2) Message: Information quality and product & service quality, (3) Channel: System quality and marketing communication tools, and (4) Receiver: Perceived value, satisfaction, and trust.

7) Loyalty – Responding of customer satisfaction and perceived value behaviors towards e-commerce business, considered to be based on two elements: (1) Repeat purchase, which is repeated purchasing at a particular e-commerce site and (2) Words

of mouth, spreading positive information about an e-commerce site via which a customer shops to other people

8) Perceived value – An assessment of customer's perceived value towards an e-commerce business, seemingly based on two elements: (1) Utilitarian shopping value – Perceived convenience and fastness of using a website and perceived time-saving for information searching and purchasing via the e-commerce site and (2) Hedonic shopping value – Perceived enjoyment and escape feeling from everyday life when visiting a site to browse through the product information and excitement with purchasing through the e-commerce site.

9) Satisfaction – Customer positive feeling towards an e-commerce business, consistently based on two elements: (1) Achieved expectation – The feeling that purchasing through an e-commerce website is a right choice and the benefits that customers receive from products and services from an e-commerce website meet their expectations and (2) Overall satisfaction – Overall, customer satisfaction with purchasing products and services from an e-commerce website is higher than that of other e-commerce websites.

10) Trust – Customer willingness of confidence towards an e-commerce business, apparently based on three elements: (1) Integrity – Creditability and disclosure of information that is honest and makes customers confident that products and services will be delivered as agreed upon, (2) Expertise – Possessing an ability which is recognized and adequate for meeting customers' needs, and (3) Benevolence – Offering the best value to customers, taking customers' interests as a top priority, losing some interests to maintain a good relationship with customers, and ready to willingly provide assistance for customers and caring for them even in small matters.

11) Information quality – The quality of information of e-commerce websites, considered to be based on four elements: (1) Completeness – Presenting complete and sufficient information for customers, i.e. product images and information, prices, terms of payment, and delivery terms, (2) Accuracy – Presenting product information that is accurate, clear, reliable, and useful for customers, (3) Currency – Presenting product information that is current and updated, and (4) Visual appeal – Presenting information, consisting of images, texts, animations, and graphics in an organized and aligned fashion throughout the site; and providing image sizes, font styles, color selections, and

compositions taking into account harmony and aesthetic, which could attract customers' attention.

12) System quality – The quality of e-commerce website system, mainly based on three elements: (1) Security and privacy – Publicizing the security and privacy policies on the website to boost customers' confidence in payment methods and publicizing the confidentiality policy to create the security-related perception that the websites will not disseminate customers' personal information, e.g. name, address, phone number, email address, and credit card number to other people or that the information will not be stolen, (2) Convenience – Equipped with structural and component designs that are convenient to use and a good navigation system; allowing users who visit the website for the first time to learn how to use different tools on it, remember how to use the website and use it skillfully after a period of time, easily access the website through an easy-to-remember site name, and access the website via different channels, e.g. a desktop or laptop computer, smartphone, and tablet; and accompanied with necessary applications to facilitate making orders and transactions, and (3) Speed – Quickly displaying information that customers' need, which saves time for searching of product information and the process of making an order on the internet; allowing customers to quickly access the website, do information searches, and go back to pages within the site; and providing functional stability, which could handle data from a large number of users at the same time without any problems, e.g. website crashes.

13) Product and service quality – The quality of products and services of the e-commerce business, consistently based on three elements: (1) Customization – Making customers feel that the sellers or website owners could meet their needs, by offering high-quality and variety of products, affordable prices, different levels of prices, and fast delivery; and providing some customized services, e.g. a welcome messages containing the user name and the list of recommended items, (2) Assurance – Showing messages that help to boost credibility of purchasing through the website, e.g. website page, buyer statistics, number of site visitors, and channels for the contact with visitors or the website owner, e.g. address, telephone number, and email; and providing product quality assurance terms, and (3) Responsiveness – Quickly responding to customer needs and providing good supports, providing channels for

interacting with customers on inquiries and problem-solving, and providing after-sales services, such as sending a notification immediately after a product is shipped.

14) Brand image – Customer's thoughts and beliefs towards the e-commerce business, comprising of three elements: (1) Reputation – Business leadership, creditability, specialized knowledge, financial stability, success, and popularity, (2) Good management – Management who are professional, are able to develop new quality products and formulate attractive marketing plans, having an efficient management system, and adopting innovations into their operations, and (3) Law and ethics – Respecting law, adhering to business morals and ethics, having integrity, taking no advantage of customers and society, and having responsibility for the impacts of business operations.

15) Marketing communication tools – Tools or activities used by e-commerce operators to communicate with customers. They do consist of (1) Offline media, i.e. advertising, sales promotions, and public relations and (2) Online media, i.e. search engine, link exchange, and banner.

1.7 Expected Benefits

1) The causal model of factors affecting Thai customers loyalty towards e-commerce business has developed from theoretical concepts and relating researches composed of the quantitative research and confirmed by the qualitative research to be used as a marketing communication prototype for online customers loyalty by the entrepreneurs who prescribe to utilize the internet as a channel to conduct a business and goods trading for Thai consumers.

2) B2C e-commerce business entrepreneurs in Thailand, especially new entrepreneurs and startups, could engage the research results as a guideline for planning and formulating marketing communication strategies for their businesses in order to ensure their competitive advantages in terms of marketing and enhance their competitiveness in the global trade arena based on the government's digital economy policy.

3) Researchers, academics, and interested persons could employ the acquaintance from the causal model of factors affecting Thai customer loyalty towards

e-commerce business for academic purposes. They could also further conduct the extent studying as well as formulate experiential omniscient about marketing communication of e-commerce business.

CHAPTER 2

LITERATURE REVIEW

In the research title on "The causal model of factors affecting Thai customer loyalty towards e-commerce business", I will explore the literature reviews as the theoretical framework in order to examine the research objectives by means of collecting concepts, theories, and relevant researches as applicable approaches for researching as follows;

2.1 E-commerce Concept

A magnitude of internet or computer networks is interconnected around the world. The usage of telecommunication infrastructure as an intermediary to exchange information has enhanced the capability of communication and the information exchange with a variety of internet applications (Kitti Siripullop, 2000: 45; Zhu, Kevin, Kenneth, & Kramer, 2002: 275).

For the internet usage in the business world, Somkiat Tangkitvanich (1998: 4) has described the use of the internet as a new trade channel that is implemented over the website and it is used as a marketing tool by which entrepreneurs can trade through a computer screen connected to the internet or the so-called electronic commerce: e-commerce. Customers can view images and product details for the instant decision making at their own personal computers. Sellers simply provide the information through their own computers and they can sell products and services all at one time globally. The customers can purchase products and pay directly through the e-commerce system; as a result, the internet has become a new market of great importance with a matter of less communication budgets than other approaches.

2.1.1   Meaning of E-commerce

Various scholars have defined electronic commerce or e-commerce as following;

Yuen Poovarawan and Somchai Numprasertchai (2000: 24) have explained that e-commerce is an electronic transaction that involves in the designs, productions, and trade of products or services of all kinds by various processes begin from sales proposals to sales closings and continue to direct after-sales services, all of which done through computer networks.

Tanapat Chandachot (2004: 7) has given the meaning of e-commerce that it is the implementation of all kinds of activities related to the purchase of products or services through the computer including trade over the internet.

Panisa Lanchanon (2005: 62) has explained that e-commerce is a commercial activity, a trade of products or services by using electronic media to transmit information rapidly and cover more space for business. It is also an internet sales business whereas sellers will advertise a product for sale on the website and buyers will visit and search for information to purchase the product appeared on the sellers' websites.

Pisit Ratanachetkul (2007: 15) has described that e-commerce is a business process where technologies on websites and the internet are used to assist in sellers' and buyers' interactions among themselves with products or services which is more convenient than the conventional trading.

Pawoot Pongvitayapanu (2007: 31) has described that e-commerce is the introduction of modern and convenient electronic tools to be used as a medium for business transactions either a computer, a telephone, or a device that is linked with the internet to blend seamlessly with the marketing approach to target customers in order to achieve truly corporate objectives.

Pichai Takkabutr (2008) has defined that e-commerce is all kinds of business activities related to trading of products or services through computers, telecommunication systems, and electronic media.

National Statistical Office (2013: 26) has indicated that e-commerce is a business that sells products or services to customers via internet while payment or delivery will be made via any channels.

Jennex (2003: 3) has defined that e-commerce is a conformation of economic activity by using electronic media and by having been done through computer networks.

Aguah and Tucci (2003: 28) have defined that e-commerce is an offering conformation of products or services which covers the post-delivery to customers. This communication technology has been applied in business that helps generating more profits.

Kleindl (2003: 7) has explained that e-commerce is a business process that helps businesses to reduce costs and complex procedures. Customers have channels to instantly purchase their needed products or services through communication devices connected to the internet.

DeLone and McLean (2004: 31) have described that e-commerce is an activity that uses the internet transactions to trade between buyers and sellers that add value to products or services in maintaining long-term relationships with customers.

Turban, King, Lee, and Viehland (2004: 19) have described that e-commerce is the process of buying, selling, transferring, and exchanging products or services through computer networks and the internet.

Chaffey (2007: 15) has described that e-commerce is a trading activity of products or services over the internet that is connected to various types of communication devices, such as laptops, etc., which encourage customers to spend more and more on products buying.

Hung and McQueen (2004: 166) have explained that e-commerce is a trade of products or services over the internet and electronic devices, such as desktops or laptop computers, tablets, cell phones, and smartphones.

Zhang, Chen, and Lee (2013: 31) have explained that e-commerce is a process of exchanging products or services between businesses and customers through computers and handheld devices through the internet either wire or wireless mode.

From all the definitions mentioned above, I have concluded the meaning of e-commerce as a process of using technology on the website to facilitate trade which the entrepreneur is offering products or services through the internet. This process includes the process of exchanging, trading, paying, and delivering to customers which reduces procedures and costs in order to extend more profitability for entrepreneur who

owns the business**.** The customers themselves are able to purchase their needs of products or services instantaneously via laptop computers or communication devices connected to the internet, such as tablets, cell phones, and smartphones**.**

2.1.2 Type of E-commerce

A trade business must consist of at least two parties: buyers and sellers. The buyers and the sellers or business matched-partners are to exchange business information which can be categorized into three main sectors: business sector, government sector, and customer sector. However, in case of the classification is made according to the e-commerce characteristics of the partners, it can be categorized into six types as follows (Arnat Leemakdej, 2003: 6; Jirathi Kamrai, 2004: 36-38);

2.1.2.1 Business to Business or B2B is a trade between business sectors through the internet which may be a business between the operators of same or different levels, such as manufacturers with manufacturers, manufacturers with exporters, or manufacturers with wholesalers / retailers. In doing this type of business, the buyers and the sellers tend to know each other before, so there is a minimum risk in buying and selling with rather optimum trade volume.

2.1.2.2 Business to Customer or B2C is a trade between business sector and customer sector through the internet; mostly are individual customers. Even the market value is less than the first type; however, this type of business will enable small and medium enterprise (SME) to obtain opportunities in the market competitions with large business organizations. The orders received from the customers are small with not so high revenue per order and payment tends to be by credit card, such as the consumption products selling.

2.1.2.3 Business to Government or B2G is a trade between business sector and government sector through the internet which is a trade between private business sector and state organization. This type of trade engages in several stipulated regulations and is of high volume business type, such as the government procurements, whereas in case of high allocated budget it is also known as e-auction.

2.1.2.4 Government to Government or G2G is an information contact between government-to-government or internal agencies. Although currently there is no information exchange between Thai and foreign governments through electronic

media, however, there has been an increment of information exchange among government agencies, such as the use of internet for exchanging information among ministries to enhance working speed.

2.1.2.5 Government to Customer or G2C is a public service work with no intention for commercial purposes. Presently, Thailand has been providing many public services, such as tax calculating and paying through the internet, providing public information via the internet, and reporting university entrance examination result.

2.1.2.6 Customer to Customer or C2C is a direct trade among customers through the internet. The business of this type can be made through the established website, such as the auction form of trade with each user consignment on the website. The problem of carrying this type of business is trust between the buyers and the sellers because mostly they do not know each other before. The website is only used for pairing, then real product exchanging usually made on the appointment and the payment done upon the product delivery.

2.1.3 Conformation of E-commerce

In Thailand, there are many interesting conformations of the e-commerce business as follows (Chattavut Peechapol, 2002: 28-29);

2.1.3.1 Online Catalogue: is an internet store listing solely product items to create business images and providing information on business and basic products to target groups. Most of them are B2B type and the sell contacts are by email or phone to negotiate and to transfer money through financial institutions.

2.1.3.2 E-tailing: is in the style of internet store that can directly sell products to customers (business to customer or B2C) usually with clear identification on product and delivery price. There is a basket system to receive money and order with a secured payment system, and then deliver directly to customer's door, such as amazon.com.

2.1.3.3 Auction Online: is a store exercising to buy or to sell products by the auction method with no necessity of owning a website but using the auction system existed already in a website and only paying the website service charge, such as ebay.com.

2.1.3.4 Webboard: is a community site used as a source of ideas exchanging. It is also applied as a consignment place with or without service fees, such as pantip.com and sanook.com.

2.1.3.5 E-marketplace: is a website created to be a hub for products exchange in order to trade relevant products only. With the subscription, the subscriber can use the website to place a consignment and pay this central site, such as foodmarketexchange.com which is a website hub for food product exchange or thaitradepoint.com which is an OTOP site hub (One Tambon One Product - OTOP).

2.1.3.6 B2B Supply Chain: is a website which provides purchasing services and supplying products nationwide and can coordinate transportation, such as pantavanij.com, and value.com.

2.1.3.7 Logistics Service: is a website's structural element of e-commerce market. The general shipping service providers usually own this website for tracking services and providing information on shipping tariff, such as fedex.com, dhl.com, and ups.com.

2.1.4 E-commerce Business Model

There are two models of the e-commerce business (National Statistical Office, 2012: 37-38; Pawoot Pongvitayapanu, 2007: 54) as follows;

2.1.4.1 Click-and-click Business refers to a business that operates through e-commerce over the internet only (online) with no sales through the store (offline) where the customers can buy or receive products from the store. When customers order a product from the website, the website will deliver the product to each address of the customers.

2.1.4.2 Click-and-mortar Business refers to a combination type of sales and services business through a physical storefront and through a website on the internet as another mean of trade. Mostly, it is a business continuity of the existing one in order to expand over the internet to increase sales channels, customers' base and raise the efficacy of services, for example, the customer is able to order through the website and pick up product at the storefront.

2.1.5   Type of Product and Service in E-commerce Business

The World Trade Organization (WTO) has classified products and services of the e-commerce business into three categories as follows (Pritsana Phetcharaburanin, 2013: 24);

2.1.5.1 Tangible Goods are products with configuration starts from small in volume and value to large volume that must be traded through the bank or with letter of credit (L/C), such as food, books, ready to wear clothes, sport equipments, furnitures, flowers, jewelries, etc.

2.1.5.2 Intangible Goods are products in the conformation of digital media, such as music, movies, software, and information on the internet.

2.1.5.3 Services are for example, tourisms, hotels, restaurants, car rentals, tours and airplane ticketing services, real estates and information services, etc.

In addition, the features of products and services traded through the e-commerce system should be characterized as follows (Kauffman & Wood, 2000: 64-65; Kitti Siripullop, 2001; Sirilak Rotchanakitumnuai, 2002: 109);

1) Product can meet the needs of the target groups

2) The quality of product

3) The diverseness of product

4) The disparity of product from competitors with unique features and difficult to imitate

5) The price of products and services should be in an affordable price range with many prices to choose and the price can be adjusted to be higher or lower than competitors which is unlikely to physical commodity trade whereas prices must be reviewed primarily in comparison with the competitors.

6) The presence of the product should come in lightweight, considerable size, and easy to ship, do not need delivery, or shipping formality should be sent in an electronic signals form.

7) The product or service which is extraordinaire and unique from the commercially available in the market in order to attract customers to become regular customers and increase the value-added of product.

8) The product is able to be sold continuously or a product with expiry or a consumption date which has to be renewal or subscribing needed or obsoleting time after time.

9) The products or services are commonly used by number of people at large, easy to comprehend and widespread.

10) The raw material distributers or manufacturers are of competent management.

2.1.6 E-commerce Business Structures

The structures of the e-commerce business system that favor the possibility of doing a business and trade through the website over the internet are comprising of six key elements as following (Chattavut Peechapol, 2002: 65-69; Jirathi Kamrai, 2004: 43-44);

2.1.6.1 Web Store or Store Front: is an important component of trading through the e-commerce system by placing the display of all information in the store including product search systems, trade policies, and relevant information to the business organization whereas the store front must engage in well design to adequately suit the target audiences.

2.1.6.2 Shopping Cart System: is a continuum system from the store front when customers need to order products by clicking the order or the cart symbol, the list of products that the customers' need will be appeared in the basket page together with the calculation of the total cost. The customers can modify the order or the quantity of order, if all are agreed, they will continue further into the payment process.

2.1.6.3 Payment System: is an electronic commerce payment in various methods, such as bank transfer, payment by credit cards, transmission of money orders, etc. The sellers must provide several options to facilitate the buyers' convenience, otherwise products or services may not be ordered if the buyers are unsatisfied with the payment method.

2.1.6.4 Member System: is a data record of customers who subscribe membership for news including customers who order product for the sake of accurate data and the merchandise delivery. In addition, the stores are able to use this information for administration of customer relationship management (CRM) as well.

2.1.6.5 Transportation System: is a delivery system to reach the buyers with many available options to the buyers like the payment system which depends on length of time the buyers want to receive the product. Each different transportation cost is not equal and now the stores do not have to carry the product themselves. They may let the transport company handle such delivery as EMS, DHL, FedEx, UPS, which they are to be linked to the transport company website to also facilitate the calculation of transportation costs conveniently.

2.1.6.6 Order Tracking System: is a tracking system for customers' orders providing that with the completion of each order of purchase, an order number of that purchase will be received by the customers. If they want to know where process the order is in, they can use that order number to check the status of the product and the situation will be reported. For example, the status is under manufacturing, the status is under delivering at any place, the status on reception of product, etc. This system absolutely assures the customers to trust and to confide in receiving the product accordingly.

2.1.7 E-commerce Trading Process

Kitti Siripullop (2001) has mentioned that trading process through the e-commerce system consists of five consecutive processes as follows;

2.1.7.1 Searching: is the first process of product purchase whereas a business needs to communicate effectively with the recipients or the customers; the senders should produce quality information which is effortless to search and to read. The recipients themselves must be comfortable in receiving the information they need and be able to easily search for information and accurate content to meet requirements and comprehensive understanding of each vendor's product for the comparative analytic data. After searching for the information, customers will decide whether to purchase or not. If they decide to purchase, the transaction will commence from the order, payment, and product delivery.

2.1.7.2 Ordering: is a self-automated system that allows the buyers to complete their own transactions. This is easy and effective for the buyers' conveniences with the enhanced ability to search and to compare information; so as to ease the currently update data and to reduce cost in long-term. There is also multimedia added features,

such as animation, audio, video to the product list which attract the customers' attentions including the instant activation or the results showing as needed. When the customers choose the product, the items would be imported to the shopping carts, which is a handy software acting as a cart contains of products and detailed information of all selected items for the users, such as product code, price, quantity of order, total cost either the ordered product price or the delivery and VAT cost whereas the customers are able to modify the product order and quantity accordingly (Pritsana Phetcharaburanin, 2013: 36).

2.1.7.3 Payment: is a stage when the customers decide to make a purchase. It depends on the convenience of each customer to choose payment method. There are several ways for payment in e-commerce, such as the online payment which is a payment paid directly through the internet by credit cards, electronic cash and smart cards, etc. The other method is the offline payment for the customers who are unable to complete payment transaction directly through the internet but rather pay by bank transferring, postal payment and pay direct to the shipping staff, etc. Payment is an important process and requires trust from the buyers utmost as it should constitute of legitimate system, verifiable with evidence to confirm the process.

2.1.7.4 Delivery: is a process to handover product directly towards customers after the payment has been made. The delivery process depends on the type of product that can be secluded into two categories which are; in case of tangible goods, employees of the business entrepreneur, the delivery service provider company or postal delivery may be used to send the product, in another case is intangible goods, they will be transmitted via electronic media, such as music downloads, membership subscriptions to view information from the site, etc. This delivery system must engage in several delivery methods for the customers to choose in order to facilitate and to handover the product conveniently towards the customers in safe and on time manner which is to rely on efficient transportation to save time and expenses in order to increase the customer's satisfactions and the value added to the products.

2.1.8 Benefits of E-commerce

E-commerce is an activity that transforms a great deal of trade by people. It not only revolutionizes trade of unnecessary store front and cash in paying for product or

service but also minimizes the separations and the competitions between large and small businesses. Either small or large, the opportunity of every business is equal when stepping into the world of internet trading or e-commerce (Arnat Leemakdej, 2003: 14-15; Kanoksak Simtrakul, 2002: 39-41).

Up to this point, Panisa Lanchanon (2005: 87-88) has described the benefits of e-commerce as following;

2.1.8.1 Benefits of Buyers

1) Convenience: The buyers do not have to waste time traveling to explore or to find information about products from various stores, they just compare to purchase from a catalog or to search from the websites. Buying in this way provides an easy and a privacy of searching since the customers do not have to encounter sales' persuasions or upset with the salespersons. Buyers can learn about products and services without waiting or wasting time with the salespersons.

2) Product access and selection: the sellers on websites can offer the buyers unlimited options. This is because the e-commerce channels allow the buyers to compare various information and relevant data from many business organizations, products, and large number of competitors. Furthermore, a well-established website should extend more useful information than the ones the customers receive from the salespersons.

3) Interactive and immediate: the buyers are capable to interact or to negotiate with the sellers through websites concerning the information, products and services' needed which the order or the download information can be activated immediately.

4) Pleasant feeling of the customers in controlling the situation with more powerful of decision-making.

2.1.8.2 Benefits of Sellers

1) Customer relationship building: this is in terms of a direct interaction between each customer and seller.

2) Learning of specific necessity and need of a certain customer in a way that the customers can propose questions and then obtain feedback, which is a way of the sellers to create value and the customer satisfaction by developing better products and services.

3) Rendering reduction of costs as well as increasing of speed and efficiency by reductions of store maintenance and related costs, such as rental, insurance, and public utilities.

4) Competency of direct connecting among suppliers, manufacturers, factories, customers, and businesses.

5) Flexibility of the e-commerce marketing in terms of ability to edit data, improve products variety, pricing, and marketing promotion to respond on ever-changing market situations.

6) Global medium of the internet allows the buyers to contact the sellers of manufactural components in different countries globally.

To elaborate this e-commerce concept, I have determined the study on the causal model of factors on customers loyalty into six e-commerce businesses boundaries which are all business to customer (B2C) e-commerce in terms of e-tailing that offers customer products directly through their websites, such as clothing, cosmetics, foods, books, desktops and laptop computers, smartphones, stationeries, home appliances and decorations, etc. The structure of these websites consists of five main components as following; (1) Web store (2) Shopping cart system (3) Payment system (4) Transportation system, and (5) Order tracking system. There are also top 6 ranks of the B2C e-commerce sites in Thailand with the highest number of visit or purchase in 2016: www.lazada.co.th, www.11street.co.th, online.advice.co.th, www.jib.co.th, www.central.co.th, and shoponline.tescolotus.com.

2.2 Marketing Communication Concept

2.2.1 Marketing Concept

Marketing concept is a business concept where marketers primarily focus on customers' satisfactions and needs. It is believed that the customers will purchase products or services only when such products or services meet their satisfactions and needs (Schultz, Tannenbaum, & Lauterborn, 1994: 34), and there are many scholars who have given the conceptual meaning to marketing in the same direction as follows;

Mason and Perreault (1987: 73) have defined that marketing concept is the determination of the brand owner on the manufacturing of products or services to meet customer needs with three main principles as follows;

1) Take into consideration of customers' satisfactions on the manufacturing of products or services

2) Main objective in running a long-term success business is to earn a profit by purchasing or reusing of products and services not just for a short-term revenue.

3) Cooperation existence within business organizations with mutual supportive and cooperative operations among each party.

Wells, Burnett, and Moriarty (2000: 38) have described that marketing concept refers to a business that values the customers' satisfactions. The owner of the products or services must obtain a profit from the business while sustaining the customers in the long run.

Kotler (2009: 83) has proposed that marketing concept refers to a business that commences with the target market, which is an outside-in perspective, then studies the needs of the target market together with the integrated marketing. In running a business, the marketers will apply the principles of marketing mix or 4Ps which consists of four components: product, price, place, and promotion to meet the customers' needs and create satisfactions over the products or services in the long run. As Kotler (2009: 87) has mentioned that marketing mix (or 4Ps) is a marketing integration of four components: product, price, place, and promotion to meet the needs of the target customers as well as to achieve satisfaction and to persist in brand loyalty.

Therefore, the marketing concept is an approach that significantly focuses on the needs of customers by application of the marketing mix (or 4Ps) which consists of four components: product, price, place, and promotion to create the satisfaction in using products or services and lead to customer loyalty which enables businesses to sustain the customers and obtain profits in the long run.

2.2.2 Marketing Mix

Pelsmacker, Geuens, and Bergh (2001: 92-94) have given additional details of the marketing mix as follows;

2.2.2.1 Product: consists of functional benefits, working formats, variety of options, quality of uses, looks of products, brandings, packaging, services, and warranty.

2.2.2.2 Price: consists of values, discounts, payments, payment periods, and rewards.

2.2.2.3 Place: consists of sales channels, delivery systems, products, inventories, transportations, and distribution places.

2.2.2.4 Promotion: consists of advertisements, public relations, sales promotion, activity promotions, individual sales, direct and interactive marketing.

In this research, I have focused on marketing "promotion" or the fourth P of marketing mix which is a marketing element aims to create the satisfaction and leads to customer loyalty. Whereas Kotler (2009: 90) has stated further that marketing promotion is an information communication to customers in relevant of products features, benefits of goods, prices, quality of service, or distribution channels. Later on, this communication has been intensively developed in accordance with the era and the needs of customers by a new form called "marketing communication" by informing, persuading to create the satisfaction in products or services as well as to stimulate the behaviors of buying products or using services that will lead to loyalty on the products or services afterward.

2.2.3 Marketing Communication

Several scholars have given definitions of the word marketing communication as following;

Narumol Thongcharoenchaikit (2000: 22-23) has defined that marketing communication refers to a communication process whereas the manufacturer or the distributor forwards messages or information to target customers and this communication aims to be responded in the expected directions. The responses have been classified into six categories as follows;

1) Customers are interested in the product

2) Customers perceive the product in a positive way with no conflict or resistance

3) Customers recognize the product

4) Reinforce customers' confidence in the product and create a positive sense than ever

5) Stimulate the demand of product usage

6) Regulate purchase behavior with no switching to other brands.

Siriwan Sereerat, Suporn Sereerat, Ong-ard Patawanich, and Parin Laksitanon (2003: 37) have described that the meaning of marketing communication comprises of two related words: the first, communication is a term for any process that transfers ideas and interpersonal messages among organizations or between each other. And the latter, marketing is a term for business activities that are set up for pricing plan, marketing promotion, distributing of product, valuing of product in exchanging the value of products or services between customers and businesses to meet the needs of the target markets and achieve corporate objectives. The marketers must communicate in accordance with the needs of customers by using persuasion methods to stimulate demand and provide useful information to the customers that lead to the attitudes change which will eventually result in behaviors change as well.

Sit Thirason (2009: 14) has mentioned that marketing communication refers to a sharing and exchanging process that begins with the search of the customers' needs, the determination of the target groups, the creation of products that will satisfy those people at adequate prices and the distribution channels and let the target groups aware of the creation by composing a communication marketing of the promotion plan.

Chuenjit Changchenkit (2013: 26) has referred to marketing communication that the term of communication means the relevant process of thoughts and interpersonal interactions between individuals or organizations and individuals. The term of marketing refers to activities that promoted by a business or an organization in order to deliver or to exchange certain values on customers. The combination of these two terms means the element in the marketing mix of any particular brand that facilitates the convenience of exchanging business.

Atthakan Sattayaphanit (2014: 42) has stated that marketing communication refers to a communication on marketing activities to help creating awareness, understanding, and positive recognitions between businesses and customers in aiming for responses to serve the purpose of communication.

Pickton and Broderick (2005: 11) have described that marketing communication is a process of presenting an amount of sensations integrated by marketing in order to stimulate the customer satisfaction as needed, additionally with the creation of channels to receive and to interpret the messages from marketing in order to modify the product images and to seek for new concepts of communication.

Stanton, Etzel, and Walker (2000: 35) have added that marketing communication needs marketing ingredients as an element in the marketing plan for more effective marketing results. These ingredients are comprised of every marketing tool that influences the persuasions of the customers' product satisfactions.

Lovelock and Wright (1998: 27) have given the meaning of marketing communication that it is the bring about of marketing communication tools to be used in operating a business by creating customers' awareness of the products or services, these marketing communication tools are helping in the aspect of brand satisfaction and loyalty building.

Wells et al. (2000: 115) have said that marketing communication refers to the process whereas an organization delivers information to the target customers effectively while the target customers can respond back the information to the organization.

Duncan (2002: 38) has mentioned that marketing communication refers to a designed information concerning products and services in the strategic presentation which delivered and communicated to the target customers by the organization effectively.

Kotler (2009: 92) has described that marketing communication refers to a process of conveying ideas, meanings, or activities to the customers in order to share the products' value which is a communication exchange between the customers and the brand owners. This marketing communication plays a very important role in the business sector as it creates the customers' recognitions, the positive attitudes toward brands, which the purchase of products or services and brand loyalty are to be followed.

By reviewing the meanings and concepts above, it can be concluded that marketing communication is the process of intercommunication between businesses and customers. The businesses will implement the brand marketing mix which are

product, price, place, and promotion to achieve the customer satisfaction purpose and lead to customer's brand loyalty.

Marketing communication is then a combination of brand marketing mix elements in order to communicate meaning to the customers and help businesses to confer with their communications and marketing objectives. This research relevantly refers to the marketing communication of e-commerce business or businesses that entrepreneurs offer sales through the internet.

2.2.4 Marketing Communication Tools

Marketing communication requires tools or activities to communicate with customers called "marketing communication tools" which may be compounded as marketing communication mix. Pelsmacker et al. (2001: 103) and Clow and Baack (2004: 174-187) similarily have described the marketing communication tools as follows;

2.2.4.1 Advertising: is a marketing communication that needs no personnel. Costs have been spent in exchange for spaces or times for communication. Advertising is the most common mean of communication because it communicates to a large number of people at the same time. Media used in advertising are newspapers, magazines, television, etc.

2.2.4.2 Public Relations: is a marketing communication that creates and retains relationships between business organizations and the target customers or creates good images to public through various media. Public relations have not resulted in direct sales revenue but it is one of important elements of the marketing strategies.

2.2.4.3 Sales Promotion: is a marketing communication that adds value or motivates customers towards products. Its main objective is to motivate the customers so as to respond immediately, such as the use of discount coupons, sample distributions, etc.

2.2.4.4 Sponsorship: is a marketing communication that emphasizes support in terms of funds or objects used in sponsorship of activities, such as sport events, music performances, social responsibility for charity, etc.

2.2.4.5 Personal Selling: is a person-to-person marketing communication between buyers and sellers whereas salespeople can assist, explain and provide useful

information to customers and it has not limited to a face-to-face communication only. Telephone sales has also considered as personal selling although it is a cost burden but on the other hand, it creates opportunities and influences on the customer trust.

2.2.4.6 Direct Marketing: is a marketing communication between a business organization and a specific target audience which requires a database for communication either by emailing letter or postal since it is intended to receive response from the customers.

2.2.4.7 Interactive marketing: is a marketing communication that provides users' participation with responses or comments. It allows friendly to access either businesses or customers with an advantage of immediate fulfillments as it allows marketers to collect personal information from the customers and this can be promptly adjusted to meet their needs.

Furthermore, Kasper, Helsdingen, and Vries (1999: 560) have proposed the definition of marketing communication tools for business organizations serving over the website that offline media communication tools are required, together with online media tools, in order to communicate effectively with the target audiences.

In communication plan to promote the services over the websites in order to accomplish the determined objectives, it is noted to consider the integrated using of various marketing communication tools based on their natures and capabilities to convey accurately and clearly the meanings according to the objectives (Kasper et al., 1999: 559). And the marketing communication tools used must be able to reflect the different aspects of the services, emphasized the overall focus of emotions and experiences that the target groups will receive (Bennett, 2003: 273). Especially, the purpose of the communication is to promote the services on the website by attracting the target customers to visit and use the services. Once the site has been visited, the motivation of revisit must be created (Duncan, 2002: 131). As shown in figure 2.1. of this research, it has indicated that an e-commerce website that provides the customers purchasing channels with the implementation of marketing communication tools will engage the customers in repeatedly purchase through the site.

Communication Mix

Offline Media
(Traditional)

Advertising
Personal Selling
Sales Promotion
Public Relations
Words of Mouth

Online Media

Search Engine
Link Exchange
Banner
E-Mail

Target Audience

Objectives

Design Message
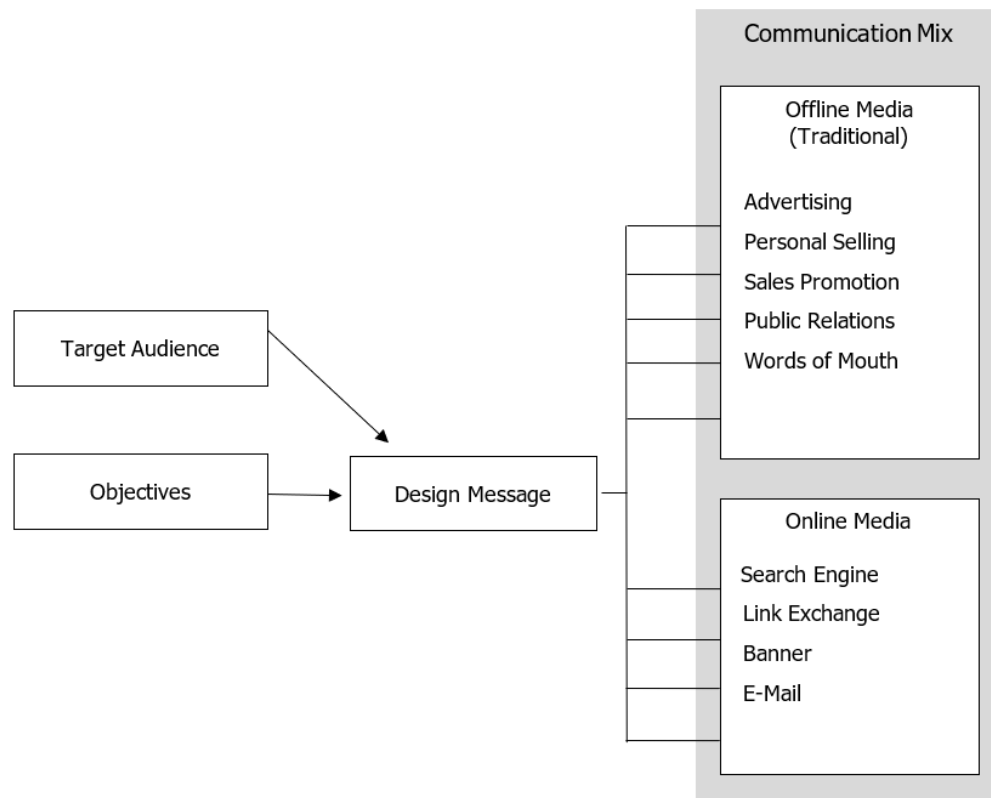
Figure 2.1 Communication Plan to Promote Website Services
Source: Kasper, Helsdingen, and Vries (1999: 559)

Kasper et al. (1999: 560-584) have categorized the marketing communication tools for the business organizations on the website into two categories which are offline media tools and online media tools with details as following;

1) Offline Media

(1) Advertising

Advertising aims to raise awareness, to assign brand positioning, to encourage demand, and to provide information (Bennett, 2003: 291). Advertising is capable in mass penetration, whereas these people can be referred as the target audiences or the customers of business (Shimp, 2003: 72). It also aims to differentiate an organization from its competitors and ensures that the advertised product is less risky than other products which can be done by information and details input of additional items in the media through the advertising medium (Kasper et al., 1999: 562).

There are various media for advertising which Fill (1995: 263-265) has classified the main types of advertising media, namely, electronics media into three types which are television, radio, and print media: newspapers, magazines, and out-of-home media which are transit media, in-store media, advertising media in packaging form, and outdoor media.

(2) Personal Selling

It is an interaction between salespeople who represent the business organizations and the target customers by presenting words and / or other expressions with the purpose to sell products or services of the business enterprise (Sirgy, 1998: 85). Salespeople communication will increase the opportunity of talking to the target audiences, encourage staff to improve services and extend the opportunity to apologize in case of there are some occurrence of mistakes (Kasper et al., 1999: 566).

(3) Sales Promotion

It is a communication component that stimulates behavior and is active in a brief period of time by add-value offers to stimulate prompt responses, such as discounts, bonuses (Shimp, 2003: 97). Mostly, sales promotions are used for the businesses brands' initiation into the market and to encourage repeat customers' buying behaviors (Bennett, 2003: 304).

(4) Public Relations

Chattayaporn Samerjai (2002: 12-13) has described that public relations is a tool to stimulate purchasing and acceptance of target groups by creating news related to products and businesses through radios, televisions, and other media using various public relations tools, such as publicity, events, and corporate advertising, whereas, the credibility is also created with the support of public relations with free media cost (Chuenjit Changchenkit, 2002: 63-70).

(5) Words of Mouth

Christiansen and Tax (2000: 187) have explained that words of mouth is an informal communication that occurs among customers about a product or service which influences the attitudes and behaviors of customers. The words of mouth come in forms of instructions, products or service reviews, include claims from customers who have used the products or services that the business organization is attempting to encourage loyal customers and to recommend products or services to friends or acquainted ones

(Bennett, 2003: 325). Thus, the words of mouth is a powerful tool because of its high reliable level and if there is any subject in focus, that subject will spread speedily (Duncan, 2002: 87).

2) Online Media

(1) Search Engine

Pipat Yodprudtikan (1999: 32) has described that the search engine is a finding tool over the websites and various information on the internet which serve as a collective index of lists and important data of many existing websites. Examples of well-known search engine providers are Google, Yahoo, Vista, Lycos, Infoseek. According to the survey data of Forrester Research, it has found that the search engine is the best marketing tool in assisting internet users to look for websites (Duncan, 2002: 103). Website owners need to register and input relating details to the site of the search engine in order that common internet users will be able to find their websites. Wong (2002, as cited in Turban et al., 2004: 65) has suggested a method to input information into a search engine since in searching for a website in e-commerce, the internet users have to identify the keyword into the search engine. If the website owners want to let online customers search and find their websites, they must identify the word online product or product onto the search engine. When an internet user visits to find out about a product purchase, the search engine system will display the website address accordingly.

(2) Link Exchange

This can be done by link exchange with the websites that are likely to be related to the organization by arrangements made with the websites to exchange the link with. The result of communication in this way contributes to opportunities for public to view more of the organizations' websites (Prasit Worachatvanich, 2000: 41). But what to consider in link exchange is the websites that the organization chooses to link with, they must be websites containing same target audiences or customers with the organization. Moreover, it should also be of referral organizations (Pipat Yodprudtikan, 1999: 36).

(3) Banner

In buying a banner from some other websites, a website with large target audiences must be chosen because the banner enables a link to the organization's website. This strategy is similar to the general business of buying advertising in printed media only switching from advertisement on paper to advertisement on websites instead (Prasit Worachatvanich, 2000: 46).

(4) E-mail

Phanchan Thanawatsathian (1994: 48-49) has mentioned that the promoting of perceptions about the websites needs to work alongside with the email plan because the websites are medium that must wait for internet users to open up whereas email is a mean to reach internet users. The use of email is a way to preserve the target audiences or group of visitors who are interested in the website's services. The important thing is to obtain the website visitors' registrations with their email addresses to receive news via emails which will provide the information, those website visitors are interested in and are presenting on the website. The end part of the email should indicate the organization's name and the website address for those who want to find out more will be able to further their searches (Prasit Worachatvanich, 2000: 53).

By reviewing all the concepts on above, I have applied the concept of marketing communication to study the marketing communication tools as one of the marketing communication factors that whether or not and how do they affect on customer loyalty. The study has considered the use of marketing communication tools for e-commerce businesses in Thailand, both the offline media of communication tools which are advertising, sales promotion, public relations, and the online media of communication tools, which are the use of search engine, link exchange, and banner.

2.3 Concept of Marketing Communication Factors in E-commerce Business

E-commerce business is an activity between the buyers and the sellers over the internet networks, such as the activity in ordering, payment, or shipping which is different from the common trades because the buyers and the sellers do not have to meet or to see each other in doing the business. So, persons who are going to step into

the internet business must understand the unique characteristics of internet marketing which are different from other businesses (Wood & Smith, 2005: 81). This is consistent to the concept of Orachorn Maneesong (2003: 54) who has mentioned that internet market is a customer market since trading occurred primarily by customer's decision. To be successful in the internet market, the business must be capable to engage in the customer satisfaction with the products and services of the business as much as possible.

