A STUDY ON CUSTOMER PERCEIVED SERVICE QUALITY OF ONLINE TRAVEL AGENTS (OTAS): A CASE STUDY OF FOREIGN USERS IN BANGKOK, THAILAND

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A THESIS SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR
THE DEGREE OF MASTER OF MANAGEMENT
(TOURISM AND HOSPITALITY MANAGEMENT)
FACULTY OF GRADUATE STUDIES
MAHIDOL UNIVERSITY
2014

Thesis
entitled

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ACKNOWLEDGEMENTS

Primarily, the author truly appreciates the plentiful advice, and consistent attentiveness and effort from Dr. Pisut Yuwanond and Dr. Veerades Panvisavas. Their advice and guidance has enabled me to develop an understanding from the beginning to the final process. Especially, my co-advisor, Dr. Veerades Panvisavas who has given me invaluable advice on the thesis process and push me to the final of this thesis.

Moreover, I and thankful to all MUIC lectures for the knowledge I have received from all the classes. In addition, I am thankful to all my MUIC lecturers for the knowledge I have received from their classes. In addition, I would not be able to achieve this goal, without the continuous support and encouragement from my friends and family.

The author wants to thank all participants and valuable help from them for participate in this questionnaire. Some were in a hurry, but kindly help finishing the survey. Finally yet importantly, I am grateful for all MUIC Sathorn assistants who have given me the advice and suggestion of the thesis process.

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ABSTRACT

The internet revolution has brought about significant changes in the way in which travel agencies interact with customers. With the advent of the internet, customers have more power to access products, services and business providers online. In many kinds of businesses, including tourism and hospitality industry, customers can easily search for tourism and hospitality products and services twenty-four hours a day.

The purpose of this study was to find out the level of customers perceived service towards online travel agents website and services from representatives. Moreover, it looked into the potential attributes leading to customer satisfaction with online travel agents websites. The research framework considered seven dimensions of E-SERVQUAL consisting of efficiency, reliability, fulfillment, privacy, responsiveness, compensation, and contact (Zeithaml et al, 2000). This study used this concept as a framework of the study. Data collection was based upon convenience sampling method, while target population was non-Thai nationalities who live in Bangkok, Thailand. This research found out customers perceived online travel agents' service well, although, there were two main areas that companies should pay more attention to. These were supporting services and complimentary services because they play major roles in customer satisfaction.

KEY WORDS: CUSTOMER PERCEIVED SERVICE QUALITY/ SERVICE QUALITY/ E-SERVQUAL/ ONLINE TRAVEL AGENTS

90 pages

การรับรู้คุณภาพในการให้บริการของตัวแทนจำหน่ายผลิตภัณฑ์การท่องเที่ยวทางอิเล็คทรอนิกส์ กรณีศึกษาผู้ใช้งานชาวต่างชาติที่อาศัยในกรุงเทพมหานคร ประเทศไทย

A STUDY ON CUSTOMER PERCEIVED SERVICE QUALITY OF ONLINE TRAVEL AGENTS (OTAs): A CASE STUDY OF FOREIGN USERS IN BANGKOK, THAILAND

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บทคัดย่อ

การพัฒนาและความก้าวหน้าของเทคโนโลยีทางด้านอินเตอร์เน็ททำให้เกิดการเปลี่ยนแปลงอย่างเห็นได้ชัดถึงวิธีการที่องค์กรธุรกิจต่างๆ สื่อสารกับผู้ใช้บริการและลูกค้า โดยผู้ใช้บริการสามารถเข้าถึงสินค้าและบริการขององค์การธุรกิจต่าง ๆ ได้อย่างมีประสิทธิภาพมากยิ่งขึ้น ในธุรกิจหลายประเภท รวมทั้งธุรกิจด้านการท่องเที่ยวและการบริการ ผู้ใช้บริการสามารถค้นหาผลิตภัณฑ์ และบริการการท่องเที่ยวได้โดยสะดวก

งานวิจัยนี้มีวัตถุประสงค์เพื่อศึกษาการรับรู้คุณภาพในการให้บริการของตัวแทนจำหน่ายผลิตภัณฑ์การท่องเที่ยวทางอิเล็คทรอนิกส์และเจ้าหน้าที่บริการลูกค้า รายงานนี้ยังค้นหาประเด็นที่มีผลต่อความพึงพอใจของผู้ใช้งาน ผู้วิจัยใช้แนวคิดของ Zeithaml (2000) เป็นกรอบในการค้นหาข้อมูล โดยประเด็นที่เกี่ยวข้องกับคุณภาพการให้บริการทางอิเล็คทรอนิกส์ ประกอบด้วย ความมีประสิทธิภาพ, ความน่าเชื่อถือ, การบรรลุเป้าหมาย หรือ ความสมปรารถนา, ความเป็นส่วนตัว, การตอบสนองต่อผู้รับบริการ, การชดเชย และการติดต่อสื่อสาร ผู้วิจัยเก็บข้อมูลโดยการเลือกตัวอย่างตามสะดวก ผู้เข้าร่วมวิจัยคือชาวต่างชาติที่อาศัยอยู่ในกรุงเทพมหานคร ประเทศไทย จากการศึกษา พบว่าผู้เข้าร่วมวิจัยรับรู้ถึงคุณภาพในระดับที่ดี โดยมีบางประเด็นที่ตัวแทนจำหน่ายควรปรับปรุง คือการให้บริการในการดูแลลูกค้า ทั้งนี้เพื่อความพึงพอใจของลูกค้า

คำสำคัญ : คุณภาพการให้บริการ/ การรับรู้คุณภาพการให้บริการ/ E-SERVQUAL/ ตัวแทนจำหน่ายผลิตภัณฑ์การท่องเที่ยวทางอิเล็คทรอนิกส์

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CHAPTER I
INTRODUCTION

1.1 Background

1.1.1 Internet development

Many studies stated about the internet as it has increased the accessibility to reach information about products, services and prices faster and at ease of use (Mouakket and Ahmad Al-hawari, 2012, Madu and Madu, 2002, Lee et al., 2011). Information technology (IT) has evolved dramatically in this decade. It has now become a part of people life. Because of the improvement, more and more business has implemented this technology greatly (Vladimirov, 2012). Online business brings benefits to business owners, supplies and customers. It also provides opportunities and challenges for businesses. Law et al (2007) described that in the early stage of travel agent, most tourism suppliers used to work with the traditional intermediaries such as tour operators and travel agents to arrange the holiday trip, though the advance of information technology and the internet have changed the way of travel distribution channels works significantly. Moreover, intermediary plays an important role in commerce since it provides valued-added activities and extra services to both buyers and sellers (Turban et al., 2008). Egger & Buhalis (2008) described that traditionally, for tourism industry, intermediaries normally provide service of outbound and inbound trips as well as tour operators. On the contrary, for cyber-world, intermediaries refer to companies or organizations working on the transactions between service providers and expected customers. Intermediaries receive transaction's value as commission (Turban et al., 2008).

From the above improvement, online business services allow customers to view the products and services, request for more related information and finish the transaction to buy those products or services. Online transaction allows users to make a purchase and transfer payment by using the internet platform (Lee et al., 2011). It

can be said that the internet is one of the most recent developments in communication and information technology. Nusair et al. (2010) described that the internet is considered as a technological asset because of the ability to gather large amount of information and capability to transfer information speedily and efficiently. This process is useful to stakeholders, including employees, customers and suppliers (Nusair et al. 2010). With the spread development of the internet and information technology, there has been an increasing number of tourists using the internet to find and gather information, which leads to buying decision (Heung, 2003). Hence, company that has not implemented the technology is likely losing its competitive power (Vladimirov, 2012). Booking and purchasing via the internet is counted one of the very fast growing methods of shopping nowadays. Moreover, the internet is also used to facilitate buying transactions among different actors: customers and businesses and among businesses and consumers as well as business and business (Grunert and Ramus, 2005). Information Technology (IT) affects our everyday lives at both individual and organizational level. It is obvious that we cannot avoid these technologies as it creates convenient to our living. Therefore, it is important to learn to apply these technologies to get the most of it.

Moreover, in the country level, information technology is also useful in improving its citizen and to facilitating economic growth. Additionally, the effective use of technology can also affect the industrial growth. Buhalis & Main (1998) stated that information technology is one of the main sources of competitive advantages for businesses especially the tourism and hospitality industry since the information for these products are such as promotion, price, and places and other details related. Law et al. (2007) supported this statement as the authors explained that travelers prefer to look around online websites before making final purchase, and another reason is that they like to compare the products and price to acquire the most reasonable one. In the hotel room booking, customers would generally browse different websites to check the price, location and other details the compare the room rate and then book for services.

1.1.2 Internet usage in Thailand

Networking in Thailand began in 1987 when a group Thai engineers created the academic network in Thailand. The network gradually transitioned in 1992

(Palasri et al. 1999). The usage of internet in Thailand is now highly valued, especially in the younger generation. The internet is not only for information sharing in the academics for students, but it is also a media, or channel for business opportunity as well (Palasri et al. 1999).

The National Electronics and Computer Technology Center (NECTEC) of Thailand gathered information of Internet users in Thailand as stated in the table 1-1.

Table 1-1: Internet users in Thailand from 2005 - 2012

Year	Total	Source
2012	25,090,000	TRUEHITS
2011	22,500,000	TRUEHITS
2010	19,790,000	TRUEHITS
2009	18,300,000	NECTEC
2008	16,100,000	NECTEC
2007	13,416,000	NECTEC
2006	11,413,000	NECTEC
2005	9,909,000	NECTEC

Source: http://internet.nectec.or.th/webstats/home.iir

From the table 1-1, number of the internet users in Thailand has increased rapidly because of the advance of internet technologies, and the conveniently reachable for this technology. Both the growth of the internet services in the world and the advance innovation of E-commerce enhance customer for tourism and other hospitality service to book online via the World Wide Web (Amit and Zott, 2001). OTA offers booking service and arranging the tourism products and services online. Moreover, it is obvious that there are many online travel agents nowadays. In order to be competitive in the travel agent market, these companies have to understand what their customers want and try to improve their services to suit customers' need. Moreover, enhancing the customer satisfaction is also important as this can increase the customer's loyalty.

Many authors had concluded the impacts of information technology as follows.

1. It has significantly enhanced competitive edge by 79%.
2. It has improved information system in organization by 77%.
3. It has improved for a better external communications by 65%.
4. It has improved the way of making decision in consumers by 61%.