Natta Changchutoe (2012: 72) has added that the role of marketing communication in a business is more significant than just being tool or the fourth P of the marketing mix. Since the communication plays important part on a brand from the beginning regardless of product design, packaging design, pricing, selection of distribution channels, advertising, public relations, and purchase or after-sales service, all of these are entirely relying on the impact of brand information value to create customer perceptions. Therefore, there are factors to be emphasized in the marketing communication of e-commerce business with wider dimensions than merely a marketing promotion.

Duncan (2002: 126) has introduced a prototype of the interactive marketing communication model comprising of communication components which are source, message, channel, receiver, feedback, and noise, all of which are different from the original process as shown in the figure 2.2.

Duncan (2002: 126-127) has further added that the interactive marketing communication model is a process of exchanging information and transferring meaning between a sender and a receiver to achieve marketing results, for example, to promote consumption of product and service, to promote corporate image, or to engage in the customer satisfaction and to gain loyalty to the organization in the long run (Hanna & Wozniak, 2001: 63). This communication process commences from the sender who interprets message into copy, image and / or encoding and delivers them through communication channel to the receiver who will interpret the message according to the comprehension and the interactive communication will take place when the receiver responds back to the sender. During the communication, noise can interfere and distort the meaning of the message whereas this marketing communication process can be

applied to outline the marketing communication approach for e-commerce businesses as follows;
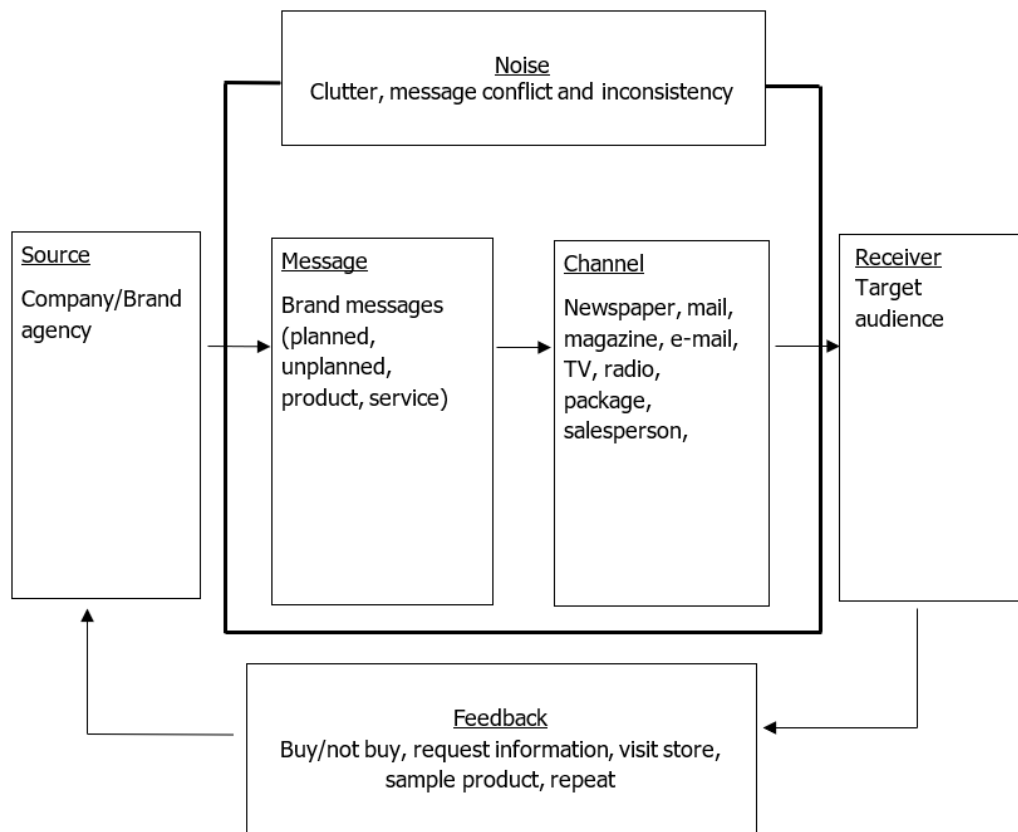
Figure 2.2 The Interactive Marketing Communication Model
Source: Duncan (2002: 127)

2.3.1 Source

In marketing communication, the messenger or the beginner in communication is the business organization, the brand owner who owns the encoding authority or the sending the message related to benefits and highlights of products or services with goals to achieve understanding and to motivate customers' behaviors. For e-commerce business, the first impression that encourages the customers to make decision on buy over the internet is credibility and trust (Apichai Ruangsiripiyakul, 2001: 62).

Since the customers do not have the opportunity to firstly see the products, only the images and descriptions can be seen which means the e-commerce business must

contribute well communication to obtain customers' trust and confidence in the products, shops, and shop owners (Turban et al., 2004: 28). Also, this includes an exercising of communication to show who the owners are, the company name, the website owner's name, the address, and the phone numbers which are real and can be reached easily. In addition, marketing communication is capable in providing that the website or the messenger is reliable by displaying the e-commerce mark over the website, the buyer quantity or statistics, the website visitors, the references of people who have already purchased the products or used the services, the exhibition of awards or news about the website, and the reference period for the e-commerce business services, etc. (Natta Changchutoe, 2012: 73).

2.3.2 Message

Message is the flow of information everything that a messenger has communicated. In marketing communication, message is the brand message, which contains all information related to the brand whereas the business owner who owns the brand sending to the customers, such as contents, voices, words, actions, illustrations, and symbols for instance. So, in the communication, the marketers should focus on the messages by constituting the structures of the messages in order to communicate to the customers, such as the choice of text, illustration, sound, style, and technique. News coverage of a brand message must be attractive and appealing to the customers (Natta Changchutoe, 2012: 73).

In marketing communication, sometimes the messages received by the customers may be direct and indirect contact from a business organization which consists of planned message, unplanned message, product message, and service message. For example, on the website where the customers see product illustrations, sales prices, banner advertisements, news story or product warranty policy and payment, all of these effects the perceptions of the website which corresponds to Duncan (2002: 128), who has stated that "everything communicates".

Natta Changchutoe (2012: 73-80) has defined that there are six features of messages to be focused on as follows;

2.3.2.1 Product Brand Message

Product brand message is the information which highlights the product: product identity, performance, appearance and packaging, etc. For the e-commerce business, product brand message is a presentation of information related to products or services through the website includes a clear display of products photo illustrations. It's also providing detailed information about the product, product dimensions and weights, materials, warranty policy or if the website has a wide assortment of products and brands, the display should be in complete presentation. The information of the website owner has to present towards the customers must be thoroughly complete of real data and image for the customers to evaluate the product quality and be assured to obtain the products or services as effectual as seen in the website. In addition, products or services information in the website should always be updated with new products and services for the customers to visit or purchase products continuously (Natta Changchutoe, 2012: 73).

2.3.2.2 Price Brand Message

Price brand message is the indicator of how a brand quality and status are when compare to other brands. The price used to distinguish the brand is not only the selling price of the product but also the acquisition and the upkeep costs. For the e-commerce business, price brand message consists of displaying information about sales prices, discounts, shippings, payments, payment fees, payment periods and product returns or replacement fees, etc. (Natta Changchutoe, 2012: 73).

For the online pricing of product or service sales, the operators should set prices in adequate to product quality and always monitor price changes of close competitors. In addition, to sell some products, such as small or lightweight jewelry, the shipping may be costly because of the minimum weight calculation tariff. Instead of separately sell, a set of jewelry should be offered by the sellers because with the combined price, the customers may not feel that the price is too high. In case of the sellers know that their main markets' customers are from what country, the total shipping charge may be alright to include in the selling price of the item in order to speed up the customers decision process to purchase. For the pricing of sell products or services online, the sellers need to carefully calculate costs or assess of risk that might happen, for example,

a customer purchases by a credit card with bank surcharge fee of 3%, whereas the sellers will have to include this as a cost prior to pricing (Arnat Leemakdej, 2003: 43).

2.3.2.3 Place or Distribution Brand Message

For the e-commerce business, a brand message is able to be presented at the place where the product is selling. Arnat Leemakdej (2003: 47) has said that locating a place for the e-commerce business has been compared as to name the store which is called domain name in internet terminology. The name or domain name contributes to the first impression that the customers memorize a website or the online store. Good domain names must be short, easy to remember, and provide value meaning offered by the websites. If it is a corporate business website, product or service name should be used as the domain name (Pisek Chainirun, 2008: 20).

Besides the location of the store, the distribution channel of e-commerce business also includes the website design which consists of the attractive website or the storefront, the instant accessibility, the colors, the tones of communication, the font size, and the resolution of the images, for example, the shipping information to deliver products or services which comprises of period of time, quality, punctuality, and variety of shipping from the websites to the customers. However, for the e-commerce business, the operator should not engage in a website for commercial only. If opportunity allows, the operator should simultaneously operate a normal trade channel to reassure the buyers because of having owned a website is a useful way to provide the preview information to the customers before buying or re-buying after the customers have bought the trial products from the normal channels with satisfactions (Natta Changchutoe, 2012: 74).

2.3.2.4 Promotion Brand Message

Promotion brand message is the process for businesses to communicate brand message through various marketing promotion tools, such as advertising, public relations, sales promotion, sales by employees, special events, communication with new tools, as well as after sales services (Natta Changchutoe, 2012: 74). For promotion brand message of e-commerce business, information message related to the marketing promotion tools can be categorized into two types: offline brand message and online brand message (Mohammed, Fisher, Jaworski, & Cahill, 2001: 218-234).

1) Offline Marketing Communication Tools

The e-commerce business is capable in presenting website's message to a large number of customers by television, radio, outdoor advertising, newspapers, magazines, sponsorships, point of purchase displays, newsletters, etc. While in the need of personal communication with the customers, the communication tools of offline type can also be used by the e-commerce business. For example, the information message of the website delivered with the attachment of statement stuffers, such as mobile phone bills, credit card bills, etc., including telemarketing, direct mailings to the customers, loyalty program or marketing communication programs designed to motivate the customers to rebuy, such as the distribution of discount coupons for the next purchase and trade stamp to exchange for souvenirs, etc.

2) Online Marketing Communication Tools

The e-commerce business is capable in presenting website's message to a large number of customers by exhibiting the content through advertisements on the internet also known as the banner or the online billboards or through the search engine, attempting to rank the website on top part of the searching. The presentation of content or image advertisements over interstitials, whereas the advertisements will be displayed in forms of pop-up or banners before the customers reach their searched-websites or complete download of the webpages.

There are also other online marketing communication tools, such as paid search engine, which may come in forms of either texts or banners. The displaying of the texts or banners will correspond with the customers' searching words. When a website is searched by the customers, that advertisement bought website will appear on the top part. This method is called keyword advertising or contextual advertising (Pisek Chainirun, 2008: 46-51).

2.3.2.5 Personalization Message

Due to the internet technology contributions, the website is capable in storing the customer specific data, therefore, such data can be used to deliver specific service to each customer, such as welcome message, username display, recommended products and services list, cross selling by utilizing customers'databases to communicate and to administrate relationships (Natta Changchutoe, 2012: 75).

For the e-commerce businesses, information on the website can be presented in customization, such as the www.amazon.com. When the customer has revisited the site, a welcome message with the username will appear with a list of books recommended by the website. When viewing in details, it is found to be the books in line with the previous purchase. When a customer orders a book, the website will continue to recommend persons who have ordered this book and will usually order as well as the following items with the inclusive list of recommended books or products which consistently creates opportunities to sell for the website (Arnat Leemakdej, 2003: 59).

2.3.2.6 Privacy Message

The e-commerce survey data and various researches have found that a major issue that causes or obstructs the accomplishment of the e-commerce business development is the customers' concern for the using safety and the business transactions done via e-commerce (Pawoot Pongvitayapanu, 2007: 73). This is in accordance with the research of Chang and Zhu (2007) on factors affecting the online shopping which consist of personal data security and trust on the sellers.

Therefore, the importance of customer privacy message and data security measures to protect the customer's internet transactions are of necessity. The e-commerce business must notify the customers of the website's security policies, create trust in payment process, inform of protecting customer's confidentiality, and must not provide customer information to other parties. This must include the customers consciousness of reliable security systems, which means their credit card numbers, names, addresses, phone numbers, and emails, will be safe from stolen (Natta Changchutoe, 2012: 76).

2.3.3 Channel

Channel is a media or medium that acts as a route to send message of products or services to the target customers, such as letters, radios, televisions, telephones, internet, newspapers, etc. By this, the marketers have to choose the media or select the communication channels that are capable of reaching the target customers (Natta Changchutoe, 2012: 76).

For the e-commerce business, the internet network is acting as a communication channel with a specific person communication advantage of capability for the instant

responses or interactions and at the same time capable to change a role of a recipient into a sender (Albert & Sanders, 2003: 48), thus the e-commerce operator must provide entire brand messages through the mentioned internet networks. Therefore, a selecting to use any specific internet network system must take into consideration of the network's speed, such as the image loading, the data searching, the result of displaying, the data storage size, the network stability, and the accommodations for a large number of customers at the same time without troubles. The system has also been designed to implement required applications or easy and convenient process to the customers, time saving of data search, ordering and business transactions. The system are possessing of the backup as well as the interactive system, for instance, the automated system will immediately forward e-mails to the customers when orders are received or emails response to the customers every time, there is a subject posted by a customer on the website.

2.3.4 Receiver or Target Audience

Receiver or target audience is the customer who is responsible for encoding a brand message communicated by the marketer. The messengers must take into account of the perceptions, original beliefs, and experiences of the receivers. The marketing communicators must always remember that the brand message encoding of each customer may be different. Since each and every customer may have received dissimilarity of brand's news, previous experiences or brand's knowledge, as such, resulting in some target audience's distortion of encoding or interpreting from that of the marketers' needs (Natta Changchutoe, 2012: 76).

Patchanee Cheyjunya, Metta Vivatananukul, and Tiranan Anawushsiriwongse (1998: 13) have been saying that human communication generally takes place with the consisting of interaction between two or more people. Communication is only possible when both, the receivers and the sources, are in shared social environments or having some shared experiences that are able to understand the meaning of shared symbols. In addition to have a common share of experiences, the more or less effectiveness of the communication between the sources and the receivers in the e-commerce business will depend on demographic, socio-cultural influences which comprise of families, friends, social classes, age groups, economic statuses, cultures, and psychological factors which

are defined by perceptions, motivations, personalities, attitudes, and emotions of the sources (Smith & Rupp, 2003: 421).

2.3.5 Feedback

In marketing communication, a reply may mean either purchase or not purchase; however, the response measurement of marketing communication does not always need to be a purchase. To obtain attentions, requests of product samples, calls for more information about the product, from the customers in product demonstrations, all of these are considered as positive results in marketing communication (Natta Changchutoe, 2012: 77).

Jennifer (2001: 210) has said that the measurement of marketing communication for e-commerce businesses can be accounted by the number of traffics, visit durations, visits or purchases, catalog sizes, sale values, number of users, as measured by the number of registered user accounts.

2.3.6 Noise

In marketing communication, noise is whatsoever that results the negative effects on the interpretation of the message that the business organization has sent to the target audience, such as the communicated message is too clutter, message conflict or inconsistency. In message communication, this noise will confuse the customers and finally fail the marketing communication (Natta Changchutoe, 2012: 77).

To be succeeded in marketing communication of e-commerce business, the operators, the marketing communicators, or the website owners should focus on the elements of marketing communication which comprise of source, message, channel, receiver, feedback, and noise (Natta Changchutoe, 2012: 80), due to the fact that each and every element of communication influences in creating perceptions, satisfactions with products and services, trust, and the online shopping behaviors and eventually customer loyalty.

In addition, Clow and Baack (2004: 358-359) have presented the marketing communication techniques to gain customers' interest in buying products from the website as follows;

1) A website should be set for business objective strategies, such as to sell products, to present information, to earn from advertisements, and to communicate marketing in a consistent direction as well as to support business strategies and the objectives in organizing a website.

2) A website should be designed to be easy to use either its message of presentation or its site structure should be organized in form which enhances well comprehension and easy usage to the customers who visit the site.

3) A website should be designed for speedy download whereas the amount of messages per page may be sorted with appropriate number of images, sizes of file so that the customers will not spend too much time in downloading the website.

4) A website should have the using of concision words and sentences to communicate through and the language used must suit the tastes of the target audiences including correct letters, grammatical spellings both in Thai and English.

5) Message delivered through the website is a core success in marketing communication with the customers, as such, the illustrations used in the website should not be in the irregular patterns or unpleasant to the eyes. Since the message presented through the website is capable in building credibility for the website, therefore, the site should be designed attractively and professionally in order to strengthen the website image, also, with carefulness in submitting message that may cause negative impacts on the website and the business.

6) Images, photos, or graphics used on the website to communicate with the customers must be attractively distinct and support or supplement the main information in marketing communication to be more eminent.

7) The marketing communication must be contributed in various ways, such as in advertising, public relations, sales promotion, direct marketing, activity arrangements, sponsorship, relationship created with the customers, etc., in order to stimulate customers' behaviors of fast purchasing.

8) The website should be appraised in order to acknowledge customers' behaviors, purchase decision process and interests, especially in marketing communication through the website design, the message presentations, the communication channels, and the marketing promotions offered to the customers are to be strategically prescribed to promote the correct and appropriated post-marketing.

9) Existence of links should be designed on every page to make it easy in usage. For example, there are links to return on the homepage or main menu page after open to view the information on the sub-pages or links to other pages. Every page may have link connecting to each other (Pawoot Pongvitayapanu, 2007: 92).

10) A website presentation on the first page should contain with a gimmick, such as animated icons or banners made from flash programs to attack the customers' interests. Do not use animations, icons, or other gimmicks on any other pages of the website as they will be disordered and annoying to the customers.

11) A website should always be improved, updated to gain more interests, such as new products updating, added with notable up-to-date features in order to attract and to gain regular visits of the website from the customers. The frequency and duration of the website updates should be taken into account with the duration of the target audiences' site visits because some group of customers may have never been visited yet. Besides, during festive seasons or important days whereas website is expected to have more visits than usual, the customers may anticipate in modifications, so new message should be updated to reflect the festive seasons, and together, there may also be sales promotion to stimulate the customers' purchase behaviors.

Base on these engagements, this research has aimed to study the causal factors affecting e-commerce on Thai customers loyalty based on a review of the concept of marketing communication factors in the e-commerce business which I used as a guideline to determine the causal variables to be studied. The causal variables comprise of following elements; (1) Source consists of brand image (2) Message consists of information quality and product and service quality (3) Channel consists of system quality and marketing communication tools, and (4) Receiver consists of perceived value, satisfaction, and trust, whereas the studying is whether or not and how do the marketing communication factors mentioned above affect on customer loyalty towards e-commerce.

2.4 Brand Image Concept

2.4.1 Definition of Brand Image

Rujiphat Rueangthatriphong (2006: 22) has defined that brand image is a subjective knowledge that the customer effectuates to interpret and gives the meaning of the brand products or services until an image imprints in the minds of customers. The same brand image in each customer's mind may be varied according to the different brand experience received.

Manit Rattanasuban and Somruedee Srichanya (2011: 45) have defined that brand image is the picture and feeling of the brand products or services embedded in the mind and influences the customers' purchasing decisions.

Reynolds (1965: 50) has explained that brand image is created from the customers' impressions toward certain brands which is the result of the marketing activities of the business organization. Customers will select prudently before imprint the meaning of brand in their minds.

Reynolds and Gutman (1984: 29) have explained that brand image has a personal and social meaning to the customer that makes the brand different from the competitors.

Aaker (1991: 160) has given the meaning that brand image is everything about brand that has linked with the customers perceptions.

Keller (2013: 6) has given the meaning that brand image is a customer perception towards brand product or service as a result from the linkage of brand data which are kept in the customers perceptions.

Cowley (1996: 31) has explained that brand image is all the impressions engage in the customers on brand and link whatever about brand either in terms of relevant usage or irrelevant usage created in the customers' minds.

Worcester (1997: 147) has given the meaning that brand image is an image that occurs in the customer's minds about the product, brand, or trademark that the business enterprise produces and sells into the market to compete with other brands.

Randall (2000: 26) has explained that brand image is an existence in the minds of customers. It has been all data about the brand that the customers perceive from experiences, words of mouth, advertising, packaging, and other services. All of these

have been modified based on the customers chosen perceptions as their beliefs, social practices which may not be in line with the organization's expectations. However, these are all existing perceptions within the customers and the organizations must have persistently developed.

Uggla (2002: 41-42) has defined the meaning that brand image is the holistic representation of ideas, beliefs, and impressions that the customers engage on how their brands, organizations, or products and services are.

Kapferer (2004: 51) has explained that to be on customer's side, a brand image must depend on imaginations related to products, brands, and countries of the customers who will encode the symbols sent from the brand through the products, services, and marketing communications.

Magid and Cox (2006: 6) have explained that brand image is a customer's response to the brand's name or trademark. Impression on the brand or brand image also symbolizes the quality of the product. The brand image consists of assets and liabilities as a matter of fact that it is capable to increase and to decrease the value of business organizations through the customers' satisfactions in the product quality or service.

Robert and Patrick (2009: 352) have explained that most of the brand images arise from the perception interpreted through reasons and consequences or the customer's sensations. Brand image, therefore, influences marketing programs including the personality of the customers.

Kotler (2009: 107) has explained that brand image is a picture of any particular brand or trademark existing in the mind of customers. Even multiple brands from the same company, they do not necessarily own the same image as a matter of the uniqueness of the brand image. In general, business organizations need to differentiate their brands from others.

From all the meanings mentioned above, I have concluded that the brand image refers to the picture of brand that appears in the customer's mind which has been affected by the perception of various information of the brand and provide the brand meaning through rationality or sense to seclude the differences of that brand from others. The same brand image in the mind of individual customer does not need to be the same whereas this research refers to the brand image of e-commerce business.

2.4.2   Element of Brand Image

In this research, I have studied the brand image of e-commerce business in Thailand by approaching the concept of Supparerk Pothipairatana (2010: 9-11), which deals with the organizational elements that play an important role in building the image with the adaptation of Kotler and Barich's image conceptualizing factors (1991: 96-97). Furthermore, I will draw upon the three key elements in creating an e-commerce brand image which could be summarized by followings these:

2.4.2.1 Reputation is a business leadership, credibility, and specialization as well as financial stability, success and popularity.

2.4.2.2 Good Management is a professional executive team, ability to develop new quality products and attractive marketing plans, efficacy management systems including input of innovational operations (Amnuay Viravan, 1997: 92; Keller, 2013: 18).

2.4.2.3 Law and Ethics is lawfulness and holding on moral and ethics principles in conducting business, honest and not exploiting on the customers and the society as well as responsible for the impact of the business (Amnuay Viravan, 1997: 92; Phot Jaichansukkit, 2005: 61; Porntip Pimolsin, 2009: 102-103; Suthiluck Vungsuntitum, 2007: 66).

2.4.3   Importance of Brand Image

Brand image is one of the important causal factors on customer loyalty (Fournier & Yao, 1997: 466; Jacoby & Chestnut, 1978: 74; Oliver, 1999: 463; Worcester, 1997: 146). As Fournier and Yao (1997: 454) have stated that the business of an organization tends to aim in creating and maintaining customer loyalty to brands, products or services. Customer loyalty is the result of how the brand perceptions in products or services are notably different from other competing brands of the same products or services in the market. This brand image will lead to a purchasing decision as well as continue to build loyalty on the brand of products or services.

In this sense, business owners must create a positive brand image in the minds of customers in order to obtain competitive advantages and market shares as much as possible because brand image influences buying behaviors and customers' loyalty (Aaker, 1991: 177; Keller, 2013: 19; Koo, 2003: 63). If the brand image is well

managed, it will assist the business to earn profitability from more loyal customers (Kotler, 2009: 110).

Aaker (1991: 162-170) has added that brand image arises from the brand association within the mind of the customers. This brand association is the basis for customers' buying decisions and brand loyalty. Loyalty derives from brand image or brand perception which is in customer's mind; for example, the linkage of product quality and product benefit to customer's attitude towards brand (Keller, 2013: 21-25).

In addition, brand image is a factor influencing customer's brand satisfaction towards the brand. This satisfaction is subject to occur after the customers perceptions or experiences with a brand. When the customers are satisfied with the brand, it will lead to repurchase and positive words of mouth about the brand to other people (Aaker, 1991: 27; Dobni & Zinkhan, 1990: 113; Keller, 2013: 7), because usually customer satisfaction is a result of brand image acceptance of each customer (Elliott, 1997: 286; Jamal & Good, 2001: 489).

Brand image either positive or negative, is entirely psychological influencing on customer behavior. A good image brand will be well supported by the customers. If the customers are satisfied with the products or services by obtaining of message or good experience with those products or services, trust and brand loyalty will be built. The customers will not seek for substitute products or services, need to know or find new information about another brand's products or services though the benefits offered are better. Therefore, brand image is essential to the success of both short-term and long-term business (Kotler, 2009: 108; Panida Sukhumjariyapong, 2013: 20-21).

Badenhausen (1996: 57) has said that a strong brand image is a motivator for brand satisfaction. Each brand has to create a different image in order to motivate customers to be more satisfied with its brand than the competitors (Fournier, 1998: 355; McFadden, 1986: 284). Brand of products or services are likely to gain more market shares than the competitors in a competitive market environment, when they acknowledge customers' needs and are able to accomplishedly deliver products or services in accordance with that needs. Business owners are required to manage customer's feeling that their brands engage a different image and are a better choice than the competitors, create customer satisfaction, drive decision to purchase product

or use the service, until the customer finally becomes a brand loyalty (Hsieh, Pan, & Sentino, 2004: 256; Park, Jaworski, & McInnis, 1988: 137).

In this research, I have aimed to study whether or not and how the factor of brand image affects on customer loyalty towards e-commerce business.

2.5 E-Commerce Website Quality Concept

According to this research, I have conducted a study of website quality of the e-commerce business in Thailand based on business success measurement model of DeLone and McLean (2004) which has stated that, the quality measurement of e-commerce website consists of three quality dimensions which are information quality, system quality, and service quality as shown in figure 2.3.
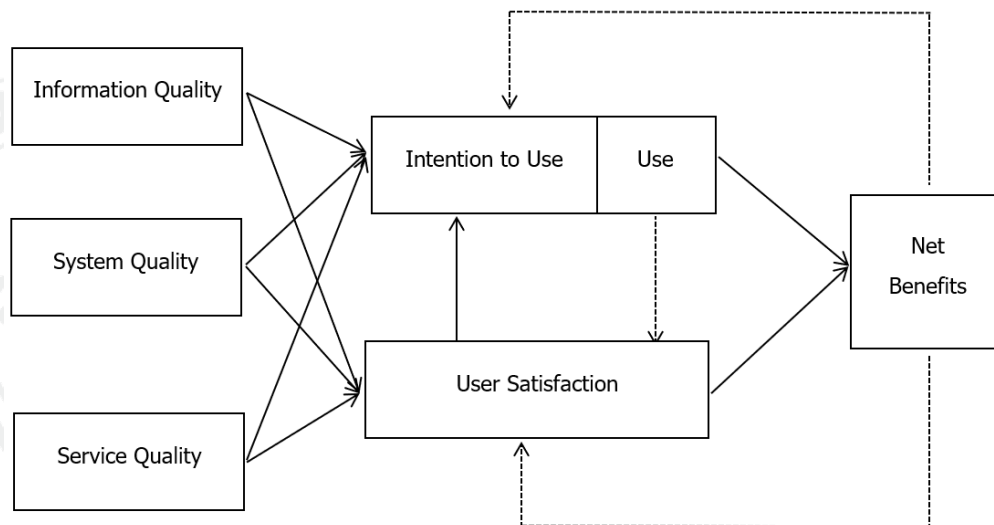
Figure 2.3   DeLone and McLean's Business Success Measurement Model of E-commerce

Source: DeLone and McLean (2004: 33)

The model component of DeLone and McLean (2004: 34-36) consists of six variables as follows;

1) Information quality refers to the message quality measurement on the website

2) System quality refers to the overall system quality measurement of the website

3) Service quality refers to the quality of service measurement of the website

4) Use refers to the purpose of customer or supplier in visiting the website

5) User satisfaction refers to the customers' satisfaction in the e-commerce website

6) Net benefit refers to the overall benefit of the e-commerce website to the customers, the business partners, the employees and the organizations

The e-commerce business success measurement model of DeLone and McLean has demonstrated that the website quality is an essential factor influencing on customer satisfaction and leading to the success of e-commerce business afterward. Whereas the success of the e-commerce business obtained in this research is customer loyalty that causes the repeat purchase through an e-commerce site and words of mouth that spreads positive information about the e-commerce site to other people.

Kanyaporn Uppathamwiphanon (2013: 6) has mentioned that in the e-commerce business, the website quality plays important role for the entrepreneurs to focus on controlling and developing since the website is like the face of business that displays credibility and business purposes. A design of the website quality should provide product required information which are product images, information, company profiles, payment processes, delivery methods, website policies, and contact channels by taking importantly into account of the clarity and adequacy of customers' needs in order to facilitate the more easiness of customers decision making in the products or services buying through the website.

Yoo and Donthy (2001: 33-34) have added that a perception of e-commerce website quality is the result of effective website system, product quality, excellent service, and credibility to the customers, including orders management. The perception of the e-commerce websites quality will enable customers' satisfaction which creates loyalty and leads to repeat purchase behavior through the same website.

As a matter of fact, the more the customers engage in the perceptions of the website quality in e-commerce, the more profits the businesses will earn (Cristobal et al., 2007: 317), because the quality of website will result in customer satisfaction and loyalty to follow (Flavián, Guinalíu, & Gurrea, 2006: 11; Shin et al., 2013: 459). They are also able to increase financial capacity of the organization which is a key to survive and eventually success of the organization (Gefen et al., 2003: 53; Kassim, Jailani,

Hairuddin, & Zamzuri, 2012: 413; Lee & Chung, 2009: 386). As Ranganathan and Ganapathy (2002: 458) have said, "in order to be successful in an electronic commerce market, the retailers need to provide a high quality websites that can attract and maintain more the buyers".

Furthermore, Saowakhon Homsut (2014: 119) has proposed an idea about the e-commerce website quality in the same direction that the website quality consists of three key elements which are information quality, system quality, and service quality whereas service quality according to the concept of Saowakhon has included of the product quality served to be sold by the e-commerce over the website as well. All these three elements of the e-commerce website influence customer loyalty to the e-commerce business which will derive only with the customer satisfaction on the products and services of the e-commerce website and perceived value on the purchase made already for that product through that e-commerce site.

The indication of Saowakhon has also shown that apart from satisfaction, perceived value is another factor that occurs with the acknowledgement of customers to the e-commerce website quality and assists in continuity of building customer loyalty to the e-commerce business which corresponds to the concept of Grewal, Monroe, and Krishnan (1998: 53) and Parasuraman and Grewal (2000: 169), who have mentioned in the same direction that the products and services quality of e-commerce website including information quality and system quality are important factors in creating perceived value and leads to customer loyalty to the e-commerce business.

By reviewing all the concepts above, I have conducted a study of factors related to the website quality of e-commerce business which consists of three factors: information quality, system quality, and product and service quality including the study of whether or not and how do these three e-commerce website factors affect on customer loyalty towards e-commerce business.

2.5.1 Information Quality Concept

2.5.1.1 Element of Information Quality

Throughout this research, I have studied the information quality of the e-commerce website by referring to the concept of Lee and Kozar (2006: 1384), which

referred to the adaptation of information system with principles of success in the website design of Jeong and Lambert (2001: 131-132), whereas I have summarized the information system of e-commerce website into four important elements as follows;

1) Completeness refers to a website which offers various information thoroughly and enough to meet the needs of customers, including product images and information, prices, terms of payment, and delivery terms, etc. (Burke, 2002: 421; Duangporn Kiangkham, 2006: 15).

2) Accuracy refers to a website which offers accurate, reliable, and beneficial information about the product to the customers (Hao et al., 2010: 302; Kim, Galliers, Shin, Ryoo, & Kim, 2012: 375; Siriwan Sereerat, Suporn Sereerat, Ong-ard Patawanich, & Parin Laksitanon, 2003: 77).

3) Currency refers to a website which always presents the current and update information (Kannika Swanpotipan, 2007: 15; Mich et al., 2003: 36).

4) Visual Appeal refers to a website which offers orderly information, such as images, text, animations, and graphics within the same direction throughout the site. This includes image sizes, font styles, colors selection, and compositions taking into account harmony and aesthetic, which could attract the customers' attentions. (Duangporn Kiangkham, 2012: 30-31; Suwit Thirakhot, 2011: 42-44; Tajzadehnamin & Etemadi, 2011: 94; Thawatchai Srisuthep, 2001: 16-17).

2.5.1.2 Importance of information quality

Information quality of e-commerce website is an important factor in creating customer satisfaction (Gefen et al., 2003: 64; Guo, Ling, & Liu, 2012: 46; Kassim et al., 2012: 415; Lee & Chung, 2009: 388). It is also a relevant factor to customer loyalty. With their perceived values of information quality on the message in the website, the customers have experience with the positive usages and feel satisfied which are the reasons to repurchase the products next time through that the e-commerce website until it develops into a long-term relationship and finally creates customer loyalty (Constantinides, 2004: 115; Wolfingbarger & Gilly, 2003: 195).

If an e-commerce business operator is capable in creating product information quality, consequently, the information would be easily compared by the customers resulting in a market competitive advantage. It has also affected the customer

satisfaction which leads to the success of the website (Lynch & Ariely, 2000: 83; Palmer, 2002: 159; Szymanski & Hise, 2000: 315).

The presentation of product information is therefore important for the e-commerce business because the product quality evaluation will affect to the purchase decision (Halander & Khalid, 2000: 613). This includes a well-established presentation of the website that will assist to present the product information at a satisfactory level when the customers visit the website. This attractive and appropriate presentation format enables the customers to understand the information clearly which will greatly influence in buying decision and eventually resulted in loyalty to the e-commerce website (Huizingh, 2000: 129).

The structural design and layout on e-commerce website including the presentation of quality information and the required details about the product offered for sale, will affect to the customer satisfaction and the purchasing behavior through the e-commerce website (Hong, Thong, & Tam, 2004: 488; Kim & Lennon, 2008: 173). In particular, the detailed information presentation of the product will improve the capability of customers to information process and purchase decisions (Mu & Galletta, 2007: 116).

In addition, the evaluation of information quality of e-commerce websites is also considered as a key factor in creating perceived value which is a perception value of customers to the e-commerce websites which will further lead to customer loyalty (Kassim & Abdullah, 2010b: 357; Lee & Lin, 2010: 359). As a matter of fact, the website designed with information quality to the customers will create perceived value through the website purchase and lead to easier buying decision (Lederer, 2000: 277; Wang et al., 2011: 52).

The information quality and series of component will enhance the overall quality of the e-commerce website which will result in the perception and behavior of customers, especially the accurate and fully covered information to suit the needs of customers (Aladwani & Palvia, 2002: 458; Huizingh, 2000: 128; Liu & Arnett, 2000: 23). The presentation of information quality on the e-commerce website will lead to a positive perception of customers on the website which stimulates buying behaviors and increases more purchase scales of the customers. Since the customer receives worthwhile information, the searching time for additional information to make a

purchase decision through the e-commerce website will be less (Alba et al., 1997: 40; Geyskens, Steenkamp, & Kumar, 1999: 233).

As a way of doing this, I have aimed to study whether or not and how the factor of information quality affects on customer loyalty towards e-commerce business.

2.5.2   System Quality Concept

2.5.2.1 Element of System Quality

In this research, I have studied the system quality of the e-commerce website based on the concept of Molla and Licker (2001: 133-134), which has described three principle elements of the e-commerce system quality as follows;

1) Security and Privacy refers to a website with security and privacy policy (Hao et al., 2010: 301; Kassim & Abdullah, 2010b: 358; Lee & Kozar, 2006: 1386; Liu & Arnett, 2000: 25) by displaying the notification of its security policy on the website in order to create confidence in payment methods and also the notification of customers' privacy policy contributed to confidentiality awareness that the website will not provide personal data, such as name, address, telephone number, email, credit card number, etc. to other parties or to be stolen (Natta Changchutoe, 2012: 76; Zeithaml et al., 2002: 364).

2) Convenience refers to a website with structural and componential design which enhances convenient usage. There is a decent guidance or navigation system which enables an easy learning on first time visit and how to use various icons on the webpage with a recognition of how to and functional use when revisiting after a period of absence (Kannika Swanpotipan, 2007: 17; Nah & Davis, 2002: 99; Suwit Thirakhot, 2011: 43). In addition, it is also an easy accessible website by an easy-to-remember name and the customers are able to access through many channels, such as desktops or laptop computers, smartphones, tablets, etc., with the design of required applications in order to facilitate conveniences on ordering and processing business transactions (Natta Changchutoe, 2012: 76; Pawoot Pongvitayapanu, 2004: 38; Pisek Chainirun, 2008: 20; Saowakhon Homsut, 2014: 21).

3) Speed refers to a website with various data display instantly to serve the customer's needs which has time saving in searching process for products information

and process of making an internet purchase. The customer may connect to the website and search for information and at the same time return to some other pages within the website rapidly (Albert & Sanders, 2003: 48; Saowakhon Homsut, 2014: 21; Seksun Saiseesod, 2006: 36). This includes functional stability of the website network which is the ability to handle a large number of users at the same time, with no problems of frequent website crashing (Natta Changchutoe, 2012: 76).

2.5.2.2 Importance of System Quality

System quality of e-commerce website contributes to the customer's perceived value. With the easy accessibility to the website as fast as they can to find the information needed and the feel of secured system, the customers would achieve confidences to purchase through the e-commerce websites repeatedly (Bridges & Florsheim, 2008: 310; Overby & Lee, 2006: 1164; Suwit Thirakhot, 2011: 44).

The efficient security and privacy policy of the e-commerce website is one of the website system elements that affects the customers' purchasing behavior. If the customers have no confidence in the e-commerce website's security and privacy policy, it is very difficult for the possibility of perceived value to lead to purchase decision and loyalty to the e-commerce website (Kassim & Abdullah, 2010b: 358; Zeithaml, Parasuraman, & Malhotra, 2002: 366).

In addition, system quality of the website also has affected to the satisfaction of customers (Brown & Jayakody, 2008: 171; Gefen et al., 2003: 64). Design of an effective website system, ready to be used or the benefit maximizing is based on the desire to increase the level of satisfaction for website users to revisit and to use the service afterward (Seksun Saiseesod, 2006: 17).

Website design that promotes user's ability to learn and to recognize the use of tools and components on the website will contribute to a positive users' experience for the website (Kannika Swanpotipan, 2007: 18). This includes the e-commerce websites with friendly design for the use of the customers which will lead to the customers' satisfaction and encourage more repeat buying behaviors through the websites (Constantinides, 2004: 116; Flavián et al., 2006: 9).

The ease of use is an important element favors to the customers understanding of the product information and facilitates the product purchase easily (Chau, Au, & Tam,

2000: 4), which will affect the satisfaction and the repeat purchase through the same website of the customers (Chau et al., 2000: 4; Hong et al., 2004: 490; Kim & Lennon, 2008: 153; Nikhashemi, Paim, Yasmin, & Yousefi, 2013: 47; Schlosser, Barnett-White, & Lloyd, 2006: 139).

In this research, I have aimed to study whether or not and how the factor of system quality affects on customer loyalty towards e-commerce business.

2.5.3   Product and Service Quality Concept

2.5.3.1 Element of Product and Service Quality

By investigating this, I have conducted a study of the product and service quality of the e-commerce website by adopting the concept of Ribbink, Van Riel, Liljander, and Streukens (2004: 451-453), which deals with the component of product and service quality of e-commerce website and applying to the concept of excellent service quality of Theerakiti Navaratana (2004: 183-186), therefore I have summarized the website service quality into three key components as follows;

1) Customization refers to a website which makes the customers feel that the sellers or the website owners can meet their needs by offering the quality and variety of products with good reasonable price and range to choose from (Kauffman & Wood, 2000: 64-65; Kitti Siripullop, 2001: 38-39; Sirilak Rotchanakitumnuai, 2002: 109) including fast delivery services according to specified time (Mich et al., 2003: 37; Pisit Pipatphokakul, 2006: 65; Semeijin et al., 200: 183), and customizes the services to meet specific needs of customers, such as welcome messages that display the user name, list of recommended products, etc. (Natta Changchutoe, 2012: 75; Schrage, 1999: 21; Shostak, 1977: 74; Siriwan Sereerat, Suporn Sereerat, Ong-ard Patawanich, and Parin Laksitanon, 2003: 79).

2) Assurance refers to a website that provides a message contributing to customer credibility in buying products through the website (Turban et al., 2004: 28). The message consists of age on the website, the buyer statistics, the website visitors, the sellers or the website owners contact channels, such as address, telephone number, email address, etc. including the terms of product quality assurance (Liu & Arnett, 2000: 26; Natta Changchutoe, 2012: 73; Smith, 2001: 140).

3) Responsiveness refers to a website that manages to meet the customer's needs rapidly and well assists with a channel to interact with the customers in order to provide information services and solve problems (Chang, Wang, & Yang, 2009: 426; Kassim & Abdullah, 2010b: 357; Konkanok Chubwangvapee, 2013: 18; Parasuraman, Zeithaml, & Berry, 1985: 42), including the after sale services, such as the customers notification as soon as the delivery is made, etc. (Bolton & James, 1992: 61; Poleretzky, 1999: 76).