(Buhalis, 1998, Chaichi, 2012, Cox and Dale, 2001, Dalton, 1999)0

1.1.3 E-business and E-commerce

Internet technologies have transformed the business world by providing a global online marketplace for sellers, buyers, and other stakeholders. The main values of e-business are such as lower cost of doing business, easy to reach new customers, source of revenue, and customer satisfaction (Amit and Zott, 2001). Willcocks et al. (2000) proposed a model for development of a firm that firm start using the web presence; create skills and infrastructure for e-commerce and transform its organization to become customer-focused organization. More and more individual businesses try to use the e-business in their own business as to better serve their customers. The key to success is to give what customer want, by offering it at the right place and at the right time. Windrum & de Berranger (2003) stated that e-business is the combination of the ICT (Information communication technology) and the internet. There are two integrations from this. One is the integration of the supply chain as to alleviate the production and deliver become one. Another one is the business models, which rely on communication system between suppliers and partners. It is obvious that e-business has minimized the process between service providers by doing internetworking between organizations and each customer. Cooper & Burgess (2000) stated that the internet commerce model from e-business development is composed of three steps; division of information and services, web-based promotion and transaction processing.

Electronic commerce, a part of e-business, known as e-commerce, is an effective channel of buying and selling products and services from seller or retailers to customers. Its process uses electronic systems such as the Internet or other computer networks. Smith (2004) described that e-commerce is all about sharing and

exchanging information and the delivery of the information, products and services. In addition, it provides competitive advantages and increases value to the customers. E-commerce brings value to both business-to-customer (B2C) exchanges and business-to-business (B2B) exchanges (Smith, 2004). E-commerce can be divided in to many areas such as technology on mobile commerce, electronic funds transfer, internet marketing, and online transaction. According to Vladimirov (2012), e-commerce referred to the way to do business electronically by using World Wide Web (www) as a base of communication and transaction. In many businesses, this e-commerce is normally considered as a sale part of the e-business, which includes the data exchanging, and facilitating the payment for business transactions. The growing amount of the telephone, internet users, and competitive market in the telecommunications industry are the steps for e-commerce development. Online travel agents were developed in order to be a center of traditional travel agents, other related tour operators, national tourist offices, airlines, car rental firms, hotels and other accommodation providers. OTAs enable tourists to schedule their trip online with their estimated budget. Several tourism organizations are going online as it develops a fast communications for global availability and within the minimal costs.

1.2 Statement of the problem

For businesses, delivering proper service quality is considered a big issue towards consumers as it leads to customer satisfaction. Nowadays, with the invention of the internet that is playing an important role in doing business, customers and businesses contact each other from the website and rarely have real face-to-face contact. Therefore, it is more difficult to understand level of satisfaction that customers have. Customer satisfaction is one of the key measurements to decide the effectiveness of a business and can be a key point for success or failure (Langer, 1997). Firms must maintain their competitiveness in the fierce marketplace, and improve themselves to be with the trend, such as new technologies while deliver product and service.

Today, more and more consumers spend their lives on the internet, smart phone, and applications. Accordingly, they tend to gain useful information from that source. Once a firm offers information of products and service on the website, interested consumers might want to buy it straightaway. For tourism and hospitality industry, there are number of traditional travel agents and online travel agents which both use the internet as a platform to convey message and trade the products and service. The most significant criterion when a firm deals with customers especially in any kinds of service industry is a service's satisfaction, which it brings about to compliment or complaint. In addition, currently, there are a large number of customer complaints about the products and service provided by the OTA (Elliott, 2010). A study by Eccles and Durand (1998) stated that online customers are likely to tell their family and friends about dissatisfied service rather than telling the company. Moreover, they would tell their friends between eight to ten people about the received service. While having good service, this people would tell only three other friends for recommendations (Eccles and Durand, 1998). As a result, this is a harm for OTAs in the long run if there are increasing numbers of dissatisfying customers.

1.3 Research Questions

In consideration of the increasing usage of the internet as a source of tourism information and reservation for tourism and hospitality services, this study examine the performance of those online travel agents' websites and customer relation department of the companies by following this question:

1. What are the levels of customer perceived service quality of online travel agents?

1.4 Research Objective

This paper attempts to observe the customer perceived service quality towards Online Travel Agents (OTAs) to both website and customer service center. The objectives of this paper were:

1. To explore level of customer perceived service from using OTAs' service from online application

2. To measure different perception between genders of participants, and among age groups of participants

3. To identify the influential factors affecting customer satisfaction

1.5 Rationale and Significant of Research

Exploring the service quality performance of OTAs would be contribution for many business purposes and educational purposes, such as tourism and hospitality related business providers and researchers.

In term of business owners or other tourism and hospitality related business providers, this research can be a guideline of how to communicate with their customers via the website of the company and be a guideline to develop the site's content and website capability in order to appreciate their customers the most. Moreover, the paper provides some suggestions for improvement in the hospitality services and online travel agents themselves as well. For Thailand tourism and hospitality industry, this paper also can be used as a guideline for any tourism website such as hotel's room booking, airline direct booking, car rental service direct booking, sine the website contain similar information serving for customers and any users.

In term of researcher, this can be useful for developing the testing theories in the condition of online travel agents, both website and customer relationship service. In addition, the paper would reveal what customers perceive from those OTAs' website and customer relationship services.

1.6 Scope and Limitation

This study had a scope of the study to online travel agents or the companies that provide information about tourism and hospitality industry service and also make a reservation of such products and service directly for online application. The study gave importance to OTAs' operators such as www.agoda.com,

www.expedia.com, www.travelocity.com. www.orbitz.com, www.priceline.com and www.booking.com. These websites provide information about tourism and other hospitality and also allow customers to search for their services by themselves, compare price from many business providers, and make a booking or reservation from the internet platform. Thus, customers who decide to book for those services can make a payment directly from the payment gateway.

Target group for this study was foreign people, or non-Thai nationalities. These international populations also include the expatriates, the foreigners living in Bangkok. Respondents must be 18 years old and above who have experience in using OTAs' website as a source of information for tourism and hospitality products and services, and have experience in make a booking from OTAs such as booking an airplane ticket, reservation for a hotel room, and other tourism products and services.

The target destinations for collecting data were at Suvarnabhumi Airport, Chatuchak weekend market, Central World department store, and Khaosan Road. Area for collecting data was in Bangkok as its most convenience for researchers to collect data.

Limitation in term of data collection process was time limitation. Since the study was conducted at the specific period of the year, therefore, the result might not show effectively in term of online travel agents' users who would be in Bangkok in other time of the year. Another limitation was language limitation. Because the study was conducted in English language only, hence, people who do not understand English language could not participate in this questionnaire survey.

CHAPTER II
LITERATURE REVIEW

This research is concerned about perceived service quality of OTAs, therefore, empirical research about these following areas were studied and analyzed.

2.1 Online Travel Agents (OTAs)

2.2 Definition of Service Quality

2.3 Perceived service quality

2.4 E-Service Quality

2.5 Application of E-SERVQUAL on online travel agent service

2.6 Conceptual Framework

2.1 Online Travel Agents (OTAs)

Online travel agents (OTAs), or travel intermediaries, is defined by Christodoulidou et al. (2007) as the organizations that conduct hotel bookings in their attempt to gain a share of this market (Christodoulidou et al.,2007). Moreover, O'Connor and Frew (2004) added further that an online travel intermediary would help to distribute hotel rooms from various hotels since the company wants to offer a full range of hotel types to potential customers (O'Connor and Frew, 2004).

In the past, travel bookings were made via telephone or by a travel agent. Today, electronic booking or online booking via the internet websites were developed to serve customers. Clearly, the electronic bookings have become a major source of revenue for tourism and other hospitality related companies. In addition, the online intermediaries offer products from several suppliers to deliver full service or one-stop shopping so that customers can purchase all of their travel accommodations at once from a single source (O'Connor and Frew, 2004).

Online travel agents use automatic system to organize the booking in order to reduce costs and increase profitability, as well the system helps improving

efficiency. Online travel agents offer several benefits to customers such as allowing customers to access to airlines, cruise lines, railways, hotels, and car rental companies from a single source. Moreover, the system also enables users to check out for discounts, special offers and promotions and make bookings from the comfort of their own homes. For this study, online travel agents included online booking website as well.

2.1.1 Operation of Online Travel Agent(s)

An article named "Understanding Online Travel Agencies" (2010) described operation of OTAs that consist of 1) the online searching and booking; 2) the offline operation; 3) the back office operation and IT or technology support.

1. Online searching and booking are the main activities for OTAs as they are the main connection that helps interaction between organizations and customers. It is necessary for OTAs to maintain and improve these processes in order to keep positive shopping experience for customers. In doing so, OTAs need to pay a close attention to server maintenance and technology support. OTAs should apply the usage of advanced search tools such as using of calendar search or similarity shopping in the system search engine. Its benefit is to offer flexible date that customers want, and to provide choices of selection to customers (Understanding Online Travel Agencies, 2010).

2. Offline support or call center is one of the main parts of OTAs, as customers who have difficulty or questions about the booking process can directly reach for assistance. Most of the call center work is dealing with customer queries, and complaints. From this article, for OTAs, the highest cost of service from this operation is the cost happening when there is a change of schedule. Reasons for schedule changes may come from the business providers' changes, and customers' ones. Cost for call center can be one of the biggest costs for OTAs. Therefore, it is suggested that OTAs should try to implement various methods to minimize workload and time spending, such as provide help via phone through the online booking process. Moreover, personal email could also be used to support this problem and limit the call volumes and time. (Understanding Online Travel Agencies, 2010)

3. Back Office is the last process of OTA. Most of back office systems are integrated with the first and second parts of the OTA. Their main tasks are to collect the payments and provide invoices to customer. In addition, this research described that the process can help reduce fraud happening in the system. (Understanding Online Travel Agencies, 2010)

Evidently, IT or technology support is also in the back office, main responsibilities of this team are separated into five categories.

1. Business Process Design: include all idea generating, process design and project management.

2. Web Application Development: include the activities of OTAs in searching and booking on the webpage.

3. Web Application Supporting System: include the cost of systems that support the booking such as Global Distribution System (GDS) or other software packages.