2.5.3.2 Importance of Product and Service Quality

Product and service quality affects the perceived value of products purchase through the e-commerce website and encourages the customers in easier purchase decision (Alba et al., 1997: 43; Kim et al., 2012: 379). The more engagement level of the customers in perceived value of the products and services quality on the e-commerce website, the higher engagement level of the customer in customer loyalty (Bitner, Bernard, & Mary, 1990: 73; Boulding, Ajay, Richard, & Valarie, 1993: 9; Kelley, Scott, Douglas, Hoffman, & Mark, 1993: 438; Rust & Zahorik, 1993: 204).

When the customers receive efficient products and services from the e-commerce website and engage with the impression, these will result in the perceived value of the purchase through the website and the tendency of revisit (Ribbink et al., 2004: 446; Srinivasan, Anderson, & Ponnavolu, 2002: 42; Tsai & Huang, 2007: 232), which corresponds to the suggestion of Semeijin et al. (2005: 184) that have mentioned that the product and service quality and perceived value are important factors contributing to customer loyalty to the e-commerce business.

In addition, the product and service quality also affects the customer satisfaction on the products and brands (Gummerus, Liljander, Pura, & Van Riel, 2004: 177; Kotler, 2009: 101; Lee & Chung, 2009: 388; Spechler, 1988: 46), as Lee and Lin (2010: 361) have mentioned that the perceived value of product and service quality on the business will accommodate a positive impact on the purchase intention and the customer satisfaction.

Jamal and Anastasiadou (2007: 405) have added that the product and service quality is a factor leading to the satisfaction and further the effect on the customer loyalty of the business enterprise. Entrepreneurs need to adjust their marketing

strategies of not only selling the products, but also paying special attention to the services because the product and service quality is a key to obtain long-term profits for the business as well. The decent product and service quality will lead to the customers' satisfaction and when the customers are assured that the product they are purchasing provides a better service than others, the purchase decision will then be easier especially the former customer will have to repurchase or more purchasing without hesitation as well as introducing new customer to the business (Danai Thieanphut, 2002: 13; Gronroos, 2000: 109; Smit Sachukorn, 2007: 28).

For the e-commerce business, Zeithaml et al. (2002: 365) have suggested that they need to focus on the product and service quality in order to motivate repurchase and to build customer loyalty (Kahn, 1998: 47). This is in line with Chang et al. (2009: 434), who have stated that the product and service quality is crucial to the success of the e-commerce business and capable to achieve the customers' satisfaction.

Vedadi, Kolobandi, and Khazaei (2013: 454) have said that creating a service model over an e-commerce website is to be corresponded of customization which will affect in loyalty of the customers. The tailoring of website to suit the need of individual user will enable user's satisfaction and familiarization in the website layout. As a result, the repurchase of needed products through the website will continue with desire to purchase the products through the website in the future (Pawoot Pongvitayapanu, 2004: 46).

By examining this, I have aimed to study that whether or not and how the factor of product and service quality affects on customer loyalty towards e-commerce business.

2.6 Perceived Value Concept

2.6.1 Meaning of Perceived Value

Many scholars have defined the meaning of customer perceived value as follows;

Dodds, Monroe, and Grewa (1991: 311) have defined that perceived value is the perception of customers about the benefits they obtain from the business

organization and the comparison of monetary and non-monetary costs which the customers use in exchanging with the business organizations.

Sheth, Newman, and Gross (1991: 27) have explained that perceived value is applied from the value of a product or service in the customer's perspective. The perceived value is something customers' need from a product or service which includes the quality the customer received at the paying price and covers the emotional value and the environmental as well.

Bhat and Reddy (1998: 36) have defined that perceived value is the customer's value acknowledgement with the business organization which consists of intangible value: reputation and feeling, and tangible value: comfort, quality, and price.

Sinha and DeSarbo (1998: 144) have defined that perceived value is the exchange of price and benefit or quality that the customer receives from the products or services.

Zeithaml (1998: 6) has defined that perceived value is the valuation of the products or services including benefits based on the perception of what the customer receives compared to expenses.

McDougall and Levesque (2000: 395) have explained that perceived value occurs when the customer compares the benefits with the price paid. These perceived benefits may be varied depend on the circumstances and individuals: each and every customer may perceive the value of the same product or service differently.

Eggert and Ulaga (2002: 108) have explained that perceived value consists of two parts: the first part is benefits which cover economic, social, and other related aspects. Another part is wastes which include price, time, effort, risk, and convenience.

Azaddin (2004: 649) has explained that perceived value is the perception of benefits customer receive from the business organization either tangible properties or intangible properties, by comparing to the payments, either financial factor or non-financial factor, such as time, effort to access products and services, etc.,

Vedadi et al. (2013: 455) have defined that perceived value is the customer perception towards products or services by comparing the benefits to the expenses that have been spent.

From all the definitions mentioned above, I have concluded that perceived value means evaluating the value of a business organization from customer perspective by comparing the benefits that the customers receive from the business organizations

which consist of tangible properties, such as product and service quality, convenience, price, etc., and intangible properties, such as reputation, emotion, etc. These all are to be considered in comparison with the expenses spent to the businesses which comprise of financial factor and non-financial factors, such as time, risk, and effort to access products and services, etc.

2.6.2 Element of Perceived Value in E-commerce Business

In the e-commerce business, the purchase of products over the website has created two types of customer perceived value: utilitarian shopping value and hedonic shopping value. In one customer, both types of value can be perceived. But which value will be more appreciated depends on the individual characteristics as each and every customer has different experiences on the purchase of products or services (Babin & Darden, 1995: 53; Gefen, 2000: 729; Saowakhon Homsut, 2014: 31; Scarpi, 2012: 56) with details as following;

2.6.2.1 Utilitarian Shopping Value

Utilitarian shopping value is a perceived value of customers who have behaviors in finding information before making a decision to purchase and own a habit of target shopping (Babin et al., 1994: 647; Janiszewski, 1998: 294; Scarpi, 2012: 54). The purchase would be planned in advance with the intention to collect information of products that the customers' require (Kim et al., 2012: 379; To et al., 2007: 778), and with the need of speedy information search about a product before making the purchase (Jone et al., 2006: 977; Overby & Lee, 2006: 1162).

Saowakhon Homsut (2014: 32) has introduced the concept of the e-commerce business "utilitarian shopping value" which consists of three main characteristics as follows:

1) Selective purchase refers to the selective product information searched by the customers in order to buy a certain product only. These products must possess the price and quality as prescribed.

2) Definite purchase goal refers to the customers who visit the websites in order to purchase the products they need only and complete the purchase transactions.

3) Speedy information search is required before deciding to make a purchase. The customers need to find information rapidly in order to save time on data seeking.

A successful e-commerce business is engaged with the customer's utilitarian shopping value type as it is the key factor contributing to the customer satisfaction (Carpenter, 2008: 359; Chiu et al., 2010: 772), and the customer loyalty (Chiu et al., 2010: 773; Kim et al., 2012: 379; Kuan et al., 2008: 6; To et al., 2007: 780).

In addition, the utilitarian shopping value in the e-commerce business occurs from the previous purchase motivation of the customers, therefore, it leads to a visit intention in browsing through the website and collects information about the product which finally engages in a decision to purchase and repurchase (Babin et al., 1994: 647; Bridges & Florsheim, 2008: 311; To et al., 2007: 778). By this, the customers will evaluate the quality of the product in comparison with the price before making a purchase decision (Overby & Lee, 2006: 1162), and the need to ease the use in order to save time on shopping through the website providing that the e-commerce website is able to offer information and facilitates the customers with satisfaction until they decide to engage in repeat purchasing behaviors in the long run.

2.6.2.2 Hedonic Shopping Value

Hedonic shopping value refers to a perceived value of the customers who have the survey search behaviors with a habit of purchasing products without goals or plans before. The needs of browsing for product information are for enjoyment or avoiding from routine or daily life with a purchase that is triggered by the external stimulation (Babin et al., 1994: 648; Janiszewski, 1998: 295; Scarpi, 2012: 56).

In the e-commerce business, the hedonic shopping value comprises of three key elements as follows (Jone et al., 2006: 978; Kim et al., 2012: 380; Overby & Lee, 2006: 1163; Saowakhon Homsut, 2014: 33; To et al., 2007: 780);

1) Enjoyment: Customers enjoy themselves when visiting the website for product information

2) Escape from everyday life: Customers feel the leaving from everyday life while visiting the website for product information

3) Excitement: Customers are excited when they shop through the e-commerce website

E-commerce business will be successful with customers' hedonic shopping value as its value is a key element contributing to the customer satisfaction (Chiu et al.,

2010: 775; Deng & Marshall, 2010: 721) and the customer loyalty (Kim et al., 2012: 380; To et al., 2007: 9).

In addition, the hedonic shopping value in the e-commerce business focuses on the customers with data survey behaviors who browse through the website and purchase products in order to achieve their own enjoyment with the purchase decision which is triggered by the external stimulus (To et al., 2007: 780). In the event that the e-commerce business engages more of this customer segment, it will generate great profits to the corporates (Sorce et al., 2005: 126). As a matter of fact, the hedonic shopping value is an important factor that creates the customer satisfaction (Gupta & Kim, 2009: 28; Kuan et al., 2008: 9) and leads to the e-commerce website visiting and repurchase decision through that website in the future which renders a group of loyal customers (Babin et al., 1994: 648; Bridges & Florsheim, 2008: 311; To et al., 2007: 783).

In this research, I have examined Thai customer's perceived value of e-commerce business by considering customer's utilitarian shopping value which offers the perception of convenient usage and time saving in searching for information and purchasing through the e-commerce website, and the hedonic shopping value which offers a sense of enjoyment and escape feeling from everyday life while browsing through the product information in the website including a feeling of excitement when selecting to purchase the product through the e-commerce website.

2.6.3   Importance of Perceived Value

Perceived value is an effective key element that influences on the customer loyalty (Azaddin, 2004: 553; Dodds et al., 1991: 311; Gommans et al., 2001: 46; Gremler & Brown, 1999: 277; Semeijin et al., 2005: 188; Tsai & Huang, 2007: 238; Vedadi et al., 2013: 457; Zeithaml, 1998: 7). As Brotherton (2004: 955) has concluded that, perceived value is an effective key element in success the business organization by referring to a study result of success factors of low-cost hotels in England which found that the hotels' perceived value has resulted in the customer loyalty. Furthermore, Gommans et al. (2001: 56) have presented the idea that perceived value is a key element of a success online business alike the offline marketing of products or services. As a result, the determined strategies to achieve perceived value of e-commerce business

and contribute to purchase behavior and customer loyalty will depend on the type of business, the customer needs, and the marketing situation at that time.

There are many scholars who have proposed the concept of perceived value that it is related to the customer satisfaction. In other words, the occurrence of perceived value accomplishes the customer satisfaction and the customer satisfaction will result further to trust (Chen, 2012: 205; Kassim et al., 2012: 414; Kim et al., 2012: 376; Namasivayam & Guchait, 2013: 187). This concept has corresponded to Woodruff's (1997: 143) who has stated that "customer satisfaction without the accomplishment of customer's perceived value is almost impossible to achieve as the brand then fails to meet the expectations of customers".

Ashton, Scott, Solnet, and Breakey (2010: 212) have said that brand image perception and the product and service quality received including the awareness of the paying price, will affect the evaluation of perceived value in the customer's perspective and the promote satisfaction, whereas Eggert and Ulaga (2002: 108) have further explained that key basic element of perceived value is the product and service quality, which provides differences in competitive advantages and it is difficult for the competitor to imitate (Roig, Garcia, Tena, & Monzonis, 2006: 270). However, even the customers have received excellent product and service quality, if they feel that it is overpriced, a low valuation of the products and services may be assessed by the customers. Valuation of products and services is unnecessary to be inexpensive. If such products and services provide the customer's sense of value for money paid whether the price is high or low, it can create the customer satisfaction.

Anderson and Srinivasan (2003: 136) have proposed that perceived value is a factor that affects the loyalty by passing through the customer satisfaction factors. Also, perceived value and satisfaction are all controllable factors to the business organizations. If a business organization is able to accommodate the customers' perceived value at a considerable level to satisfy customers with the product, it will accomplish in repeat purchase decision and long-term loyalty to the organization.

The customer's received value from the business will affect the perceived value which has a positive impact on the customers' satisfaction and loyalty (Chitty, Ward, & Chua, 2007: 565; Ekinci, Dewes, & Massey, 2008: 61; Heskett, Sasser, & Schlesinger, 1997: 112). The recognition of perceived value will directly affect the

customer satisfaction; this is depending on the customer perceived value that derives from experiences or product and service quality. Consequently, customer satisfaction will lead to loyalty and repeat purchase intention in the future (McDougall & Levesque, 2000: 403).

Han, Back, and Barrett (2009: 569) have mentioned further with the reference based on the results of the hotel business study that when the customers interact and receive some benefits from the business organizations, tangible and intangible, which covers the facilities inside either the rooms or the hotels, the quality of food and dining rooms including the staff service quality, the post-evaluation of the customers will assess the quality of the products and services received from the hotels, comparing to the cost paid which leads to the perceived value of satisfaction and loyalty to the hotel business.

It has also found that the perceived quality, the perceived value of products and services, and the customer expectation are positive direct effects on the customer satisfaction and at the same time the customer satisfaction has resulted in positive or negative impact on the customers' complaint as well as the customer loyalty to the products and services (Thailand Productivity Institute, 2008: 58).

Tossapol Ramingwong (2008: 56-58) has mentioned that in the United States, there has been a development of tools since 1994 to measure the customer satisfaction at the macro level namely "American customer satisfaction index (ACSI)" by professor Claes Fornel, University of Michigan, United States. This tool of customer satisfaction index measurement will reflect the efficacy of a business organization in terms of demand side. The mentioned tool consists of three factors that affect the customer satisfaction and consequently resulting in the customer loyalty;

1) Perceived Quality refers to the evaluation on the effectiveness of products and services based on the actual customer experiences

2) Perceived Value refers to the comparison customers making between the quality of products and services with the prices set

3) Customer Expectation comprises of expectations prior to buying of products and services, future delivery quality, and post-delivery care.

In this research, I have aimed to conduct a study that whether or not and how the factor of perceived value affects on customer loyalty towards e-commerce business.

2.7 Concept and Theory of Satisfaction

2.7.1 Meaning of Satisfaction

Satisfaction has been defined by several scholars as following;

Smit Sachukorn (1999: 18) has defined that satisfaction refers to a level of customer sentiment resulting from the comparison of what they have received and what they have expected. The customer satisfaction level is the difference between products and services received and the expectation on each brand.

Uthaipan Sudjai (2002: 7) has described that satisfaction refers to one's feeling or attitude towards something probably in a sense of overall evaluation of the feeling or the attitude towards that something in either positive or negative way.

Siwarit Pongsakornrungsilp (2004: 338) has defined that satisfaction refers to a contentment with the purchase of products or services. This satisfaction is resulting from a comparison of the differences between the customer perceived value and expectation.

Piyada Sukthong (2011: 28) has given the meaning that satisfaction refers to a positive feeling of a person towards something which meets his/her expectation.

Engle, Blackwell, and Miniard (1995: 259) have described that satisfaction refers to the overall satisfaction the customer receives from products or services. This satisfaction will accomplish when the customers receive products or services that sufficiently serving their needs and expectations. The owner of a product or service must satisfy the customer as much as possible in order to achieve customer re-consumptions and spread word-of-mouth to their intimates.

Olsen and Johnson (1997: 91) have explained that satisfaction is an overall perception and feeling that achieve within the mind of customers after the use of products or services.

Howard (1998: 41) has explained that satisfaction means that the products or services has achieved expectation of the customers and will result in future purchasing decisions. If any business organization fails to satisfy the customers, that business organization is regarded as an unsuccessful in its operation.

Assael (2004: 113) has explained that satisfaction is the customer's overall attitude towards products or services. This satisfaction can assist to reinforce positive

attitudes towards one brand over another and it could lead to repurchase of that particular product or service.

Gustafsson et al. (2005: 214) have explained that customer satisfaction is a consequence of the difference between the customers' expectations and what has been received. If the customers receive what they need and what they have received meets their expectations, the customers will then be satisfied.

Kotler et al. (2006: 67) have described that customer satisfaction accomplished when the overall receiving of the customer is more than the achieved expectation and will result in repurchase in the future.

Kim et al. (2011: 258) have given the meaning of satisfaction that it is a sense of customer's right decision including overall satisfaction with the products or services received.

Shin et al. (2013: 456) have explained that satisfaction is a feeling of customer who feel that they have made correct decisions as well as the feeling of being smart in deciding to choose the products or services of any particular brand. This includes the comparison of a brand to another has rendered them more satisfactions.

From all descriptions mentioned above, I have concluded that customer satisfaction refers to a feeling of making right decision. It accomplishes when customers obtain products or services that have achieved expectation together with an overall satisfaction of the customers over the products and services of a particular brand more than another.

To elaborate, this research is a study of Thai customers satisfaction with e-commerce business considering on the customer satisfaction with a feeling of making right decision in terms of sensing a right choice in purchasing products through an e-commerce website whereas the benefits of products and services on the e-commerce websites are as expected with total satisfaction. In the overall picture, the customer feels satisfied with the purchase including the products and services of a particular e-commerce website more than another.

2.7.2 Importance of Satisfaction

Bloemer and Kasper (1995: 313) have suggested that the customer loyalty must base on satisfaction with the products and services they have received. Satisfaction is

then, one of the important factors affecting on customer loyalty of products and services as well as assisting to generate a great amount of profits for the business organization in the long run (Bearden & Teel, 1983: 22; Bloemer & Kasper, 1995: 313; Dick & Basu, 1994: 102; Jamal & Anastasiadou, 2007: 399; Oliver, 1997: 35; Sawarak Laicharoenwong, 2013: 22).

Chuenjit Changchenkit (2001: 89-90) has mentioned that the behavior of satisfied customer is like a flag of loyalty and can survive the business organizations as follows;

1) Satisfied customers maintain with products of the business organizations for a longer period

2) Satisfied customers will purchase more products or services from the business organizations

3) Satisfied customers will refer with admiration to the business organizations or the products of the business enterprise to the expected and other customers. Along with some satisfied customers may step out to protect the reputation of a business organization from competitor's attacks and attempt to express their persistences on buying products or using the services of the business enterprise

4) Satisfied customers will pay the least attention to brand and the marketing communication campaigns of competitors

5) Satisfied customers will provide useful suggestions to the business organizations in order for the business organizations to use as guidelines to improve products and services to well meet the needs of the customers

6) The cost of products and services sales presentation to satisfied customer is lower than to new customer.

For the e-commerce business, the satisfied customer is a key component for a business's survival because they tend to be the loyal customers who foster the products or services of the e-commerce business in the long run (Anderson & Lehmann, 1994: 55; Cyr, 2008: 50; Fisher, 2001: 79; Srinivasan et al., 2002: 44; Zin, 2001: 271). Whereas Ribbink et al. (2004: 449) have said, "it is even more important to create the customer satisfaction online than in the offline market". Further with Anderson and Srinivasan (2003: 125) and Kim, Jin, and Swinney (2009: 241) who have given the same direction of opinion that the customer satisfaction will affect loyalty as satisfied

customer tends to spread positive words of mouth about the products and services of the e‑commerce website to other people and is more likely to repurchase which has responded to suggestions of Changet al. (2009: 436) and Lee and Lin (2010: 367) who have stated that customer satisfaction is a factor resulting in further repurchase of products and services which earns profits and market shares to the e‑commerce business.

Therefore, e-commerce entrepreneurs need to create customer satisfaction in order to motivate the repeat purchase of products and services through the website or the spread words of mouth to nearby persons as well as assist sustaining customers in the business which will result in the success of the e-commerce business (Carpenter, 2008: 361; Engle et al., 1995: 258; Howard, 1998: 41; Panuwat Rattanadit, 2012: 12; Saengrawee Singha-ampoln, 2012: 27).

In this research, I have aimed to study that whether or not and how satisfaction factor affects on customer loyalty towards e-commerce business.

2.8   Concept and Theory of Trust

Trust is an intangible factor (Giffin, 1967: 109; Taylor, 1989: 86) and an essential key to interpersonal relationships including relationships between the customers and the business organizations (Fox, 1974: 23; Lewis & Weigert, 1985: 970). It has been found that a group of scholars have turned their attentions of study on trust from the interpersonal framework to study the trust of customer's attitudes towards brands, products or services of business organizations including in the e-commerce business (Kim & Tadisina, 2010: 421; Riegelsberger, Sasse, & McCarthy, 2003: 760).

2.8.1   Meaning of Trust

There are many scholars who have described the definition of the word "trust of customer" as follows;

Kulp Kumpabooth (2005: 12) has defined that trust means confidence given to others willingly with the consideration on that person's skill and expertise, as well as expectation that the person will not cause any damage to the trust giver.

Sakon Saechin (2009: 39) has said that trust is the expectation of a person or a group of people to express their confidence in various ways to other person or group of people that can be trusted under conditions of independence and risk.

Parasuraman et al. (1985: 43) have defined that trust is the ability to deliver products or services as promised to the customer with integrity and is an important indicator of the relationship engagement of customer towards business organizations.

Anderson and Weitz (1989: 23) have mentioned that trust is the confidence of any person that demands to be fulfilled in the future by the actions of others.

Gundlach and Murphy (1993: 38) have defined that trust is the value given from one party to the other particularly on integrity and benevolence.

Moorman, Deshpande, and Zaltman (1993: 84) have defined that trust is the willingness or consent of ones for a trustee to do what ones can actually help or do by themselves with confidence that the trustee is capable as an expertise on that.

Morgan and Hunt (1994: 23) have explained that trust is the actual condition when certain number of customer have confidence with the recognition of integrity and the beliefs that business organizations have taken into account of their benevolences.

Mayer, Davis, and Schoorman (1995: 713) have defined that trust is the willingness to take risk and the tendency of trust derives from expertise, benevolence, and integrity.

Mishra (1996: 264) has described trust that the first is a person's willingness to take risk with another person in believing that the latter is being accepted with capability and trusted for the benevolence of delivering value to his/her benefit regularly.

Stern (1997: 13) has explained that trust is the result of a customer commitment to a business organization. Whereas the business organizations should render benevolences in standing for a loss of benefit in order to maintain customer good relationship.

Kimery and McCord (2002: 66) have explained that trust is a certain situation of one's intention to accept the indecision which depends upon positive expectation of the intention and the individual satisfaction to accept that.

McKnight, Choudhury, and Kacmar (2002: 337) have said that trust is a feeling that one feels that the other party has sufficient expertise to meet his/her needs.

From all the references mentioned above, I have concluded that customer trust refers to the customer's willingness of confidence to the business organizations. In situations where risk and insecurity arise, trust will derive from the customers' perceptions of integrity, expertise, and benevolence of the business organizations in considering on the importance of customer's interest which in this research has referred to as customer's trust in the e-commerce business.

2.8.2 Element of Trust

Mayer et al. (1995: 713) have referred that trust is a result from three key elements as follows;

1) Integrity is trustworthiness (Arpaporn Watthanakul, 2012: 30) and agreeable commitment given to the party who confers trust

2) Expertise is acceptable competence skills (Lumdens & Lumdens, 2003: 27) that sufficiently meet the needs of the party who confers trust

3) Benevolence is optimum value delivered to the party who confers trust (Lee & Turban, 2001: 79), by taking importantly into account of the party conferring trust's interests and standing for the loss of benefits for the sake of good relationships with customers.

Whereas McKnight et al. (2002: 337-338) have proposed a concept of trust from customer's attitudes towards e-commerce products or services' brands in a way that the customer trust consists of three elements as follows;

1) Integrity refers to the honest disclosures of important information through the e-commerce site, with no deceptions (Siau & Shen, 2003: 92). The e-commerce business operators have confirmed the customer confidence by delivering the products and services according to the agreement made.

2) Expertise refers to the e-commerce entrepreneur who has the skill and been recognized as being able to response to the customer need (Salo & Karjaluoto, 2007: 611).

3) Benevolence refers to the promptness to assist customers with caring and giving even upon minor matters. This is to ensure that the business organizations have taken importantly into consideration of the interests of the customers (Morgan & Hunt, 1994: 23).

As a way of doing this, I have conducted a study of Thai customer's trust in e-commerce business with the consideration of the customer trust based on integrity which refers to a sense of credibility, straightforward disclosures of information via the websites with no deceptions and makes the customers feel confident to receive the products and services as agreement made. Expertise refers to the acceptable and sufficient capability to meet the customers' need. Furthermore, benevolence refers to the best value proposition to the customers by importantly taking the interests of customers into account, accommodating loss of benefits to maintain good relationships with customers, and assisting customers willingly with care though in minor matters.

2.8.3　Importance of Trust

Building a customer trust has been very important for the success of an e-commerce business (Bahmanziari, Pearson, & Crosby, 2003: 49; Chen & Dhillon, 2003: 305; Coulter & Coulter, 2002: 36; Kim, Ferrin, & Rao, 2009: 241), because trust will energize the purchase decision through the website and assist in contributing and maintaining relationships between customers and businesses in a long run and resulting in customer loyalty (Kassim & Abdullah, 2010b: 356; Ribbink et al., 2004: 449).

Reichheld and Schefter (2000: 106) have explained that trust is a key factor in retaining the e-commerce business customers in the long-term or creating loyalty to the business. If the customers have no trust in dealing online transactions with the organization, there will be no achievement of expectation in purchases and profits. Therefore, if a business enterprise needs to build a loyal customer base, trust needs to be built first. In accordance with the concept of Chaudhuri and Holbrook (2001: 84) have proposed that the customer loyalty towards e-commerce business is built on trust.

Ndubisi (2007: 100) has added that trust is an essential key factor in building customer loyalty and trust is positively correlated with customer loyalty, as concluded from a research of Cyr (2008: 70) and Kim et al. (2009: 255) which has found that customer trust is a factor related to the e-commerce website loyalty.

The customer trust in e-commerce business will cause various useful behaviors to the entrepreneurs, either agree to disclose personal information willingly or decide to purchase through the website as fast and often, including recommend positive information and convince the others to purchase through the websites they trust

(Ambrose & Johnson, 1998: 264; Mayer et al., 1995: 715; McKnight et al., 2002: 338; Rousseau, Sitkin, Burt, & Camerer, 1998: 396).

Corbitt, Theerasak, and Han (2003: 214) have mentioned that trust will help building and retaining good relationships between e-commerce businesses and customers and lead to decision to repurchase products or services through the e-commerce website. While Lee and Lin (2010: 368) have added that customer trust helps to stimulate the first and next purchase of products and services over the e-commerce website and retains customer good relationships in a long-run until that the e-commerce website eventually accomplishes customer loyalty.

Furthermore, the study related to the customer trust has found that there are many academic scholars who have proposed concepts that the customer trust is correlated to the customer satisfaction (Clottey, Collier, & Stodnick, 2008: 37; Geyskens, Steenkamp, Scheer, & Kumar, 1996: 314; Tsai & Huang, 2007: 236). As Moorman et al. (1993: 84) and Mukherjee and Nath (2003: 12) have proposed a consistent concept that trust is the result from satisfaction and trust is the causal key to further achievement of the customer loyalty.

Kim et al. (2009: 241) have explained that the e-commerce business operators need to create environments to support the customer trust in implementing online transactions and the contributed environments to trust and satisfaction are an eminent key to success. This has corresponded to the concept of Yousafzai, Pallister, and Foxall (2003: 853) who have suggested that trust is an important factor in providing the customer loyalty to the business organizations. However, the customer trust in the business organizations are rather difficult to achieve, the businesses need to deliver products and services in consistent with the customer expectations to receive initially the customer satisfactions.

Safa and Ismail (2013: 562), in the same direction, have explained that trust is resulted from the customer satisfactions when purchase products through the e-commerce website which eventually leads to loyalty to that e-commerce website. This includes the research summary of Kim et al. (2009: 244) that have found that the customer satisfaction is the causal key to trust and the customer trust is a key factor contributing to loyalty of the e-commerce business.

However, the customer trust which leads to loyalty will occur only when the customer is satisfied with the brands of products or services in considerable plenteous level (Apaolaza, Hartmann, & Calvo, 2006: 644).

In this research, I have focused on a study whether or not and how trust factor affects on customer loyalty towards e-commerce business.

2.9   Concept and Theory of Customer Loyalty

2.9.1   Meaning of Loyalty

Many scholars have given the meaning of customer loyalty as follows;

Damrongsak Chaisanit (2002: 48) has suggested that the loyalty concept is a behavior of customer who routinely performs in consistence with the purchase of a particular brand on a regular basis. Brand loyalty is subject to capital and time. However, if it is successful, it will guarantee the stability of future sales and also the repetition of customer words of mouth.

Supaporn Polnikorn (2005: 27) has offered the idea that loyalty is a buyer satisfaction after a purchase or satisfied buyers who always repeat an opportunity to purchase or have become the repeat purchasers. After the repeat of purchases, the customers have developed a bond called brand committed. They are neither searching for information when repeat the purchase nor interesting in the competitor's marketing events and tend to spread positive words of mouth which are tremendously valuable to owners of that products or services.

Teerapun Lotongkum (2007) has defined that loyalty is the relevance or the customers' engagement providing towards brands, stores, manufacturers, services, or others based on affirmative attitudes or the responses by joining marketing activities with the brand and by repeating purchases.

Aaker (1991: 39) has explained that customer brand loyalty is considered to be the best thing ever of the brand. If the customers have not perceived of the difference of quality and value of the brand, it will not be possible for them to find good reasons in deciding to purchase with no attachment to brand loyalty. If the customers are the most loyal to the brand, they will continue to buy products or services accordingly.

Keller (2013: 72) has given the meaning that loyalty refers to a clear expression of repeat purchase behavior with a particular satisfied attitude towards a brand of products or services.

Peter and Olson (1993: 81) have given the meaning that loyalty refers to a behavior of buying or using the same brand repeatedly. Customer's thinking process will influence the behavior of buying or using of the same brand.

Dick and Basu (1994: 103) have defined the meaning that loyalty refers to a direct individual's relative attitude and repeated patronage to the products or services.

Assael (1995: 72) has offered the idea that loyalty is the customer positive attitude towards a brand which results in the customers purchasing of that brand several times. Since the customers have learned that the brand meets their needs, thus, satisfaction and perceived value of the brand have been accomplished.

Mowen and Minor (1998: 25) have described that loyalty refers to a customer's positive attitude level towards brand and there is a tendency for future purchases based on trust. Loyalty is also subject to brand perceived value and experience accumulation from using the brand for periods of time.

Lau (1999: 36) has offered the meaning that loyalty refers to the measurement of attracting customers in using the service and earning benefits for brand and the business organizations as it causes customers to repeat purchases and spread words of mouth to others.

Oliver (1997: 34) has explained that loyalty means a profound commitment to repurchase or to provide a consistent patronage for products or services in the future whereas the nature of the purchase will be repeated in the same original brand. The affected situations and the potential of marketing efforts will influence on the changing of this behavior.

Stone, Woodcock, and Machtynger (2000: 40) have also explained that loyalty refers to a structural subjectivity starting with the trust of the chosen organization more than any other organizations which leads to behavioral consequences whereas the customers are repurchasing products, using existing services, or spreading the advantages words of mouth of the organization.

Gronroos (2000: 13) has defined that loyalty refers to the customer's willingness to support or to reward the organization in the long run. As the customers,

they will repurchase or consistently use the services from the organization or spread the positive words of mouth of the organization to other people. These all will be based on the more satisfaction of the chosen organization than the others and the persistence of loyalty will exist as long as the customer feels of receiving better perceived value than from other organizations.

Hawkins and Coney (2001: 137) have explained that loyalty refers to a consistent purchase of a certain brand of product or service because the emotional feelings for the brand are also involving. The customer perceived value of products or services and satisfaction will affect in product re-use, repurchase, and brand loyalty. Also, brand loyal customers are words of mouth sources to other people which are a value-added to the organization. The brand loyal customer's positive words of mouth will result in the increment of the customer volume of the organizations in the future. Therefore, the brand loyal customer will provide more profits to the organizations than just being repurchased customer.

Balabanis, Reynolds, and Simintiras (2006: 216) have proposed a concept that satisfaction alone is not a sufficient factor leading to the customer loyalty. It is believed that trust is another essential factor resulting in the customer loyalty building.

Schiffman and Kanuk (2007: 145) have defined that loyalty is a consistent satisfaction and a purchase of the same brand product of any organizations.

From all references mentioned above, I have concluded that customer loyalty means the repeating purchase and the spreading positive words of mouth behavior to other persons which affect on an increase in the number of customers and the long-term profitability of the business as a result of the perceived value, satisfaction, and trust of the customer to that particular brand of products or services.

The Thai customer loyalty towards e-commerce business has been studied in this research whereas loyalty refers to a repurchase behavior through any e-commerce website and the spreading positive words of mouth behavior to other people about the e-commerce websites that customers have been facilitated to buy the products. All of these have based on the perceived value, satisfaction, and trust of customer to the e-commerce website. For this purpose, I will conduct a study that whether or not and how these three factors affect on customer loyalty.

2.9.2 Importance of Loyalty

The ultimate valuable customers to the business are customers who are most loyal to brands of products and services. Therefore, the marketing and communication strategies should be focused on creating loyalty and must aim to groups of loyal customers in order to earn business profitability in the long run. Since customer loyalty reduces marketing costs, increases business revenues, and maintains the market share over the competitors, it is also a perspective reflection of the market potential of products or services and at the same time, protects the business from the competitors' threats (Aaker, 1991: 29; Natta Changchutoe, 2012: 75; Pearce, 1997: 8; Reicheheld, 1996: 102).

Phatcharaporn Ngamvijitnun (2011: 129) has referred to the importance of customer loyalty as follows;

1) Create Value-Added to the Business: The more the business retains the customer, the better the customer extends the revenue to the business. With loyalty, the customer will not only purchase the product as it currently is but also with satisfaction. In the future, there will be additional purchases from current purchase which called cross-selling including up-selling which refer to a purchasing of higher value product more often and in the greater quantity.

2) Decrease Operational Cost: Loyal and long-lasting customer helps to reduce the operational cost of a business in services spending and new customer seeking. From the research, it has found that seeking for a new customer will cost five to seven times of the maintaining cost of a former loyal customer (Reicheheld, 1996: 134).

3) Spread Positive Words of Mouth: Customer's words of mouth are of great benefits to the business marketing. According to other researches, there has been found that customer who satisfies with products or services will spread words of mouth averagely to three other persons. The more the business succeeds in retaining former loyal customer, the better expending the spread of positive words of mouth does.

4) Consent to Pay More: Customers who are familiar with the business, apart from lengthy repurchase of the products, tend to be prepared or willingly to pay more in order to obtain the needed products (Reichheld & Sasser, 1990: 98). Loyal customers who have been with the business for a long time will increase more profits to the

business because they are willing to pay more. Therefore, the longer the customer stays with the business, the greater profitability gains for the business.

5) Weak Market Competitors and Impede New Competitors into the Market: Loyal customer helps reduce the cost of marketing communication and advertising because they will repurchase without much help of communication which will increase the business profitability (Grahame & Uncles, 1997: 74).

For the e-commerce business at present, it has been found that the marketing competition tends to rise with more number of competitors in the market especially in the business to customer (B2C) e-commerce market type. Consequently, the customers are able to search for their most satisfied products or services through the internet without attaching to the same brand of products or services including the same online stores or the same e-commerce websites (Chaiwat Phithakraktham, 2013: 107; Chang et al., 2009: 425; Mithas, Ramasubbu, Krishnan, & Fornell, 2007: 98). In these situations, the business operators need to determine their marketing target groups and yet to maintain these groups of customers accordingly. Therefore, customer loyalty is the consequential key to increase the market competitiveness of e-commerce based on the result of great numbers of customers who purchase products over the e-commerce websites and to increase the profits from customers who decide to purchase online including reduce the outflow of these customer groups (Anderson & Srinivasan, 2003: 124; Hoffman & Novak, 2000: 183; Kim et al., 2009: 239; Reichheld & Schefter, 2000: 108).

2.9.3 Type of Loyalty

Customer loyalty comprises of three types as follows (Chaudhuri & Holbrook, 2001: 85; Han, Kimb, & Kima, 2011: 110; Keller, 2013: 74; Nattapat Lopraditpong, 2006: 29-30; Oliver, 1997: 36);

2.9.3.1 Behavioral Loyalty refers to customer commitment and supports to brands continuously (Schiffman & Kanuk, 2007: 220) by the expressions of repeat purchase intention and repeat purchase behavior.

2.9.3.2 Attitudinal Loyalty refers to customer brand appreciation (Schiffman & Kanuk, 2007: 220) and positive words of mouth to others' behaviors.

2.9.3.3 Composite Loyalty refers to the merging aspect of behavioral and attitudinal loyalty whereas the customers engage in repeat purchase behaviors or subsidize their favourite products or services regularly in the future, including spreading positive words of mouth to others.

Han et al. (2011: 112) have additionally suggested that the business organizations should focus on both attitudinal and behavioral loyalty of customers or consider their composite effects. As a matter of fact, the behavioral loyalty can be clearly measured by regular repeat purchase behavior, however, such behavior may arise from other causes, such as the customers have not much choice, need to save cost, have insufficient time to search for information, or because the website has attractive promotions (Martizez & Bosque, 2013: 90). While the attitudinal loyalty refers that the measurement of customer emotions whether they engage in the positive attitudes and are parts of the brand or not. Although it is difficult to measure but it can be observed from certain behavior expressions, such as introduce the products or services to close persons, always compliments the brand to others, or protect the brand when others complaint of products and services they are loyal to. But the customers may not repeat purchase in the next time, thus, the loss of profit to the organization is caused by the attitudinal loyalty (Dick & Basu, 1994: 101; Nattapat Lopraditpong, 2006: 30; Oliver, 1997: 34).

Therefore, in this research, I have conducted a study of the Thai customer loyalty towards e-commerce business in the aspect of composite loyalty with the consideration of both types: behavioral loyalty which refers to repeat purchase through any e-commerce websites and attitudinal loyalty which refers to the behavior of spreading positive words of mouth about the e-commerce website that the customer uses in buying products to other persons.

2.9.4 Key Factors Affecting Customer Loyalty towards E-commerce Business

Anderson and Srinivasan (2003: 124-128) have categorized key factors for customer loyalty towards e-commerce business into two levels as follows;

2.9.4.1 Individual Level Factor

1) Satisfaction is a post-purchase evaluation by comparing the effects of expectation prior to the purchasing with actual received when the purchase is done. Marketers must try to comprehend and minimize the gap between the expectations and impacts of products as much as possible in terms of attempting to create satisfaction beyond expectations prior to a purchase which will affect customer loyalty.

2) Inertia is a decision on the inclination of perceived benefits and customer satisfactions with the business. If the customers' feelings of inertia are in high level, their expressions of satisfaction and loyalty will be low. On the contrary, if their feelings of inertia are in low level, the expressions of satisfaction and loyalty will be high.

2.9.4.2 Business Level Factor

1) Trust is a level of perceived risk over internet purchases (Doney & Cannon, 1997: 38), which is a very important factor in the context of e-commerce business. If the customers have no trust in dealing with electronic transactions, there shall not be loyal towards products and other business components. But if there is a customer's trust towards the business, loyalty is as far as possible to be followed.

2) Perceived Value refers to a utility evaluation of products and services based on the customer perceptions of what has received and what has lost (Dodds et al., 1991: 311). This perceived value contributes to customer loyalty to electronic transactions which reduces the search for substitutive products or services. But if the customer's perceived value is in low level, their loyalty tends to also exist in low level with more opportunity to switch the purchase to other brands of products or services.

In this research, I have determined to study whether or not and how do factors of perceived value, satisfaction, and trust affect on customer loyalty towards e-commerce business.

2.10 Analysis of Structural Equation Modeling Concept

2.10.1 Overview of Structural Equation Modeling

Historically, the analysis of relationships between variables may be chosen by the researcher to use various statistics in order to find the relationships between the two

variables, for instance, Pearson's product moment correlation, chi-square, and multiple regression analysis. However, these statistical analyzes are often based on traditional measurement theories in terms of the error of every variable in normal distribution with the mean equals to 0 and the variance equals to 1. Furthermore, some statistics, such as regression analysis, also have an agreement that the measurement must be free from inaccuracy, that is, the tool must have an exactitude value equals to 1 which does not follow the nature of the measurement (Nonglak Wiratchai, 1995: 210-211).

With the problem mentioned, many foreign researchers have collaborated in the integration of factor analysis, path analysis, and regression analysis, then synthesized a new statistic called "structural equation modeling - SEM" (Joreskog & Sorbom, 1993: 119). Consequently, this new analysis has contributed that the analysis and the research model are of one model alike and the validity of the model can be examined whether it is consistent with the empirical data or not.

Although there are many ready-to-use software packages used to analyze the structural equation modeling, such as LISREL, EQS, MPLUS, AMOS, LISCOMP, LINCS, etc. It has been found that LISREL (linear structure relationship) and AMOS (analysis of moment structure) are popular programs (Kanlaya Vanichbuncha, 2014: 4; Sirichai Kanjanawasee, 2007: 121-122). In this research, I have chosen the analysis of moment structure (AMOS) for analysing the structural equation modeling (SEM).

2.10.2 Importance of Structural Equation Modeling

The importance of structural equation modeling (SEM) is as follows (Kanlaya Vanichbuncha, 2014: 2-3);

1) Structural equation modeling is a technique that combines multivariate analysis techniques by applying the co-share of multivariate analysis technique principles especially factor analysis, path analysis, and regression analysis. Which is to say, SEM is a technique that combines the causal technique, the regression analysis technique, and the technique of finding the relationships of variables, covariance, and correlation, thus, this contributes SEM to represent both causal finding and correlative finding techniques.

2) Structural equation modeling can examine multiple causal relationship equations in the same time with no analysis separation as in the regression analysis technique.

3) Some variables in the structural equation modeling can be constituted of two statuses: which are either independent or dependent variables.

4) The structural equation modeling contributes in the examination of the consistency between the developed model and the empirical data by collecting multiple statistics for decision making.

2.10.3 Type of Variable Used in the Structural Equation Modeling

Variable types of SEM can be classified into various categories depend on the different criterion used (Kanlaya Vanichbuncha, 2014: 4-6) as follows;

2.10.3.1 Variable Classification by Its Origin

The structural equation modeling variables can be categorized by source of variables into two types as follows;

1) Observed Variable: called indicator variable or measurement variable in some occasions, is a variable that can be directly measured by the researchers. In the structural equation modeling, it will be designated by a square or a rectangle symbol.

2) Latent Variable: called unobserved variable or constructed variable in some occasions, is a variable that cannot be directly measured by the researchers with the use of observed variable as the indicator. Latent variables then represent multiple observable variables. In the structural equation modeling, it will be designated by an ellipse or a circle symbol.

2.10.3.2 Variable Classification by Its Duty or Status

The duty and status of variable in the structural equation modeling can be considered to be classified into two types (Joreskog & Sorbom, 1993: 147-148) as follows;

1) Exogenous Variable is regarded as independent variable. As a matter of fact that the exogenous variable only will have influences on other variables in the structural equation modeling and will never be influenced by other variables.

2) Endogenous Variable is regarded as both dependent variable, which is uninfluenced by other variables in the structural equation modeling, and mediating

variable which acts as independent and dependent variables in the structural equation modeling.

2.10.4 Structure of Structural Equation Modeling

Structural equation modeling comprises of two principle structures (Kanlaya Vanichbuncha, 2014: 6; Yuth Kaiyawan, 2013: 5-6) as follows;

2.10.4.1 Measurement Model

Measurement model is a model that identifies the linear relationships between latent variable and observable variable. There are two types of the measurement model which are (1) Measurement model for exogenous variables or independent variables and (2) Measurement model for endogenous variables or dependent variables. In order to examine the construct validity of the measurement model of latent variables, the confirmatory factor analysis – CFA is likely to be used for analysing the composition of the set of latent variables, and all observed variables was examined to identify if the appropriate distribution of concreteness for the respective latent variables could be ensured whereas observed variable should engage in the factor loading of not lower than 0.50 which is statistically significant.

The measurement criterion to examine whether the measurement model is the construct validity or not whereas the model is consistent with the empirical data, which was the model fit engagement in the index of a consistent indicator in examining of the model compliance which consists of (1) Chi-square (χ^2) (2) Relative chi-square (χ^2/df) (3) Goodness of fit index (GFI) (4) Adjusted goodness of fit index (AGFI) (5) Comparative fit index (CFI) (6) Normed fit index (NFI) (7) Incremental fit index (IFI) (8) Relative fit index (RFI) (9) Root mean square residual (RMR) (10) Root mean square error of approximation (RMSEA)   (Supamas Aungsuchoti, Somtawin Wijitwanna, & Ratchaneekool Pinyopanuwat, 2011: 21-24; Yuth Kaiyawan, 2013: 231), and each index value must meet the criterion of consistency in examining the model. Thus, each index has to pass consistent indicator in examining of the model compliance more than three indexes (see table 3.2 in chapter 3 for details).

2.10.4.2 Structural Model

Structural model is a model contributing to relationships between exogenous variables and endogenous variables by determining with firm concepts, theories, and

relevant researches. Since the structural equation modeling confirms whether the relationship found by the empirical data has been consistent with the model developed by the researchers or not.

The analysis processes of structural equation modeling are as follows;

Stage 1: Study of Concepts, Theories, and Relevant Researches in order to develop the conceptual framework of researches which will help the researchers to select which variables should be included in the structural equation modeling.

Stage 2: Development of Research Model is a post study of all information that the researchers gather in order to create a conceptual framework of research by developing a structural equation modeling of the research.

Stage 3: Model Identification of Structural Equation Modeling by studying the defining characteristics of every unknown parameter in the structural equation modeling whether they are according to the analytical conditions or not

Stage 4: Parameters Estimation is when the probability of a single value has been examined whether it is in over identification stage or not. The program will evaluate all parameters in the structural equation modeling, and then calculate those parameters back to the variance-covariance of observed variables in the structural equation modeling and demonstrate in this matrix form called "variance-covariance matrix" from the model estimation.

2.11 Related Researches

1) Dawisa Saisuwan (2011: 84-86) has conducted a study namely "Factors influencing behavior decision making purchase and repurchasing homemade ice-cream product of Banbueng Dairy Cooperative", which is a survey research with a study populated of 400 people who have been continuing customers of the product. The research has found that marketing mix that influences the repeat purchase of the customers is information from newspapers, recommends from acquaintances, friends or relatives, reading of brochures or billboards including trust in the brand image and conveniences in purchasing.

2) Panattapawn Potpattanapol (2011: 104-105) has conducted a study namely "Factors affecting consumers' brand loyalty in Thai e-commerce bookstore business."

It is a survey research with a study of populated 400 people, residing in Bangkok, aged over 18 years old group who have been customers with experiences in purchasing books from Thai e-bookstore of Chulalongkorn University Book Center. The results have found that the trust, message evaluation and the website design, the product and service quality and the marketing communication tools which consist of communications through the bookstore website of the Chulalongkorn University Book Center, online social networking websites, emails, and search engines are entirely influencing on the brand loyalty of the e-commerce bookstores.

3) Panuwat Rattanadit (2012: 45) has conducted a study namely "Factors affecting success of online business", which is a survey research with a study populated of 385 people who have ever used the online business services in Thailand. The research has found that the information quality, the product and service quality, the user interface quality, and the security and privacy, all have contributed to success of online business in the sense of loyalty.

4) Konkanok Chubwangvapee (2013: 88-90) has conducted a study namely "The effect excellence of service quality trust in service and word of mouth Bangjak Greenwash the Premium (Vibhavadi Rangsit - Laksi)", which is a survey research conducted with a study populated of 320 people who are the users of Bangjak Greenwash the Premium (Vibhavadi Rangsit - Laksi). The research has found that the service quality and trust are positive influences on the user's words of mouth behavior.

5) Nalinmas Laoviwat (2013: 199-209) has conducted a study namely "The marketing communication strategies, consumers' information exposure, satisfaction and decision on buying fast fashion clothing." The result of the research from data sources of fast fashion clothing brands namely Zara, H&M, and UNIQLO, has found that all brands have selected advertising in marketing communication tools through their mainstream websites in displaying their products by focusing on the design of the webpage that facilitates the customers to find information about the products with colorful and large images for attractions. Besides these, the fast fashion clothing brands have chosen price reducing as sales promotion to encourage the buy-more behavior of the customer including the brand image building with an emphasis on being modern and trendsetters of fashion at the same time. In addition, the survey research has resulted from the study populated of 400 people who are customer of fast fashion clothing in

Bangkok, Thailand, women, aged 18-40 years, and found that the exposure of fast fashion clothing information through marketing communication tools has influenced on the products' satisfaction. In other word, the information exposure through marketing communication tools, satisfaction, and purchasing behavior of fast fashion clothing of customers are correlated.

6) Pranisa Suksawaeng (2013: 72-74) has conducted a study namely "Factors affecting repurchase of jewelry and decoration through website and Facebook", which is a survey research with a study populated of 200 people who have bought jewelry and decoration through website and another 200 people who have bought jewelry and decoration through Facebook. The research has found that the website design, the responses to customer service, the trust in the purchase of products through the website, and the customization affect the repeat purchase having trendly through the website. Whereas the perceived value of jewelry and decoration products through websites and Facebook affects the repurchase having trendly through websites and Facebook.

7) Royboon Laohawilai (2013: 167-168) has conducted a study namely "Factors influencing brand image, brand preference, and brand loyalty: a case study of gas stations in Thailand", which is a survey research with a study populated of 480 people who have used the services of five major gas stations of oil companies namely PTT Public Company Limited, Bangchak Petroleum Public Company Limited, Esso (Thailand) Public Company Limited, Chevron (Thailand) Limited, and Shell Company of Thailand, Ltd. The research has found that factors influencing brand preferences are trust, attractiveness of sales promotion, and brand images including factors that influence brand loyalty are brand images and brand preferences.

8) Saowakhon Homsut (2014: 131-135) has conducted a study namely "Structural equation model of B2C e-commerce repurchase intention of customers in Bangkok", which is a survey research with a study populated of 384 people in Bangkok region who have had experiences in buying products or services over the internet. The research has found that the information quality, the system quality, and the product and service quality have the positive relationships to the utilitarian shopping value and hedonic shopping value, as well as, customer trust and customer satisfaction are factors which positively correlated with customer repurchase intention.

9) Wanlop Wasuthada (2015: 76-79) has conducted a study namely "Factors influencing repurchase intention of internet user", which is a survey research with a study populated of 458 people who have been repurchase buyers over the internet. The research has found that factors influencing satisfaction are the information quality, the system quality, and the service quality. Whereas factors influencing trust are satisfaction and fairness in the distribution. Besides, it has also found that trust and satisfaction are factors influencing the repurchase intention and words of mouth of the internet buyers.

10) Luarn and Lin (2003: 156-163) have conducted a study namely "A customer loyalty model for e-service context", which is a survey research with a study populated of 180 people aged 16-45 years old who have been using online services. The research has found that three key factors influencing customer loyalty in the online services are trust, satisfaction, and perceived value.

11) Kassim and Abdullah (2010a: 275-286) have conducted a study namely "Loyalty in e-commerce settings: an empirical study", which is a survey research with a study populated of 300 Malaysian customers who have used to buy products or services through the e-commerce system. The research has found that the perceived product and service quality, the customer satisfaction, the customer trust, and the customer loyalty are positively correlated. The perceived product or service quality has a direct positive influence on satisfaction, trust and satisfaction factor have a direct positive influence on trust, while both satisfaction and trust have a direct positive influence on customer loyalty.

12) Eid (2011: 78-86) has conducted a study namely "Determinants of e-commerce customer satisfaction, trust, and loyalty in Saudi Arabia", which is a survey research with a study populated of 400 customers of B2C e-commerce business in eastern region of Saudi Arabia. The result has found that satisfaction and trust are factors influencing customer loyalty towards e-commerce business, whereas information quality, perceived security, and perceived privacy are factors influencing both customer satisfaction and customer trust.

13) Nawaz (2011: 213-219) has conducted a study namely "What makes customers brand loyal: a study on telecommunication sector of Pakistan", which is a survey research with a study populated of 475 people who have been users of cellular

network services. The research results have found that service quality is 'the most important factor' in building customer's loyalty to the cellular network providers and the service quality factor is positively correlated with customer loyalty through the satisfaction factor.

14) Saeed et al. (2013: 1364-1369) have conducted a study namely "Effect of brand image on brand loyalty and role of customer satisfaction in it", which is a survey research with a study populated of 150 teachers and students of Sahiwal University, Pakistan. The research has found that brand image is a factor influencing loyalty to the business brand which provides a network of the wireless telecommunication in relation to users' satisfaction which serves as a moderating role.

15) Napitupulu and Aditomo (2015: 386-390) have conducted a study namely "Factors affecting customer loyalty in business e-commerce: a case of Indonesia", which is a survey research with a study populated of 285 customers who have purchased online products in Jakarta city, Indonesia. The research has found that customer satisfaction influencing the loyalty to e-commerce and factors influencing customer satisfaction towards e-commerce are brand image, information quality, transaction security, and promotion programs, such as discounts, free shipping product, etc.

Table 2.1 Synthesis of Concepts, Theories, and Relevant Researches

Variable	Liu & Arnett (2000)	Jeong & Lambert (2001)	Molla & Licker (2001)	Thawatchai Srisuthep (2001)	Burke (2002)	Nah & Davis (2002)	Zeithaml et al. (2002)	Albert & Sanders (2003)	Mich et al. (2003)	Siriwan Sereerat et al. (2003)	Pawoot Pongvitayapanu (2004)	Duangporn Kiangkham (2006)	Lee & Kozar (2006)	Seksun Saiseesod (2006)	Kannika Swanpotipan (2007)	Pisek Chainirun (2008)	Hao et al. (2010)	Kassim & Abdullah (2010b)	Suwit Thirakhot (2011)	Tajzadehnamin & Etemadi (2011)	Duangporn Kiangkham (2012)	Kim et al. (2012)	Natta Changchutoe (2012)	Saowakhon Homsut (2014)
1. Information Quality																								
- Completeness		x		x								x	x											
- Accuracy		x								x			x		x							x		
- Currency		x								x			x		x									
- Visual Appeal		x	x										x							x	x	x		
2. System Quality																								
- Security and Privacy	x		x				x						x					x	x				x	
- Convenience		x		x							x				x	x			x				x	x
- Speed			x					x						x									x	x

Table 2.1 (Cont.)

Variable	Shostak (1977)	Parasuraman et al. (1985)	Kotler & Barich (1991)	Bolton & James (1992)	Amnuay Viravan (1997)	Poleretzky (1999)	Schrage (1999)	Kauffman & Wood (2000)	Kitti Siripullop (2000)	Liu & Arnett (2000)	Smith (2001)	Sirilak Rotchanakitumnuai (2002)	Mich et al. (2003)	Siriwan Sereerat et al. (2003)	Ribbink et al. (2004)	Theerakiti Navaratana (2004)	Turban et al. (2004)	Phot Jaichansukkit (2005)	Semejin et al. (2005)	Pisit Pipatphokakul (2006)	Suthiluck Vungsuntitum (2007)	Chang et al. (2009)	Porntip Pimolsin (2009)	Kassim & Abdullah (2010b)	Supparerk Pothipairatana (2010)	Natta Changchutoe (2012)	Keller (2013)	Konkanok Chubwangvapee (2013)
3. Product and Service Quality																												
- Customization	x					x	x	x				x	x	x	x	x			x	x						x		
- Assurance										x	x				x	x	x									x		
- Responsiveness		x		x	x										x	x						x		x				x
4. Brand Image																												
- Reputation			x																							x		
- Good Management			x	x																						x	x	
- Law and Ethics			x	x														x		x		x				x		

Table 2.1 (Cont.)

Variable	Babin et al. (1994)	Babin & Darden (1995)	Engle et al. (1995)	Olsen & Johnson (1997)	Howard (1998)	Janiszewski (1998)	Kasper et al. (1999)	Gefen (2000)	Pelsmacker et al. (2001)	Uthaipan Sudjai (2002)	Asseal (2004)	Clow & Baack (2004)	Siwarit Pongsakornrungsilp (2004)	Gustafsson (2005)	Jone et al. (2006)	Kotler et al. (2006)	Overby & Lee (2006)	Smit Sachukorn (2007)	To (2007)	Kim et al. (2011)	Kim et al. (2012)	Natta Changchutoe (2012)	Scarpi (2012)	Shin et al. (2013)	Saowakhon Homsut (2014)
5. Marketing Communication Tools																									
- Offline Media							x		x			x										x			
- Online Media							x		x			x										x			
6. Perceived Value																									
- Utilitarian Shopping Value	x	x					x		x						x		x		x					x	x
- Hedonic Shopping Value	x	x					x		x						x		x	x	x					x	x
7. Satisfaction																									
- Achieved Expectation			x	x										x		x	x		x					x	
- Overall Satisfaction			x	x							x	x	x												

Table 2.1 (Cont.)

Variable	Aaker (1991)	Gundlach & Murphy (1993)	Moorman et al. (1993)	Peter & Olson (1993)	Dick & Basu (1994)	Morgan & Hunt (1994)	Assael (1995)	Mayer et al. (1995)	Mishra (1996)	Stern (1997)	Lau (1999)	Gronroos (2000)	Stone et al. (2000)	Hawkins & Coney (2001)	Lee & Turban (2001)	Damrongsak Chaisanit (2002)	McKnight et al. (2002)	Lumsden & Lumden (2003)	Siau & Shen (2003)	Kulp Kumpabooth (2005)	Supaporn Polnikorn (2005)	Salo & Karjaluoto (2007)	Teerapun Lotongkum (2007)	Arpaporn Watthanakul (2012)
8. Trust																								
- Integrity		x				x		x									x		x					x
- Expertise			x					x									x	x			x	x		
- Benevolence		x				x		x	x	x					x		x							
9. Loyalty																								
- Repeat Purchase	x			x	x						x	x		x	x						x	x		
- Words of Mouth											x	x		x	x									

2.12 Conceptual Framework

Information Quality
- Completeness
- Accuracy
- Currency
- Visual Appeal

System Quality
- Security and Privacy
- Convenience
- Speed

Product and Service Quality
- Customization
- Assurance
- Responsiveness

Brand Image
- Reputation
- Good Management
- Law and Ethics

Marketing Communication Tools
- Offline Media
- Online Media

Perceived Value
- Utilitarian Shopping Value
- Hedonic Shopping Value

Satisfaction
- Achieved Expectation
- Overall Satisfaction

Trust
- Integrity
- Expertise
- Benevolence

Loyalty
- Repeat Purchase
- Words of Mouth

2.13 Research Model

<div align="center">

CHAPTER 3

RESEARCH METHODOLOGY

</div>

This research, entitled on "The causal model of factors affecting Thai customer loyalty towards e-commerce business," utilizes mixed-method research with its objective to develop and to examine the consistency between the causal model of factors affecting Thai customer loyalty towards e-commerce business and the empirical data. It is also to explore the opinions of academics and online marketers in relating to the marketing communication factors influencing Thai customer loyalty towards e-commerce business. The research methodology has been divided into two parts consecutively, as follows (1) The survey research as method for the quantitative research employing a one-shot description study of a close-ended questionnaire by data collecting tool from sample groups who represented the research population, and (2) The in-depth interview as method for the qualitative research employing the semi-structured interview from key informants with details describing hereunder;

3.1 Quantitative Research

3.1.1 Population

The population in this research consisted of Thai customers who shopped through the e-commerce websites. According to a summary report on the 2015 survey on household use of information and communication technology among 62.6 million Thais aged 6 years or over, the number of internet users was 24.6 million. Out of the entire number of internet users, there were 1.57 million, representing 6.4 percent, who purchased products or services over the internet (Ministry of Information and Communication Technology, 2015: 18-23).

3.1.2 Sample Size

The appropriate sample size for the structural equation modeling (SEM) analysis was examined. The following criteria were observed for determining the sample size:

1) Critical N (CN) – The sample size must be large or consist of at least 200 samples (Supamas Aungsuchoti et al., 2011: 93). Thus, this research should involve at least 200 samples.

2) Number of Observed Variables (p) – The sample size must be greater than the number of the variance-covariance. The variances and covariances of observed variables in the developed model were calculated based on the formula $\frac{p(p+1)}{2}$ (Kanlaya Vanichbuncha, 2014: 122). This research included 24 observed variables (p = 24), so the sample size should exceed $\frac{24(24+1)}{2} = 300$ samples.

3) Rule of Thumb – A common rule of thumb for statisticians who conduct multivariate analysis is the use of 10-15 samples per variable (Hair et al., 2010: 76). As there were 24 observed variables in this research, the sample size should range from 10 x 24 = 240 to 15 x 24 = 360 samples.

Based on the three aforementioned conditions, the ideal sample size for this research was 360 Thai customers who shopped using e-commerce websites.

3.1.3 Sampling Technique

The multi-stage sampling technique was employed in this study, the details of which are presented below;

Step 1: Purposive Sampling

The data was collected from Thai customers who did their shopping via more than one e-commerce website and frequently did it using a particular website, at least three times annually. The websites had to be B2C e-commerce websites in Thailand which were ranked in the top 6 in 2016 for the number of purchases or visits, by www. Ystats.com, an online marketing research company. They consisted of www.lazada.co.th, www.11street.co.th, www.online.advice.co.th, www.jib.co.th, www.central.co.th, and www. shoponline.tescolotus.com (Zhang, 2017).

Step 2: Accidental Sampling

As the samples in this research were Thai customers who purchased products through the e-commerce websites, who were able to access and to use the internet to do everyday activities, the accidental sampling technique was adopted after considering the appropriateness of channels through which the samples could be accessed. An online questionnaire was used as the tool for collecting data from the samples, who were willing to respond to this questionnaire. The web link to this questionnaire was posted on the websites largely visited and used by the samples, such as www.facebook.com and www.pantip.com. Finally, data from 360 samples was successfully collected.

3.1.4   Research Tool

As mentioned earlier, a questionnaire served as the tool for gathering data from these samples. It consisted of checklist and rating-scale questions, which were designed based on the research framework. The questionnaire structure was composed of 6 parts (75 items), as follows:

Part 1: there are 6 checklist questions concerning to general information about the respondents, i.e. gender, age, education, occupation, monthly income, and the e-commerce site via which they frequently shopped.

Part 2: there are 49 questions in 5 points of Likert (rating) scales concerning to factors affecting customer loyalty to e-commerce, i.e. the information quality, the system quality, the product and service quality, the brand image, and the marketing communication tools.

Part 3: there are 5 questions in 5 points of Likert (rating) scales concerning to the customer's perceived value of e-commerce.

Part 4: there are 4 questions in 5 points of Likert (rating) scales concerning to the customer satisfaction with e-commerce.

Part 5: there are 7 questions in 5 points of Likert (rating) scales concerning to the customer trust in e-commerce.

Part 6: there are 4 questions in 5 points of Likert (rating) scales concerning to the customer loyalty towards e-commerce.

3.1.5   Variables

In this research, there were 9 latent variables, which comprised of exogenous variables and endogenous variables.

3.1.5.1 Exogenous Variables

Exogenous variables are latent variables that are not affected by any other variables. This research involved 5 exogenous variables, as follows:

1) Information Quality – Its elements were synthesized based on the concept developed by Lee and Kozar (2006: 1384), which discussed the elements related to information quality. They were also synthesized based on the principles of successful website design of Jeong and Lambert (2001: 131-132). The 4 observed variables were identified: (1) Completeness, (2) Accuracy, (3) Currency, and (4) Visual appeal, based on which 10 questions were developed.

2) System Quality – Its elements were synthesized based on the concept by Molla and Licker (2001: 133-134), which identified key elements in the e-commerce website system quality. The 3 observed variables were identified: (1) Security and privacy, (2) Convenience, and (3) Speed, based on which 12 questions were developed.

3) Product and Service Quality – Its elements were synthesized based on the concept by Ribbink et al. (2004: 451-453), which discussed the elements of the quality of products and service rendered by the e-commerce websites. In addition to this, they were synthesized based on the concept of excellent service quality of Theerakiti Navaratana (2004: 183-186). There were 3 observed variables identified: (1) Customization, (2) Assurance, and (3) Responsiveness, based on which 12 questions were developed.

4) Brand Image – Its elements were synthesized based on the concept by Supparerk Pothipairatana (2010: 9-11), which discussed key organizational elements that contribute to the corporate image. They were also synthesized based on the concept of factors in the corporate image building by Kotler and Barich (1991: 96-97). There were 3 observed variables identified: (1) Reputation, (2) Good management, and (3) Law and ethics, based on which 9 questions were developed.

5) Marketing Communication Tools – Its elements were synthesized based on the concept of marketing communication tools for the website-based business organizations developed by Kasper et al. (1999: 560-584). Furthermore, they were

synthesized based on the concept by Mohammed et al. (2001: 218-234), which identified marketing communication tools for e-commerce brands. There were 2 observed variables identified: (1) Offline media and (2) Online media, based on which 6 questions were developed.

3.1.5.2 Endogenous Variables

Endogenous variables are latent variables that are affected by other variables. This research involved 4 endogenous variables.

1) Perceived Value – Its elements were synthesized based on the concept of customer's perceived value of shopping over the internet by Babin and Darden (1995: 53), Gefen (2000: 729), Saowakhon Homsut (2014: 31), and Scarpi (2012: 56). This synthesis revealed 2 observed variables: (1) Utilitarian shopping value and (2) Hedonic shopping value, based on which 5 questions were developed.

2) Satisfaction – Its elements were synthesized based on concepts and theories concerning satisfaction. There were 2 observed variables identified: (1) Achieved expectation and (2) Overall satisfaction, based on which 4 questions were developed.

3) Trust – Its elements were synthesized based on concepts and theories relating to trust. There were 3 observed variables identified: (1) Integrity, (2) Expertise, and (3) Benevolence, based on which 7 questions were developed.

4) Customer Loyalty – Its elements were synthesized based on concepts and theories relating to the customer loyalty. There were 2 observed variables identified: (1) Repeat purchase and (2) Words of mouth, based on which 4 questions were developed.

3.1.6   Variable Measurement

The measurement of the key variables was in line with statistical analysis, as follows;

3.1.6.1 Measurement of Variables Affecting Customer Loyalty

In part 2 of the questionnaire, the values of the variables were measured on the interval scale. The summated rating scale was used to measure the level of customer opinions about factors in the marketing communications of e-commerce, i.e. information quality, system quality, product and service quality, brand image, and marketing communication tools.

The levels of opinions about the respective factors as discussed above were assessed using questions equipped with 5 points of Likert (rating) scales, which ranged from the highest to the lowest (5-1), as follows:

Mostly agree	=	5 points
Strongly agree	=	4 points
Moderately agree	=	3 points
Slightly agree	=	2 points
Least agree	=	1 point

The criteria for assigning the mean values for the level of opinions about respective factors were based on the following 5 levels (Boonchom Srisa-ard, 2013: 55-56):

Means	4.21-5.00	=	Mostly agree
Means	3.41-4.20	=	Strongly agree
Means	2.61-3.40	=	Moderately agree
Means	1.81-2.60	=	Slightly agree
Means	1.00-1.80	=	Least agree

3.1.6.2 Measurement of Customer's Perceived Value Variables

In part 3 of the questionnaire, the values of the variables were measured on the interval scale. The summated rating scale was used to measure the level of customer's perceived value of e-commerce. The levels of perceived value were evaluated using questions equipped with 5 points of Likert (rating) scales, which ranged from the highest (5) to the lowest (1), as follows:

Highest perceived value	=	5 points
High perceived value	=	4 points
Moderate perceived value	=	3 points
Low perceived value	=	2 points
Lowest perceived value	=	1 point

The criteria for assigning the mean values for the level of perceived value were based on the following 5 levels (Boonchom Srisa-ard, 2013: 55-56):

Means	4.21-5.00	=	Highest perceived value
Means	3.41-4.20	=	High perceived value
Means	2.61-3.40	=	Moderate perceived value

| Means | 1.81-2.60 | = | Low perceived value |
| Means | 1.00-1.80 | = | Lowest perceived value |

3.1.6.3 Measurement of Customer Satisfaction Variables

In part 4 of the questionnaire, the values of the variables were measured on the interval scale. The summated rating scale was used to measure the level of customer satisfaction with e-commerce. The levels of satisfaction were evaluated using questions equipped with 5 points of Likert (rating) scales, which ranged from the highest (5) to the lowest (1), as follows:

Highest satisfaction	=	5 points
High satisfaction	=	4 points
Moderate satisfaction	=	3 points
Low satisfaction	=	2 points
Lowest satisfaction	=	1 point

The criteria for assigning the mean values for the level of satisfaction were based on the following 5 levels (Boonchom Srisa-ard, 2013: 55-56):

Means	4.21-5.00	=	Highest satisfaction
Means	3.41-4.20	=	High satisfaction
Means	2.61-3.40	=	Moderate satisfaction
Means	1.81-2.60	=	Low satisfaction
Means	1.00-1.80	=	Lowest satisfaction

3.1.6.4 Measurement of Customer Trust Variables

In part 5 of the questionnaire, the values of the variables were measured on the interval scale. The summated rating scale was used to measure the level of customer trust in e-commerce. The levels of trust were evaluated using questions equipped with 5 points of Likert (rating) scales, which ranged from the highest (5) to the lowest (1), as follows:

Highest trust	=	5 points
High trust	=	4 points
Moderate trust	=	3 points
Low trust	=	2 points
Lowest trust	=	1 point

The criteria for assigning the mean values for the level of trust were based on the following 5 levels (Boonchom Srisa-ard, 2013: 55-56):

Means	4.21-5.00	=	Highest trust
Means	3.41-4.20	=	High trust
Means	2.61-3.40	=	Moderate trust
Means	1.81-2.60	=	Low trust
Means	1.00-1.80	=	Lowest trust

3.1.6.5 Measurement of Customer Loyalty Variables

In part 6 of the questionnaire, the values of the variables were measured on the interval scale. The summated rating scale was used to measure the level of customer loyalty towards e-commerce. The levels of loyalty were evaluated using questions equipped with 5 points of Likert (rating) scales, which ranged from the highest (5) to the lowest (1), as follows:

Highest loyalty	=	5 points
High loyalty	=	4 points
Moderate loyalty	=	3 points
Low loyalty	=	2 points
Lowest loyalty	=	1 point

The criteria for assigning the mean values for the level of loyalty were based on the following 5 levels (Boonchom Srisa-ard, 2013: 55-56):

Means	4.21-5.00	=	Highest loyalty
Means	3.41-4.20	=	High loyalty
Means	2.61-3.40	=	Moderate loyalty
Means	1.81-2.60	=	Low loyalty
Means	1.00-1.80	=	Lowest loyalty

3.1.7 Research Tool Quality

The validity and reliability of this questionnaire, the data collection tools, were tested in order to enhance the clarity and appropriateness of the questionnaire.

3.1.7.1 Validity Test

The content validity of questions in the developed questionnaire was examined by 3 experts. The questions were sent to these 3 experts to consider the consistency

between the question content and research objectives in conjunction with the operational definitions and to consider the appropriateness of the language used in each of the questions. The 3 experts, all lecturers from the faculties of communication arts, consisted of:

1) Asst. Prof. Dr. Asawin Nedpogaeo, professor from the Faculty of Communication Arts and Management Innovation, the National Institute of Development Administration.

2) Asst. Prof. Dr. Duangtip Chareonrook Phuenchote, professor from the Faculty of Communication Arts, Rangsit University.

3) Asst. Prof. Sermyos Thammaragsa, professor from the Faculty of Communication Arts, Bangkok University.

After the improvement of the question content was completed, based on the recommendations made by these 3 experts, the process of collecting data from samples started. The data collected was examined in terms of tool quality, which was the construct validity. By doing this, I have employed the confirmatory factor analysis (CFA) which is the analysis statistic tool employing with the measurement model of latent variables in "The causal model of factors affecting Thai customer loyalty towards e-commerce business". They were carried out to examine the model fit, which was the consistency between the model and the empirical data. If the index values met the criteria more than 3 indexes, this manifested that the measurement model was consistent with the empirical data and the construct validity. The index values that met the criteria comprised: (1) Chi-square (χ^2) is greater than 0.05 (2) Relative chi-square (χ^2/df) is less than 2.00 (3) Goodness of fit index (GFI) is greater than 0.90 (4) Adjusted goodness of fit index (AGFI) is greater than 0.90 (5) Comparative fit index (CFI) is greater than 0.90 (6) Normed fit index (NFI) is greater than 0.90 (7) Incremental fit index (IFI) is greater than 0.90 (8) Relative fit index (RFI) is greater than 0.90 (9) Root mean square residual (RMR) is less than 0.05 (10) Root mean square error of approximation (RMSEA) is less than 0.05 (Supamas Aungsuchoti et al., 2011: 21-24; Yuth Kaiyawan, 2013: 231). Furthermore, all observed variables were examined to identify if the appropriate distribution of concreteness for the respective latent variables could be ensured. This was done by identifying if the factor loading of each observed variable

which is not lower than 0.50 with statistical significance (see the result of the Construct Validity Test in Chapter 4).

After the content of the different questions was adjusted based on the 3 experts' recommendations, the reliability test for the questionnaire was conducted.

3.1.7.2 Reliability Test

The internal consistency reliability was analyzed by means of Cronbach's alpha coefficient. The questionnaire, which was improved based on these experts' suggestions, was tried out on a group of 30 Thai customers who shopped via more than one e-commerce website and frequently shopped through a particular e-commerce website, at least three times a year. This group was not an official sample of this research, but shared similar characteristics with the samples. Only questions with a value $\alpha = 0.70$ or above were selected because they received similar responses by the samples – these questions were considered to have acceptable reliability (Cronbach, 1990, cited in Laddawan Petchroj and Achara Chamniprasart, 2002: 48).

$$\alpha = \frac{K}{K-1}\left[1 - \frac{\sum s_i^2}{s_t^2}\right]$$

When α = Reliability
K = Number of questions
S_i^2 = Variance of the score of each question
S_t^2 = Variance of total scores

The internal consistency reliability test revealed that the value of α was 0.70 or above. This suggested that the reliability of this questionnaire was at an acceptable level as the following;

1) Reliability test output of total 69 questions equal to 0.98
2) Reliability test output of 49 questions concerning to the factors affecting customer loyalty on e-commerce equal to 0.97
3) Reliability test output of 5 questions concerning to the customer's perceived value of e-commerce equal to 0.82

4) Reliability test output of 4 questions concerning to the customer satisfaction with e-commerce equal to 0.91

5) Reliability test output of 7 questions concerning to the customer trust in e-commerce equal to 0.89

6) Reliability test output of 4 questions concerning to the customer loyalty towards e-commerce equal to 0.82

When all the questions met all these quality criteria, the questionnaire was used for collecting data from the samples.

3.1.8 Data Collection

The questionnaire was developed to be an online questionnaire using Google Docs on www.docs.google.com, which had to be completed by the samples. A public relations message which requested cooperation in responding to the questionnaire was launched. The web link to this online questionnaire was posted on websites largely visited and used by the sample population, e.g. www.facebook.com (especially Facebook Fan Page) and www.pantip.com (webboard), which provided the content on products or services over the internet. The data collection period took place from August to September 2017. Three hundred sixty valid questionnaires were gathered and processed by computer using the statistical program package to conduct analysis and to develop a conclusion.

3.1.9 Data Processing

After the data collection was completed, the following processing procedure was undertaken:

1) Validating data in the questionnaires – Any incomplete questionnaires were considered to be non-valid.

2) Coding in the coding form for the whole sample size.

3) Recording data that had been put in the coding form and processing the data by means of the statistical program package to calculate statistics used in this research and to analyze these results.

3.1.10 Statistics in Data Analysis

This research involved the quantitative data analysis, which can be classified according to the topics, as follows:

3.1.10.1 Analysis of Descriptive Statistics, i.e. percentages, mean values ($\bar{x}$), and standard deviations (S.D.). This purpose of the analysis was to describe the characteristics of the following data – general information of the respondents, the level of opinions about information quality, system quality, product and service quality, brand image, and marketing communication tools, as well as the levels of perceived value, satisfaction, trust, and loyalty.

3.1.10.2 Analysis of Pearson's Correlation Coefficient, has been used to analyze the relationship among observed variables. The coefficient of correlation among the variables in the analysis of the structural equation modeling (SEM) must not be more than 0.80, and then I have relied on the interpreting criterion of the correlation coefficient as follows (Yuth Kaiyawan, 2013: 220);

Table 3.1 Criteria for Interpreting Pearson's Correlation Coefficient

No.	Correlation coefficient	Meaning
1	0.90-1.00	Very high positive relationship
2	0.70-0.90	High positive relationship
3	0.50-0.70	Moderate positive relationship
4	0.30-0.50	Low positive relationship
5	0.00-0.30	Very low positive relationship

3.1.10.3 Analysis of Structural Equation Modeling (SEM) – This analysis was aimed at examining the model fit – the consistency of the causal model of factors affecting Thai customer loyalty towards e-commerce business, there were developed. In this part, data analysis was conducted by using statistics derived from the structural equation modeling analysis. The analysis was conducted by estimating the values of model parameters by means of the maximum likelihood estimation method and by using indexes as statistics to determine the consistency between the model and the

empirical data. As shown in table 3.2, consistency criteria were used in the examination of the structural equation modeling. If the index value examination met the criteria more than 3 indexes, this manifested that the measurement model was consistent with the empirical data (Supamas Aungsuchoti et al., 2011: 21-24; Yuth Kaiyawan, 2013: 231).

Table 3.2 Criteria for Identifying the Consistency between the Structural Equation Modeling and the Empirical Data

No.	Consistency index	Criteria
1	Chi-square (χ^2)	p-value > 0.05
2	Relative Chi-square (χ^2/df)	χ^2/df < 2.00
3	Goodness of Fit Index (GFI)	GFI > 0.90
4	Adjusted Goodness of Fit Index (AGFI)	AGFI > 0.90
5	Comparative Fit Index (CFI)	CFI > 0.90
6	Normed Fit Index (NFI)	NFI > 0.90
7	Incremental Fit Index (IFI)	IFI > 0.90
8	Relative Fit Index (RFI)	RFI > 0.90
9	Root Mean Square Residual (RMR)	RMR < 0.05
10	Root Mean Square Error of Approximation (RMSEA)	RMSEA < 0.05

3.1.11 Data Presentation

Data obtained from this research is presented by topics in accordance with the research problems, research objectives, and research hypothesis. Analysis values were used to confirm results of the research based on the conceptual framework, theoretical framework, and relevant research. The research report was presented through analysis results which answered the following research problems:

1) What are the causal factors that affect Thai customer loyalty towards e-commerce business?

2) Is the causal model of factors affecting Thai customer loyalty towards e-commerce business developed in this research consistent with the empirical data? If yes, how?

Table 3.3 Variable Distributions and Questionnaire Questions

No.	Variable	Questionnaire Question
1	**Latent Variable**	
	Information Quality	
	Observed Variable	
	- Completeness	- Part 2 Item 1-2
	- Accuracy	- Part 2 Item 3-5
	- Currency	- Part 2 Item 6-7
	- Visual Appeal	- Part 2 Item 8-10
2	**Latent Variable**	
	System Quality	
	Observed Variable	
	- Security and Privacy	- Part 2 Item 11-12
	- Convenience	- Part 2 Item 13-18
	- Speed	- Part 2 Item 19-22
3	**Latent Variable**	
	Product and Service Quality	
	Observed Variable	
	- Customization	- Part 2 Item 23-28
	- Assurance	- Part 2 Item 29-30
	- Responsiveness	- Part 2 Item 31-34

No.	Variable	Questionnaire Question
4	**Latent Variable**	
	Brand Image	
	Observed Variable	
	- Reputation	- Part 2 Item 35-37
	- Good Management	- Part 2 Item 38-40
	- Law and Ethics	- Part 2 Item 41-43
5	**Latent Variable**	
	Marketing Communication Tools	
	Observed Variable	- Part 2 Item 44-46
	- Offline Media	- Part 2 Item 47-49
	- Online Media	
6	**Latent Variable**	
	Perceived Value	
	Observed Variable	
	- Utilitarian Shopping Value	- Part 3 Item 1-2
	- Hedonic Shopping Value	- Part 3 Item 3-5
7	**Latent Variable**	
	Satisfaction	
	Observed Variable	
	- Achieved Expectation	- Part 4 Item 1-2
	- Overall Satisfaction	- Part 4 Item 3-4
8	**Latent Variable**	
	Trust	
	Observed Variable	
	- Integrity	- Part 5 Item 1-3
	- Expertise	- Part 5 Item 4-5
	- Benevolence	- Part 5 Item 6-7

No.	Variable	Questionnaire Question
9	**Latent Variable**	
	Loyalty	
	Observed Variable	
	- Repeat Purchase	- Part 6 Item 1-2
	- Words of Mouth	- Part 6 Item 3-4

3.2 Qualitative Research

3.2.1 Research Target Group

In this part, I will select the research target group or the key informants of this research consisting of the academics and the online marketers by the purposive sampling. This target group comprising of 5 academics who are experienced persons in the online marketing communication and the interviews given upon marketing communication factors influencing Thai customer loyalty towards e-commerce business are consistent perfectly with the actual circumstances; the key informant names are as following;

1) Asst. Prof. Chatpong Tangmanee, Ph.D., professor from Statistic Department, Faculty of Commerce and Accountancy, Chulalongkorn University.

2) Khun Pitayapan Sriwaewnetr, professor from International Programme, Faculty of Communication Arts, Chulalongkorn University.

3) Khun Somyot Chaowalit: managing director, JIB Computer Group Ltd. and online www.jib.co.th

4) Khun Amrarat Eiawaksorn: digital media director, BrandBaker Co.Ltd., a digital marketing strategy and digital media development agency.

5) Khun Warayu Prasertsom: marketing director, Unixdev Co., Ltd., a computer support and services for the business organizations and marketing consultant company.

3.2.2 Research Tool

The semi-structured interview has been employed as a research tool in order to collect key informants' data. Therefore, I have determined the scope of the interviews in advance with the approaches and theories in relating to the marketing communication

factors contributed to customer loyalty towards e-commerce business which consist of information quality, website system quality, product and service quality, brand image, marketing communication tools, and a customer loyalty theory including the finding results of the first part of qualitative research. The key point of questions has focused on the marketing communication opinions influencing customer loyalty towards e-commerce business as a matter to confirm the results of the quantitative research.

3.2.3 Research Tool and Data Quality Verification

In this part, I have employed the data triangulation methodology in verifying the trustworthiness of tools and data quality in the qualitative research. This research is a collection of data from various types of individuals in particular the information deriving from the in-depth interviews from the online marketing communication experts in the academic and professional fields. Furthermore, I have verified the member checking by means of consistency examination between research data and the interpretation by summarizing the interview data and reconfirmed the data once again with the key informants accordingly.