4. Office Supporting System: include all the support systems for mid-office, back-office, and accounting system.

5. Server Maintenance: include the server hosting, updates and others.

2.1.2 Online Travel Agents (OTA) and its role in the economy

Tourism and hospitality industry have developed along with the economics of scale of the country. During the year of 1950 – 1960 or product economy, tourism was seen as a time for family and friends togetherness (Vladimir, 1989). Spending time together was considered as the pleasure of lives, while travelling was preserved for the riches and businessperson (Vladimir, 1989). Then in 1960s to 1970s (service economy), customer had more opportunities to acquire personalized products and services. They were looking for pleasure from traveling to remote destination while receiving better services along the trips. Nowadays, desires of people are much more complicated than just only product and service but they desire for enjoyable experience. In this experience economy, travelers make a decision to purchase or not to purchase base on the quality of experience receiving during the trip and other services selection (Yeoman et al. 2005). Currently, tourism products with satisfied

service are what customers enjoy. Therefore, businesses generally enhance this experience to serve customers. (Yeoman et al. 2005)

Previously, tourism suppliers used traditional intermediaries such as travel agents and tour operators to distribute the tourism and hospitality products and services (Law et al. 2007). Nowadays, both traditional travel agents and online travel agents use the internet as a medium to arrange a trip for their customers. As a consequence, online distribution channels gradually became a common process to make travel reservations. The channels provide customers with the ease of use and easy access for information provided on the website. Online service utilizes some common territories related to traditional interpersonal services, and online service uses web-based technologies to automate products and services distribution to customers (Yang and Fang 2004). These services mostly begin with customer service, customer relation management system, transaction and payment system, customer care center and other operation in organization (Yang and Fang 2004). The four largest OTAs are Expedia, Orbitz Worldwide, Priceline, and Travelocity. According to the statistics from New Media Trend Watch, Expedia Inc. (which includes Hotwire) ranked as the top property in the online travel agents category in 2012 with 31.6% of all category page views, followed by Priceline.com Inc. with 17.3% and Orbitz Worldwide at 12.9% (New Media Trend Watch, 2013).

The internet has increased its accessibility to reach for source of information about products, services and price in a short time and ease of use. Since the internet had been developed with wireless technology, hotels have taken advantage to use them as a low price distribution channel by setting up their service websites and cooperate with third party as Online Travel Agents (OTAs). Kim et al. (2007) explained that online travel agents' role in the tourism industry is almost the same as traditional agents in the process of providing travel related information and reservation. However, for online travel agents, customers or users can purchase tourism and hospitality products and service online without having communication with agents. Moreover, both the traditional and the online one convey their products and information via the websites (Kim et al., 2007). Clemons et al. (2002) described that roles of the OTAs start from providing reservation information and recommend the products and service. The recommendation is based on customer's criteria such as

time of the trip, or minimum and maximum charges. After the selection of customer, OTAs complete a reservation and ticket the booking. It can be said that reservation and recommendation services are the basic roles of the OTAs and being a basic competition in OTAs business (Clemons et al., 2002).

The internet also enables customers to identify the best deal to compare the price and negotiate for reasonable price of the service with vendors both booking online and with traditional methods (Clemons et al., 2002). Also travel agent act as an intermediary to organize other services: organize package tour, book an airplane ticket, book accommodation, and reserve a rental car (Lam and Zhang, 1999). Smith (2004) also state that online travel agents in the travel marketplaces (such as Expedia, Priceline, Orbitz and Travelocity) offer service that is less expensive with more convenience. Moreover, the OTAs can offer the service without decreasing of the service quality. Combes and Patel (1997) described about online travel agents as a whole new experience of service convenience of the shopping and buying experience. Customers have potential to access the information related to tourism industry such as price and promotion conveniently. Customers are also able to gain many aspects of travel destination with their comfort and without having to talk to travel agents representatives (Combes and Patel, 1997). The authors also commented that online booking is now taking over the tourism and hospitality market. As the support of the internet, travelers can access the information about prices, discounted tickets, deals and schedules in a quick time with comfort environments.

According to Clemons et al.'s (2002) study, the beneficial points of online travel agents in terms of air tickets booking are:

1. Timeliness: for customers selecting specific flights covered specific date and time of the departure, OTAs can provide the flight details. Moreover, not only the specific requirement is shown, the system also presents the relevant flight information with less expensive.

2. Number of connections: having number of connections allow customers using OTAs service to book for a cheaper price since OTAs have information about the price in different period of time and different service providers.

2.1.3 Nature of the work and the role of Travel Agents and Online Travel Agents

In the past, travel agents were developed to become intermediaries contacting between tourism service providers such and transportation, accommodation and customers. Travel agents do not deal with real physical products but with the information about service and booking. Their main roles are divided in to information preparation, distribution and reservations.

1. Arranging transportations such as airlines, rails, and car rentals service.
2. Preparing itineraries for individual tour group or person.
3. Arranging accommodation such as hotels, resorts, and motels.
4. Preparing other tourism related products such as travel insurance, baggage insurance and currency exchange.
5. Arranging special interest reservation for special group such as sports event and eco-tourism.

2.1.4 Advantages of OTAs compare with traditional travel agents

Online travel agents were developed from traditional agents by using the internet and information technology as a source of information to provide customers. Because of the improvements, here are some advantages that OTAs have over traditional travel agents.

1. Online Travel Agents are online tourism related products distributors that allow travelers to search and research and book for their products on the same website and they also receive payment and deliver to the service providers.
2. OTAs can source their product and service easily by using the set program on the internet website.
3. OTAs can process both domestic and international tourism products and services to users.
4. OTAs do not always sell distressed inventory with short lead times.

2.1.5 The travel agents' biggest challenges

In a competitive market of travel agents, the challenges of online travel agent are the competition from the other travel websites and the service providers as

well as direct marketing. It has created pressure to traditional agent to have larger profits while having lower cost for operation. In the industry, customers are more demanding about the products and service and the products suppliers distribute their service to many places. As a result, travel agent find difficulties in booking through many websites. These processes can be time consuming, which is directly affect the service quality, efficiency and total revenue of the companies. Currently, online travel agents utilize the benefit of global reservation system (GDS) as a source of information to reach more information about the price, place and other options to offer to customer.

With the intense of competition in the booking service (self-service booking, traditional agent, and direct-customer service, and other online travel agents), OTAs try to add value to their service to be successful. Personalized service is considered as a unique part of OTAs as OTAs can provide specific help such as location finders, offer unique packages to each customer. Personalized service can differentiate each OTA from other OTAs to survive in the market. Moreover, one advantage of online travel agents is that OTAs operates twenty-four hours per day, and 365 days per year. In the fast growing online travel sector, the main differentiators of OTAs is the personalized service, delivery of human touch, convenience and one stop of booking management. To do so, OTA has to take responsibility in all process, provide clear solutions to customer, and offer the best price and support the customer's need at all time.

2.2 Definition of Service Quality

Parasuraman et al. (1985) suggested that there are three principle themes of service quality.

A. Service quality is an aspect that can be a little bit more difficult to evaluate than goods and quality.

B. The perceptions of service quality mostly derive from customer expectations. In this term, expectations derive from service performance.

C. Customer evaluations of service quality are the result from outcome of service and the process of delivering service.

In addition to the principal themes, Parasuraman et al. (1985) gave a conclusion that the measurement of service quality is overall attitude or judgment about the service. Parasuraman et al. (1998) suggested five-dimension of service quality: intangibles, reliability, responsiveness, assurance, and empathy. Also, Parker and Matthews (2001) and Swartz and Brown (1989) provided two aspects of service quality. The first one is concerned about what service is delivered which can be calculated or evaluated after one performance. The second one is service delivery process, which can be evaluated by the process during delivery. Parasuraman et al. (1985) called the first dimension of quality as “outcome quality”. While Grönroos (1983) described as a “technical quality”, Lehtinen and Lehtinen (1982), called this a “physical quality”. The process of service delivered also has different names. Parasuraman et al. (1985) described service delivered as “process quality”, Grönroos (1983) mentioned service delivered as a “functional quality” and Lehtinen and Lehtinen (1982) gave a term of “interactive quality”. From the statements, it could be seen that both Grönroos (1983) and Lehtinen and Lehtinen (1982) agreed that service quality could be separated into two dimensions. The first dimension is the output or physical quality or tangible one, while another is the process quality of the functional before having products. Moreover, Grönroos (1983) and Lehtinen and Lehtinen (1982) explained further that these dimensions are used to compare the attitude and behavior, service mindedness and accessibility of the customer contact personal.

From those two dimensions of Grönroos (1983), Lehtinen and Lehtinen (1982), and Edwardsson et al. (1989) studied further by gathering four aspects of quality, which directly affect customers’ perception. First aspect is the technical quality of the service system. In this case, it covers the personnel and design of the program. However, in the e-commerce, these aspects are not shown to customers. Second aspect is the integrative quality, this aspects is related to the system of the service delivery working together. In e-commerce, the system that provides a smooth running program, processes correct order and payment and finally gets the products or service as promised would enhance the satisfaction level of customer. Third aspect is the functional quality or the process of delivering products. The third aspect is similar to the definition of functional quality by Grönroos (1983) and Lehtinen and Lehtinen (1982), that functional quality is concerned about the layout and accessibility of

website. The last dimension is the outcome quality, or the products at the end of process. Regarding this quality, if customers do not feel satisfied with the products, they may not to use that service again.

2.3 Perceived Service Quality

Concept of service quality is mostly conceptualized in the service marketing literature. Therefore, it relates with the concept of perceived service quality. According to Zeithaml et al., (1990), perceived service quality is the range to which a firm successfully serves the purpose of customers. Customers mostly determine the perceived value of service based on their experience with the service delivered and their previous experiences. While, customers' expectation, service delivery process and service outcome have impact directly on perceived service quality (Ghobadian et al, 1994). In the service process, employees are critical elements in enhancing perceived service quality (You and Park, 2007). In addition, Edvardsson (2005) added further that service quality perceptions are formed during the service production, service delivery and service consumption process. A report from O'Neill and Palmer (2003) explained that prior experience with one specific service could influence the perception of service quality. In other word, positive or negative feeling of customer and previous experiences may have significant impact on perceived service quality.

The SERVQUAL approach is used to evaluate perception that the customer's assessment of service quality. This assessment refers to a gap between what the customer expects service quality from service providers and the evaluations of the performance of that service.

Many researchers have developed the scale to measure service quality in the service marketing, through the most common instrument called SERVQUAL which was developed by Parasuraman and his team. The first scale was summarized in 1985 with the ten dimensions to measure service quality (Parasuraman et al., 1985). Parasuraman et al. (1985) came up with ten determinants to measure service quality.

1. Access (the ability for ease of contact);
2. Communication (two ways communication);
3. Competence (skills and knowledge required to perform service);

4. Courtesy (attitude and manner of contact person);
5. Credibility (honesty);
6. Reliability (the ability to perform consistency);
7. Responsiveness (timeliness of service delivery);
8. Security (secure from the danger);
9. Tangible (physical of service); and
10. Understanding (ability to understand the need of customers).

In the follwing three year, Parasuraman et al. (1988) developed new instrument. This new approach was developed by grouping part of ten dimensions to be a shorter group for measure service quality. The new approach, SERVQUAL (Parasuraman et al., 1988) is used to measure service quality. The method has received great attention for decades. This approach begins with the determination of the gap happening between customers' expectation and perception of the actual service quality that they receive from the service providers. For the service quality dimensions, Berry, Parasuraman, Ziethaml (1994) come up with the five dimensions on how customers use to evaluate the quality. Their research suggests dimensions in broad service to be five dimensions. These are the criteria using to evaluate the service quality. Parasuraman et al. (1988) reduced the ten determinants in to five as follow;

1. Intangibles – Overall appearance of facilities, other equipment, employee and communication materials.

2. Reliability – Ability of employee to accurately perform service dependably and accurately to customers.

3. Responsiveness – Willingness of the staff to provide help promptly.

4. Assurance – Employee's knowledge and manners and ability to express confidence and trust.

5. Empathy – Individualized Attention and caring that the organizations deliver to customers.

Similar to Parasuraman et al (1998) study, a study by Johnson (1995) about the service quality was also frequently cited because the author has separated service quality dimensions into details. The researcher proposed 18 service dimensions: access, functionality, aesthetics, friendliness, attentiveness, availability,

care, comfort, commitment, communication, cleanliness, competence, courtesy, flexibility, integrity, reliability, responsiveness, and security.

2.4 E-Service Quality

With the advance of the internet and the growing number of companies, which use the internet to be main distribution channel, the most reasonable price is an important criterion to compete with other companies in the market. Morrison et al. (2004) said that in the vast network of global suppliers and wide ranges of customers, the appropriate distribution channel for tourism products is the online channels. Also Law et al. (2007) claimed that hotel booking is working as a prime service sector of travel industry and has integrated in the internet largely. While Starkov and Prince (2007) estimated that one-third of the hotel booking number in 2010 were completed online. Accordingly, electronic services quality, or e-service quality is now concerned as a method to retain customer and attract new customers.

Zeithaml et al. (2000) explained that E-SERVQUAL can be defined as the extent to which a Web site facilitates efficiently and effectively in shopping, purchasing, and delivery of products and services. Davis (1989) described two important factors for users wanting to adopt the information technology are 1) ease of use and 2) usefulness. The “ease of use” is a criterion that users believe that using the new technology is free of effort, while the “usefulness” is a criterion meaning of how the technology would enhance his or her performance. These two factors are used to evaluate online service quality. According to the literature, the online customers are end-users of the service in both information consumers and network utilizers (Yang and Fang 2004, Yang et al. 2004). Doll and Torkzadeh (1988) proposed four quality dimensions that influence end-user satisfaction: content, ease of use, format and timeliness.

Li et al. (2009) conducted a research on important factors of the customer towards online travel service quality and discussed that the important factors are: trust in customers’ mind, reliability, responsiveness of the system, and ease of use of the technology. It this Li et al. (2009) research, conducted another study about e-service quality and proposed the model of 9 dimensions to the online companies when

comparing to the experience and trust. The model is comprised of ease of use, website design, system availability, reliability, privacy, responsiveness and empathy. From their research, they found that online travel companies should concern about the reliability, responsiveness and system availability and try focus more on trust and ease of use of the program as to enhance the satisfaction of customers.

In the context of e-commerce, e-service quality is developed to measure success or failure of the company (Yan and Jun, 2002). Santos (2003) gave a definition of e-service quality as mix components of perceptions, judgments, and evaluation of the service quality that online shopping websites offered. On the other hand, Zeithaml (2002) explained that it is a method to measure how a website provides effective and efficient purchasing good or service.

Online service quality dimension or E-SERVQUAL has been developed from the traditional SERVQUAL scale. Zeithaml et al. (2001, 2002) have identified eleven dimensions of online service quality, which are: access, ease of navigation, flexibility, efficiency, personalization, reliability, security or privacy, cite aesthetics, trust, responsiveness and price knowledge. The authors mentioned that both SERVQUAL and E-SERVQUAL share some common dimension that are, access, reliability, assurance, and responsiveness. Moreover, those dimensions can be used to evaluate both traditional service and e-service quality. Madu and Madu (2002) also studied the criteria of online service quality and enlarged the criteria to measure E-SERVQUAL. The study was based on the intense of literature review. They proposed fifteen following dimensions: feature, aesthetics, structure, reliability, serviceability, performance, storage capacity, trust, security, responsiveness, customization and service differentiation, system integrity, web store policy, assurance, reputation and empathy. At the same time, Cox and Dale (2001) did not agree to all crieteria mentioned. Cox and Dale proposed that there are some dimensions do not relevant to online services: competence, cleanliness, courtesy, friendliness, and comfort. On the other hand, factors that are essential to the success of the organizations are accessibility, appearance, credibility and communication.

Zeithaml et al (2000, 2002) have studied the dimensions and developed E-SERVQUAL scale to measure e-service quality. The scale includes seven dimensions, which are efficiency, reliability, responsiveness, fulfillment, privacy, compensation

and contact. From the seven measurements, the E-SERVQUAL scale, the core service quality aspects that consist of four factors (efficiency, fulfillment, reliability and privacy) are the scale used to measure customers' perception to online providers' service quality. Then the three factors are counted in recovery service scale to evaluate the e-service recovery when faced problem (responsiveness, compensation and contact).

Table 2-1 consists of conclusions of empirical study on electronic service quality. This table groups in to different authors and research method that they used in the study.

Table 2-1: Empirical study on dimensions of e-service quality

Study	E-Service Quality Scale	Research Method
Li et al. (2009)	Ease of use Website design Reliability System Availability Privacy Responsiveness Empathy Trust Experience	Survey
Yoo &Donthu(2001)	Ease of use Aesthetic design Speed Security	Survey
Zeithaml et al. (2001)	Ease of access and navigation Efficiency Flexibility Reliability Personalization Security Responsiveness Assurance Aesthetics Information	Six focus group interview
Zeithaml et al. (2002)	Security Communication Reliability Responsiveness Delivery	Literature Review
Santos (2003)	Ease of use Communication Reliability Efficiency Security Customer support	Qualitative Research
Field et al. (2004)	Reliability Security Website design Customer Service	Theoretical study
Lee and Lin (2005)	Website design Reliability Responsiveness Trust Personalization	Survey

Table 2-1: Empirical study on dimensions of e-service quality (cont.)

Study	E-Service Quality Scale	Research Method
Kim et al. (2006)	Efficiency System availability Fulfillment Responsiveness Privacy Information Contact Graphic style Compensation	Content analysis
Gounaris et al. (2005)	Website design Information Responsiveness Reputation Trust	Survey
Parasuranman et al. (2005)	Efficiency Availability Fulfillment Privacy Responsiveness Contact	Survey
Yang et al. (2004)	Responsiveness Ease of use Reliability Convenience Communication Competence Personalization Collaboration Security Aesthetics	Qualitative study
Cox and Dale (2001)	Accessibility Communication Credibility Understanding Appearance Availability	Literature Review
Yang and Jun (2022)	Reliability Access Ease of use Personalization Security Credibility	Survey
Kaynama and Black (2000)	Content and purpose Accessibility Design presentation Navigation Responsiveness Background Personalization and customization	Literature Review
Sahadev and Purani (2008)	Efficiency System availability Fulfillment Privacy	Survey
Bauer et al. (2006)	Responsiveness Reliability Process Gunctionality Enjoyment	Survey

According to table 2-1, many research studies used the survey questionnaires for their research methodology as it can reach a wider group of respondents. Therefore, this research employs the same method to study E-SERVQAUL dimension of online travel agents.

2.5 Application of E-SERVQUAL on OTAs Service

Electronic service quality is the instrument used to measure service quality of many electronic businesses such as online banking, and online shopping. However, criteria of measurement to measure service of online travel agents are different according to the nature of business. For online travel agents, criteria to measure and the nature of business are described below.

Efficiency is the measurement that indicates the ability of users to access the website and find needed information of product or service within a minimal effort. Parasuraman et al., (2005) defined the efficiency as the ease of use and speed accessing and using the website, in other word, this refers to ease of website access, simplicity of using the web and find information effortlessness, and fast check-out. According to Chin and Lee (2000), efficiency is the accessibility to the speed of access, information downloading and the availability of the website. Moreover, speed of the system is counted to be an important factor that affects the usability and emotional response of users. Turban and Gehrke (2000) claimed that speed of page-loading is counted to be the most important part to measure the successfulness of the website design. Cheung and Lee (2005) explained that the speed of website to access information have strong impact to users' satisfaction. Ranganathan and Ganapathy (2002) stated that convenience and the time saving, likewise, are considered to be the most significant reasons that people buy products and services online.

Moreover, efficiency is refers to the ability that the technical functioning of the site is working properly. Parasuraman et al (2005) defined the dimension as the correct technical functioning of the website. Technical program issues are directly related to purchasing on the internet (Fram and Grady, 1995). Moreover, customers facing these problems such as non-working link, or buttons could lead to frustration and be a reason of losing customer loyalty (Wachter, 2002). Santos (2003) mentioned that avoiding the broken links or under construction links are related to e-service quality directly. To become a successful online travel agent, these difficulties should be eliminated or kept in minimum number.

These are criteria used to measure the efficiency dimension of online travel agents.

A. Efficiency in OTAs website's function quality (Navigability)

B. Efficiency in the search engine or search result. (variety of products and services)

C. Efficiency in booking process (input information, confirm information, payment process)

D. Efficiency in e-commerce development. (channel of payment, and security system)

Fulfillment refers to the accuracy of the service, the ability of firms to deliver products and services in the promised time. Parasuraman et al., (2005) explained that the dimension is the extent to what the website promises to delivery and item availability and to fulfill the customers. Ho and Lee (2007) explained that the dimension refers to the successful of online stores to deliver product and services to customers as well as the willingness to accept and correct the mistakes happening in the transactions. Wolfinbarger and Gilly (2003) stressed on the error-free in ordering process and delivery of the order on-time. Ho and Lee (2007) said that a website which can deliver the products and services and minimize the dissatisfaction in customers will maintain a higher level of quality evaluation from customers. Zeithaml et al. (2002) also mentioned that the dimension is separated into 1) have products in stock, ready to deliver within the time promised, and 2) deliver it correctly and in promised time. Yang and Fang (2004) mentioned that the process of delivery products and service accurately and in time leads to customer satisfaction and dissatisfaction. Nusair and Kandampully (2008) described that personalized attention affects the fulfillment of the customers. Their paper stated that personalized service are such as the ID registration system, recommendations for users, and program creating community in the OTAs. Personalization, for users, is extra service to create customer relationship as well, such as community communication (Nusair and Kandampully, 2008). Perception of this dimension between gender was different according to a research by Pesonen (2013). The researcher examined that there were difference in perceived service quality of fulfillment in term of personalized service. Women perceived personalized function more than men did.