3.2.4 Data Compilation Methodology

By doing this, I have conducted the in-depth interview with the five academics and online marketers with the interview questionnaire and tape recorder to record the interviews with writing the important notations of the key informants down. The summary and tape transcription for particular issues had been done afterwards.

3.2.5 Data Analysis

After collecting data, all data from the academics and online marketers point of views had been grouped into categories in order to summarize on the marketing communication factors influencing Thai customers loyalty towards e-commerce business to which confirming the correlation among the variables in the research title on "The causal model affecting Thai customer loyalty towards e-commerce business" based on the results of the quantitative research.

3.2.6 Data Presentation

I have presented data in relating to marketing communication factors influencing Thai customer loyalty towards e-commerce business in response to the third set of research questions appointing to how do the academics and the online marketers have any opinion in marketing communication factors influencing Thai customer loyalty towards e-commerce business. Accordingly, I have then relied on the quotation of the key informants in summarizing the results and employing the approaches, theories, and related researches including the research results based on the qualitative research.
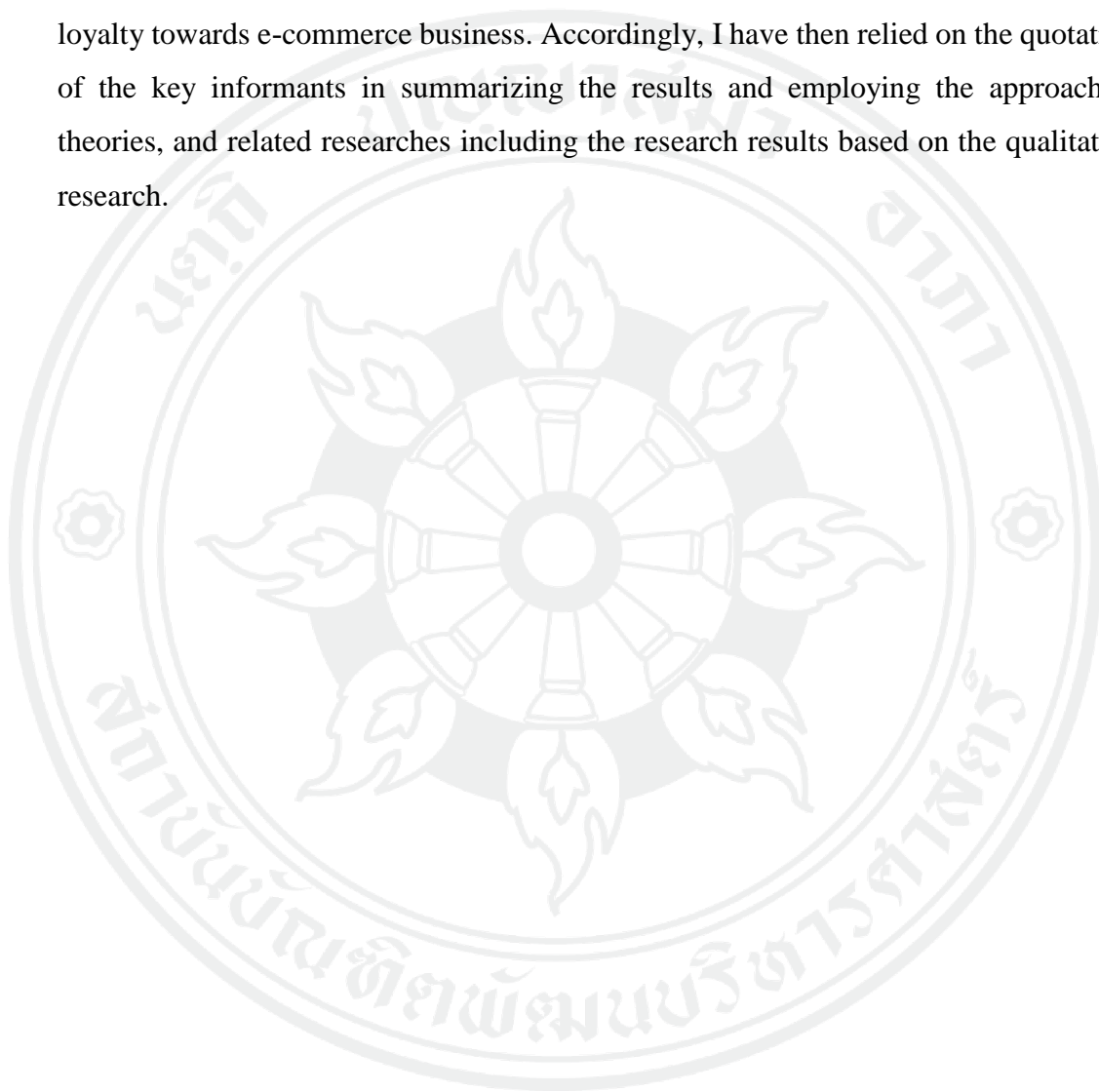
CHAPTER 4

QUANTITATIVE RESEARCH RESULTS

This chapter illustrates the results of data analysis and data interpretation based on the research objectives so as to develop and to examine the consistency between the causal model of factors affecting Thai customer loyalty towards e-commerce business and the empirical data. These results are divided into four parts, as follows:

Part 1	General information of the respondents
Part 2	Levels of opinion in regard to factors affecting loyalty, perceived value, satisfaction, trust, and loyalty
Part 3	Analysis results of the relationships among variables
Part 4	Analysis results of the structural equation model

Symbols for variables and statistics used in data analysis

IQ	represents	Information Quality
IQ1	represents	Completeness
IQ2	represents	Accuracy
IQ3	represents	Currency
IQ4	represents	Visual Appeal
SQ	represents	System Quality
SQ1	represents	Security and Privacy
SQ2	represents	Convenience
SQ3	represents	Speed
PS	represents	Product and Service Quality
PS1	represents	Customization
PS2	represents	Assurance
PS3	represents	Responsiveness

BI	represents	Brand Image
BI1	represents	Reputation
BI2	represents	Good Management
BI3	represents	Law and Ethics
MC	represents	Marketing Communication Tools
MC1	represents	Offline Media
MC2	represents	Online Media
PV	represents	Perceived Value
PV1	represents	Utilitarian Shopping Value
PV2	represents	Hedonic Shopping Value
ST	represents	Satisfaction
ST1	represents	Achieved Expectation
ST2	represents	Overall Satisfaction
TR	represents	Trust
TR1	represents	Integrity
TR2	represents	Expertise
TR3	represents	Benevolence
LY	represents	Loyalty
LY1	represents	Repeat Purchase
LY2	represents	Words of Mouth
n	represents	Number of samples
$\bar{x}$	represents	Mean
S.D.	represents	Standard Deviation
e	represents	Statistic Error
a	represents	A Statistical Significance at 0.1
*	represents	A Statistical Significance at 0.05
**	represents	A Statistical Significance at 0.01
***	represents	A Statistical Significance at 0.001
DE	represents	Direct Effects
IE	represents	Indirect Effects
TE	represents	Total Effects

4.1 General Information of the Respondents

The results of analysis of general information of the respondents are as follows: 360 respondents who were Thai customers who shopped via more than one e-commerce website and frequently shopped through a particular e-commerce website, at least three times a year, as presented in table 4.1.

Table 4.1 Number and Percentage of Respondents Classified by Personal Information

Personal Information	Number	Percentage
1. Gender		
- Male	128	35.56
- Female	232	64.44
2. Age		
- 20 years old or less	48	13.33
- 21-30 years old	119	33.06
- 31-40 years old	104	28.89
- 41-50 years old	39	10.83
- 51 years old or more	50	13.89
3. Education		
- Undergrad Degree	31	8.61
- Bachelor Degree	257	71.39
- Higher than Bachelor Degree	72	20.00
4. Occupation		
- Civil officer/State enterprise officer	36	10.00
- Private company employee	143	39.72
- Private own business/Trader	43	11.94
- Employee/Freelance	21	5.83

Personal Information	Number	Percentage
- Student/Post-grad	111	30.83
- Others	6	1.67
5. Monthly Income		
- 10,000 bahts or less	94	26.1
- 10,001–20,000 bahts	66	18.3
- 20,001–30,000 bahts	63	17.5
- 30,001–40,000 bahts	48	13.3
- 40,001 bahts or more	89	24.7
6. Shopping via e-commerce websites		
- online.advice.co.th	12	3.33
- shoponline.tescolotus.com	11	3.06
- www.11street.co.th	12	3.33
- www.central.co.th	32	8.89
- www.jib.co.th	10	2.78
- www.lazada.co.th	283	78.61

Table 4.1 shows the general information of 360 respondents. The analysis results are described as below.

1) Gender

There were more female respondents (64.44 percent) than male respondents (35.56 percent).

2) Age

Most of the respondents were 21-30 years old (33.06 percent), followed by 31-40 years old (28.89 percent), 51 years old or more (13.89 percent), 20 years old or less (13.33 percent), and lastly 41-50 years old (10.83 percent).

3) Education

Most of the respondents obtained a bachelor's degree (71.39 percent), followed by higher than a bachelor's degree (20.00 percent), and lastly an undergrad degree (8.61 percent).

4) Occupation

Most of the respondents were private company employees (39.72 percent), followed by students/post-graduates (30.83 percent), private business owners/traders (11.94 percent), civil officers/state enterprise officers (10.00 percent), employees/freelancers (5.83 percent), and others (1.67 percent).

5) Monthly Income

Most of the respondents earned 10,000 bahts or less a month (26.11 percent), followed by 40,001 bahts or more (24.72 percent), 10,001-20,000 bahts (18.33 percent), 20,001-30,000 bahts (17.50 percent), and lastly 30,001-40,000 bahts (13.33 percent).

6) Shopping via e-commerce websites

Most of the respondents shopped via www.lazada.co.th (78.61 percent), followed by www.central.co.th (8.89 percent), online.advice.co.th (3.33 percent), www.11street.co.th (3.33 percent), shoponline.tescolotus.com (3.06 percent), and lastly www.jib.co.th (2.78 percent).

4.2 Levels of Opinion in regard to Factors Affecting Loyalty, Perceived Value, Satisfaction, Trust, and Loyalty

The results of analysis of the levels of opinions about factors affecting the customers' loyalty, the perceived value level, the satisfaction level, the trust level, and the loyalty level in relation to e-commerce are presented in table 4.2-4.6.

Table 4.2 Means, Standard Deviations, and Levels of Opinions about Factors Affecting Customer Loyalty towards E-commerce Business

Factors Affecting Customer Loyalty	n = 360		
	$\bar{x}$	S.D.	Level of Opinion
1. Information Quality	**4.01**	**0.71**	**high**
1.1 Completeness	**4.01**	**0.71**	**high**
- The website offers complete information, such as product images and information, pricing, terms of payment, terms of shipping, etc.	3.92	0.72	high
- The website offers enough information to meet the customer needs	4.09	0.69	high
1.2 Accuracy	**4.05**	**0.70**	**high**
- The website offers accurate data	4.06	0.68	high
- The website offers reliable information, such as product information, exact product features, etc.	3.96	0.75	high
- The website offers useful information	4.12	0.67	high
1.3 Currency	**4.08**	**0.69**	**high**
- The website presents current information.	4.20	0.65	high
- The website information has always the up-to-date.	3.95	0.72	high

Factors Affecting Customer Loyalty	n = 360		
	$\bar{x}$	S.D.	Level of Opinion
1.4 Visual Appeal	**3.95**	**0.74**	**high**
- The format of the information on the website is orderly, including images, text, animations, and graphics	3.98	0.74	high
- The format of the information on the website is appropriate, such as image size, font style, color, layout, etc.	3.95	0.75	high
- The format of information on the website is attractive, such as images, animations, graphics, colors, etc.	3.91	0.73	high
2. System Quality	**3.98**	**0.73**	high
2.1 Security and Privacy	**3.93**	**0.71**	**high**
- Security policy is notified by the website to ensure confidence with the payment method	3.96	0.72	high
- Privacy policy is notified by the website to ensure safety of name, address, credit card number, etc.	3.89	0.69	high
2.2 Convenience	**4.03**	**0.72**	**high**
- Easy to remember of the website name	3.93	0.69	high
- The website is designed to be ease of use	4.06	0.72	high
- Easy to learn how to use when first visiting to the website	4.03	0.75	high

Factors Affecting Customer Loyalty	n = 360		
	$\bar{x}$	S.D.	Level of Opinion
- Remember how to use and to use fluently even though not using the website for a certain period of time.	4.08	0.72	high
- Multiple accesses to the website including desktop, laptop, smartphone, tablet, etc.	4.00	0.73	high
- The website has an application that facilitates ordering	4.06	0.69	high
2.3 Speed	**3.93**	**0.77**	**high**
- Speedy connectivity to the website	3.96	0.75	high
- Speedy display of the desired data	3.84	0.82	high
- Speedy in searching for information and returning on the website	3.98	0.78	high
- The website system is stable with no failure while running	3.95	0.72	high
3. Product and Service Quality	**4.01**	**0.73**	**high**
3.1 Customization	**3.98**	**0.75**	**high**
- The website offers quality products	3.89	0.70	high
- The website offers variety of products	3.89	0.69	high
- The website offers adequate product price	4.19	0.73	high
- The website offers many price ranges to choose	4.01	0.73	high
- The website offers speedy delivery as time specified	3.93	0.80	high

Factors Affecting Customer Loyalty	n = 360		
	$\bar{x}$	S.D.	Level of Opinion
- The website has adjusted service format to meet each customer need, such as welcome note on the site with customer name, list of recommended product to meet customer interest of each person, etc.	3.94	0.83	high
3.2 Assurance	**4.04**	**0.71**	**high**
- The website displays important information to assure the placing of an order, such as the website age, the buyer statistics, the site visitors, the contact with sellers, etc.	3.96	0.74	high
- The website displays terms of product quality warranty to assure the ordering, such as refund or return of product policy	4.12	0.68	high
3.3 Responsiveness	**4.04**	**0.71**	**high**
- The website offers after sales service, such as email notification to customers as soon as the products have been sent	4.15	0.74	high
- The website provides contact and information channels, such as LiveChat, Facebook, Line, and telephone to solve problem	4.03	0.70	high
- The website provides assistance and problem solving quickly	4.02	0.71	high

Factors Affecting Customer Loyalty	n = 360		
	$\bar{x}$	S.D.	Level of Opinion
⁻ The website provides assistance and well problem solving	3.96	0.70	high
4. Brand Image	**4.17**	**0.70**	high
4.1 Reputation	**4.15**	**0.74**	**high**
- The website owns credible image	4.12	0.75	high
- The website is popular	4.11	0.77	high
- The website is a successful business	4.21	0.71	highest
4.2 Good Management	**4.13**	**0.68**	**high**
- The website develops remarkable marketing plan	4.21	0.68	highest
- The website owns efficacy administrative system	4.12	0.68	high
- The website applies innovation in doing business	4.05	0.68	high
4.3 Law and Ethics	**4.25**	**0.68**	**highest**
- The website business is lawful	4.33	0.68	highest
- The website is carrying business of integrity with no exploitation on customer and society	4.29	0.68	highest
- The website shows the responsibility whenever there is any impact caused by its business	4.12	0.69	high

Factors Affecting Customer Loyalty	n = 360		
	$\bar{x}$	S.D.	Level of Opinion
5. Marketing Communication Tools	**4.07**	**0.72**	**high**
5.1 Offline Media	**4.07**	**0.73**	**high**
- The website places advertisement through offline media, such as television, newspapers, magazines, etc.	4.12	0.70	high
- The website has sales promotion, such as discount, premium, free product delivery, etc.	4.03	0.73	high
- The website places public relations on various media, such as press release, interviews, special events, etc.	4.05	0.77	high
5.2 Online Media	**4.08**	**0.71**	**high**
- The website places online media on search engine, such as Google, Yahoo, etc.	3.97	0.77	high
- The website installs a link with other websites	4.25	0.64	highest
- The website places banner on other websites	4.02	0.71	high

Table 4.2 illustrates the levels of opinions about 5 factors affecting customers' loyalty towards e-commerce, i.e. the information quality, the system quality, the product and service quality, the brand image, and the marketing communication tools. The details of the analysis results are described as below.

1) Information Quality

Overall, the respondents had the opinions that the information quality was a factor that affected customers' loyalty towards e-commerce at a high level ($\bar{x}$ = 4.01,

S.D. = 0.71). The information quality consisted of completeness, accuracy, currency, and visual appeal. The analysis results are described as below.

   1.1) Completeness – The respondents' opinions about completeness were at a high level ($\bar{x}$ = 4.01, S.D. = 0.71). They had the opinions that the websites offered complete information, e.g. product images and information, prices, terms of payment, and terms of shipping ($\bar{x}$ = 3.92, S.D. = 0.72) and offered enough information to meet customer needs ($\bar{x}$ = 4.09, S.D. = 0.69) at a high level.

   1.2) Accuracy – The respondents' opinions about accuracy was at a high level ($\bar{x}$ = 4.05, S.D. = 0.70). They had the opinions that the websites offered accurate data ($\bar{x}$ = 4.06, S.D. = 0.68), offered reliable information, e.g. product information that matches product features ($\bar{x}$ = 3.96, S.D. = 0.75), and offered useful information ($\bar{x}$ = 4.12, S.D. = 0.67) at a high level.

   1.3) Currency – The respondents' opinions about currency was at a high level ($\bar{x}$ = 4.08, S.D. = 0.69). They had the opinions that the websites offered current information ($\bar{x}$ = 4.20, S.D. = 0.65) and had always the up-to-date ($\bar{x}$ = 3.95, S.D. = 0.72) at a high level.

   1.4) Visual Appeal – The respondents' opinions about visual appeal was at a high level ($\bar{x}$ = 3.95, S.D. = 0.74). They had the opinions that the format of information on the websites was well-organized, i.e. images, text, animations, and graphics ($\bar{x}$ = 3.98, S.D. = 0.74), the format of information on the websites was appropriate in terms of, for example, image sizes, font styles, colors, and layout ($\bar{x}$ = 3.95, S.D. = 0.75), and the format of information on the websites was attractive, e.g. images, animations, graphics, and colors ($\bar{x}$ = 3.91, S.D. = 0.73) at a high level.

   2) System Quality

   Overall, the respondents' opinions that the system quality was a factor that affected the customer loyalty towards e-commerce was at a high level ($\bar{x}$ = 3.98, S.D. = 0.73). The system quality consisted of security and privacy, convenience, and speed. The analysis results are described as below.

   2.1) Security and Privacy – The respondents' opinions about security and privacy was at a high level ($\bar{x}$ = 3.93, S.D. = 0.71). They had the opinions that the websites had the security policy to ensure confidence in the payment methods ($\bar{x}$ = 3.96,

S.D. = 0.72) and had the privacy policy to ensure the safety in relation to names, addresses, credit card numbers, etc. ($\bar{x}$ = 3.89, S.D. = 0.69) at a high level.

2.2) Convenience – The respondents' opinions about convenience was at a high level ($\bar{x}$ = 4.03, S.D. = 0.72). They had the opinions that the websites' names were easy to remember ($\bar{x}$ = 3.93, S.D. = 0.69), were easy to use ($\bar{x}$ = 4.06, S.D. = 0.72), were easy to learn how to use even in the first site visit ($\bar{x}$ = 4.03, S.D. = 0.75), were easy to remember how to use and able to be skillfully used after discontinued use for a certain period of time ($\bar{x}$ = 4.08, S.D. = 0.72), were easy to access via different channels, e.g. desktop, laptop, smartphone, and tablet ($\bar{x}$ = 4.00, S.D. = 0.73), and had an application facilitating product ordering ($\bar{x}$ = 4.06, S.D. = 0.69) at a high level.

2.3) Speed – The respondents' opinions about speed was at a high level ($\bar{x}$ = 3.93, S.D. = 0.77). They had the opinions that the connectivity to the websites was speedy ($\bar{x}$ = 3.96, S.D. = 0.75), displayed desired data quickly ($\bar{x}$ = 3.84, S.D. = 0.82), fast to search for and retrieve data on the websites ($\bar{x}$ = 3.98, S.D. = 0.78), and lastly had a stable system without failure during use ($\bar{x}$ = 3.95, S.D. = 0.72) at a high level.

3) Product and Service Quality

Overall, the respondents' opinions that the product and service quality was a factor that affected customer loyalty towards e-commerce at a high level ($\bar{x}$ = 4.01, S.D. = 0.73). The product and service quality consisted of customization, assurance, and responsiveness. The analysis results are described as below.

3.1) Customization – The respondents' opinions about customization was at a high level ($\bar{x}$ = 3.98, S.D. = 0.75). They had the opinions that the websites offered the quality of products ($\bar{x}$ = 3.89, S.D. = 0.70), offered a variety of products to choose from ($\bar{x}$ = 3.89, S.D. = 0.69), offered products with reasonable prices (X = 4.19, S.D. = 0.73), offered products with diverse price ranges to choose from ($\bar{x}$ = 4.01, S.D. = 0.73), offered speedy delivery within the time specified ($\bar{x}$ = 3.93, S.D. = 0.80), and adjusted service format to meet each customer need, such as welcome note on the site with customer name, list of recommended product to meet customer interest of each person, etc. ($\bar{x}$ = 3.94, S.D. = 0.83) at a high level.

3.2) Assurance – The respondents' opinions about assurance was at a high level ($\bar{x}$ = 4.04, S.D. = 0.71). They had the opinions that the websites displayed important

information to create confidence in placing an order, such as the website age, the buyer statistics, the number of site visitors, and the seller contact channels ($\bar{x}$ = 3.96, S.D. = 0.74) and had the product quality warranty terms to create confidence in placing an order, such as the refund or return the product policy ($\bar{x}$ = 4.12, S.D. = 0.68) at a high level.

3.3) Responsiveness – The respondents' opinions about responsiveness was at a high level ($\bar{x}$ = 4.04, S.D. = 0.71). They had the opinions that the websites offered after-sales service, such as email notification to customers as soon as the products were shipped ($\bar{x}$ = 4.15, S.D. = 0.74), provided contact and information channels, such as LiveChat, Facebook, Line, and telephone to solve problems ($\bar{x}$ = 4.03, S.D. = 0.70), provided quick assistance and problem-solving services ($\bar{x}$ = 4.02, S.D. = 0.71), and provided good assistance and problem-solving services ($\bar{x}$ = 3.96, S.D. = 0.70) at a high level.

4) Brand Image

Overall, the respondents' opinions about brand image was a factor that affected customer loyalty towards e-commerce at a high level ($\bar{x}$ = 4.17, S.D. = 0.70). The brand image consisted of reputation, good management, as well as law and ethics. The analysis results are described as below.

4.1) Reputation – The respondents' opinions about reputation was at a high level ($\bar{x}$ = 4.15, S.D. = 0.74). They had the opinions about the business success ($\bar{x}$ = 4.21, S.D. = 0.71) at the highest level and they had the opinions of a credible image ($\bar{x}$ = 4.12, S.D. = 0.75) and popularity of the websites ($\bar{x}$ = 4.11, S.D. = 0.77) at a high level.

4.2) Good Management – The respondents' opinions about good management was at a high level ($\bar{x}$ = 4.13, S.D. = 0.68). They had the opinions that the websites had remarkable marketing plans ($\bar{x}$ = 4.21, S.D. = 0.68) at the highest level. However, they had the opinions that the websites owned an efficient administration system ($\bar{x}$ = 4.12, S.D. = 0.68) and applied innovation to their businesses ($\bar{x}$ = 4.05, S.D. = 0.68) at a high level.

4.3) Law and Ethics – The respondents' opinions about law and ethics was at the highest level ($\bar{x}$ = 4.25, S.D. = 0.68). They had the opinions that the websites

operated business under a legal framework ($\bar{x}$ = 4.33, S.D. = 0.68) and conducted business with integrity without the exploitation on customers or society ($\bar{x}$ = 4.29, S.D. = 0.68) at the highest level. However, they had the opinions that the websites exercised the responsibility when any impacts of business operations were found ($\bar{x}$ = 4.12, S.D. = 0.69) at a high level.

5) Marketing Communication Tools

Overall, the respondents had the opinions that marketing communication tools were factor that affected customer loyalty towards e-commerce at a high level ($\bar{x}$ = 4.07, S.D. = 0.72). The marketing communication tools consisted of offline media and online media. The analysis results are described as below.

5.1) Offline Media – The respondents' opinions about offline media was at a high level ($\bar{x}$ = 4.07, S.D. = 0.73). They had the opinions that the websites placed advertisements through offline media, e.g. television, newspaper, and magazine ($\bar{x}$ = 4.12, S.D. = 0.70), had sales promotion, e.g. discount, premium gifts, and free delivery service ($\bar{x}$ = 4.03, S.D. = 0.73), and provided public relations via various media, e.g. press release, interviews, and special events ($\bar{x}$ = 4.05, S.D. = 0.77) at a high level.

5.2) Online Media – The respondents' opinions about online media was at a high level ($\bar{x}$ = 4.08, S.D. = 0.71). They had the opinions that the websites provided links to other websites ($\bar{x}$ = 4.25, S.D. = 0.64) at the highest level, provided their news and information on search engine websites, e.g. Google and Yahoo ($\bar{x}$ = 3.97, S.D. = 0.77), and provided a banner on different websites ($\bar{x}$ = 4.02, S.D. = 0.71) at a high level.

Table 4.3 Means, Standard Deviations, and Levels of Customer Perceived Value of E-commerce Business

Perceived Value	n = 360		
	$\bar{x}$	S.D.	Level of Perceived Value
1. Utilitarian Shopping Value	**4.10**	**0.71**	**high**
- Perceived value of the ease of use on the website	4.10	0.67	high
- Perceived value of the time saving in data searching and product ordering through the website	4.10	0.75	high
2. Hedonic Shopping Value	**4.01**	**0.73**	**high**
- Feel the escape from everyday life when visiting the website for product information	3.98	0.71	high
- Feel enjoy while using the website	4.00	0.70	high
- Feel excited when shopping through the website	4.06	0.77	high
Total Means	**4.05**	**0.72**	**high**

Table 4.3 shows that the respondents' perceived value of e-commerce was at a high level ($\bar{x}$ = 4.05, S.D. = 0.72). The perceived value consisted of utilitarian shopping value and hedonic shopping value. The results of analysis are as follows:

1) Utilitarian Shopping Value – The respondents' perceived utilitarian shopping value was at a high level ($\bar{x}$ = 4.10, S.D. = 0.71), with perceived value of the ease of use on the websites ($\bar{x}$ = 4.10, S.D. = 0.67) at a high level and perceived value

of the time saving in data searching and product ordering through the websites ($\bar{x}$ = 4.10, S.D. = 0.75) at a high level.

    2) Hedonic Shopping Value – The respondents' perceived hedonic shopping value was at a high level ($\bar{x}$ = 4.01, S.D. = 0.73), with feeling the escape from everyday life when visiting the websites for product information ($\bar{x}$ = 3.98, S.D. = 0.71), feeling joyful while using the websites ($\bar{x}$ = 4.00, S.D. = 0.70), and feeling excited when shopping through the websites ($\bar{x}$ = 4.06, S.D. = 0.77) at a high level.

Table 4.4 Means, Standard Deviations, and Levels of Customer Satisfaction with E-commerce Business

Satisfaction	n = 360		
	$\bar{x}$	S.D.	Level of Satisfaction
1. Achieved Expectation	**3.99**	**0.75**	**high**
- Achieved expectation of the correct choice in purchasing over the website	4.01	0.75	high
- Achieved expectation of the usefulness of product and service on the website	3.97	0.75	high
2. Overall Satisfaction	**3.99**	**0.76**	**high**
- Overall satisfaction in purchasing through this website more than others	3.97	0.77	high
- Overall satisfaction in product and service of this website more than others	4.00	0.75	high
Total means	**3.99**	**0.76**	**high**

Table 4.4 shows that the level of respondents' satisfaction with e-commerce was at a high level ($\bar{x}$ = 3.99, S.D. = 0.76). The customer satisfaction consisted of achieved expectation and overall satisfaction. The analysis results are described as below.

1) Achieved expectation – The respondents' achieved expectation was at a high level ($\bar{x}$ = 3.99, S.D. = 0.75). They thought that shopping through websites was a right option ($\bar{x}$ = 4.01, S.D. = 0.75) and the benefits of services and products from the websites were as expected ($\bar{x}$ = 3.97, S.D. = 0.75) at a high level.

2) Overall satisfaction – The respondents' overall satisfaction was at a high level ($\bar{x}$ = 3.99, S.D. = 0.76). Their satisfaction with shopping through these websites were greater than that through other websites ($\bar{x}$ = 3.97, S.D. = 0.77) and their satisfaction with services and products from these websites were greater than that from other websites ($\bar{x}$ = 4.00, S.D. = 0.75) at a high level.

Table 4.5 Means, Standard Deviations, and Levels of Customer Trust in E-commerce Business

Trust	n = 360		
	$\bar{x}$	S.D.	Level of Trust
1. Integrity	**4.15**	**0.70**	high
- The website is reliable	4.13	0.72	high
- The website discloses all important information openly with no deception	4.19	0.68	high
- The website delivers product and service as agreement made	4.13	0.69	high
2. Expertise	**4.01**	**0.69**	high
- The website provides the product and service of acceptable quality	4.01	0.66	high

Trust	n = 360		
	$\bar{x}$	S.D.	Level of Trust
⁻ The website provides the product and service quality that meets the customer need	4.01	0.71	high
3. Benevolence	**4.05**	**0.68**	high
- Focus importantly on customer benefit	3.96	0.66	high
- Take very good care of every customer even small matter	4.13	0.69	high
Total means	**4.09**	**0.69**	**high**

Table 4.5 reveals that respondents' trust in e-commerce was at a high level ($\bar{x}$ = 4.09, S.D. = 0.69). Customer trust consisted of integrity, expertise, and benevolence. The analysis results are described as below.

1) Integrity – The respondents' trust in integrity was at a high level ($\bar{x}$ = 4.15, S.D. = 0.70). They regarded that the websites were reliable ($\bar{x}$ = 4.13, S.D. = 0.72), disclosed all important information openly without the deception ($\bar{x}$ = 4.19, S.D. = 0.68), and delivered the products and services based on the agreement on the websites ($\bar{x}$ = 4.13, S.D. = 0.69) at a high level.

2) Expertise – The respondents' trust in expertise was at a high level ($\bar{x}$ = 4.01, S.D. = 0.69). They believed that the websites had the products and services with acceptable quality ($\bar{x}$ = 4.01, S.D. = 0.66) and had the products and services with adequate quality for meeting the customer need at a high level ($\bar{x}$ = 4.01, S.D. = 0.71).

3) Benevolence – The respondents' trust in benevolence was at a high level ($\bar{x}$ = 4.05, S.D. = 0.68). They regarded that the websites placed top priority on customer benefits ($\bar{x}$ = 3.96, S.D. = 0.66) and took very good care of every customer even in small matters ($\bar{x}$ = 4.13, S.D. = 0.69) at a high level.

Table 4.6 Means, Standard Deviations, and Levels of Customer Loyalty towards E-commerce Business

Loyalty	n = 360		
	$\bar{x}$	S.D.	Level of Loyalty
1. Repeat Purchase	**4.06**	**0.74**	**high**
- The website is the first choice to repurchase product next time	4.11	0.73	high
- Intention to repurchase product in this website again	4.01	0.75	high
2. Words of Mouth	**4.05**	**0.72**	**high**
- Spread positive words of mouth about the website to other people	3.96	0.72	high
- Pursuade other people to purchase product over the website	4.14	0.72	high
Total means	**4.06**	**0.73**	**high**

Table 4.6 shows the levels of customer loyalty towards e-commerce. Overall, the respondents had customer loyalty towards e-commerce at a high level ($\bar{x}$ = 4.06, S.D. = 0.73). The customer loyalty consisted of repeat purchase and words of mouth. The analysis results are described as below.

1) **Repeat Purchase** – The respondents' loyalty with relation to repeat purchase was at a high level ($\bar{x}$ = 4.06, S.D. = 0.74). They thought that the websites were the first choices for their next shopping ($\bar{x}$ = 4.11, S.D. = 0.73) and they had the intention to repurchase products from these websites ($\bar{x}$ = 4.01, S.D. = 0.75) at a high level.

2) **Words of Mouth** – The respondents' loyalty with relation to words of mouth was at a high level ($\bar{x}$ = 4.05, S.D. = 0.72). They recommended good things about these websites to other people ($\bar{x}$ = 3.96, S.D. = 0.72) and persuaded other people to buy products through the websites ($\bar{x}$ = 4.14, S.D. = 0.72) at a high level.

4.3 Analysis Results of the Relationships among Variables

Initially, in the analysis of the structural equation modeling (SEM), variables in the research needed to have the relationships. Thus, Pearson's correlation coefficients were analyzed in order to identify the relationships among observed variables of latent variables. The analysis results revealed that all observed variables in the model had relationships with correlation coefficients not exceeding 0.80, which passed the criteria for correlation coefficients among variables in the SEM analysis (Yuth Kaiyawan, 2013: 220).

4.3.1 Results of Analysis of Pearson's Correlation Coefficients among Observed Variables of the Exogenous Latent Variables

In this research, there were 5 exogenous latent variables – the information quality, the system quality, the product and service quality, the brand image, and the marketing communication tools. They consisted of 15 observed variables. An analysis was conducted on the correlation coefficients among 15 observed variables, consisting of 105 pairs. The analysis revealed that the observed variables of all pairs of the exogenous latent variables had significant relationships at the statistical significance level of 0.01. 12 pairs had a high level of relationship with correlation coefficients ranging from 0.701-0.800; 78 pairs had a moderate level of relationship with correlation coefficients ranging from 0.509-0.692; and 15 pairs had a low level of relationship with correlation coefficients ranging from 0.365-0.489. The details are presented in table 4.7.

Table 4.7 Results of Analysis of Pearson's Correlation Coefficients among Observed Variables of the Exogenous Latent Variables

	IQ1	IQ2	IQ3	IQ4	SQ1	SQ2	SQ3	PS1	PS2	PS3	BI1	BI2	BI3	MC1	MC2
IQ1	1														
IQ2	.764**	1													
IQ3	.576**	.671**	1												
IQ4	.512**	.555**	.701**	1											
SQ1	.512**	.569**	.552**	.595**	1										
SQ2	.559**	.576**	.579**	.533**	.800**	1									
SQ3	.567**	.589**	.593**	.513**	.750**	.799**	1								
PS1	.566**	.565**	.556**	.471**	.676**	.720**	.763**	1							
PS2	.481**	.460**	.432**	.365**	.487**	.545**	.580**	.741**	1						
PS3	.534**	.555**	.528**	.436**	.513**	.570**	.569**	.673**	.692**	1					
BI1	.569**	.532**	.471**	.388**	.518**	.604**	.569**	.642**	.624**	.670**	1				
BI2	.571**	.566**	.534**	.443**	.516**	.563**	.525**	.576**	.563**	.587**	.715**	1			
BI3	.598**	.621**	.566**	.449**	.489**	.582**	.555**	.567**	.511**	.548**	.660**	.734**	1		
MC1	.545**	.545**	.509**	.404**	.466**	.572**	.557**	.608**	.618**	.608**	.687**	.675**	.726**	1	
MC2	.567**	.566**	.555**	.446**	.579**	.655**	.651**	.712**	.628**	.626**	.647**	.598**	.641**	.650**	1

4.3.2 Results of Analysis of Pearson's Correlation Coefficients among Observed Variables of the Endogenous Latent Variables

In this research, there were 4 endogenous latent variables – the perceived value, the satisfaction, the trust, and the loyalty, which consisted of 9 observed variables. An analysis was conducted on the correlation coefficients among 9 observed variables, consisting of 36 pairs. The analysis revealed that the observed variables of all pairs of the endogenous latent variables had significant relationships at the statistical significance level of 0.01. 5 pairs had a high level of relationship with correlation coefficients ranging from 0.712-0.766; 28 pairs had a moderate level of relationship with correlation coefficients ranging from 0.525-0.697; and 3 pairs had a low level of relationship with correlation coefficients ranging from 0.421-0.485. The details are shown in table 4.8.

Table 4.8 Results of Analysis of Pearson's Correlation Coefficients among Observed Variables of the Endogenous Latent Variables

	PV1	PV2	ST1	ST2	TR1	TR2	TR3	LY1	LY2
PV1	1								
PV2	$.727^{**}$	1							
ST1	$.639^{**}$	$.681^{**}$	1						
ST2	$.647^{**}$	$.712^{**}$	$.766^{**}$	1					
TR1	$.619^{**}$	$.614^{**}$	$.541^{**}$	$.595^{**}$	1				
TR2	$.591^{**}$	$.636^{**}$	$.600^{**}$	$.636^{**}$	$.659^{**}$	1			
TR3	$.556^{**}$	$.643^{**}$	$.660^{**}$	$.683^{**}$	$.636^{**}$	$.754^{**}$	1		
LY1	$.605^{**}$	$.646^{**}$	$.648^{**}$	$.697^{**}$	$.617^{**}$	$.607^{**}$	$.744^{**}$	1	
LY2	$.485^{**}$	$.530^{**}$	$.421^{**}$	$.485^{**}$	$.525^{**}$	$.533^{**}$	$.575^{**}$	$.527^{**}$	1

4.3.3 Results of Analysis of Pearson's Correlation Coefficients among Observed Variables of All the Latent Variables

In this research, there were 9 latent variables, consisting of 24 observed variables. An analysis was conducted on the correlation coefficients among these 24 observed variables, consisting of 276 pairs. The analysis revealed that the observed variables of all pairs of the latent variables had significant relationships at the statistical significance level of 0.01. 20 pairs had a high level of relationship with correlation coefficients ranging from 0.701-0.800; 224 pairs had a moderate level of relationship with correlation coefficients ranging from 0.508-0.698; and 32 pairs had a low level of relationship with correlation coefficients ranging from 0.355-0.493. The details are shown in table 4.9.