These are criteria used to measure the fulfillment dimension of online travel agents.

A. Fulfillment in the products and services quality.

B. Fulfillment in the personalized care from OTA.

C. Fulfillment in the extra service from OTA.

Reliability refers to the correctness of products' information provided on the website. Ho and Lee (2007) explained that reliability is the site's content to be represented as the promised services. Especially for online travel website, users can only acquire the information about products or service from the OTAs website, therefore, the reliable details or the service providers is important for customers. Wolfinbarger and Gilly (2003) gave another point of reliability that it refers to customer perception of the site's reliability such as confirmation email, order tracking. Yang and Fang (2004) described that the incorrect of the service described on the website and the received service will lead to customer dissatisfaction strongly. Moreover, the dimension is overlapped to the fulfillment in term of accuracy of promised service such as delivering what is ordered (Zeithaml et al., 2002). However, for this study, the focus of reliability is measured from information quality.

Perception of this dimension among different age categories was different according to a research by Ganguly et al. (2011). They examined that there were different in perceived service quality of reliability among different age categories that older customers give emphasis to the reputation of the online portal more than customers in other age groups.

These are criteria used to measure the reliability dimension of online travel agents.

A. Reliability in information quality.

B. Reliability in the OTA's company (such as reputation, and after sale service).

Privacy refers to dimension includes guarantee of the customers' data and credit card are not shared to others and are secured properly. Parasuraman et al. (2005) gave a definition to this dimension as the degree that the website provides safe and

protection of customer and customer information, as the issue has been a critically important of online stores' customers. Zeithaml et al. (2002) explained that privacy involves securing users' personal information by not sharing information about customers with others, providing informed consent. In other term, it is a perception of customer of the confidence and trust towards the website. Security risk perceptions have a strong impact on attitude towards usage of online services especially when relate to financial topic (Montoya-Weiss et al., 2000, and Kim et al., 2006). Because of the risk from the internet, many people still do not want to buy products and services online. From this problem, online retailers must aware of customers privacy policies on the internet (Ranganathan and Ganapathy, 2002). In other term, it is perception of customer of the confidence and trust towards the website. Vladimirov (2012), explained that both website security and website privacy features need to be maintained and strengthened to increase trustworthiness of the company. Less security and privacy can happened from the security issues, lack of communication between users and the company (Vladimirov, 2012). From the same article, Vladimirov (2012) stressed that users feel confidence and trust from the provided company information such as license document, guaranteed certificate, partners and suppliers, contact address, and company's profile (Vladimirov, 2012).

Perception of this dimension between genders was different according to a research by Ganguly et al. (2011). This paper revealed the examination that there were different in perceived service quality of privacy among different gender. To elaborate, women concerned about the privacy more than men did. Additionally, this paper also presented that there were different in perceived service quality of privacy among different age categories that older people concerned about privacy more than customers in other age groups.

These are criteria used to measure the privacy dimension of online travel agents.

A. Privacy received from the OTA's website usage.

B. Privacy received from giving personal information.

C. Privacy received from the usage of the OTA's company.

Responsiveness is a key determinant that is important to customers when shopping online via the website (Jarvenpaa and Todd, 1997). Zeithaml et al. (2002) explained the criterion that is related to response from the online stores especially when customers have questions or problem. Other examples are prompt service, helpful advice and guidance, and accurate information about the products and services. Zeithaml et al. (2002) also described online responsiveness index can be illustrated from the number of channel for communication, frequently asked questions, asking question process and feedback to users' inquiry. The index includes attributes on how website's representatives respond to customers' need. Cox and Dale (2001) also stressed that responsiveness is one of the factor that has great important to user as users want to receive the prompt service that company can provide to. Watson et al. (1998) also agreed to other researchers that responsiveness is the willingness to help customers and to give prompt service. This determinant can be measured by the length of the time taken to reply to customers' questions. Since the transaction via the website is non-human interaction, users expect good response after contact by email or telephone Watson et al. (1998).

These are criteria used to measure the responsiveness dimension of online travel agents.

A. Responsiveness from the service received before and after booking.

B. Responsiveness from the service received after facing difficulty.

C. Responsiveness of both OTAs website and OTAs representative.

Compensation dimension's definition by Parasuraman et al., (2005) is the degree to how website compensates users or customers for those problems. In the other word, compensation is related to how companies handle when the problem occurs such as refund for the error, shipping, or payback for the extra costs (Kim et al. 2006).

These are criteria used to measure the compensation dimension of online travel agents.

A. The availability of Compensation policy on the websites.

B. The availability of clear instruction for compensation plan on the websites.

Contact dimension's definition by Parasuraman et al., (2005) is the availability of assistance from website though telephone of direct online staffs. Especially when customers run into problem, they prefer a quick response from the website and have an appropriate solution (Kim et al. 2006). Kim et al. also suggested further that online services need to provide prompt assistance to customer email as it is the main advantage of contact information.

Perception of this dimension between genders was different according to a research by Pesonen (2013). Researcher examined that there were difference in perceived service quality of FAQ. Women perceived several services including FAQ, links to other websites, map, booking and contact information more than what men did. Men, however, regarded mobile access more important attribute than what women do. Moreover, Pesonen tested that there were different in perceived service quality of contact information provided. Younger people do not concern about this part like the customers in the older age.

These are criteria used to measure the contact dimension of online travel agents.

1. Availability of contact information (company's address, telephone, fax, and E-mail address).
2. Availability of the communication method

In conclusion, both core service and recovery service can group in to figure 2-1 and 2-2.

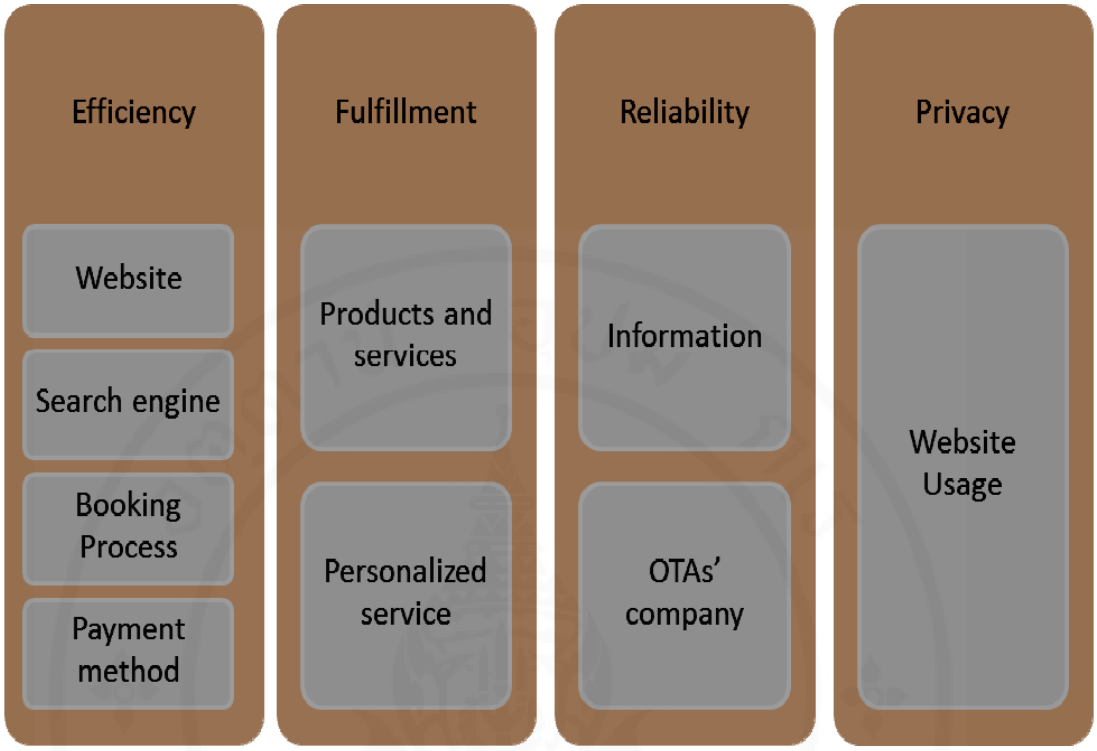

Figure 2-1: Criteria used in the core service of E-SERVQUAL

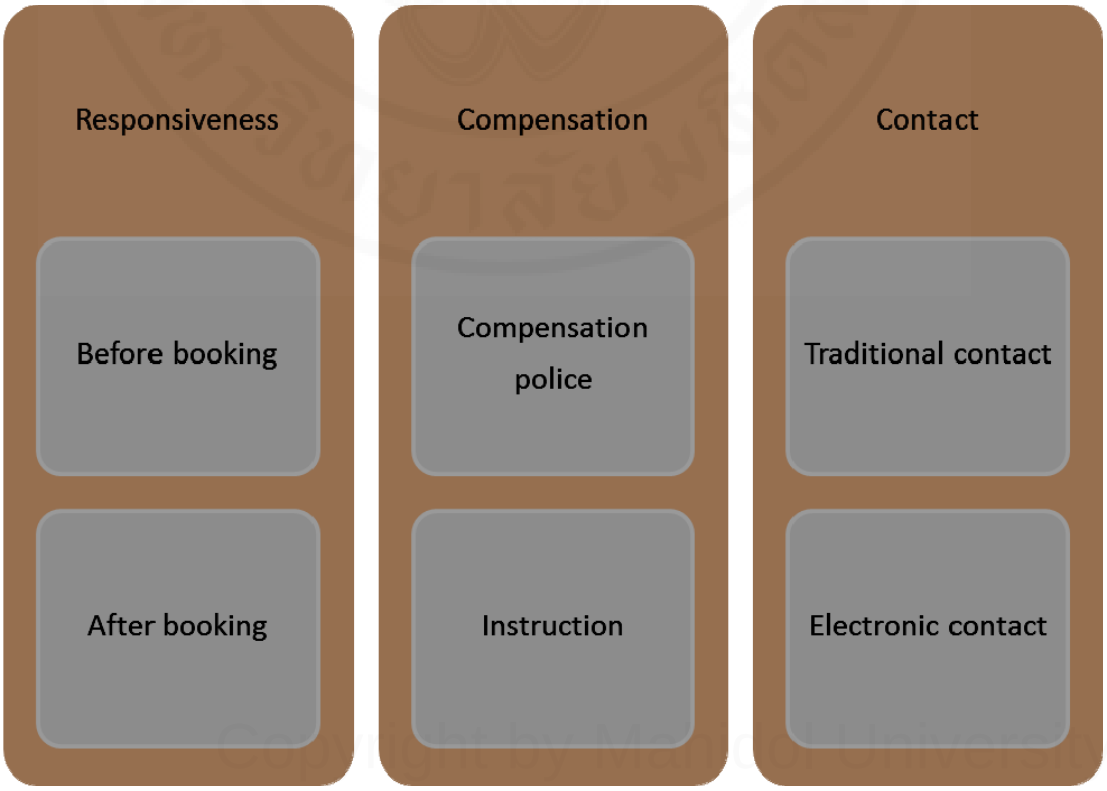

Figure 2-2: Criteria used in the recovery service of E-SERVQUAL

2.6 Conceptual Framework

The above explanation of the literature were combined into a model below.