Table 4.9 Results of Analysis of Pearson's Correlation Coefficients among Observed Variables of All the Latent Variables

	PV1	PV2	ST1	ST2	TR1	TR2	TR3	LY1	LY2	IQ1	IQ2	IQ3	IQ4	SQ1	SQ2	SQ3	PS1	PS2	PS3	BI1	BI2	BI3	MC1	MC2
PV1	1																							
PV2	.727**	1																						
ST1	.639**	.681**	1																					
ST2	.647**	.712**	.766**	1																				
TR1	.619**	.614**	.541**	.595**	1																			
TR2	.591**	.636**	.600**	.636**	.659**	1																		
TR3	.556**	.643**	.660**	.683**	.636**	.754**	1																	
LY1	.605**	.646**	.648**	.697**	.617**	.607**	.744**	1																
LY2	.485**	.530**	.421**	.485**	.525**	.533**	.575**	.527**	1															
IQ1	.566**	.558**	.508**	.572**	.588**	.527**	.617**	.584**	.736**	1														
IQ2	.571**	.582**	.536**	.536**	.619**	.560**	.624**	.553**	.698**	.764**	1													
IQ3	.518**	.534**	.437**	.475**	.585**	.517**	.568**	.544**	.553**	.576**	.671**	1												
IQ4	.403**	.456**	.355**	.420**	.493**	.429**	.432**	.421**	.530**	.512**	.555**	.701**	1											
SQ1	.452**	.573**	.503**	.548**	.535**	.542**	.577**	.616**	.528**	.512**	.569**	.552**	.595**	1										
SQ2	.573**	.628**	.591**	.664**	.618**	.594**	.658**	.653**	.513**	.559**	.576**	.579**	.533**	.800**	1									
SQ3	.536**	.600**	.529**	.595**	.574**	.538**	.582**	.627**	.501**	.567**	.589**	.593**	.513**	.750**	.799**	1								
PS1	.615**	.672**	.559**	.679**	.556**	.598**	.610**	.688**	.527**	.566**	.565**	.556**	.471**	.676**	.720**	.763**	1							
PS2	.585**	.557**	.551**	.611**	.512**	.554**	.501**	.631**	.408**	.481**	.460**	.432**	.365**	.487**	.545**	.580**	.741**	1						
PS3	.591**	.625**	.591**	.603**	.552**	.605**	.589**	.578**	.475**	.534**	.555**	.528**	.436**	.513**	.570**	.569**	.673**	.692**	1					
BI1	.644**	.657**	.620**	.602**	.600**	.541**	.641**	.629**	.510**	.569**	.532**	.471**	.388**	.518**	.604**	.569**	.642**	.624**	.670**	1				
BI2	.636**	.617**	.592**	.566**	.591**	.578**	.636**	.602**	.563**	.571**	.566**	.534**	.443**	.516**	.563**	.525**	.576**	.563**	.587**	.715**	1			
BI3	.618**	.602**	.523**	.526**	.574**	.522**	.617**	.578**	.559**	.598**	.621**	.566**	.449**	.489**	.582**	.555**	.567**	.511**	.548**	.660**	.734**	1		
MC1	.630**	.644**	.593**	.604**	.548**	.581**	.613**	.635**	.457**	.545**	.545**	.509**	.404**	.466**	.572**	.557**	.608**	.618**	.608**	.687**	.675**	.726**	1	
MC2	.738**	.717**	.597**	.689**	.612**	.627**	.614**	.688**	.517**	.567**	.566**	.555**	.446**	.579**	.655**	.651**	.712**	.628**	.626**	.647**	.598**	.641**	.650**	1

4.4 Analysis Results of the Structural Equation Model

4.4.1 The Construct Validity Was Examined by Means of the Confirmatory Factor Analysis of the Measurement Model.
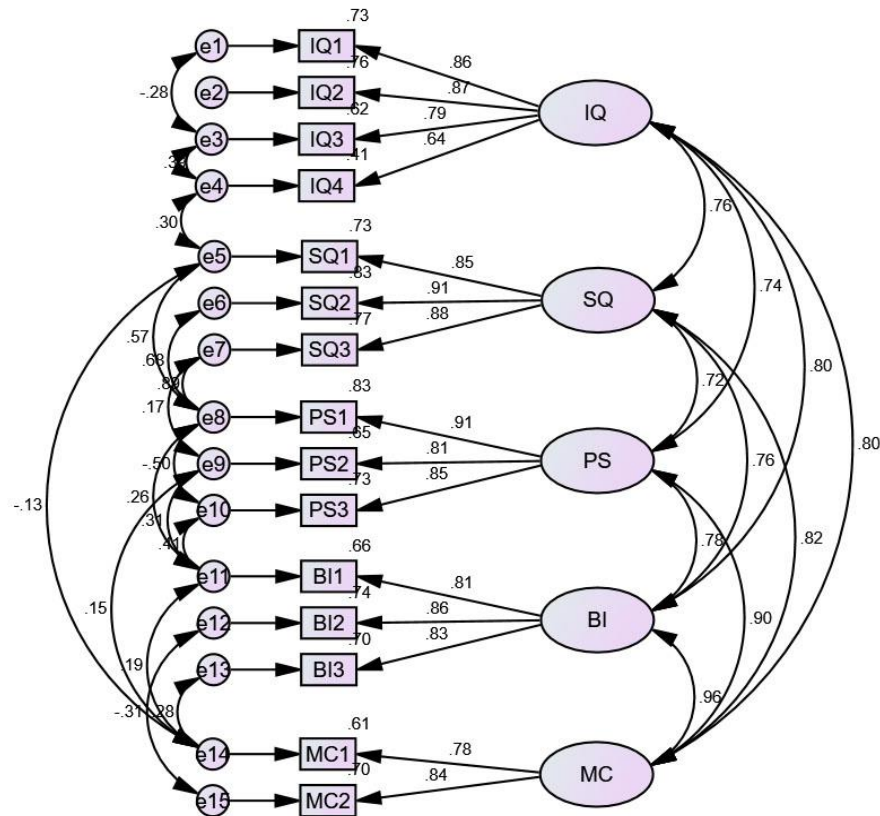
Chi-square=94.405,Chi-square/df=1.475, df=64, p=.008, GFI=.967, CFI=.993, RMR=.010, RMSEA=.036, NFI=.979, AGFI= .939, IFI=.993, RFI=.966

Figure 4.1 Results of the Analysis of the Confirmatory Factor Analysis of the Causal Model of Factors Affecting Thai Customer Loyalty towards E-commerce Business from a Statistical Package Program

Figure 4.1 illustrates the test results of the construct validity. The confirmatory factor analysis (CFA) by means of a statistical package program revealed that the measurement model of the latent variables was consistent with the empirical data (model fit) and the construct validity because the values of more than 3 indexes passed the criteria (Supamas Aungsuchoti et al., 2011: 21-24; Yuth Kaiyawan, 2013: 231). The examination results revealed that value of the following 9 indexes passed the criteria: (1) Relative chi-square (χ^2/df) = 1.475 (less than 2.00), (2) Goodness of fit index (GFI)

= 0.967 (over 0.90), (3) Adjusted goodness of fit index (AGFI) = 0.939 (over 0.90), (4) Comparative fit index (CFI) = 0.993 (over 0.90), (5) Normed fit index (NFI) = 0.979 (over 0.90), (6) Incremental fit index (IFI) = 0.993 (over 0.90), (7) Relative fit index (RFI) = 0.966 (over 0.90), (8) Root mean square residual (RMR) = 0.010 (below 0.05), and (9) Root mean square error of approximation (RMSEA) = 0.036 (below 0.05).

In addition, the factor loading of all the observed variables was not less than 0.50 and had a statistical significance level of 0.01. The factor loading of all observed variables of the respective latent variables is illustrated in figures 4.2-4.6.

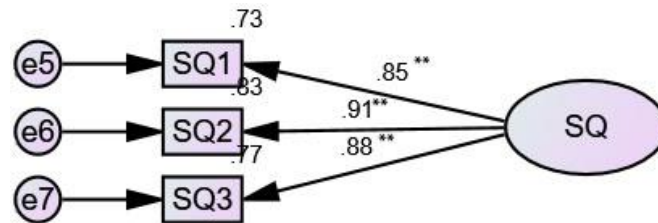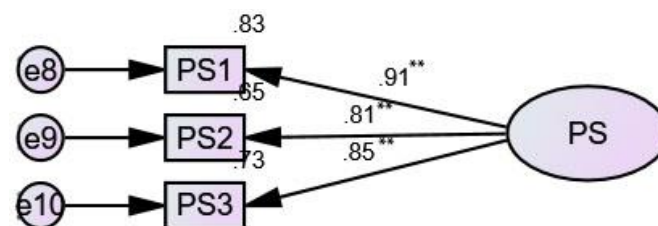### 1) Information Quality (IQ)
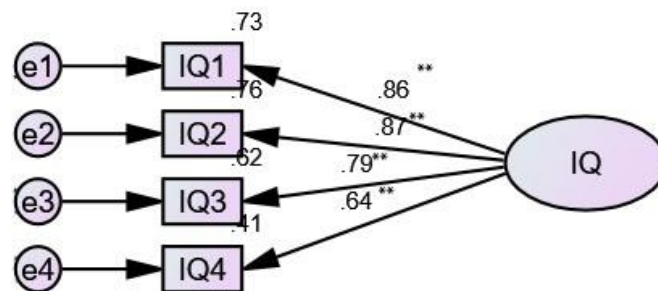
Remarks: At the significance level of 0.05 and the significance level of 0.01

Figure 4.2   The Factor Loading of Observed Variables of the Latent Variable 'Information Quality'

Figure 4.2 shows that the latent variable 'information quality' (IQ) consisted of 4 observed variables – completeness (IQ1), with the factor loading of 0.86; accuracy (IQ2), with the factor loading of 0.87; currency (IQ3), with the factor loading of 0.79; and visual appeal (IQ4), with the factor loading of 0.64.

2) System Quality (SQ)

Figure 4.3 The Factor Loading of Observed Variables of the Latent Variable 'System Quality'

From figure 4.3, the latent variable 'system quality' (SQ) consisted of 3 observed variables, i.e. security and privacy (SQ1), with the factor loading of 0.85; convenience (SQ2), with the factor loading of 0.91; and speed (SQ3), with the factor loading of 0.88.

3) Product and Service Quality)PS(

Figure 4.4 The Factor Loading of Observed Variables of the Latent Variable 'Product and Service Quality'

From figure 4.4, the latent variable 'product and service quality' (PS) consisted of 3 observed variables, i.e. customization (PS1), with the factor loading of

0.91; assurance (PS2), with the factor loading of 0.81; and responsiveness (PS3), with the factor loading of 0.85.
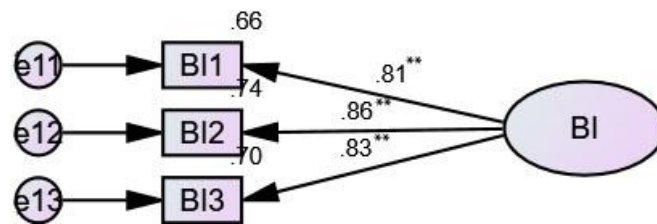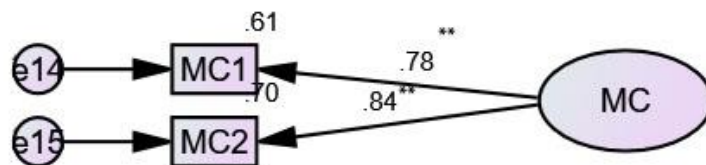
4) Brand Image (BI)

Remarks: At the significance level of 0.05 and the significance level of 0.01

Figure 4.5 The Factor Loading of Observed Variables of the Latent Variable 'Brand Image'

Figure 4.5 shows that the latent variable 'brand image' (BI) consisted of 3 observed variables, i.e. reputation (BI1), with the factor loading of 0.81; good management (BI2), with the factor loading of 0.86; and law and ethics (BI3), with the factor loading of 0.83.

5) Marketing Communication Tools (MC)

Remarks: At the significance level of 0.05 and the significance level of 0.01

Figure 4.6   The Factor Loading of Observed Variables of the Latent Variable 'Marketing Communication Tools'

From figure 4.6, the latent variable 'marketing communication tools' (MC) consisted of 2 observed variables, i.e. offline media (MC1), with the factor loading of 0.78 and online media (MC2), with the factor loading of 0.84.

4.4.2 Analysis of the Structural Equation Model

The analysis of the consistency between the causal model of factors affecting Thai customer loyalty towards e-commerce business and the empirical data involved the structural equation modeling (SEM). This was done by estimating the model parameter values by means of the maximum likelihood estimates (MLE) using the statistical package program and values of 10 indexes – (1) Chi-square (χ^2), (2) Relative chi-square (χ^2/df), (3) Goodness of fit index (GFI), (4) Adjusted goodness of fit index (AGFI), (5) Comparative fit index (CFI), (6) Normed fit index (NFI), (7) Incremental fit index (IFI), (8) Relative fit index (RFI), (9) Root mean square residual (RMR), and (10) Root mean square error of approximation (RMSEA). If there were over 3 indexes whose values passed the criteria, this suggested that the developed model was consistent with the empirical data (model fit) (Supamas Aungsuchoti et al., 2011: 21-24; Yuth Kaiyawan, 2013: 231).

4.4.2.1 Results of the Consistency between the Causal Model of Factors Affecting Thai Customer Loyalty towards E-commerce Business and the Empirical Data before the Model Adjustment

The results of the model examination using the statistical package program revealed the following index values: χ^2 was equal to p = 0.000, χ^2/df = 4.200, GFI = 0.824, CFI = 0.906, RMR = 0.018, RMSEA = 0.094, NFI = 0.880, AGFI = 0.770, IFI = 0.906, and RFI = 0.856, as illustrated in figure 4.7 and table 4.10.
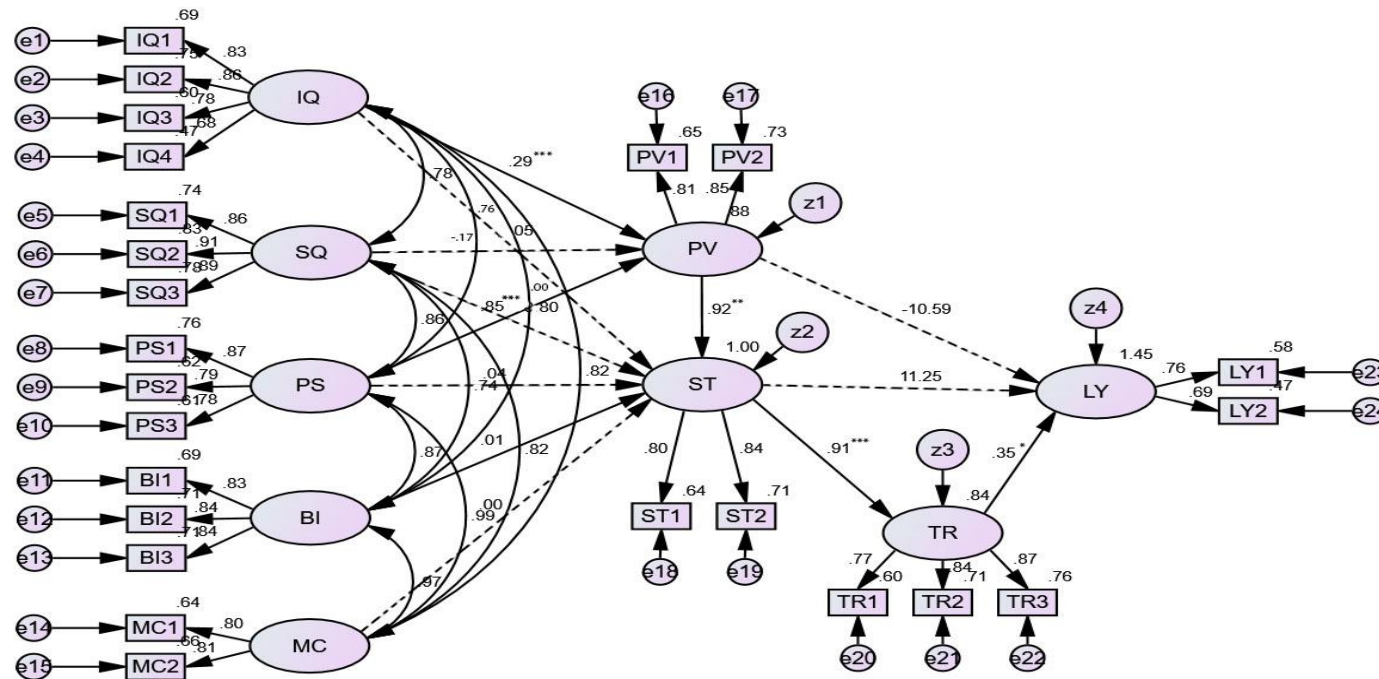
Chi-square=961.766,Chi-square/df=4.200, df=229, p=.000, GFI=.824, CFI=.906,
RMR=.018, RMSEA=.094, NFI=.880, AGFI= .770, IFI=.906, RFI=.856

Remarks: 1) The dash line means there is no the statistical significance. 2) * means the statistical significance at 0.5,
** means the statistical significance level at 0.01, *** means the statistical significance level at 0.001.

Figure 4.7 The Causal Model of Factors Affecting Thai Customer Loyalty towards E-commerce Business with the Empirical Data before the Model Adjustment

Table 4.10 Results of the Consistency between the Model and the Empirical Data
before the Model Adjustment

No.	Consistency index	Criteria	Index value	Result
1	Chi-square (χ^2)	$p > 0.05$	0.000	fail
2	Relative Chi-square (χ^2/df)	χ^2/df < 2.00	4.200	fail
3	Goodness of Fit Index (GFI)	GFI > 0.90	0.824	fail
4	Adjusted Goodness of Fit Index (AGFI)	AGFI > 0.90	0.770	fail
5	Comparative Fit Index (CFI)	CFI > 0.90	0.906	pass
6	Normed Fit Index (NFI)	NFI > 0.90	0.880	fail
7	Incremental Fit Index (IFI)	IFI > 0.90	0.906	pass
8	Relative Fit Index (RFI)	RFI > 0.90	0.856	fail
9	Root Mean Square Residual (RMR)	RMR < 0.05	0.018	pass
10	Root Mean Square Error of Approximation (RMSEA)	RMSEA < 0.05	0.094	fail

From table 4.10, there were 3 indexes whose values passed the criteria and the
chi-square (χ^2) index had the p-value that was below 0.05. If the structural equation
model is complicated as a result of a large number of observed variables, this will cause
weakness to the chi-square index and will result in the p-value failing the criteria, and
this will cause errors in the result. Thus, there was no need to take into account the
chi-square index (Kanlaya Vanichbuncha, 2014: 135). In the model examination, the
model consistency was considered based on other index values. This revealed that the
values of 3 indexes passed the criteria: (1) CFI = 0.906 (over 0.90), (2) IFI = 0.906
(over 0.90), and (3) RMR = 0.018 (below 0.05). This suggested there was no
consistency with the empirical data. Therefore, the model was adjusted to increase the
number of indexes that passed the criteria, and then this provided the consistency

between the model and the empirical data. This was because the model will be consistent with the empirical data when the values of over 3 indexes pass the criteria.

4.4.2.2 Results of the Consistency between the Causal Model of Factors Affecting Thai Customer Loyalty towards E-commerce Business and the Empirical Data after the Model Adjustment

The first examination of the model revealed that no consistency between the model and the empirical data as the values of less than 3 indexes passed the criteria. Thus, the model was adjusted by taking into account modification indices (MI) as suggested by the program. In addition, the adjustment was conducted by taking into account the modification indices that contained the highest values first. The results of the model adjustment are presented in table 4.11.

As for the modification indices, the program suggested adjusting the model using the covariance between errors. Thus, the lines of the relationships between the covariance of the errors of the observed variables were linked, from the highest-value lines, for all relationship pairs. The p-value of the chi-square index (χ^2) was less than 0.05, which did not pass the model consistency criteria. Kanlaya Vanichbuncha (2014: 135) indicated that if the structural equation model is complicated as a result of a large number of observed variables, this will cause weakness to the chi-square index and will result in the p-value failing the criteria, and this will cause errors in the result. Thus, there was no need to take into account the chi-square index. Thus, in the model examination, the consistency of the model was considered based on other index values. This revealed that there were 9 indexes that passed the criteria, as follow: (1) χ^2/df = 1.489 (below 2.00), (2) GFI = 0.941 (over 0.90), (3) AGFI = 0.901 (over 0.90), (4) CFI = 0.989 (over 0.90), (5) NFI = 0.967 (over 0.90), (6) IFI = 0.989 (over 0.90), (7) RFI = 0949 (over 0.90), (8) RMR = 0.012 (below 0.05), and (9) RMSEA = 0.037 (below 0.05). This showed that the developed model was consistent with the empirical data since the values of more than 3 indexes passed the criteria. The details are illustrated in figure 4.8 and table 4.12.

Table 4.11 Results of Model Adjustment

Adjustment No.	Relationship Pair			χ^2	df	p-value	χ^2/df
1	e4	<--->	e3	895.000	228	0.000	3.930
2	e19	<--->	e18	845.953	227	0.000	3.727
3	e1	<--->	e24	805.896	226	0.000	3.566
4	e4	<--->	e5	774.381	225	0.000	3.442
5	e2	<--->	e24	743.653	224	0.000	3.320
6	e13	<--->	e14	719.693	223	0.000	3.227
7	e10	<--->	e9	694.328	222	0.000	3.128
8	e9	<--->	e8	658.577	221	0.000	2.980
9	e16	<--->	e22	638.242	220	0.000	2.901
10	e7	<--->	e8	622.352	219	0.000	2.842
11	e3	<--->	e1	604.809	218	0.000	2.774
12	e8	<--->	e18	592.510	217	0.000	2.730
13	e9	<--->	e14	580.435	216	0.000	2.687
14	e22	<--->	e23	566.006	215	0.000	2.633
15	e9	<--->	e23	553.421	214	0.000	2.586
16	e12	<--->	e15	539.379	213	0.000	2.532
17	e10	<--->	e11	528.441	212	0.000	2.493
18	e4	<--->	e24	514.760	211	0.000	2.440
19	e5	<--->	e16	504.114	210	0.000	2.401
20	e15	<--->	e18	493.631	209	0.000	2.362
21	e15	<--->	e22	484.246	208	0.000	2.328
22	e22	<--->	e20	467.916	207	0.000	2.260
23	e8	<--->	e20	457.251	206	0.000	2.220
24	e15	<--->	e16	447.034	205	0.000	2.181

Adjustment No.	Relationship Pair			χ^2	df	p-value	χ^2/df
25	e5	<--->	e24	438.414	204	0.000	2.149
26	e11	<--->	e21	431.770	203	0.000	2.127
27	e13	<--->	e21	422.631	202	0.000	2.092
28	e3	<--->	e24	407.056	201	0.000	2.025
29	e6	<--->	e19	400.891	200	0.000	2.004
30	e9	<--->	e11	393.774	199	0.000	1.979
31	e13	<--->	e12	384.560	198	0.000	1.942
32	e10	<--->	e8	376.163	197	0.000	1.909
33	e17	<--->	e22	366.391	196	0.000	1.869
34	e11	<--->	e15	354.714	195	0.000	1.819
35	e14	<--->	e24	347.620	194	0.000	1.792
36	e5	<--->	e14	341.651	193	0.000	1.770
37	e1	<--->	e17	335.753	192	0.000	1.749
38	e2	<--->	e13	330.476	191	0.000	1.730
39	e9	<--->	e22	323.344	190	0.000	1.702
40	e8	<--->	e22	313.368	189	0.000	1.658
41	e9	<--->	e17	308.276	188	0.000	1.640
42	e10	<--->	e21	302.492	187	0.000	1.618
43	e5	<--->	e23	297.326	186	0.000	1.599
44	e2	<--->	e18	292.621	185	0.000	1.582
45	e2	<--->	e5	287.452	184	0.000	1.562
46	e2	<--->	e20	282.325	183	0.000	1.543
47	e3	<--->	e19	277.518	182	0.000	1.525
48	e3	<--->	e11	272.772	181	0.000	1.507
49	e14	<--->	e20	268.007	180	0.000	1.489
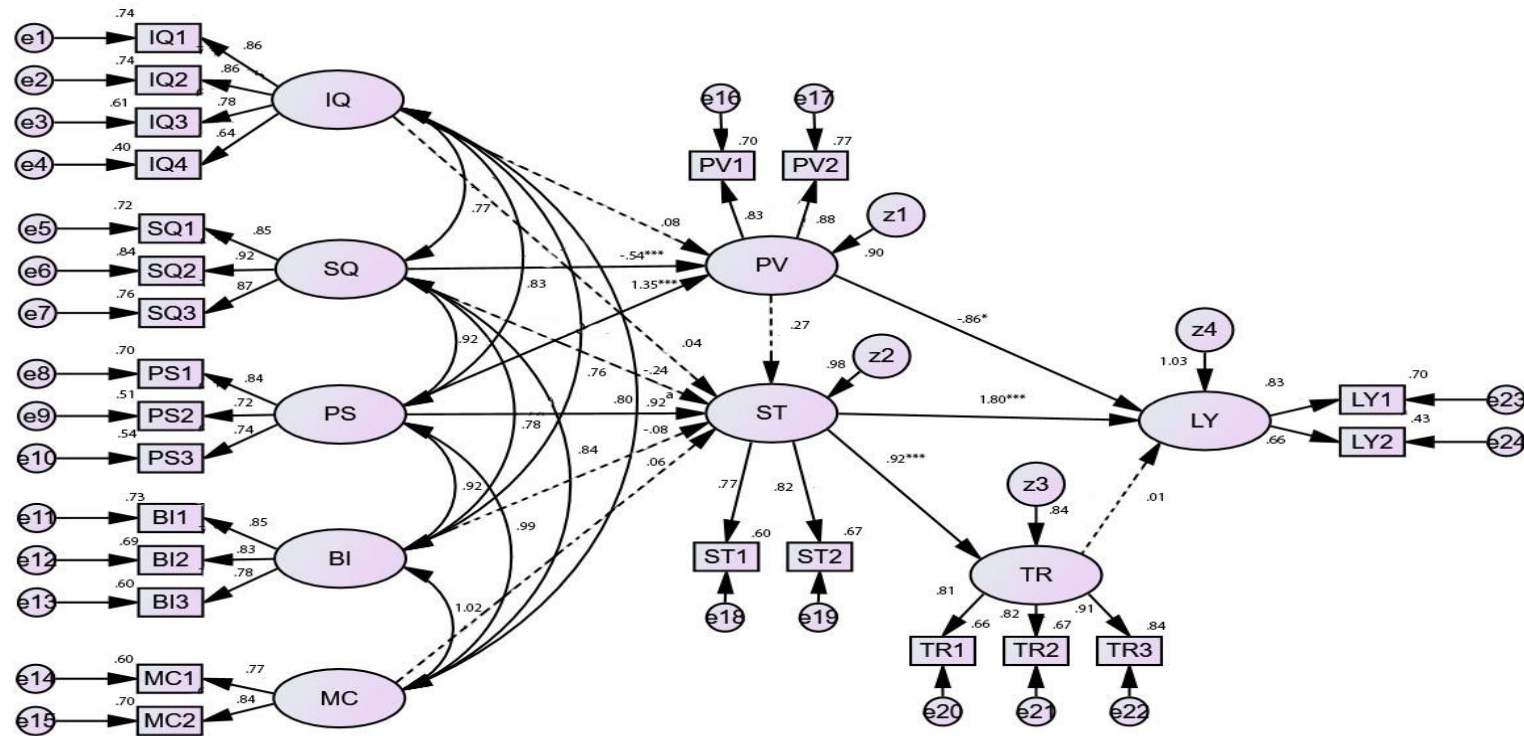
Chi-square=268.007,Chi-square/df=1.489, df=180, p=.000, GFI=.941, CFI=.989, RMR=.012, RMSEA=.037, NFI=.967, AGFI= .901, IFI=.989, RFI=.949

Remarks: 1) The dash line means there is no the statistical significance. 2) a means the statistical significance at 0.1, * means the statistical significance level at 0.05, *** means the statistical significance level at 0.001.

Figure 4.8 The Causal Model of Factors Affecting Thai Customer Loyalty towards E-commerce Business and the Empirical Data after the Model Adjustment

Table 4.12 Results of the Consistency between the Model and the Empirical Data after the Model Adjustment

No.	Consistency Index	Criteria	Index Value	Result
1	Chi-square (χ^2)	$p > 0.05$	0.000	fail
2	Relative Chi-square (χ^2/df)	χ^2/df < 2.00	1.489	pass
3	Goodness of Fit Index (GFI)	GFI > 0.90	0.941	pass
4	Adjusted Goodness of Fit Index (AGFI)	AGFI > 0.90	0.901	pass
5	Comparative Fit Index (CFI)	CFI > 0.90	0.989	pass
6	Normed Fit Index (NFI)	NFI > 0.90	0.967	pass
7	Incremental Fit Index (IFI)	IFI > 0.90	0.989	pass
8	Relative Fit Index (RFI)	RFI > 0.90	0.949	pass
9	Root Mean Square Residual (RMR)	RMR < 0.05	0.012	pass
10	Root Mean Square Error of Approximation (RMSEA)	RMSEA < 0.05	0.037	pass

In addition, the results of path analysis of the different latent variables in the causal model of factors affecting Thai customer loyalty towards e-commerce business were that the system quality (SQ) had a direct effect on the perceived value (PV) with a path coefficient of 0.485; the product and service quality (PS) had a direct effect on the perceived value (PV) and on the satisfaction (ST) with path coefficients of 1.650 and 1.287, respectively; the perceived value (PV) and the satisfaction (ST) had a direct effect on loyalty (LY) with path coefficients of 0.961 and 1.754, respectively; and the satisfaction (ST) had a direct effect on the trust (TR) with a path coefficient of 0.827, as presented in table 4.13.

Table 4.13 Results of Path Analysis of the Variables in The Causal Model of Factors Affecting Thai Customer Loyalty towards E-commerce Business

Causal Relationship			Estimate	S.E.	C.R.
PV	<--------------	IQ	0.098	0.113	0.868
PV	<--------------	SQ	-0.485	0.141	-3.428***
PV	<--------------	PS	1.650	0.239	6.902***
ST	<--------------	IQ	0.060	0.093	0.651
ST	<--------------	SQ	-0.241	0.230	-1.049
ST	<--------------	PS	1.287	0.686	1.877[a]
ST	<--------------	BI	-0.107	0.290	-0.370
ST	<--------------	MC	0.075	0.235	0.320
LY	<--------------	PV	-0.961	0.438	-2.20*
LY	<--------------	ST	1.754	0.406	4.318***
ST	<--------------	PV	0.311	0.245	1.270
TR	<--------------	ST	0.827	0.043	19.231***
LY	<--------------	TR	0.013	0.164	0.080

4.4.2.3 Results of Effect Analysis for Variables in the Causal Model of Factors Affecting Thai Customer Loyalty towards E-commerce Business

The results of analysis of the effects of the 9 latent variables in the causal model of factors affecting Thai customer loyalty towards e-commerce business, i.e. the information quality (IQ), the system quality (SQ), the product and service quality (PS), the brand image (BI), the marketing communication tools (MC), the perceived value (PV), the satisfaction (ST), the trust (TR), and the loyalty (LY) are presented in table 4.14.

Table 4.14 Results of Analysis of the Effects of Variables in the Causal Model of
Factors Affecting Thai Customer Loyalty towards E-commerce Business

Causal Variable	Effect	Output Variable			
		PV	ST	TR	LY
IQ	DE	0.098	0.060	-	-
	IE	-	0.030	0.075	0.066
	TE	0.098	0.090	0.075	0.066
SQ	DE	-0.485***	-0.241	-	-
	IE	-	-0.151	-0.324	-0.226
	TE	-0.485***	-0.392	-0.324	-0.226
PS	DE	1.650***	1.287^a	-	-
	IE	-	0.513^a	1.489	1.591
	TE	1.650***	1.800^a	1.489	1.591
BI	DE	-	-0.107	-	-
	IE	-	-	-0.088	-0.188
	TE	-	-0.107	-0.088	-0.188
MC	DE	-	0.075	-	-
	IE	-	-	0.062	0.132
	TE	-	0.075	0.062	0.132
PV	DE	-	0.311	-	-0.961*
	IE	-	-	0.257	0.549*
	TE	-	0.311	0.257	-0.412*
ST	DE	-	-	0.827***	1.754***
	IE	-	-	-	0.011***
	TE	-	-	0.827***	1.765***
TR	DE	-	-	-	0.013
	IE	-	-	-	-
	TE	-	-	-	0.013

Table 4.14 presents the results of analysis of direct effects, indirect effects, and total effects of the different latent variables in the causal model of factors affecting Thai customer loyalty towards e-commerce business. The analysis results are outlined as below.

1) Direct Effects

1.1) The system quality (SQ) had a direct effect on the perceived value (PV) with a statistical significance level at 0.001 and the effect value of 0.485.

1.2) The product and service quality (PS) had a direct effect on the perceived value (PV) with a statistical significance level at 0.001 and the effect value of 1.650.

1.3) The perceived value (PV) had a direct effect on the loyalty (LY) with a statistical significance level at 0.05 and the effect value of 0.961.

1.4) The product and service quality (PS) had a direct effect on the satisfaction (ST) with a statistical significance level at 0.1 and the effect value of 1.287.

1.5) The satisfaction (ST) had a direct effect on the trust (TR) with a statistical significance level at 0.001 and the effect value of 0.827

1.6) The satisfaction (ST) had a direct effect on the loyalty (LY) with a statistical significance level at 0.001 and the effect value of 1.754.

2) Indirect Effects

2.1) The system quality (SQ) had an indirect effect on the loyalty (LY) through the perceived value (PV) with a statistical significance level at 0.05 and the effect value of 0.226.

2.2) The product and service quality (PS) had an indirect effect on the loyalty (LY) through the perceived value (PV) with a statistical significance level at 0.001 and the effect value of 1.591.

2.3) The product and service quality (PS) had an indirect effect on the trust (TR) through the satisfaction (ST) with a statistical significance level at 0.1 and the effect value of 1.489.

2.4) The product and service quality (PS) had an indirect effect on the loyalty (LY) through the satisfaction (ST) with a statistical significance level at 0.001 and the effect value of 1.591.

3) Total Effects

3.1) The product and service quality (PS) had a total effect on the satisfaction (ST) with a statistical significance level at 0.1 and the effect value of 1.800.

3.2) The system quality (SQ) had a total effect on the loyalty (LY) with a statistical significance level at 0.05 and 0.001 and the effect value of 0.226.

3.3) The product and service quality (PS) had a total effect on the loyalty (LY) with a statistical significance level at 0.1, 0.05, and 0.001 and the effect value of 1.591

3.4) The perceived value (PV) had a total effect on the loyalty (LY) with a statistical significance level at 0.05 and the effect value of 0.412.

3.5) The satisfaction (ST) had a total effect on the loyalty (LY) with a statistical significance level at 0.001 and the effect value of 1.765.
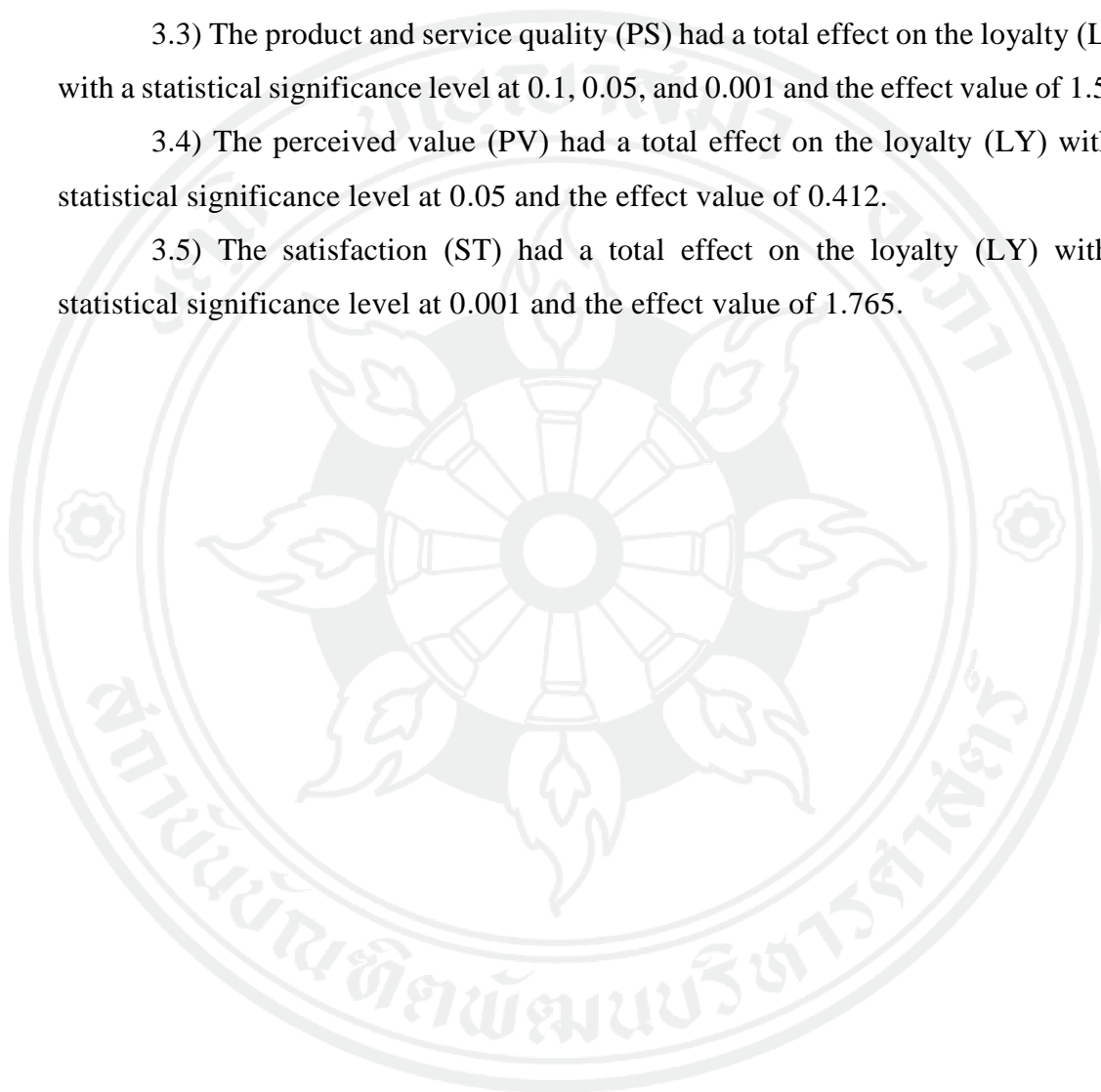
CHAPTER 5

QUALITATIVE RESEARCH RESULTS

In this chapter, I will illustrate the results of data analysis and the interpretation for the purpose of this research in order to explore the opinions of academics and online marketers in relating to the marketing communication factors influencing Thai customer loyalty towards e-commerce business. The research's objective aims to study the loyalty of Thai customer towards B2C e-commerce in terms of e-tailing of which products are directly selling to customers. The research results have been divided into four parts, based on factors and elements of each factor which are: (1) Product factor, (2) Service factor, (3) E-commerce website system factor, and (4) Information factor as per following details;

1) Product Factor

Variety of products is an issue that most key informants have commented that it has influenced on customers' loyalty. E-commerce entrepreneurs should offer a variety of products on the website in order to meet different needs of customers. Although the consumers may not previously plan to buy, the variety of products will persuade their needs to buy more. Additionally, when the customers have visited the store's website and found that there are many products to buy, this will enhance good experiences and lead to repurchasing. And the results of the interviews have disclosed that the more offering of product varieties, the more difficulties for customers of decision-making to buy. As such, the entrepreneurs should market with specific products or select a clear target customer group for business, and focus on the product selected to be offered over the website to meet the interests of the target audience based on the following interviews;

"The first thing in creating customer loyalty is product variety. Before hand, the customers may have previous specific need or desire to buy, but on visiting webpage and finding variety of products, their needs will arise. This is an experience that creates awareness and follows with repeat purchasing over the website on the following time."

(Pitayapan Sriwaewnetr, interviewed, 11 January 2018)

"If we sell something, we need to have sufficient variety of products. If we were a laptop computer website entrepreneur, we should have almost all brands and models of laptop computers for sale. We must have 60% of all laptop computer brands in the market to sell. Because the opportunity to do B2C business is to grant whatever customers need, it is unlikely that if they want this model of laptop computer but there is none for them when browsing through the website, they may not want to visit our website again."

(Somyot Chaowalit, interviewed, 20 January 2018)

"Speaking on behalf of product, of course, the product must be of varieties but it should not be too varied because it will cause difficulty for customers to decide. Should the particular group be targeted or be clear on specific type of product, the chance to compete will be more."

(Amrarat Eiawaksorn, interviewed, 26 January 2018)

All five academics and online marketers have commented consistently that product quality is a key factor in promoting customer purchase and loyalty towards e-commerce business providing that the quality of product will help assure the purchase and repurchase of the customers. This perceived value of product quality would occur into two scenarios which are: the first scenario, customers are familiar with the product before and the latter scenario is that the customers obtain good experiences after buying and trying on the product. For these reasons, the entrepreneurs should select to sell products that most customers trust in the quality. But if the product is not widely known, the process of selecting and inspecting the product quality before they are placed to be sold is an obligation as the interviews following hereunder;

"Customer loyalty depends essentially on the product quality. It is not likely to focus on only varieties of products but having no quality because eventually quality is more important than quantity. Product displaying on the webpage has to be prior to screen. If the customer perceived that we sell only good quality products, inexpensive or may be the price which is a bit higher than other web stores, but the quality is assured; therefore, the repeat purchasing is out of question."

(Pitayapan Sriwaewnetr, interviewed, 11 January 2018)

"For the online e-commerce business web store type, customer's perceived value is separated between product and website which is a storefront. If customers buy products from websites, then find out that the product quality is not good, the customers will not blame the product, but they will blame the website of which not choosing to sell good quality product and they will not return to purchase over that website again."

(Chatpong Tangmanee, interviewed, 15 January 2018)

"Though the service is good, fast delivery, cheap, but if the product is of no quality, the customers will not buy. Just like opening a restaurant with no delicious food, the customers will not come back to eat again."

(Somyot Chaowalit, interviewed, 20 January 2018)

"Products must be of good quality by selecting, only quality products for sell. If the trial purchase is not working out as expected or advertised, the next purchase will not happen. Worse thing is the unsatisfied customers, not only the repeat purchasing won't happen, but their dissatisfaction will also be viral on the social media which directly affecting the business."

(Warayu Prasertsom, interviewed, 24 January 2018)

"Products to sell through e-commerce business must be selected ones that people fairly know and trust in the brand or else, it will be difficult to sell. But there are groups of people who want to try new brands and unknown products. As such, the products are sellable but quality must come first."

(Amrarat Eiawaksorn, interviewed, 26 January 2018)

In addition to product quality, warranty terms is another important factor that contributes the increasing of customer's buying decision. As a matter of fact, the customers are not able to touch the real product before purchasing in the trading model of e-commerce business. Thus, warranty terms for quality assurance has important to help reduce the customer buying risk. For example, in case of the product has any problem or the customers are not satisfied with the product, the web store will exchange the product or return full refund within specific period of time, etc. The web store must be able to conduct practical on specific terms provided thereof. Academics and online marketers have proposed their interviews as follows;

"In the event that consumer is not satisfied with the product, no matter whether it's the consumer faults or damages of the product, according to Thai culture, we should have a policy to change the product or refund, such as a return of product within 7 days after the purchase. Or if the product damages caused by the company itself, a resolve of problem must be made such as refund within 1 hour after receiving a problem notification from the customer."

(Somyot Chaowalit, interviewed, 20 January 2018)

"Warranty terms is very necessary. It motivates customers to take buying risk. Since selling of product online, people will not see and do not touch the real products before, so this will guarantee the consumers that if they are unsatisfied with the product, the return of product or refund can be made within a few days. The condition to return the product is especially very important as well because the customers have not seen the product before. There will be a certain opportunity that the product may not be satisfied for them."

(Warayu Prasertsom, interviewed, 24 January 2018)

"Warranty statement on the webpage for e-commerce business is mandatory to be done. But what is more important is when problems arise, practical action as promised must be taken, this is where customer loyalty ascends. Being responsible is more important than the impractical conditions stated."