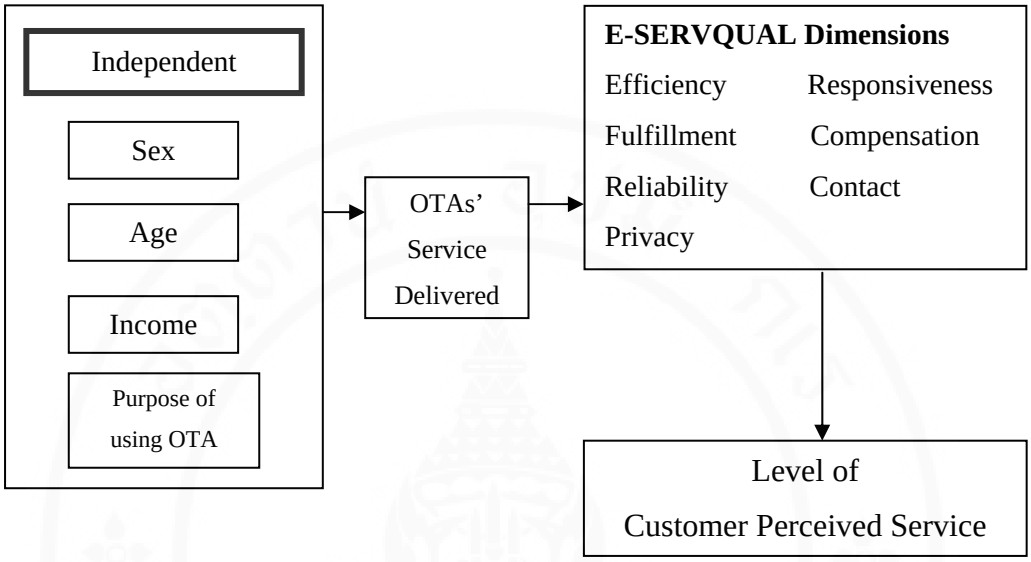

Figure 2-3: Conceptual Framework

CHAPTER III
RESEARCH METHODOLOGY

This chapter presents research methodology adopted for the study. This study is an exploratory research with a primary aim to explore service quality performance of OTAs. The content for this chapter includes research approach, research design, data collection process, data analysis, research validity and reliability, research ethics, and research limitations.

3.1 Research Approach

The primary aim of this study was to explore customer perceived service quality of online travel agents, while target populations for this study were foreign users who have experience in using OTAs. The quantitative approach was adopted for this present study as it can reach a wider group of respondents in a short time. This type of research is used to explain phenomena of a situation by collecting numerical data, after that, data are analyzed by statistics methods (Aliaga and Gunderson, 2000) Moreover, the method allowed researcher to measure and analyze data in detail. Statistic data was also used to test, measure experiments and to find different value of each variables.

3.2 Research Design

Sample group

According to the research objectives, respondents for this study were foreign people, or non-Thai nationalities. These international populations also included the expatriates, the foreigners living in Bangkok. The age of respondents was above 18 years old. These respondents were person who have experience in using

OTAs' website as a source tourism products and services, or make a booking through websites.

The survey respondents of this study were foreign users who book and pay for the services via the online travel agents. Since there are a large number of international populations in Bangkok, it is necessary to determine the sample size before start collecting data. To determine the sample size, A simplified formula from Yamane (1976) was used to calculate the sample sizes. This formula was used to calculate the sample size with 95% confidence level and precision of 5%.

$$n = \frac{N}{1 + N(e)^2}$$

Where:

n is representing the sample size

N is representing the population size

e is representing the level of precision

In this study:

N = 22,303,065 (This number derives from the total number of international tourists' arrival to Thailand from January-December 2012)

e = 0.05

$$n = \frac{N}{1 + N(e)^2}$$

$$n = \frac{22{,}303{,}065}{1+22{,}303{,}065\ (0.05)^2}$$

n = 399.99

n = 400

Therefore, the sample size of this research is approximately equal to 400.

Survey Instrument

The questionnaire survey is employed to the study in order to measure the variables and to answer the research question "What are the levels of customer perceived service quality of online travel agents?" Moreover, the statements of questionnaire were designed to achieve the objectives of the study.

1. To explore level of customer perceived service from using OTAs' service from online application.

2. To measure different perception between genders of participants, and among age groups of participants

3. To identify the influential factors affecting customer satisfaction

There are two sections in the designed questionnaire which are demographic characteristic information, level of agreement towards electronic service quality of OTAs. According to literature review, electronic service quality consisted of seven dimension which are efficient, fulfillment, reliability, privacy, responsiveness, compensation and contact.

Section 1: Demographic characteristics and OTAs usage experience

The first part of this section gathered personal information of each respondent by this set of questions.

1. Gender
2. Age categories
3. Nationality by continents
4. Occupation

The second part of the section collected data about OTAs usage behavior of respondents by this set of questions.

1. Purpose of using OTAs
2. Frequency of OTAs usage per year
3. Frequently use OTAs' website

Section 2: Respondents' agreement to the service quality of OTAs

This section contained a set of statement about electronic service quality of OTAs. Statements about online travel booking service quality were separated clearly

according to the E-SERVQUAL dimensions. The respondents were asked to indicate their level of agreement towards those statements about the online travel agent and other online booking website. The study used level of agreement on the 5-point Likert-scale which 1 is “strongly disagree” while 5 is “strongly agree”. The Cronbach alpha reliability coefficients were tested with 41 statements about E-SERVQUAL dimensions, and the result is demonstrated in table 3-1

Table 3-1: Cronbach Alpha Reliability Coefficients of electronic service quality of OTAs

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.815	.784	41

3.3 Data Collection Process

Data Collection

For data collection, there were two processes to collect data for this research. The related data were from both primary data and secondary data. Pöysä (2010) explained that there are many ways to evaluate customer satisfaction such as gathering secondary data or primary data or use two ways of collecting data. Primary data is a process that has to spend time more than the secondary data. Secondary data mainly comes from libraries or the government, while primary data comes from spending time for observation, conducting interviews, and having respondents fill out the questionnaires (Pöysä 2010). Primary data is collected from observations, questionnaires, and in-depth interview (Patton, 1987, Patton, 2001, Polkinghorne, 2005, Berry, 1999). And secondary data is collected from researches, journals, and government publications (Darke et al. 1998).

Since this research require a large number of respondents to complete the questionnaire survey, it was more appropriate to make use of questionnaire survey to collect data. Also, the target population for this study was all foreigners who have experience in using OTAs before and live or stay in Bangkok at the data collection

period, therefore the questionnaire was written in English language in order to assemble the users' opinion. Approximately 400 questionnaires were calculated for this research study.

The data collection process for this study was conducted through the use of primary data, and primary data normally carry out by using questionnaire survey. The questionnaire was composed in English for the target population of the study. These questionnaires were distributed to 400 international tourists at the tourists' destination places in Bangkok by using convenience method. The target destinations of collecting data were at Suvarnabhumi Airport, Chatuchak weekend market, Central World department store, and Khaosan Road. Moreover, to minimize bias in collecting data, the data collection will be done in various time of the day at the different attractions. The data collection process was collected from October to November 2013 with cross-sectional approach.

As this research was conducted with the foreign people, therefore these steps were used to ask for permission and collect data. Firstly, researcher prepared the questionnaire in English language by using appropriate sentence that is easy to understand. In some specific word such as OTA, a definition of the word was defined in the questionnaire as well. Secondly, the questionnaires were distributed to respondents.

Next, researcher asked for permission from respondents whether he or she is convenient to participate in the survey, the survey should take about 5-10 minutes. Then, researcher asked the respondents about the criteria need to response in the survey such as age, must be more than 18 years old, and experience in using OTAs. After that, researcher informed participant about information needed for this questionnaire survey, such as about the background and reason of the study. Importantly, for respondents' confidentiality, researcher informed that data received will be used for educational purpose only, and all the paper will be destroy after the project is completed. While participants answered the questionnaire, researcher stayed with him to explain further about what may have confused them. After the participant filled out the entire questionnaire, researcher rechecked again that all statements were checked and the questionnaire was completely done.

Sample approach

Questionnaires were distributed in four areas of Bangkok which were at Suvarnabhumi Airport, Chatuchak weekend market, Central World department store, and Khaosan Road. At Suvarnabhumi Airport, researcher found out that collecting data at the taxi waiting area received more participants than at the taxi drop off area, because participants in the taxi waiting area were not in a hurry for another purposes. At Chatuchak weekend market, researcher asked for participation from target group in different area, such as at bus stop, MRT underground train station and inside the market especially near the gift shops or souvenir shops. At this souvenir shops, researcher received kind cooperation from many foreigners who mainly are tourists.

At Central World department store, researcher was at the connection of BTS sky train and the department store. There were small amount of completed questionnaires at this location because most people were in a hurry and did not have time to participate in the survey. Last but not least, at Khaosan Road, researchers received a number of completed questionnaires from this area.

Processes of collecting data from sample group are described below.

1. Primarily, researcher observed at the target group to find out who was available to participate in the survey questionnaire.

2. Then, researcher approached target respondents and kindly asked for participation in the survey, and whether has the person used the OTAs' service or not.