(Chatpong Tangmanee, interviewed, 15 January 2018)

However, though most key informants have proposed consistency with point of views, e-commerce business needs to define the warranty terms in order to assure customer's purchase of product through the website. But the interviews' result has revealed an interesting suggestion that the entrepreneurs should focus on selected quality products by communicating with the customers that the web store will deliver only quality products to the consumers and a quality warranty will cover damages from shipping only. As a matter of fact, a quality assurance prior to purchasing which can be truly conducted in accordance with the conditions provided will encourage customers to make better purchasing decisions than returning the product or refund after purchase. Since every time the product has any problem, the customers who will feel dissatisfied and negative experience will have taken place which resulting in losing customer loyalty towards the business. The key informants have given some comments as follows;

"If the seller can 100% guarantee for every product quality and able to deliver the guaranteed product, this will be more important to the consumers than the warranty terms and directly effects on the customer loyalty as they will feel safe and confident. No matter what warranty terms we have offered, the best is not to let mishandling happen because the customers may not waste their time telling us or request for a replacement but instead they will not come back to buy again."

(Pitayapan Sriwaewnetr, interviewed, 11 January 2018)

"The unique feature of online product is the difference from offline product on the aspect that the customers will not have a chance to see a real product before buying, thus the product return or the refund policy is inevitable as they will help ensure the customers' confidence. However, it should be guaranteed only if the product is damaged during delivery since what is more important is the guarantee that the product sold through our website has been selected up to product quality standard."

(Amrarat Eiawaksorn, interviewed, 26 January 2018)

Special feature product is another factor contributing to customer loyalty towards e-commerce business. In addition to offering the same product with the

competitors, websites should offer exceptional different products from other competitors in the market in order to add product value, encourage interest and create higher customer buying opportunities. The entrepreneurs must study the competitors' products and enhance own business products development to be more unique and different than the competitors based on the interviews of the academics and online marketers as following;

"Customers will like products that are more unique than the product selling by other competitors. Value added to product will enhance favors for the consumers, as such, they will come back to buy again, we will then obtain loyal customers. The unique characteristic of our product which differs from those of competitors in the market is of essential. We must have the same product that our competitors do have and there must also be product that they do not have but we do to differentiate, attract the attention of the customers, and increase sales opportunities. But though our product is unique, not before long the imitation will be produced, or if no imitation made, we need to continue developing a good product."

(Warayu Prasertsom, interviewed, 24 January 2018)

"In online market competitions, our products will stand out off the competitors. If our products are of quality but if ours are not, the inferior will be seen outstandingly as well. Because online accessibility to compare data is such easy, everything is available on the internet. Therefore, prior to selling a product online, we have to study on the advantage potential of our products, whether it's possible for customers to pay same price but gain extra. Study within your competitors' webpage information and develop your product to be above or at least keep in the same level as the competitors, we will then know how to adjust our products to be a unique divergent than those of the competitors."

(Amrarat Eiawaksorn, interviewed, 26 January 2018)

In addition, all five academics and online marketers have commented consistently that proper pricing influences customer loyalty. In e-commerce business, a product price should be set to be as close to or lower than the competitors and adjust

the price currently. Since before decision-making to purchase, the customers will search and compare prices of products they need from various websites of many webpages and choose to buy the lowest price. And one of the interesting comments about pricing of e-commerce products is that the product price should not be set too low as this will influence customer perceived quality. If the offered price is very cheap, the customers will perceive that the product quality is off. There have been some interviews as following hereunder;

"If our product is not different from the competitors, without any distinctive point, we can play with the price. Of course, if our product is more expensive and the customers search the information to compare prices, they would surely choose to buy from other websites that products are cheaper than us."

(Amrarat Eiawaksorn, interviewed, 26 January 2018)

"Pricing must be observed in accordance with the market and the adjustment needs to be made at all time for the online product. We need to fairly study our competitors whether there are any other shops which sell the same product but cheaper. Therefore, product pricing should be grouped together. The more our product price expensive than the competitors are, the less opporturnity for the customers to buy with us has."

(Warayu Prasertsom, interviewed, 24 January 2018)

"Product pricing should not be too expensive or too inexpensive. Sellers should check the price of other stores in order to help decisive price since buyers themselves compare the price of our store with others as well. Reasonable price and real time adjustment by comparing with other stores are matters for us to pay attention to because they are directly affecting on customers' purchase."

(Somyot Chaowalit, interviewed, 20 January 2018)

"Price is important for people in decision-making to purchase. E-commerce business is a battle of price. Consumers can easily compare prices; they know for sure which website is the cheapest in same product but with the lowest price and worth for

money. Thus, price is a primary factor that allows the consumers to choose before buying and the web store which has been frequently selected to buy with will absolutely be granted with customer loyalty."

(Pitayapan Sriwaewnetr, interviewed, 11 January 2018)

"For the online shopping, most consumers will already have the product they want to buy in mind. But before purchasing, information from several web stores must be known, as such, price is a key variable to consumers' decision. But the forewarning of the online pricing issue is that a too-low pricing will affect product perceived value. If the product price is very cheap, the consumers will have less expectation about the product quality."

(Chatpong Tangmanee, interviewed, 15 January 2018)

The results of the interviews revealed that some academics and online marketers who give guidelines provided for pricing determination strategy of the e-commerce business as following; the first strategy is pairing products and pricing them lower than the original price of both items in order to increase customer satisfaction and sales opportunities. Another strategy is setting very low price of some products in order to persuade customers' desire to buy and to visit the store's website. After that, the customers will have the opportunity to see other products the store is offering. And there are opportunities to buy those products that selling prices are set to a higher profitable level for the business. There have some interviews to be considered as following;

"Popular price strategy in e-commerce business nowadays is a product pairing strategy and re-pricing them lower than the original price of both products. This strategy will help creating customers' satisfaction and opportunities to sell more."

(Warayu Prasertsom, interviewed, 24 January 2018)

"Some websites induce people with cheap price product, reduce the price immensely, or sell certain product at a profit loss price, but at the same time there are other products selling with profit gain prices. This is a way to let the price losing item

by pulling people and induce them to additionally buy other website products. In relating to those products, the price has been set at a profitable selling price and then offset the cost afterward."

<div align="right">(Amrarat Eiawaksorn, interviewed, 26 January 2018)</div>

2) Service Factor

Delivery issue is a major factor influencing on the customer satisfaction, repeat buying, and loyalty towards the e-commerce business. A majority of the key informants have commented that web stores must deliver expeditiously with clear specific delivery schedule and the actual delivery is effectively complying with the time given to the customers. There is also a status check service providing for the customers to monitor the product after ordering on the store's website in order to ensure that they will definitely receive their products. The system also allows the customers to revisit the website which will increase the opportunities of seeing other products and buying more of the customers. The results of the interview have revealed some interesting suggestion which is if an expeditious delivery service is provided; the customers are willing to pay additional delivery cost. But if the delivery cost should not be included into the product price, this makes the customers feel that the product is too expensive and change their mind not to purchase. Academics and online marketers have given interviews accordingly as follows;

"A matter of delivery is to be quick, sending date must be clear. The important problem that people do not want to buy online product is that they will be bored waiting, not knowing when the product will arrive and then worried. To cooperate with a reliable partner in order to deliver products faster will satisfy the customers who want to shop with us. If the delivery is expedited, date is specified, with additional charge of delivery cost, the customers will agree to pay."

<div align="right">(Amrarat Eiawaksorn, interviewed, 26 January 2018)</div>

"The most important aspect of e-commerce business is delivering. Many websites have good products, cheap price but so slow in product delivery, this will cause customers to be unsatisfied. And a track system to indicate product delivery status

whether the product delivered within days will relieve the customers concern as they can see movement of the product at any time by checking over the website. The advantage of this system is to pull the customers back into the webpage and if they are revisiting the webpage, it is likely that they will see other products they may like and the opportunity to order more products will be opened."

(Warayu Prasertsom, interviewed, 24 January 2018)

"E-commerce business needs to focus on-time and fast delivery service time with actual product arrival on the date committed to customers. All of these matters are not just should be done, but they are crucial as a must to be done."

(Chatpong Tangmanee, interviewed, 15 January 2018)

"Fast delivery and clear committed time/date with customers to have the right product at the committed schedule will help pruning customer's anxiety and creating satisfaction which contributes to product value added. All of these encourage the customers' desire to come back to buy product with us and consumers nowadays are willing to pay more in order to obtain product faster."

(Somyot Chaowalit, interviewed, 20 January 2018)

Payment is an issue that five academics and online marketers have consistently agreed that it has influenced on product buying decision of customers. The web store must have a variety of payment channels to facilitate the customer both online and offline, such as payment by credit or debit card, internet banking, e-money, top-up card, bank transfer, cash on delivery, etc. as some interviews presenting hereunder;

"Payment should be done in several ways: credit card, money transfer, all of these will do. Please keep in mind that though customer nowadays needs something easy and speedy, but convenience comes ahead."

(Somyot Chaowalit, interviewed, 20 January 2018)

"Payment is particularly an interesting process for customers. Sellers must have a variety of payment channels, including offline and online. This becomes the trend of

new generation focusing on convenience of payment; for example, the e-money system which balances the outstanding by scanning bank QR code is a very favorite channel."

(Chatpong Tangmanee, interviewed, 15 January 2018)

"If our website is targeting on mass consumers, the payment should be multi-channel. Do not forget that not everyone owns a credit card. Online payment may not be enough for. There must be other payment channels such as bank transfer or internet banking, these are a must."

(Amrarat Eiawaksorn, interviewed, 26 January 2018)

"There should be several payment channels provided to serve the nowadays changefulness of consumers. In the beginning, they might have bought whatever they first found from the search, but now they will spend more time searching for further information. They will know for sure what services are providing on whatever websites and choose to buy from a website that renders the most convenience to them."

(Warayu Prasertsom, interviewed, 24 January 2018)

"To offer variety of payment is to be enhanced the most convenience to customers, the one-minute top-up card and refill money via phone number, for instance. Do not mess with customers' main account numbers. These all mentioned are options that urge the customers' needs to buy products with us."

(Pitayapan Sriwaewnetr, interviewed, 11 January 2018)

Most key informants have expressed their views consistently that e-commerce business should have an assistance service and call center. Web stores should establish customers' contact channels with both online and offline to facilitate their customers as much as possible. The online channels such as Line, Facebook, live chat on the store's website, etc. The advantage is for the customers to easily access with real-time communication. If the staffs are slow in responding to the enquiries, the customers will feel dissatisfied and may change their mind not to buy or return to buy again. Moreover, the customers may spread words of mouth of this unpleasant experience with others which have directly influenced to loyalty towards the business.

An offline channel or an assistance service and call center are very necessary, especially when customers are extremely upset and want to report problems or need detailed explanations. The web stores must have sufficient employees to respond throughout to each and every customer. The employees must have accurate and adequate information to be capable to answer customer questions. The result of the interviews has disclosed with interesting suggestion that if the product is of high value of money, to let an employee call the customer to confirm the order and delivery schedule before delivery is helping the web store to acknowledge the customer's other needs during that telephone conversation. And if the customer's expectation could be fulfilled, he/she will be impressed and return to buy more.

Besides, the academics and online marketers also have provided a collaborative approach between online and offline communication in order to assist and answer customers' enquiries effectively as follows; the web stores should have call center employees to help solving problems and responding to customers' questions during office hours. Chatbot or online chat should be available for the customers to leave their enquiries during non-office hours and the web store staff will respond back by phone during the working hours.

The academics and online marketers have given interviews as following;

"There must be various contact channels between buyers and sellers, both offline and online, live chat and telephone for convenience. But most consumers will want to talk to people in person especially when they are upset, wanting to complain, or having complex problems which need explanation in detail, as such, telephone call channel is needed. It is vital that employees must have fair knowledge to provide information and must be capable to answer customers' questions. The information training for the call center team is important, if we cannot respond to what customers need, the customers would not want to come back."

(Pitayapan Sriwaewnetr, interviewed, 11 January 2018)

"If we are operating an online service trade, the most important is to have a call center or a chatbot to answer customer enquiries at any time. Since the customers have not touched the product, which is normal, they may have questions or enquiries about

the product. There should be channels to interact between each other such as live chat on the website, Line, Facebook, etc. By statistically, most consumers choose firstly an online media because of its more convenience and easy accessibility. They want something in real time and speedy interactive. But if they have to wait, no one responds when they are unsatisfied, this will result consequently in severe damage because the consumers will not only complain to us, but they will also complain through their social channels. This will cause further negative impact on the business."

(Warayu Prasertsom, interviewed, 24 January 2018)

"Thai people love service facility, so let an employee calls to customer and create a conversation between buyers and sellers, which actually just a call to confirm the order of that customers and the date/time to be delivered but the effect is more than just a confirmation, it's a conversation that benefits something else. For example, the customer may want to buy more product or postpone the delivery time. The more the product price is high, the more service should be available. The customers will love this service and come back to buy more products."

(Somyot Chaowalit, interviewed, 20 January 2018)

"There are two ways to handle questions and answers problem. The first, there must be really someone to respond to it but this cannot be done all the time. The second, the most up-to-date use is a chatbot to be input with the answers of frequently asked questions before and after the sale, and automatically sends to the consumers. But at one point, the consumers may want to talk to a real person, so a call center to support this should be available. And information must be made that the call center will be available from 9 am to 8 pm, and after 8 pm will be converting to a chat system for the customers to please leave enquiries and we will contact right away during the office hours."

(Amrarat Eiawaksorn, interviewed, 26 January 2018)

Some key informants have suggested further that the e-commerce business should provide special services for members. This is emphasizing on a storage of personal information and a purchase history of each customer in order to recommend

products to meet each specific interest. The significant purpose is to impress customers and attribute to loyalty towards the business, such as sending birthday special discount gifts, emailing the featured product that the customers are interested with special promotions. This may be a brand that they have purchased regularly, or products that the customers have clicked on the shopping cart, but have not clicked the payment yet as these are products that the customers have high opportunities to buy, etc. All of these processes will encourage the customers to resume their purchase at the products'web stores by the following interviews;

"We will retrieve the original customer information to see all buying, payment history, to learn what did this customer buy, or what product did he/she take into the basket and picked it out or canceled the whole bill after all. We would know all whatever product these customers ever wanted. When there is a marketing promotion of the product customers were about to buy but then canceled, we will send the promotion information to this group of customers first as there are very high potential of buying opportunities."

(Somyot Chaowalit, interviewed, 20 January 2018)

"The re-marketing is also important. We should conduct a process of online marketing to see how we have to deal with people who intend to buy, but then sign out and do not buy, how we have to go back to talk to them and win them back. A customer journey must be made to see the current status of this customer, whether he has already viewed but did not push the button to buy or put item in the basket already but did not process the payment. We may advertise product that interests that customer or close to the product he is interested in to encourage him to come back to view and buy product on our website."

(Amrarat Eiawaksorn, interviewed, 26 January 2018)

"Service extending to former customers is also important. We must track data to check before what products they are interested in, which categories of products they click the most. Then select information about the products' recommendations that they might be interested with promotions to them by email, so they will have more

opportunities to buy. Or we may have something special for the customers like special discount gift on their birthday by checking into birth date data when customers registered. All of these will keep the customers loyal to our brand, they will want to buy again. They will feel that we care although they can buy this product at the same price over other websites but they will choose to buy with us."

(Warayu Prasertsom, interviewed, 24 January 2018)

3) E-commerce Website System Factor

Five academics and online marketers have agreed that convenient access of e-commerce website system factor is an important factor influencing on customer loyalty. The suggestions have proposed that e-commerce businesses should make their website systems to be used as easy as possible because each customer has an ability to operate a website differently. Website's structural and component design should be taken into account of order, good navigation system to help customers easily find the product they want, it must not be difficult to learn to use especially in product ordering, simplified process to be the least complicated, for example, the system can recognize customers' original data, so no need to retype, etc. In addition, website system should be able to support the use with different devices such as computers, tablets, etc. Website systems must accurately display information based on the type of device that a customer is activating as the following interviews;

"The process of ordering through a website should be as simple as possible. Since the buyer is already in need, then if there are so many processes, it will affect the user experience directly. The website design should minimize hassles of the buyers as much as possible."

(Pitayapan Sriwaewnetr, interviewed, 11 January 2018)

"Reduce ordering process to be speedy and easy. Product search has to be effortless. Membership system in keeping the original information of customers will also be a great advantage. Other information that customers have given us when first registered as members; we should not waste their time to refill it."

(Somyot Chaowalit, interviewed, 20 January 2018)

"Our online web store must be user friendly which means easy to find product, no clutter. Navigate easily into the website, then straight to the needed product, there is a clear button, all categories are notably in order. Do not let customers get lost in our store and then leave."

(Amrarat Eiawaksorn, interviewed, 26 January 2018)

"You need to look in the visitor point, not the developer point because the developer likes to look from technical angle and thinks that it is already easy which in fact it may not be that easy for the visitor. Usability or web usability should be tested as well in designing a website. Entrepreneurs should give importance to website design; the use of each component must be easy to all visitors, because each visitor owns a different ability."

(Chatpong Tangmanee, interviewed, 15 January 2018)

"The website must be compatible with all devices, such as customer may open it from a tablet, open it from a desktop or from a mobile, it must be displayed flawlessly. In the previous 4-5 years ago, some websites opened in a mobile phone would be so much disorder. If customers cannot view the product, they cannot buy it."

(Warayu Prasertsom, interviewed, 24 January 2018)

Most key informants have expressed consistently with the viewpoints that e-commerce business needs to set security and privacy policy to create customer trust in product buying. The key informants have proposed four guidelines on the security and the privacy policy of the e-commerce website system as following;

Guideline 1: Web stores should stipulate agreement concerning responsibility in the event of payment processing system error on website, for example, the web store will accept return product, responsible for delivery charge, reimburse to customers, etc., and is capable to practically take action according to the specified agreement, as there have been some sayings as following;

"If errors occur in the payment process which sometimes may be caused by customers themselves or internet system failure, the web store must be responsible for

online payment: PayPal, True Money, etc., there have been some notations as following;

"Reliable payment system also provides security, for example, third party services such as in the payment system of PayPal, True Money, etc., a customer payment information will be sent directly to the bank without filing into the stores' website system."

(Warayu Prasertsom, interviewed, 24 January 2018)

"In order to avoid the insecure feeling of customers, we may offer variety of payment channels, such as top-up card, to just refill money through phone number as it does not have to be so risky, no mess with customers' bank main account number."

(Pitayapan Sriwaewnetr, interviewed, 11 January 2018)

Last guideline: Web stores need to specify the agreement clearly on the website in order to allow consumers to accept firstly terms and conditions of the web store's privacy policy, as such this will prevent consumers from feeling dissatisfied later when their personal information from the register stage with the stores are used for other commercial purposes such as sending advertising messages to their phones or emails, etc., as there have been some proposes as following;

" For privacy policy, there should be a requirement of terms and conditions for customers to accept that the information given to us may be used for other preferences such as selling customer data base to insurance companies. With a buying of some other products, there is a chance that a telephone sale may be called from an insurance company. This is why we have to put the agreement of terms and conditions to protect ourselves. When the customers accept the agreement, it means that they eventually are accepting to lose their privacy."

(Warayu Prasertsom, interviewed, 24 January 2018)

"Consumers are concerned that if they give their information to the website upon register whereas they must fill in so many personal information and wonder why

there are so much requirement like this, whether the web store will use this data for other purpose or not. The thorough security data somehow results in a halt for people while they are carrying on something. But the best for a business is to advise them first that their data may be used, this is to protect the business itself."

(Pitayapan Sriwaewnetr, interviewed, 11 January 2018)

"It is very normal that they will be disturbed by many news we are sending and they have already known when receiving such information from whatever businesses. In my opinion, I think they would not accuse us of stealing their personal information but by law, consumers must be warned that this website has a cookie tracking for them to click accepting first."

(Amrarat Eiawaksorn, interviewed, 26 January 2018)

Speed of website system is an issue that academics and online marketers have commented to be a factor directly influencing on customer's experience of using websites in finding information and product purchase. If the web store has a slow rendering, customers will feel tired of and do not return to buy again. Therefore, the web store should optimize its website system to be instant, such as not to use too large file image, so customers can download product images faster, etc. Moreover, the page loading speed also results in the website link displaying on the top part of search engine which enhances more opportunities for customers to visit the website and order more product. The payment process should be especially speedy in order to facilitate the fastest product buying process.

System stability is another issue that the entrepreneurs need to take into account because if the website's system is unstable, running with problem, the consumers may have unpleasant experience which will influence on the business. Therefore, the e-commerce website system must be monitored to maintain the site with speed and stability. This is so important that the entrepreneurs should always be focused on with the following interviews of the academics and online marketers hereunder;

"The system needs to be speedy, product must be relatively fast to meet the criteria, not that too slow loading. We need to optimize our own website, this may

happen that files putting in are too big, then it takes time to load, we need to reduce the size of the image first, the image must still be explicit but the loading will be enhanced to be faster. And the system must be constantly monitored for speed and stability."

(Warayu Prasertsom, interviewed, 24 January 2018)

"We need to optimize our webpages well. The page loading speed is pretty much important. It has effected on the unsatisfied customers experience if they have to wait that long and relatively concerns with the search engine optimization (SEO) as well. Speed of the system contributes to our web ranking on the top search page, especially the speed in payment process which should be made simplest and fastest. The stability of the system is also vital, it is unlikely that customers press buy and are about to pay but the system suddenly crashes."

(Amrarat Eiawaksorn, interviewed, 26 January 2018)

4) Information Factor

Academics and online marketers have commented that complete product information providing has been an important factor for e-commerce business. The web stores must display sufficiently product detailed information on websites to provide decisive information to customers in making a purchase. The study to acquire product information that customers need in order to decide before buying has been advised and the needed information displaying on the store's website must be complete. Information given should be provided to explain products' remarkable characters in order to motivate customers to make a purchase decision including testimonials provided from persons who have buying experiences in terms of quality assurance. In customers' views, informative acquisition from this group of people is more reliable than the information received from the web store. Product information displaying on the website should be updated at all times especially price information because the customers often compare prices of product they need from many stores before deciding to purchase.

Attractiveness is one of the factors that e-commerce business should take into account. Product image should look decent to attract customers' attention and look like actual product at most because customers do not have the opportunity to see and touch the product before buying. This includes the appearance of the website, the colors using

should be designed to be comfortable and eye-catching to the web store's target consumers. Academics and online marketers have given suggestions as follows;

"Apart from speedy system, product image must be complete and attractive. Product details are to be provided to customers in order to see exact product features, the existence of its strong or weak points. Survey must be made to gather data of what information customers want to know concerning this product especially product reviews. At this moment, there is a trend that people do not trust what we have written on the website. If we have the testimonials from people who have already bought our product, it will be reliable and help a lot in sales."

(Warayu Prasertsom, interviewed, 24 January 2018)

"Product description is important since customers will read product details before decision-making to purchase. If we well describe the information that presents the product quality in suggestive writing or providing illustrations to convince the customers, these will have so much effect for them to buy. On the contrary, if they obtain insufficient information, it will be difficult for them to decide."

(Pitayapan Sriwaewnetr, interviewed, 11 January 2018)

" Website page is like an iceberg whereas website system below is enormous. Our store front or webpage must be attractive, neat and product illustrations must be beautiful and most alike the real product. Because customers do not see or touch the real product, a complete product description as a suggestion to buy is crucial. Besides, the information in the website must be updated at all times."

(Somyot Chaowalit, interviewed, 20 January 2018)

"In addition, the website must be designed to be functional, mood and tone of the design is also important, images and colors should be pleasing and suitable for our target audience."

(Amrarat Eiawaksorn, interviewed, 26 January 2018)

"Product information over the online platform is very important because customers like to compare prices before buying so online business must be aware of the information that can be accessed by the customers. But problem is the not-up-to-date information quality. Thai people give less priority to information preparation nowadays."

(Chatpong Tangmanee, interviewed, 15 January 2018)

Based on in-depth interviews with five academics and online marketers who are knowledgeable and well experienced in the online marketing communications, I have summarized marketing communication factors that influence on Thai customer loyalty towards e-commerce business into four factors, as detailing in table 5.1 as following;
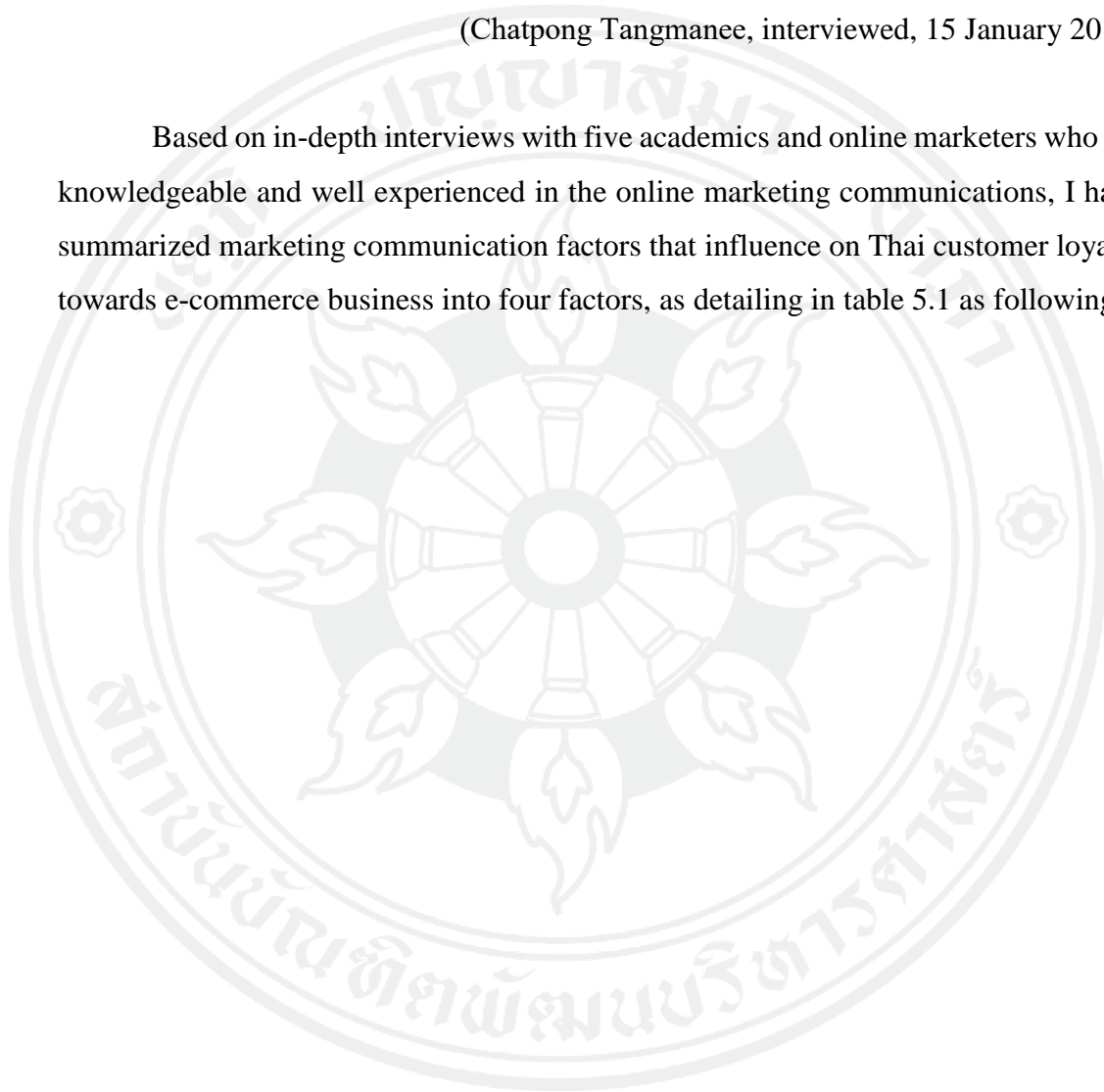
Table 5.1 Summary of the Academics and Online Marketers Opinions Refer to the Marketing Communication Factors Influencing Thai Customers Loyalty towards E-commerce Business

Factors Influencing Customer Loyalty	Chatpong Tangmanee	Pitayapan Sriwaewnetr	Somyot Chaowalit	Warayu Prasertsom	Amrarat Eiawaksorn
1. Product Factor					
1.1 Variety	x		x		x
1.2 Quality and Warranty	x	x	x	x	x
1.3 Special Features				x	x
1.4 Proper Price	x	x	x	x	x
1.5 Pricing Strategy - Product Pairing and Lower Price - Set a Loss Price to Motivate Purchase				x	x
2. Service Factor					
2.1 Product Delivery		x	x	x	x
2.2 Payment Process	x	x	x	x	x
2.3 Assistance and Call Center	x		x	x	x
2.4 Special Service for Member			x	x	x
3. E-commerce Website System Factor					
3.1 Convenience	x	x	x	x	x
3.2 Security and Privacy	x			x	x
3.3 Speed				x	x
3.4 Stability				x	x
4. Information Factor					
4.1 Completeness	x		x	x	
4.2 Currency		x	x		
4.3 Attractiveness			x	x	x

CHAPTER 6

CONCLUSION, DISCUSSION, AND RECOMMENDATION

The research title of "The causal model of factors affecting Thai customer loyalty towards e-commerce business" aims to develop and to examine the consistency of the causal model of factors affecting Thai customer loyalty towards e-commerce business with the empirical data in addition to explore the opinions of academics and online marketers in relating to the marketing communication factors influencing Thai customer loyalty towards e-commerce business. I therefore used the analysis data to summarize and discussed the results in order to answer the prescribed research objectives including suggestions offered from the research and recommendations for the further research as following;

6.1 Conclusion

The summary results of this research are based on the statistical analysis and the in-depth interviews. The presentation of the research results has been divided into five parts as per following;

Part 1   General information of the respondents

Part 2   Levels of opinions in regard to factors affecting loyalty, perceived value, satisfaction, trust, and loyalty

Part 3   Analysis results of the relationships among variables

Part 4   Analysis results of the structural equation model

Part 5   Opinions of academics and online marketers on the marketing communication factors influencing Thai customer loyalty towards e-commerce business

Part 1   General Information of the Respondents

There were 360 respondents, who are Thai customers, from this survey who used to purchase over more than one e-commerce website and purchase regularly over any e-commerce website at least three times a year. Most of them were female (64.44%), age 21-30 years (33.06%), bachelor degree (71.39%), private company employees (39.72%), monthly income 10,000 bahts or less (26.11%), and purchasing over www.lazada.co.th e-commerce website (78.61%).

Part 2   Levels of Opinions in Regard to Factors Affecting Loyalty, Perceived Value, Satisfaction, Trust, and Loyalty

The respondents' opinions on factors affecting customer loyalty towards e-commerce business such as information quality, system quality, product and service quality, brand image, and marketing communication tools are as following;

- Information quality is a factor affecting customer loyalty towards e-commerce business at a high level, the mean score is 4.01. By considering on each element of information quality, it is found that the respondents expressed their opinions on currency, accuracy, completeness, and visual appeal in high level with mean scores of 4.08, 4.05, 4.01, and 3.95 respectively.

- System quality is a factor affecting customer loyalty towards e-commerce business at a high level, the mean score is 3.98. By considering on each element of system quality, it is found that the respondents expressed their opinions on speed, security and privacy, and convenience in high level with mean scores of 4.03, 3.93, and 3.93 respectively.

- Product and service quality is a factor affecting customer loyalty towards e-commerce business at a high level, the mean score is 4.01. By considering on each element of product and service quality, it is found that the respondents expressed their opinions on assurance, responsiveness, and customization in high level with mean scores of 4.04, 4.04, and 3.98 respectively.

- Brand image is a factor affecting customer loyalty towards e-commerce business at a high level, the mean score is 4.17. By considering on each element of brand image, it is found that the respondents expressed their opinions on law and ethics

in the highest level with a mean score of 4.25 while their opinions on reputation and good management are in high level with mean scores of 4.15 and 4.13 respectively.

- Marketing communication tools is a factor affecting customer loyalty towards e-commerce business at a high level, the mean score is 4.07. By considering on each element of market communication tools, it is found that the respondents expressed their opinions on online media and offline media in high level with mean scores of 4.08 and 4.07 respectively.

There are also respondents' levels for perceived value towards e-commerce, satisfaction towards e-commerce, trust towards e-commerce, and loyalty towards e-commerce as following;

- Perceived value towards overall e-commerce business is at high level with a mean score of 4.05. In considering to each element of perceived value, it is found that the respondents' perceived value types: utilitarian shopping value and hedonic shopping value are in high level with mean scores of 4.10 and 4.01 respectively.

- Satisfaction towards overall e-commerce business is at high level with a mean score of 3.99. By considering on each element of satisfaction, it is found that the respondents were aware of achieved expectation and overall satisfaction in high level with same mean score of 3.99.

- Trust towards overall e-commerce business is at high level with a mean score of 4.09. By considering on each element of trust, it is found that the respondents set trust with integrity, benevolence, and expertise in high level with mean scores of 4.15, 4.05, and 4.01 respectively.

- Loyalty towards overall e-commerce business is at high level with a mean score of 4.06. By considering on each element of loyalty, it is found that the respondents were loyal by behavior of repeat purchase and words of mouth in high level with mean scores of 4.06 and 4.05 respectively.

Part 3   Analysis Results of the Relationships Among Variables

The analysis of the correlation coefficient among the observed variables in the causal model of factors affecting Thai customer loyalty towards e-commerce business is of 24 variables, totaling 276 pairs which has been found that the variables of all latent variables are related with the statistical significance level of 0.01.

Part 4   **Analysis Results of the Structural Equation Model**

        The analysis results of the confirmatory factor analysis – CFA have been found that measurement model of latent variables in the causal model of factors affecting Thai customer loyalty towards e-commerce business developed in this research. There are the construct validity and factor loading of every observed variable value that is not less than 0.50 with the statistical significance level of 0.01. Each and every observed variable of latent variable with factor loading are as following;

        - Latent variable of information quality comprises of four observed variables which are accuracy, completeness, currency, and visual appeal with factor loading of 0.87, 0.86, 0.79, and 0.64 respectively.

        - Latent variable of system quality comprises of three observed variables which are convenience, speed, and security and privacy with factor loading of 0.91, 0.88, and 0.85 respectively.

        - Latent variable of product and service quality comprises of three observed variables which are customization, responsiveness, and assurance with factor loading of 0.91, 0.85, and 0.81 respectively.

        - Latent variable of brand image comprises of three observed variables which are good management, law and ethics, and reputation with factor loading of 0.86, 0.83, and 0.81 respectively.

        - Latent variable of marketing communication tools comprises of two observed variables which are online media and offline media with factor loading of 0.84 and 0.78 respectively.

        The results of the consistency examination with the causal model of factors affecting Thai customer loyalty towards e-commerce business developed in this research. It has found that the model is consistent with the empirical data (model fit) with the statistical significance level of 0.001, 0.05, and 0.1 with nine criterion indexes as follows: (1) χ^2/df = 1.489 (less than 2.00) (2) GFI = 0.941 (over 0.90) (3) AGFI = 0.901 (over 0.90) (4) CFI = 0.989 (over 0.90) (5) NFI = 0.967 (over 0.90) (6) IFI = 0.989 (over 0.90) (7) RFI = 0.949 (over 0.90) (8) RMR = 0.012 (less than 0.05), and (9) RMSEA = 0.037 (less than 0.05). When considering result of the path analysis and an influence of latent variables in the model, there are four variables affecting the loyalty of Thai customer towards e-commerce business which comprise of

e-commerce website system quality, product and service quality, perceived value, and satisfaction which the path of relationships and effects' magnitude among variables could be summarized as follows;

- System quality directly affects customer perceived value towards the e-commerce business by the statistical significance level of 0.001, with an effect value of 0.485.

- Product and service quality directly affects customer perceived value towards the e-commerce business by the statistical significance level of 0.001, with an effect value of 1.650.

- Perceived value directly affects customer loyalty towards the e-commerce business by the statistical significance level of 0.05, with an effect value of 0.961.

-System quality indirectly affects customer loyalty towards the e-commerce business through perceived value by the statistical significance level of 0.05, with an effect value of 0.226.

- Product and service quality indirectly affects customer loyalty towards the e-commerce business through perceived value by the statistical significance level of 0.001, with an effect value of 1.591.

- Product and service quality directly affects customer satisfaction towards the e-commerce business by the statistical significance level of 0.1, with an effect value of 1.287.

- Satisfaction directly affects customer trust towards the e-commerce business by the statistical significance level of 0.001, with an effect value of 0.827.

- Satisfaction directly affects customer loyalty towards the e-commerce business by the statistical significance level of 0.001, with an effect value of 1.754.

- Product and service quality indirectly affects customer trust towards the e-commerce business through satisfaction by the statistical significance level of 0.001, with an effect value of 1.489.

- Product and service quality indirectly affects customer loyalty towards the e-commerce business through satisfaction by the statistical significance level of 0.001, with an effect value of 1.591.

Part 5   Opinions of Academics and Online Marketers on the Marketing Communication Factors Influencing Thai Customer Loyalty towards E-commerce Business

The analysis of the data obtained from the interviews with the academics and online marketers has revealed that the marketing communication factors influencing Thai customer loyalty towards B2C e-commerce in terms of e-tailing are comprising of four factors which are: product factor, service factor, e-commerce website system factor, and information factor. Each and every important factor can be summarized as following;

1) Product Factor

1.1) Product Variety

The offering of product variety to meet different customers' needs helps to persuade customer desire to purchase more and return to repurchase. But instead, the offering of too many varieties will cause difficulties in deciding to the purchase of customers. The web stores should be marketing in a particular category of products or targeting clearly their group of customers and selecting to offer products that meets interests of the target group.

1.2) Quality and Warranty

There should be selections of selling products that customers are confident in quality. If the products are not widely well-known, there should be selected and checked the quality of the product before placing them for sale. There is also an including of warranty terms for the product quality, such as if there is a problem with the product or the customer is not satisfied with the product, the web stores will accept the product return or provide full refund within a specific period. Product quality and quality warranty will help reduce purchasing risk of consumers. As a result of the e-commerce business model, the consumers will not be able to touch and to see real product before purchasing.

1.3) Special Features

Offering of exceptional unique product which is different from other competitors in the market is a key to promote value added, stimulate attention, and enhance higher customer purchasing opportunities. This includes study of competitors

consistently in order to develop business product to be more exceptional and distinguished.

1.4) Proper Pricing

Product pricing has to be as close to or lower than competitors and the price must always be updated currently because customers will search and compare prices from many other web stores before deciding to purchase. Moreover, they will purchase at the store with the lowest price.

1.5) Pricing Strategy

Pricing strategies will enhance customer satisfaction and increase opportunities to sell. The first strategy is product pairing and pricing them lower than the original price of both items. The second strategy is pricing some products at a very low price in order to pursuade customers to purchase and to visit the web store. After that, the customers will have the opportunity to see other products where the store is offering, and there are opportunities for them to purchase those products of which the selling price has been set at a profitable level for the business.

2) Service Factor

2.1) Product Delivery

Product delivery is an important factor affecting customer satisfaction, repeat purchase, and loyalty towards e-commerce business. Product must be delivered quickly with clear delivery schedule and on time to customers. There is also a service for customers to check their product status after ordering on the web stores.

2.2) Payment

There are variety of payment channels available both online and offline to facilitate customers so as to purchase products, such as paying by credit or debit card, debit through internet banking, payment via electronic cash (e-money), payment by cash card (top-up card), transfer to bank account, cash payable on delivery, etc.

2.3) Assistance and Call Center

Provide a channel for dealing with customers both online and offline in order to facilitate the customers as much as possible with the online channel, such as Line, Facebook, live chat on the web store, etc. This channel enables the customers with an advantage of a fast real time accessibility. While the offline channel or assistance service and call center service are very necessary in case that the customers are very

upset, filing problem report or detailed explantions are needed. Having enough of operator availability and capability to answer customer questions are important matters.

2.4) Special Service for Member

Provide special service for member such as giving birthday special discount, emailing product features that consumers are interested in with special promotion, etc. Personal information and purchase history of each customer are to be recorded in order to recommend suitable products to meet specific interests. This process will encourage customers to repurchase product of web store with impression and lead to customer loyalty to the business.

3) E-commerce Website System Factor

3.1) Convenience

The web store system must be utmost simple because each customer has a different ability of web usability. The structural website and other component design should be well organized with good navigation system in order to allow customers to easily find their needed products and be effortless to learn how to use the system. Especially in product ordering, all processes should be simplified to be fewest, for instance, the system is capable to remember customer original data so they do not need to retype the data, etc. In addition, the website system must be able to display information properly according to types of device the customers are activating with, such as computers, tablets, etc.

3.2) Security and Privacy

Security and privacy policy has been specified to create customer trust in product purchasing. There are four approaches in relevant to security and privacy policy of e-commerce website system which are as following; (1) Agreement stated on the website page of the store with an execution according to the agreement terms thereof. In case of system errors in the payment process, for example, the web store will accept all products, be responsible for delivery charge, refund remaining amount to customers, etc. (2) Verify to confirm the customer identity with mobile number or email address prior to payment. (3) There are payment channels where customers do not need to provide important personal information to the web store, such as payment gateway, e-money, payments through online channels as PayPal, True Money, etc. And (4) Stipulate the agreement distinctively on store's webpage in order for customers to be

prior concurred to privacy policy's terms and conditions of the web store to prevent customer dissatisfaction in consequences when their personal data upon register have been used on other commercial aspects such as advertisement dispatching to their mobiles or emails, etc.

3.3) Speed

Optimize website system to be as speedy as possible, for instance, not using too large file images to enable customers, displaying product image instantly, etc. Particularly in payment process, the web stores need to engage in a fast payment system in order to enhance the most expeditious purchase process. Moreover, the page loading speed results in web store's link in the top part of search engine which enhances more opportunities for customers to visit the website and orders more product.