3. Next step, researcher politely described about the research objective and explained about the nature of the work.

4. Later then, researcher waited until the target group completes the questionnaires. Meanwhile, if the respondent did not understand about the statement, research will explain further in detail.

5. Finally, researcher thanks the respondent for the help and their time for doing research.

3.4 Data Analysis

According to the questionnaire survey, there were two main parts included. The first one was demographic characteristics of participants and the second part is

about level of agreement towards perceived service quality of OTAs. After all questionnaires were check for completion, descriptive statistics data was used to check for all participant personal information. All demographic characteristics or participants were analyzed by using frequency distributions and percentage distribution. This descriptive data was analyzed by frequency, mean, and standard deviation.

The second part of the questionnaire was about level of agreement towards service quality of OTAs. This set of questionnaire used 5-point Likert scales. This sale ranges from 1 (strongly disagree), 2 (disagree), 3 (moderate agreement), 4 (agree) and 5 (strongly agree).

Table 3-2: The level of agreement towards service quality of OTAs

Agreement level	Scale
Strongly disagree	1
Disagree	2
Moderate agreement	3
Agree	4
Strongly agree	5

All the statements in this questionnaire were analyzed by arithmetic mean and standard deviation (S.D). The mean score in this study was interpreted as listed in table 3-3.

Table 3-3: The Arithmetic Mean Interpretation for level agreement towards service quality of OTAs

Degree	Mean
Strongly disagree	1.00 – 1.80
Disagree	1.81 – 2.60
Moderate agreement	2.61 – 3.40
Agree	3.41 – 4.20
Strongly agree	4.21 – 5.00

Finally, all data factors were analyzed by t-test to evaluate and test for differences between two variables. In addition, researcher used an analysis of variance or ANOVA to test the difference or more than two independent variables.

3.5 Research Validity and Reliability

Before distributing questionnaires to the target respondents, face validity was conducted to test for the overall understanding of the questions. In other word, face validity is an estimate of the degree that the questions are clearly and unambiguously statements. The concept of face validity is similar to item subtlety, but there are important differences as well. Whereas face validity describes the transparency of an entire test, item subtlety describes the transparency of individual test items (Bornstein et al., 1994). After pre-test was completed for checking format and suitability of the questionnaires, a pilot test was conducted to evaluate the reliability and validity of the research question. Process of pilot test was to find feedback about the clearness of research question and the appropriate of the questions' content. These processes were done in order to eliminate ambiguity and imprecise statements.

3.6 Research Ethics

The Ethical Committee of Mahidol University has approved the research ethics before gathering the data or sending the questionnaires. Importance of the research ethics for any studies is the process of collecting data such as, how to approach the target population, how to secure respondents' personal information.

For this study, researcher informed every respondent about the research study background, and objective of research study as well as contents of the questionnaire and how to participate in this study. Moreover, to respondent's concern, personal and private information about respondents are strictly protected by researcher, since all the collected data were used for educational purposes only. Then, respondents were asked whether they are willing to complete the questionnaire survey

or not. This step was used to confirm that participant are voluntary participate in the survey.

Finally, after process of data collection and analysis were completed, all information documents, informed consent form and questionnaires will be destroyed after completion of the project in order to protect the personal information of respondents. The processes were done to make sure that information of respondents are not published or wrongly used by others.

3.7 Research Limitation

Research Limitations were varied. Firstly, the sample employed only non-Thai nationalities subjects, which may not be representative of the general population of online travel users. The analytical results presented here thus may have limited generalizability. Secondly, because the target population for this study was in Bangkok only, therefore, it may not represent data from other location of the country. Thirdly, since this study only considered online travel agents, it is unclear whether the analytical results can be generalized to other online marketplaces such as online shopping, or online bookstores. Last but yet still important, language barrier was one of the limitations, because some of respondents who cannot communicate in English were not included in this result.

Other limitations that research found during the research study were mainly about data collection process. First of all, some respondents did not have time to participate in the study as they were in a rush. According to this difficulty, researcher tried to observe person that seem to be relax and not in a hurry, then, gently approached them for the questionnaire survey. Secondly, there were 2-3 Japanese participants and they understood English thoroughly, therefore, researcher generally explained to respondents in Japanese language and used hand language some time.

CHAPTER IV
FINDING AND DISCUSSION

The fourth chapter presents results of this research study consisting of the personal data of the respondents, and level of agreement towards the E-SERVQUAL method used in questionnaires. The questionnaires were distributed to target respondents which were non-Thai persons who had experience using OTAs to book for tourism and hospitality products and services. The sampling method was based on convenience sampling method. In addition, this chapter includes respondents' opinion and suggestions about service quality of online travel agents booking websites and representatives from the company.

4.1 Demographic Characteristics of Target Respondents

This section presents the personal data of 400 foreign people who has experience in using online travel booking websites in Bangkok, Thailand. The section includes gender, age, nationality, occupation, purpose of the usage, frequency of using per year, and the name of the online travel websites.

Table 4-1: Gender

Gender	Frequency	Percentage
Male	180	45.00
Female	220	55.00
Total	400	100.00

Table 4-1 shows the number of total respondents of 400 people. The majority of the respondents were female which has 220 people or 55.00% of total respondents, while other 180 people or 45.00% of respondents were male.

Table 4-2: Age categories

Age categories	Frequency	Percentage
18 – 25 years old	44	11.00
26 – 35 years old	273	68.25
36 – 45 years old	72	18.00
46 – 55 years old	6	1.50
56 years old and above	5	1.25
Total	400	100.00

Table 4-2 shows the age categories of total respondents of 400 people. The largest group of respondents was age between 26 – 35 years old, counted 68.25% of total number or 273 people. In addition, there were 72 respondents in the age group between 36 – 45 years old or 18%, 44 respondents in the age group between 18 – 25 years old or 11%, and 6 people in the age group between 46 – 55 years old or 1.5%. The rest 5 people in the age group of 56 years old and above or 1.25% were completed the questionnaires.

Table 4-3: Nationality by continents

Nationality	Frequency	Percentage
Asian	214	53.50
European	121	30.25
American	65	16.25
Total	400	100.00

Table 4-3 shows the nationalities of total respondents of 400 people. The largest group of respondents was from countries in Asia. There were 214 respondents, which counted for 53.50% of all respondents. In addition, there were 121 people from European countries and 65 respondents from the United States of America. Percentage of the two latter groups was 30.25% and 16.25% respectively.

From the table 4-3, Asian respondents refer to respondents from Asia counties. Respondents from Asian can be grouped into 1) Eastern Asia such as China, Korea, and Japan, 2) Southern and Central Asia such a India, Bhutan and Bangladesh,

3) South East Asia such as Malaysia, Philippines and Vietnam, and 4) Western Asia such as Turkey, 5) Northern Asia such as Russia, and 6) Australia and New Zealand. Respondents from European referred to participants from 1) Northern Europe such as Denmark, Scotland and United Kingdom, 2) Eastern Europe such as Poland, Bulgaria, and, 3) South Eastern Europe such as Italy, Portugal, and 4) Western Europe such as Austria, Belgium, and Germany. Respondents from America referred to participants from 1) Central America, 2) South American such as Brazil, Peru, and 3) North America such as Canada, and the United States.

Table 4-4: Occupation

Occupation	Frequency	Percentage
Employee	155	38.75
Business owner	90	22.50
Student	144	36.00
Others	11	2.75
Total	400	100.00

Table 4-4 shows the occupation of total respondents of 400 people. 155 respondents were employees and was the largest group of respondents, counted for 38.75%. In addition, 144 respondents were student, counted for 36%. There were 90 respondents of business owner and 11 respondents in other occupation. The percentage of business owner and others was 22.50% and 2.75% respectively.

Table 4-5: Purpose of using OTAs

Purpose of using OTAs	Frequency	Percentage
Vacation	248	62.00
Honeymoon	72	18.00
Seminar	36	9.00
Business	22	5.50
Education	22	5.50
Total	400	100.00

Table 4-5 presents the purpose of using OTAs to book for or make a reservation of tourism and hospitality products and services. The largest group of the target respondents used OTAs for vocational purposes consisted of248 peoples or 62% of all respondents. There were usage for honeymoon purpose at 18% or 72 persons, and seminar purposed at 9% or 36 persons. The two smallest portions were for business and educational purposes at 5.50% or 22 persons equally.

Table 4-6: Frequency of OTAs usage per year

Frequency of OTAs usage	Frequency	Percentage
1 time	100	25.00
2 times	80	20.00
3 times	85	21.25
4 times	83	20.75
5 times and more	52	13.00
Total	400	100.00

Table 4-6 presents frequency level of OTAs usage of target respondents. The question was used to obtain frequency of usage per year. The largest group of target respondents used OTA only one time per year. Number of respondents was 100 persons or 25% of all respondents. In addition, there were 85 persons used the OTAs three times annually, or 21.25% and 83 persons used these services four times yearly, or 20.75%. Moreover, there were 80 persons used the service twice a year and 52 persons used it five times or more each year. The percentages of the two latter groups were 20% and 13% respectively.

Table 4-7: Common use OTAs' website

Frequency of OTAs usage	Frequency	Percentage
Agoda	117	29.25
Expedia	60	15.00
Travelocity	58	14.50
Orbitz	18	4.50
Priceline	54	13.50
Booking	22	5.50
Others	71	17.75
Total	400	100.00

Table 4-7 presents common OTAs' operators that were commonly used by the target respondents. The largest group of respondents used www.agoda.com. There were 117 persons or 29.25% of all respondents. Moreover, there were 71 persons who use others OTAs' service providers (17.75%), and 60 persons who use www.expedia.com (15%), and 58 persons using www.travelocity.com (14.50%), and 54 persons using www.priceline.com (13.50%). Additionally, there were 22 persons using www.booking.com (5.50%), and the rest 18 persons using www.orbitz.com (4.50%).

4.2 Perceived Service Quality towards Online Travel Agent(s)

4.2.1 Finding analysis of perceived service quality

This section presents the frequency of respondents' agreement towards service quality's statements of online travel agents' websites and companies. The questionnaire was separated into seven parts according to the literature review of E-SERVQUAL criteria which are efficiency, fulfillment, reliability, privacy, responsiveness, compensation and contact. Respondents were asked to complete this part by rating the agreement to the statements, which has five levels of agreement. Findings of each e-service quality are described below.

Efficiency

There were 14 questions used to measure e-service quality of the website. From the table 4-8, it shows level of agreement towards the efficiency factor. The mean score of overall website design was at 4.5, while website navigation was at 4.2 for easy to use, 3.7 for the downloading speed, and 4.18 for the access to the website. For the search engine and result, the score was at 3.62 for the correctness of the result and 3.83 for the variety of the result and 3.41 for the sort ability of the result.