3.4) Stability

Web store system must perform with stability, no failures during operation and the e-commerce website system must always be monitored to maintain steadiness in order to prevent customers from unpleasant experience which may lead to negative impact on the business.

4) Information Factor

4.1) Complete

A full and complete product details help customers to use that information to make a purchase decision. A study of what information related to the product that the customers may need to know and a display of the needed information on the web store are a must. In addition to the main feature product description, the web stores need to provide testimonial information about product quality. From the customer point of views, information obtained from this group of people is more reliable than information directly received from the web store.

4.2) Currency

Product price must be updated to be current at all times particularly the price information because customers often compare product prices from many different web stores before buying decision-making.

4.3) Attractiveness

Web store font design must be utilized with attractive colors, comfortable, and eye-catching suitable to target customers. The product images offered on the website

should be beautiful to attract the attention of customers and most alike to real products since purchasing via e-commerce system, the customers will have no opportunity to see and to touch the product prior to purchasing.

6.2   Discussion

The objective of this research is to develop and to examine the causal model of factors affecting Thai customer loyalty towards e-commerce business in addition to explore the opinions of academics and online marketers in relating to the marketing communication factors influencing Thai customer loyalty towards the e-commerce business. By investigating this, I have studied customers' composite loyalty which are behavioral loyalty by means of repeat purchase over any e-commerce website and attitudinal loyalty by spreading words of mouth about the purchasing over e-commerce website to others.

The results of quantitative research have found that factors affecting Thai customer loyalty towards e-commerce business are the system quality, the product and service quality, the customer perceived value, and the customer satisfaction which could be summarized and discussed as follows;

System quality and product and service quality which directly affect customer perceived value towards e-commerce business have indicated that system quality and product as well as the service quality are essential factors to customer perceived value towards e-commerce business. They conformed to the study result of "Structural equation model of B2C e-commerce repurchase intention of customers in Bangkok" by Saowakhon Homsut (2014: 131-135), which found that the system quality and product as well as the service quality were positively correlated with the perceived value of customers who purchased product or service over the internet.

The easy design for convenient use of e-commerce website system facilitates and saves time in the process of information searching about the product and the process of decision making a purchase. Moreover, the security and privacy policy contributing to confidence in payment methods and confidentiality of customer information has increased customer perceived value towards e-commerce business as Suwit Thirakhot (2011: 44) and Bridges and Florsheim (2008: 310) mentioned in the same direction that

customers recognized the perceived value through the system quality of the e-commerce website with easy accessibility, speedy searching, and security of the system.

If e-commerce businesses encouraged customers to realize that product and service of the business could meet their needs by offering a variety of product, reasonable price, fast delivery on time with product warranty, providing contact channels to solve problems for customers and always available with before and after sales services, all of these would also possibly create customer perceived value towards the e-commerce business. Since product and service quality affected the perceived value towards purchase over e-commerce website (Kim et al., 2012: 379). When customer obtained product and service quality from the e-commerce website, the impression would affect the perceived value of the purchase through that website (Bitner et al., 1990: 73; Boulding et al., 1993: 9).

Perceived value is a factor directly affects customer loyalty towards e-commerce business, that is to say that customer perceived value is a key factor contributing to loyalty towards e-commerce business which fell on the finding of Semeijin et al. (2005: 184) with a conclusion that the perceived value was a key factor that contributed to promote customer loyalty towards e-commerce business in terms of convenience in searching for information and purchase through the e-commerce website. This included the enjoyment of shopping through the e-commerce website. Besides, the research results have also consistency with concepts of Gommans et al. (2001: 56) who proposed that perceived value was a key factor affecting the success of online business as well as the market place or the offline service and led to purchase behaviors and customer loyalty. The success factor study result of low-cost hotels in England of Brotherton (2004: 955) had also found that the perceived value was a success factor of business organization as it contributed to customer loyalty towards hotel business.

As well, system quality and product and service quality indirectly affect customer loyalty towards e-commerce business through customer perceived value which signifies that system quality including product and service quality shall contribute to customer perceived value and lead to customer loyalty towards e-commerce business, since customer loyalty had been acquired from the perceived

value after a purchase over that e-commerce website (Saowakhon Homsut, 2014: 119). This is in line with Grewal et al. (1998: 53) and Parasuraman and Grewal (2000: 169) who stated in the same direction that product and service quality of the e-commerce website along with information quality and system quality were key factors contributing to the perceived value and leading to customer loyalty towards e-commerce business.

Besides other factors than system quality, product and service quality and customer perceived value, the result of this research has indicated that customer satisfaction is one of the key factors contributing to customer loyalty towards e-commerce business. It has been found that customer satisfaction directly affects customer loyalty towards e-commerce business which conforms to the research of Eid (2011: 78-86) who found out that satisfaction was a factor affecting customer loyalty towards e-commerce business due to the fact that customer loyalty had to be primarily originated from satisfaction (Bearden & Teel, 1983: 22; Bloemer & Kasper, 1995: 313; Dick & Basu, 1994: 102; Jamal & Anastasiadou, 2007: 399; Oliver, 1997: 35; Sawarak Laicharoenwong, 2013: 22). In this research, customer satisfaction is a perception of a right choice in purchasing through the e-commerce website, the utilities of e-commerce website's product and service are as expected. In overall, the customer perception of satisfaction is with the purchase including preference on the product and service of one e-commerce website more than another website.

For e-commerce business, satisfied customer was a key element to survival since the satisfied customer was more likely to be a loyal customer who subsidizes the product and service of the e-commerce business in the long run (Anderson & Lehmann, 1994: 55; Cyr, 2008: 50; Fisher, 2001: 79; Srinivasan et al., 2002: 44; Zin, 2001: 271). This is consistency with the proprosal of Chang et al. (2009: 436) and Lee and Lin (2010: 367) which had stated that customer satisfaction was a factor contributing to purchase or repurchase in the future as well as benefits and market shares for the e-commerce business.

If the e-commerce entrepreneurs successfully created customer satisfaction, it would encourage customers to make purchase decision through the website more often or spread words of mouth to all around people to help sustain customers with the business which would enable the further success of the e-commerce business

(Carpenter, 2008: 361; Engle et al., 1995: 258; Howard, 1998: 41; Panuwat Rattanadit, 2012: 12; Saengrawee Singha-ampoln, 2012: 27).

In addition, there are other factors affecting customer satisfaction which comprise of product and service quality and customer trust. The research's result disclosed that product and service quality directly affects customer satisfaction towards e-commerce business and customer satisfaction directly affects customer trust towards e-commerce business.

Product and service quality would contribute to customer satisfaction towards products and business brand (Chang et al., 2009: 434; Gummerus et al., 2004: 177; Kotler, 2009: 101; Lee & Chung, 2009: 388; Spechler, 1988: 46) as Lee and Lin (2010: 361) proposed their opinions that the perception of product and service quality would positively affect customer satisfaction and also this conformed with Smit Sachukorn's concept (2007: 28) which concluded that product and service quality contributed to customer satisfaction and increased well business benefits in the long run. The inclusion of research results of Kassim and Abdullah (2010a: 275-286) found that customer perception of product and service quality which used to purchase product and service through e-commerce system played directly positive affecting upon satisfaction.

In part of satisfaction which contributes to customer trust as Moorman et al. (1993: 84) and Mukherjee and Nath (2003: 12) had proposed the concept in the same direction that trust had been a result from satisfaction which conformed to many academics who proposed their concepts that customer trust had been related to customer satisfaction (Clottey et al., 2008: 37; Geyskens et al., 1996: 314; Tsai & Huang, 2007: 236). This also included the research summary of Kim et al. (2009: 241) which found that customer satisfaction was a causal factor of trust. E-commerce businesses need to create a conducive environment to trust with an employment of satisfaction as a key to success. While research result of Wanlop Wasuthada (2015: 76-79) found that satisfaction was a causal factor affecting trust of the internet purchaser. This is to say that customer trust towards e-commerce business means confidence that the business would deliver product and service as agreed and trust that the business would deliver the best value to customer by taking into account of the customer interest as essential and meeting the need of the customer.

Moreover, it has been found that product and service quality indirectly affects customer loyalty towards e-commerce business through customer satisfaction as Jamal and Anastasiadou (2007: 405) had stated that product and service quality was a factor contributed to satisfaction and led to customer loyalty towards business organization because product and service quality promoted to increase benefits to the business in a long run. Product and service quality contributed to create customer satisfaction. When they had confidence in the product, they decided to purchase with the belief that it had better service than others. The decision to purchase would be done easier especially the former customer would repurchase or multiply the purchase without hesitation. And this included to spread words of mouth to new customers as well (Danai Thieanphut, 2002: 13; Gronroos, 2000: 109; Smit Sachukorn, 2007: 28).

In addition, product and service quality indirectly affects customer trust towards e-commerce business through customer satisfaction. As a matter of fact, customer trust towards business organization has been fairly difficult to establish, the businesses needed to consistently deliver products and services to meet customer expectations at the very first stage to gain customer satisfaction (Yousafzai et al., 2003: 853). This conformed with Safa and Ismail's concept (2013: 562) which explained in the same direction that when customers were satisfied with the purchase through the e-commerce website, they obtained confidence and trust in that e-commerce website. The result of this research discovered that customer trust has not directly affected customer loyalty towards e-commerce business since customer trust leading to loyalty would occur only when customers were satisfied with the products and services of that business organization in a substantial level (Apaolaza et al., 2006: 644).

The results of qualitative research have consistency with findings which confirm the above quantitative research results. Academics and online marketers have given their interviews in the same direction that product factor, service factor, and e-commerce website system factor are the marketing communication factors influencing Thai customer loyalty towards B2C e-commerce business in terms of e-tailing that sells product directly to customers through a website with the discussions on the research result as following;

Key informants have commented on product factor influencing Thai customer loyalty on e-commerce business that website stores need to select selling products to

meet target customer's interests and should offer a wide variety of products to meet different needs of the customers. All product offered must be of quality with warranty conditions, such as if the product has a problem or the consumer is not satisfied, the store would accept the return product or refund remaining amount within a specific period. This would help reduce purchasing risk because customers have no chance to see real product before purchasing including that product must be well selected to assure product quality to the customers. And there should be extraordinary product to be distincted from those of competitors which sold on their web stores to create value added and increase sales opportunities. A study of competitor product in order to maximize web store business product to be more unique is a must, which has been agreed in line with the concept of Sirilak Rotchanakitumnuai (2002: 109) and Kauffman and Wood (2000: 64-65) who have proposed in the same direction that features of product traded through the e-commerce system should be able to meet the target group's needs, be of quality and variety, special features that competitors may not easily imitate or have been very different from those available in the general market and it has been a product that people use a lot, easy to understand and widespreadly recognized.

Furthermore, five academics and online marketers have expressed concurrent point of views that the product quality has been a key factor stimulating customer purchase and loyalty towards e-commerce business. Since the quality product has contributed to customer trust in purchase and repurchase by their perceived value, the product quality could be occurred in two scenarioes: first scenario is that customers have already familiared with the product and second scenario is that the customers have obtained good experience after purchasing and testing the product. For these reasons, the entrepreneurs should offer selected product that most customers have been confident in quality and if the product is not widely known, a process of selecting and inspecting the product quality prior to placing on sell has been very necessary. In accordance to Zeithaml et al. (2002: 365) who have suggested that e-commerce business entrepreneurs needed to focus on the product quality to encourage repeat purchases and customer loyalty. The more product quality awareness level over e-commerce business, the more loyalty level of the customers (Kelley et al., 1993: 438; Rust & Zahorik, 1993: 204).

Interesting discovery on product factor in terms of the product quality and warranty is that the entrepreneurs should focus on selected the quality of product policy. The communication provided to customers would be that the web store would deliver selected the quality product to customer and the quality warranty would cover damages from delivery only. Because of the product quality assurance prior to purchasing and its practicable actions in accordance with the contract provided, these would all encourage customer decision-making to purchase better than returning the product or refund after purchase. Everytime encountering with a problem, the customers would be unsatisfied and impacted with negative experiences affecting in terms of losing customer loyalty towards the business. The results of this study are consistent with Ribbink et al. (2004: 451-453) who have suggested that selling of quality product with warranty terms has been an important element in selling product over the e-commerce website.

The issue of product price is another important factor influencing Thai customers loyalty towards e-commerce business, of which five academics and online marketers have commented in the same direction that web stores should provide proper product pricing. The selling price has to be as close with or as lower than the competitors and the price must always be updated. Consumers will search for information and compare prices from many web stores prior to making a purchase and would purchase from the web store with the lowest price. As Natta Changchutoe (2012: 73) has suggested that in product pricing for sell or online services, the entrepreneurs should set prices to match the quality product and regularly check the price varying of nearby competitors. Other interesting comments refering to pricing of e-commerce product obtained from the interviews of academics and online marketers are: the web stores should not set the product price of the business too low as it would affect to customer product perceived value, this is to say that when the product price offered is very cheap, the customer will perceive that it is not a quality product.

In addition, the key informants have proposed two strategies for product pricing in the e-commerce business comprising of (1) Product pairing and lower the price than an original price of both items in order to increase customer satisfaction and sales opportunities. (2) Pricing some products to be very low to lead purchasing decision and visiting to the web stores of the customers. This will enhance customer opportunities to

view other store product offering with more opportunities to purchase those products which price has been set to a profitable level for the business.

For service factor, the key informants have commented that delivery service, payment service, customer assistance and call center, as well as special service for member have been factors influencing Thai customer loyalty towards e-commerce business which consistent to Jamal and Anastasiadou (2007: 405) who have suggested that service quality has been a factor leading to the customer loyalty towards the business organizations. The entrepreneurs must need to adjust their marketing strategies focusing on solely selling but to pay attention on services as well.

The results based on the interviews of academics and online marketers revealed that online retail e-commerce business must deliver service to customers as per following: (1) The web stores must render expedite delivery, clear delivery time notified to customers, and ontime efficient product delivery to the customers as stated. There should be also a service for the customers to check the product status after placing a purchase order on the web stores to ensure that they would definitely receive the product. It also enhances customers to return to the website, which would increase the opportunities of other products seeing and more selective purchasing of the customers. (2) The web stores must provide a variety of payment channels to facilitate customers both online and offline channels, such as paying by credit or debit card, debit via internet banking, e-money, top-up card, transfer to bank account, cash payable on delivery, etc. The payment channel is an issue that the five academics and online marketers have agreed that it has influenced in product selecting when making a purchase of the customers. (3) The web stores should establish the contact channels both online and offline to facilitate conveniences to customers as much as possible. Online channel advantage enables customers with easy access, real time communication such as live chat on the store's website, Line, Facebook, etc. Offline channel or customer assistance and call center service are very necessary to handle dissatisfied customers who may want to report problems or need a detailed explanation. Having enough telephone staff with capability to respond the customer's enquiries has always been very important. And (4) Web stores should have special services for members, such as special discounts on birthdays, emailing the product features that customers may be interested in with special promotion. This may have been a brand

that the customers have purchased regularly or products that customers have clicked and placed on shopping cart, but have not yet the payment process. This is a product that customers have high opportunity to purchase, etc. Record personal information and purchase history of each and every customer in order to recommend products to meet specific interests. These methods will encourage customers to repurchase the web store's product and also impress the customers which lead eventually to loyalty towards the business.

The results of the research on service factors mentioned above are consistent with the concept of e-commerce business structure which proposes that the seller must have a choice of payment varieties and delivery options to facilitate the purchasers. If the purchasers are not satisfied with the way the seller offers, they may not order products or services, additionally the sellers must provide an order tracking system on the e-commerce website upon the completion of each order. If the purchasers want to know what status their orders are in, they can use order number to check the status of the products, such as the status of production process, the status of where is the location of delivery, the status of product receipt, etc. This system will assure the purchasers that they will definitely receive their products. It also includes the establishment of membership system to record the purchasers' information for the benefits of accurate information and product delivery. Moreover, the sellers could also use this information to benefit customer relationship management (CRM) as well (Chattavut Peechapol, 2002: 65-69; Jirathi Kamrai, 2004: 43-44) and consistent with the concept of Kitti Siripullop (2000: 51-53) which has referred to the buying and selling process through e-commerce system that customers must be comfortable in getting the information they needed from the business in order to decide whether to buy or not to buy the product. This is also consistent with the concept of Arnat Leemakdej (2003: 59) and Natta Changchutoe (2012: 75) who have expressed their suggestions in the same direction that e-commerce business could provide information on the website in a customization manner by using customer databases in order to communicate and manage well their relationships. Because of the internet technology which enables websites to possibly store individual customer information to which can be used in providing specific customers services. Moreover, the service conformation model on the e-commerce website in line with specific customers' needs also affects the customer loyalty because

the website customization to meet individual customer needs would enhance customer satisfaction with a familiar website layout resulting in continually repurchase in that website and desire to purchase products through that website again in the future (Pawoot Pongvitayapanu, 2004: 115; Vedadi et al., 2013: 454).

Interesting suggestions on service factor in terms of supporting to assistance service and answering customer enquiries are that if the product is of high value, to let an employee make a phone call to customer in order to confirm the order and delivery schedule prior to sending the product will help the web store to acknowledge other needs of the customer from that telephone conversation. And if the customer needs have been met, they will be impressed and come back to purchase more product. In addition, academics and online marketers have also been interviewed referred to a collaborative approach between online and offline communication in order to assist and to respond the customer enquiries effectively as following; the web store should establish a call center with employees to help answer telephones in order to solve problems and to respond the customer enquiries during office hours, while during non-office hours automatic system like chat bot or online chat should be existed for customers to leave their enquiries and the employees will be contacting back by telephone during office hours. There are also interesting comments from academics and online marketers referred to the delivery service that if the delivery service could be expedited, customers would be willing to pay more for delivery costs. But this delivery costs should not be added into product price because customers would feel that the product has been expensive and would change their mind not to purchase.

The study results of e-commerce website system have found that convenience of web using is as important factor as the five key informants commented consistently that influencing on Thai customer loyalty towards e-commerce business. The entrepreneurs need to manage the web store system to be as easy as possible because each and every customer has a different web usability. The structural of website and the component design must be well organized with good navigation system in order to allow customers to easily find products they are looking for and not so complicated for them to learn how to use it. The ordering process must be simplified to be fewest, for example, the system can remember the original customer data with no requirement for the customer to retype it, etc. And the website system must be able to display the

information accurately by the type of device that the customers activate, such as computers, tablets, etc. In addition, the entrepreneurs must optimize website system to be speedy, such as not to use too large image to allow customers to download images faster, etc. Especially in the payment process, an instant payment system is a must to expedite customer's purchase as fast as possible. Moreover, the page loading speed will result in the website link appearing on the top part in search engine which will enhance more opportunities for customers to visit the website and order more products. This includes the stability of the web store system with no failures during operation. The e-commerce website system must be always monitored to be speedy and stable in order to prevent unpleasant experience to customers, which can cause negative effect on the business.

The results of research in relevant to the e-commerce website system factor in various issues mentioned above are consistent with Clow and Baack (2004: 358-359) who have proposed the marketing communication techniques in order to attract customers to purchase products from the website that website design must consist of easy and speedy usage, instant loading of page content divided of specific images, suitable file size for customers, brief loading time, and friendly design to be used. They should also be able to link back to main page when you have visited a sub-page or link to other pages. Each page should have links to each other. This has also concurred to concepts of Suwit Thirakhot (2011: 43) and Nah and Davis (2002: 99) who have consistently proposed that the e-commerce websites should have a constructural and component design extending convenience for usage with good navigation system, able to easily learn how to use the icons on the webpage though visiting the website for the first time and could also recognize keenly how to use the website after not using for a period of time. This discovery has yet concurred to the approach of Seksun Saiseesod (2006: 36) and Albert and Sanders (2003: 48) who have explained in the same direction that the e-commerce website should have a display of information that consumers might need instantly to save time in the product information searching and the internet shopping process. Consumers should be able to access to websites and search for information and revert back to the pages within the website rapidly. This has included a functional stability which could handle data from many users at the same time without

causing any problems such as website's failure too often, etc. (Natta Changchutoe, 2012: 76).

When consumers could easily access into the website, searching for needed information instantly, these would ensure that the product will be repurchased for the next time through the e-commerce website (Bridges & Florsheim, 2008: 310; Overby & Lee, 2006: 1164) and the ease of using design of the e-commerce website would enhance consumer understanding to the product information easily and facilitate the purchase process which affects consumer satisfaction and encourages more repurchase behavior through the same website (Chau et al., 2000: 4; Hong et al., 2004: 490; Kim & Lennon, 2008: 153; Nikhashemi et al., 2013: 47; Schlosser et al., 2006: 139).

Security and privacy issue is also another factor in the e-commerce website system influencing Thai customer loyalty towards e-commerce business. Academics and online marketers have provided interviews that the e-commerce business in terms of e-tailing should stipulate the security and privacy policy in order to ensure customer trust towards the product purchase. The security and privacy policy of e-commerce websites have been proposed into four approaches as follows; (1) Agreement stipulation over the web store and problem execution in an event of mishandling from the operating system, the payment process such as the web store will accept the return product, be responsible for product delivery cost, refund the remaining amount to customer, etc. (2) Verify in order to identify individual confirmation by mobile phone or email address before the payment process. (3) Provide payment channel that the customers have no need to give important information to web stores such as payment gateway, e-money, payment through online channels such as PayPal, True Money, etc. And (4) Agreement is clearly stated on the web store in order for customers prior to accepting the terms and conditions of the web store's privacy policy in order to protect customer dissatisfaction later when their registered personal data have been used for other commercial purposes such as forwarding various advertisement news via customer telephone or email, etc.

Thus, the result of this research has been consistent with the conclusion that the e-commerce websites must require a security and privacy policy (Hao et al., 2010: 301; Kassim & Abdullah, 2010b: 358; Lee & Kozar, 2006: 1386; Liu & Arnett, 2000: 25). Stating the text on the website as a notice of website's security policy would contribute to confidence in the payment process and the customer privacy policy would contribute

security awareness that the websites would not disseminate personal information such as their names, addresses, phone numbers, email addresses, credit card numbers, etc. to other people or would not be stolen (Natta Changchutoe, 2012: 76; Zeithaml et al., 2002: 364). The effective privacy and security policy of the e-commerce website has been one of the website system elements affecting to the customer purchase behavior. If consumers had no confidence in the e-commerce website's security and privacy policy, the opportunity to make a purchase decision which would lead to customer loyalty towards the e-commerce website would be very difficult (Kassim & Abdullah, 2010b: 358; Zeithaml et al., 2002: 366). Furthermore, this is consistent with the study result of "Determinants of e-commerce customer satisfaction, trust, and loyalty in Saudi Arabia" of Eid (2011: 78-86) which revealed that perceived security and perceived privacy have been factors affecting customer loyalty towards B2C e-commerce business model.

Moreover, the qualitative research result has also provided important different findings from the result of quantitative research. It has revealed that information factor has been one of marketing communication factors influencing Thai customer loyalty towards B2C e-commerce in terms of e-tailing. Academics and online marketers have suggested opinions related to information factor with three aspects as follows; (1) Completeness: the web stores should provide complete and adequate product descriptions to assist customers in decision-making to purchase. Product information required by customers should be studied and displayed the requirement information on the web store accordingly. In addition to the product description, testimonials about the product quality have also been very necessary. This is because in the customers' view, information obtained from other group of people would be more reliable than information directly provided from the web stores. (2) Currency: product information must be updated to be current at all times especially product price because consumers always compare their needed product price with many other web stores before deciding to purchase. And (3) Attractiveness: web store design should have feature with attractive colors and comfortable design to be an eye-catching to target consumers. The presentation of product images offered on the website should be beautiful to attract the attention of customers and with the most likeliness to the products as a matter of fact

that a business via the e-commerce system, consumers will not have the opportunity to see and touch the product before purchasing.

Clow and Baack (2004, 358-359) have proposed the technical marketing communication to consumers who have purchased products from website as following; a content delivered through the website has been a core value of success in the marketing communication with the consumers, as it should be attractive, professional and enhance the website image. Must not design the website using disordered and messy images. Pictures, photos, or graphics using to communicate with consumers on the website must be explicit and beautiful, and support or supplement the main content in the marketing communication to be more noticeable. The website should always be modified to be interesting and currently up to date in order to obtain customers' regular visits of the website and stimulate their purchasing behaviors. This is as well as consistent with the content of product brand message for e-commerce business of Natta Changchutoe (2012: 73) who explained that the information providing in relevant to product or service through the website should consist of the display of clear photos, product detailed information of dimentions, weights, colors, and material providing. Or if the website had a wide range of products and brands, it must be described completely. As such, the information provided to customers by the website owner must be complete and true with real photo for the customers to evaluate the product quality and trust that the product or service received would be as effective as the statement in the website. In addition, the website should always be updated for its product or service information so as for consumers to revisit or purchase the products continuously.

The results of this research have also based on the concept of e-commerce website information quality that many scholars and researchers have suggested that website must offer completeness and sufficiency for customers on information aspects such as images and product descriptions, price, payment and delivery terms, etc. (Burke, 2002: 421; Duangporn Kiangkham, 2006: 15). And the website must be modified to be always currently updated (Kannika Swanpotipan, 2007: 29; Mich et al., 2003: 36). And information presentation such as pictures, text, animations, and graphics should be well organized and have been in the same direction throughout the website, including specification of image size, font style, color selection, and layout of the aspects in proper harmonious and beautiful design to attract customers well (Duangporn

Kiangkham, 2012: 30-31; Suwit Thirakhot, 2011: 42-44; Tajzadehnamin & Etemadi, 2011: 94; Thawatchai Srisuthep, 2001: 16-17). This has been also consistent with a study result of "Factors affecting online business success" of Panuwat Rattanadit (2012: 45) who has stated that information quality has been a factor affecting customer loyalty towards the online business success, and a finding in study research of "Factors affecting customer loyalty in business e-commerce: a case of Indonesia" of Napitupulu and Aditomo (2015: 386-390) who have summarized that information quality has been a factor affecting customer satisfaction and loyalty towards e-commerce business.

6.3   Research Result Recommendations

The B2C e-commerce business in terms of e-tailing in Thailand, especially for the new entrepreneurs and the startup business of Thailand are capable to use the results of this research as an approach to the marketing communication planning in order to gain the competitive advantage. The research results have found that product and service factor, e-commerce website system factor, and information factor are key factors influencing Thai customer loyalty towards e-commerce business. Therefore, in planning marketing communication of the business, the entrepreneurs should consider these factors more than others. The approaches to customer loyalty towards e-commerce business from the research are as follows;

1) Product Factor

1.1) The entrepreneurs should offer varieties of product to accommodate different customer needs. Though the customers have no plan to purchase, the varieties of product will persuade them to purchase more. Additionally, when the customers visit the web store and find that there are many products to purchase, this will render them in good experiences and they will return to repurchase. However, over varieties of product offering will also result in the difficulties of decision-making to buy of the customers. As such, the entrepreneurs should market with specific product or select a clear targeted consumer group of business in order to increase their market opportunities.

1.2) The entrepreneurs should offer the quality product and the quality warranty to help reduce purchasing risk because customers have no opportunity to capture the

real products prior to purchasing and a policy of selective quality product to offer is to be stipulated. With customers communication that the web store will only deliver the quality product to them and the warranty policy will cover merely damages from delivery. This product quality assurance before purchasing which is practical in accordance with the contract provided will encourage customers to make better purchasing decisions than returning the product or refund after purchase. As a matter of fact everytime a mishandling arises, the customers will feel dissatisfied and negative experience will occur, this will result in losing of customer loyalty towards the business.

1.3) The entrepreneurs should set the selling price close to or lower than competitors and the price must always be current; this because before making a purchase, customers will search for information and compare prices from many other web stores and eventually purchase at the lowest price. However, the entrepreneurs should not price the product too low because this will result in customer perceived value towards the product quality which means to say that with a very low product price offering, the customers will perceive that the product quality is also low.

1.4) The entrepreneurs should set pricing strategies to stimulate customer purchasing behaviors. These pricing strategies of the e-commerce business derived from the research results comprise of two approaches which are (1) Product pairing and lower the price than original price of both items in order to increase customer satisfaction and sales opportunities. (2) Setting selling price of some products to be very low in order to attract customers to purchase and visit the web stores. The customers will then have opportunities to see other products. The web stores are offering and there are opportunities to purchase those products that are set with profitable selling prices for the business.

2) Service Factor

2.1) The entrepreneurs should provide assistance and response to customer enquiries with suggestions from this research as follows: (1) Providing communication channels to customer both online and offline to facilitate customers as much as possible. There should be a call center with employees to help solving problems and respond to customers enquiries during business hours. During non-office hours, chat bot or online chat system must be available for customers to leave their enquiries and an employee will contact back by telephone during office hours. (2) If the product is of high value,

there should let an employee to call customer so as to confirm the order and delivery schedule before sending the product; that will help the web store to acknowledge customer other needs via that telephone conversation. And if the respondent action can meet customer needs, they will be impressed and returned to purchase more products.

2.2) The entrepreneurs should provide an expeditious delivery service with clear specific delivery schedule and be capable to deliver on that specific time to customers. An interesting suggestion from the research results is that if that delivery service is faster, customers are willing to pay extra charge for the delivery cost. But the delivery cost should not be included in the product price because customers will feel that the product price is too expensive and change their mind to not purchase. In addition, the entrepreneurs should have services for customers to check status of product after ordering on the store's website to ensure that they will definitely receive the product. It will also allow the customers to revisit the website which will increase the possibilities of product visibility and purchase more of the customers.

2.3) The entrepreneurs should provide a special service for members of the web stores such as birthday special discounts, emails sending to recommend customers their interested products with special promotion, etc. Personal information and purchase history of each customer are to be recorded and filed in order to recommend right product to meet each specific interest. All of these approaches will encourage customers to revisit and repurchase the web store's product, create customer's impression, and eventually lead to customer loyalty towards the business.

3) E-commerce Website System Factor

3.1) The entrepreneurs should provide a website system which is as easy as possible because each consumer has a different web usability. The structural and component design of the website should be well organized with good navigation which enable customers to easily search their needed products, learn how to use, especially in ordering process which should be simplified to be fewest to expedite product purchase such as the system can regconize customer former data so they do not have to retype at all, etc.

3.2) The entrepreneurs should optimize and monitor their web store system to always maintain an operation of speed and stability. Not only the system will satisfy the customers in purchasing through the web store, but the page loading speed will also

display a link of the website store on the top part of the search engine which will enhance opportunities for the customers to visit the website and purchase more.

3.3) The entrepreneurs should stipulate the security and privacy policy to ensure consumer trust in the product purchase. As a result of this research, there are four approaches on the security and privacy policy of the e-commerce website system which are as following; (1) Agreement: should be stipulated over the store website and executed according to the agreement in the event of a mishandling in the payment system, for instance, the web store will accept return of product, be responsible for delivery cost, refund remaining amount to customers, etc. (2) Verify: should be provided to confirm customer identity with mobile number or email address prior to the payment process. (3) Payment: with channels that customers need, not to provide important personal information to the web stores such as payment gateway, e-money, online payments such PayPal, True Money, etc. And (4) Stating of agreement clearly over the store website in order for customers prior to accept terms and conditions related to the store's privacy policy in order to prevent customer dissatisfaction later when their registered personal information may be used commercially such as other advertisement news sending to their telephones or email addresses, etc.

4) Information Factor

4.1) The entrepreneurs should provide full and sufficient product descriptions on the store's website for customers in order to accommodate them with information prior to making a purchase decision. The studying of what customers need to know about the product has to be done and then display the needed product information on the store's website. In addition to the product description, the web stores need to provide testimonials of quality product from experienced customers because in consumers point of views, information obtained from this group of people is more reliable than information received directly from the web store.

4.2) The entrepreneurs should update their product information to be current at all times, especially the price information. This is because customers often compare product price from other web stores before making a purchase. It also encourages customers to revisit the web stores regularly and stimulates customer purchase behavior.

4.3) The entrepreneurs should design their websites to attract customer interests. Especially the product image should be considered of attractiveness to attract the attention of customers and as resemble as possible to the real product since in the e-commerce business system, customers will have no opportunity to see and touch the product before purchasing.

6.4   Recommendations for the Following Research

1) Consider other causal factors affecting customer loyalty in order to add new variables that I therefore developed the model in addition to the five variables studied in this research which comprises of e-commerce website information quality, system quality, product and service quality, brand image, and marketing communication tools.

2) Study the causal factors affecting Thai customer loyalty towards e-commerce business by identifying product and service category such as food, ready-to-wear clothings, cosmetics, tourism, etc., in order to be able to apply research results for those specific e-commerce businesses in determining specific marketing communication strategies.

3) As a result of this research, customer perceived value and satisfaction are factors affecting directly to Thai customer towards e-commerce business, as such, the research to be followed should consist of in-depth factor study, for instance, the communication strategies for creating customer perceived value towards e-commerce websites, factors affecting customer satisfaction towards e-commerce businesses, etc.

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APPENDIX A

Research Questionnaire of

"The Causal Model of Factors Affecting Thai Customer Loyalty
towards E-Commerce Business"

Part 1: General Information of the Respondent

Explanation: Please mark √ in only one space that matches most with your reality.

1. Gender

( ) 1. Male ( ) 2. Female

2. Age

( ) 1. 20 years old or less ( ) 2. 21-30 years old

( ) 3. 31-40 years old ( ) 4. 41-50 years old

( ) 5. 51 years old or more

3. Education

( ) 1. Undergrad Degree ( ) 2. Bachelor Degree

( ) 3. Higher than Bachelor Degree

4. Occupation

( ) 1. Civil officer/State enterprise officer ( ) 2. Private company employee

( ) 3. Private own business/Trader ( ) 4. Employee/Freelance

( ) 5. Student/Post-grad ( ) 6. Others please specify...........

5. Monthly Income

( ) 1. 10,000 bahts or less ( ) 2. 10,001–20,000 bahts

( ) 3. 20,001–30,000 bahts ( ) 4. 30,001–40,000 bahts

( ) 5. 40,001 bahts or more

6. Currently, what e-commerce website do you buy on a regular basis? (Choose only one answer)

( ) 1. www.lazada.co.th ( ) 2. www.11street.co.th

( ) 3. online.advice.co.th ( ) 4. www.jib.co.th

( ) 5. www.central.co.th ( ) 6. shoponline.tescolotus.com

Part 2: Factors Affecting Customer Loyalty to E-commerce Business

Explanation: Please mark √ in a space matches level of your opinion most, each level has the following meaning:

Level of Opinion				
5	4	3	2	1
Mostly Agree	Strongly Agree	Moderately Agree	Slightly Agree	Least Agree

Item	Factors Affecting Customer Loyalty	Level of Opinion				
		5	4	3	2	1
1. Information Quality						
1.1 Completeness						
1	The website offers complete information, such as product images and information, pricing, terms of payment, terms of shipping, etc.					
2	The website offers enough information to meet the customer needs					
1.2 Accuracy						
3	The website offers accurate data					
4	The website offers reliable information, such as product information, exact product features, etc.					
5	The website offers useful information					
1.3 Currency						
6	The website presents current information.					

Item	Factors Affecting Customer Loyalty	Level of Opinion				
		5	4	3	2	1
7	The website information has always the up-to-date.					
1.4 Visual Appeal						
8	The format of information on the website is orderly, including images, text, animations, and graphics					
9	The format of information on the website is appropriate, such as image size, font style, color, layout, etc.					
10	The format of information on the website is attractive, such as images, animations, graphics, colors, etc.					
2. System Quality						
2.1 Security and Privacy						
11	Security policy is notified by the website to ensure confidence with the payment method					
12	Privacy policy is notified by the website to ensure safety of name, address, credit card number, etc.					
2.2 Convenience						
13	Easy to remember of the website name					
14	The website is designed to be ease of use					
15	Easy to learn how to use when first visiting to the website					
16	Remember how to use and to use fluently even though not using the website for a certain period of time.					
17	Multiple accesses to the website including desktop, laptop, smartphone, tablet, etc.					

Item	Factors Affecting Customer Loyalty	Level of Opinion				
		5	4	3	2	1
18	The website has an application that facilitates ordering					
2.3 Speed						
19	Speedy connectivity to the website					
20	Speedy display of the desired data					
21	Speedy in searching for information and returning on the website					
22	The website system is stable with no failure while running					
3. Product and Service Quality						
3.1 Customization						
23	The website offers quality products					
24	The website offers variety of products					
25	The website offers adequate product price					
26	The website offers many price ranges to choose					
27	The website offers speedy delivery as time specified					
28	The website has adjusted service format to meet each customer need, such as welcome note on the site with customer names, list of recommended products to meet customers' interest of each person, etc.					
3.2 Assurance						
29	The website displays important information to assure the placing of an order, such as the website age, the buyer statistics, the site visitors, the contact with sellers, etc.					

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Item	Factors Affecting Customer Loyalty	Level of Opinion				
		5	4	3	2	1
30	The website displays terms of product quality warranty to assure the ordering, such as refund or return of product policy					
3.3 Responsiveness						
31	The website offers after-sales service, such as email notification to customers as soon as the products have been sent					
32	The website provides contact and information channels, such as LiveChat, Facebook, Line, and telephone to solve problem					
33	The website provides assistance and problem solving quickly					
34	The website provides assistance and well problem solving					
4. Brand Image						
4.1 Reputation						
35	The website owns credible image					
36	The website is popular					
37	The website is a successful business					
4.2 Good Management						
38	The website develops remarkable marketing plan					
39	The website owns efficacy administrative system					
40	The website applies innovation in doing business					
4.3 Law and Ethics						
41	The website business is lawful					

Item	Factors Affecting Customer Loyalty	Level of Opinion				
		5	4	3	2	1
42	The website is carrying business of integrity with no exploitation on customer and society					
43	The website shows the responsibility whenever there is any impact caused by its business					
5. Marketing Communication Tools						
5.1 Offline Media						
44	The website places advertisement through offline media, such as television, newspapers, magazines, etc.					
45	The website has sales promotion, such as discount, premium, free product delivery, etc.					
46	The website places public relations on various media, such as press release, interviews, special events, etc.					
5.2 Online Media						
47	The website places online media on search engine, such as Google, Yahoo, etc.					
48	The website installs a link with other websites					
49	The website places banner on other websites					

Part 3: Customer's Perceived Value of E-commerce Business

Explanation   Please mark √ in a space matches level of your perceived value most, each level has the following meaning:

Level of Perceived Value				
5	**4**	**3**	**2**	**1**
Mostly Agree	Strongly Agree	Moderately Agree	Slightly Agree	Least Agree

Item	Perceived Value	Level of Perceived Value				
		5	**4**	**3**	**2**	**1**
1. Utilitarian Shopping Value						
1	Perceived value of the ease of use on the website					
2	Perceived value of the time saving in data searching and product ordering through the website					
2. Hedonic Shopping Value						
3	Feel the escape from everyday life when visiting the website for product information					
4	Feel enjoy while using the website					
5	Feel excited when shopping through the website					

Part 4: Customer Satisfaction with E-commerce Business

Explanation Please mark √ in a space matches level of your satisfaction most, each level has the following meaning:

Level of Satisfaction				
5	**4**	**3**	**2**	**1**
Mostly Agree	Strongly Agree	Moderately Agree	Slightly Agree	Least Agree

Item	Satisfaction	Level of Satisfaction				
		5	**4**	**3**	**2**	**1**
1. Achieved Expectation						
1	Achieved expectation of the correct choice in purchasing over the website					
2	Achieved expectation of the usefulness of product and service on the website					
2. Overall Satisfaction						
3	Overall satisfaction in purchasing through this website more than others					
4	Overall satisfaction in product and service of this website more than others					

Part 5: Customer Trust in E-commerce Business

<u>**Explanation**</u> Please mark √ in a space matches level of your trust most, each level has the following meaning:

Level of Trust				
5	**4**	**3**	**2**	**1**
Mostly Agree	Strongly Agree	Moderately Agree	Slightly Agree	Least Agree

Item	Trust	Level of Trust				
		5	**4**	**3**	**2**	**1**
1. Integrity						
1	The website is reliable					
2	The website discloses all important information openly with no deception					
3	The website delivers product and service as agreement made					
2. Expertise						
4	The website provides the product and service of acceptable quality					
5	The website provides the product and service quality that meets the customer need					
3. Benevolence						
6	Focus importantly on customer benefit					
7	Take very good care of every customer even small matter					

Part 6: Customer Loyalty towards E-commerce Business

Explanation Please mark √ in a space matches level of your loyalty most, each level has the following meaning:

Level of Loyalty				
5	**4**	**3**	**2**	**1**
Mostly Agree	Strongly Agree	Moderately Agree	Slightly Agree	Least Agree

Item	Loyalty	Level of Loyalty				
		5	**4**	**3**	**2**	**1**
1. Repeat Purchase						
1	The website is the first choice to repurchase product next time					
2	Intention to repurchase product in this website again					
2. Words of Mouth						
3	Spread positive words of mouth about the website to other people					
4	Pursuade other people to purchase product over the website					

APPENDIX B

Interview Question

Subject: Marketing Communication Factors Influencing on Thai Customer Loyalty towards E-commerce Business

Section 1   Personal Data
1. Name-Surname_____
2. Job Title_____
3. Year of experiences in online marketing area _____ years

Section 2   Probe of Questions
1. "What factors do you think would influence on Thai customer loyalty towards e-commerce business?"
2. "What marketing communication factors do you think would successfully enhance Thai customer loyalty towards e-commerce business, for example; the system quality of website or the quality factor of products and services?"

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