Next part was efficiency of booking process, the mean score for whether there is an indicator showing the stage of booking was at 3.56. The webpage makes use of ID registration to complete the booking received mean score 3.52. In addition, the accuracy of confirmation email was scored at 4.05 score, and 4.17 for the confirmation email sent to personal email. The score for booking process, respondents gave score at 3.57 for the convenience of the booking through website, and 3.06 for booking process that is not complicated. On the other hand, respondents rated 1.32 score for the variety of payment methods.

Table 4-8: Mean score of efficiency level of OTAs

Efficiency	Mean	Std. Deviation	Level
Overall website design is visually appealing	4.5000	0.5438	HIGHEST
The website has a user-friendly system	4.2000	0.4643	HIGH
Access to the website is effortlessness	4.1875	0.5772	HIGH
A confirmation email is directly sent to email	4.1725	1.1004	HIGH
A confirmation email is accurate	4.0550	1.0582	HIGH
There are a variety of search results	3.8325	1.0306	HIGH
Downloading speed of the website is appropriate	3.7000	0.9887	HIGH
The search results are correct	3.6200	0.7695	HIGH
Booking through website is done in a few clicks.	3.5750	0.8782	HIGH
There is an indicator of the booking process	3.5650	1.0190	HIGH
Information is linked to ID registration	3.5250	1.1544	HIGH
The search results are able to sort	3.4175	0.6590	AVERAGE
Booking through website is not complicated	3.0650	1.1723	AVERAGE
There are various payment methods	1.3225	0.5188	LOWEST

Fulfillment

The second criterion for E-SERVQUAL was the fulfillment containg 5 questions asking the respondents. From table 4-9 Mean score for correctness of what has ordered was 3.6 score, and 3.61 for the on-time delivery to the customers. Evidently, there are clear process for helping user to use the website, respondents rated this at 4.19 score. Next question was the travel preference record; the website received score at 3.84 for this function and give recommendation well at 2.48 scores.

Table 4-9: Mean score of fulfillment level of OTAs

Fulfillment	Mean	Std. Deviation	Level
There are clear processes of helping users for booking	4.1900	0.4465	HIGH
The website provides personalized function to record preferences	3.8450	0.8293	HIGH
Products or services are delivered in the promised time	3.6175	0.5449	HIGH
Products or services are correct to what I have booked	3.6000	0.5484	HIGH

Reliability

Next part was the reliability of the online travel agent. There were five statements to measure the quality of the website and the mean score is listed in the table 4-10. Respondents rated the accuracy and update information at 4.28 and 4.49 score, while there was 3.80 score for the adequacy of information. Website performed well in sending confirmation email to users when booking, cancellation and making amendment, so the mean score was at 4.51 for this process. In addition, website provides record or order history well and had mean score at 3.18 scores.

Table 4-10: Mean score of reliability level of OTAs

Reliability	Mean	Std. Deviation	Level
Confirmation email is directly sent to email.	4.5175	0.5003	HIGHEST
Information is updated	4.4975	0.5154	HIGHEST
Information is accurate	4.2825	0.7901	HIGHEST
Information detail is adequate for making decisions	3.8025	1.0252	HIGH
Booking history is well-organized	3.1800	1.2832	AVERAGE

Privacy

Next criterion was the privacy of the website usage. There were four statements to measure the E-SERVQUAL for online travel agent website. Score for a clear privacy policy was at 4.69. Score for a notice before sending additional email such as new promotion, other advertisement was at 4.23, while OTAs received 2.72 scores for organization that provide notice fore for recording voice call. Score for auto-sign-out system, for customer's information safety, was at 2.26.

Table 4-11: Mean score of privacy level of OTAs

Privacy	Mean	Std. Deviation	Level
There is a clear privacy policy	4.6900	0.4738	HIGHEST
There is a notice before sending additional email	4.2350	0.4362	HIGHEST
There is a notice before recording telephone call	2.7250	1.3013	AVERAGE
There is an auto-sign-out system and the payment page (for safety)	2.2650	0.5152	AVERAGE

Responsiveness

The fifth criterion was the responsiveness of the website's operators to customers. First, before booking, respondents gave score at 4.06 for the speediness of return email from the company and rated at 3.86 for the time waiting on the phone. After booking, the scores was at 3.31 and 2.30 respectively. Moreover, respondents gave score for company's representatives that provide help 2.27 and 2.09 for the continuous assistance until the problem is resolved.

Table 4-12 : Mean score of responsiveness level of OTAs

Responsiveness	Mean	Std. Deviation	Level
The speediness of return email before booking	4.0600	0.7019	HIGH
The time waiting for a phone call before booking	3.8600	0.8198	HIGH
The speediness of return email after booking	3.3125	1.0898	AVERAGE
The time waiting for phone call after booking	2.3075	0.4833	LOW
Company's representative can provide help step by step	2.2700	0.5458	LOW
There is continuous help to customers.	2.0925	0.7213	LOW

Compensation

Next part was the compensation policy that company offers to users. There were two statements related to compensation dimensions. Respondents rated the score in the high level at 4.28 for the compensation policy available on the website, and 4.24 for the clear instruction, rules and regulation of the policy.

Table 4-13: Mean score of compensation level of OTAs

Compensation	Mean	Std. Deviation	Level
There is clear compensation stated on the website.	4.2800	0.4606	HIGHEST
There is clear instruction, rules and regulations for this policy	4.2450	0.4749	HIGHEST

Contact

Last part of the questionnaires was the criterion of contact detail of OTAs companies. There were five statements related to contact dimensions. According to the survey, respondents gave 4.07 scores for the availability of the traditional contact shown on the website, and 4.04 for the telephone number that is available on the page of the website. On the other hand, scores for electronic contact details was at 3.85 scores. Furthermore, respondents gave score for usefulness of FAQ at 3.08 score and 3.73 score for the live chat program from the website.

Table 4-14 : Mean score of contact level of online travel agents

Contact	Mean	Std. Deviation	Level
Traditional contact details are clearly found on the website	4.0775	1.1618	HIGH
Telephone number is shown in every page of the website	4.0425	1.1572	HIGH
Electronic contact details are clearly found on the website	3.8550	1.5476	HIGH
Live Chat program is provided on the website	3.7350	1.1415	HIGH
Frequently asked question (FAQ) is available for the usage	3.0800	0.7141	AVERAGE

In addition, the translation of ranking level is analyzed follow criteria of customers satisfaction designed by Best (1977: 174)

The score among 1.00-1.80 mean lowest satisfaction

The score among 1.81-2.61 mean low satisfaction
The score among 2.62-3.41 mean average satisfaction
The score among 3.42-4.21 mean high satisfaction
The score among 4.22-5.00 mean highest satisfaction

4.2.2 Discussion of perceived service quality findings

For the efficiency dimension, researcher found that customer perceived service quality of OTAs was high in nine statements. Nine statements were about the overall outlook of the website, and the process of booking which respondents ranked high. At the same time, there were two statements; sort ability of research results and the process of booking were in the average level of agreement. On the other hand, customer perceived service quality of the payment methods was the lowest. The results were conformable with the research of Li et al. (2009) that ease of used is rated the most important factor of this dimension.

For the fulfillment dimension, researcher found that customer perceived service quality of OTAs was high in all the four statements relating to on-time delivery and correct ordering. The result was compatible with the research of Wolfinbarger & Gilly (2003). They mentioned that OTAs should emphasize on the non-error ordering process and on-time delivery of an order for online customers.

For the reliability dimension, researcher found that customer perceived service quality of OTAs was the highest in the statements about accurate information provided and confirmation email from OTAs. On the other hand, the result of booking history in OTAs website was ranged in the average agreement. This result was accordant with the research by Yang & Fang (2004) mentioning accurate order is the most important criteria for OTAs.

For the privacy dimension, researcher found that customer perceived service quality of OTAs was the highest in term of privacy policy and notice before sending an additional message to customers' e-mail. This result was agreeable with the research of Lee & Lin (2005) that customers most concern about privacy policy and protection of their personal information.

For the responsiveness dimension, researcher found that customers perceived service quality of OTAs was the highest in responsiveness of representatives

only before booking. The results were slightly consistent with the research by Ho & Lee (2007) that promptly responds to users' inquiries is an important part of online services. The results of this study showed that OTAs performed average to low level of prompt responds after booking, which is not consistent with Ho & Lee's research.

For the compensation dimension, researcher found that customers perceived service quality of OTAs was in the highest agreement in both compensation policy and instruction to cancel a booking. This also matched with the research for Ho & Lee (2007) stating that policies for cancelling order is an important aspect of online services.

For the contact dimension, researcher found that customers perceived service quality of OTAs was high in four statements except the availability of FAQ page (frequently asked questions). The results were agreeable about with the research of Kim et al. (2006) that online services' users pay attention to the interaction with representatives such as telephone, and live chat program.

4.3 Statistical Analysis between Variables with the E-SERVQUAL

After the analysis of all factors both demographic characteristics and perceived service degree were describec, relationship analysis between demographic characteristics and core service of E-SERVQUAL were then analyzed in order to find the relationship of independent and dependent factors. In dependent factors for this study and analysis were respondents' demographic characteristics including gender, age categories, nationality and occupation of respondents.

4.3.1 Gender

The result in the table 4-15 presents below, there were differences between gender and efficiency scale on "The overall website design is visually appealing", and "There is variety of search results for selection choices" as $p<0.05$.

Table 4-15: The different perception between Gender and efficiency

Core service of E-SERVQUAL	Gender	Mean	Std. Deviation	F	Sig.
The overall website design is visually appealing.	Male	4.51	0.5		
	Female	4.3	0.58	0.034	0.002*
The website has a user-friendly system.	Male	4.29	0.46		
	Female	4.12	0.46	0.372	0.556
Downloading speed of the website is appropriate.	Male	3.62	0.84		
	Female	3.77	1.09	0.644	0.127
Access to the website and information is effortlessness.	Male	4.22	0.42		
	Female	4.16	0.68	0.118	0.277
The search results are correct to the input data.	Male	3.63	0.81		
	Female	3.61	0.73	0.033	0.855
There is variety of search results for selection choices.	Male	4.08	0.92		
	Female	3.63	1.07	0.023	0.038*
The search results are able to sort.	Male	3.37	0.66		
	Female	3.45	0.66	0.654	0.214
The website page indicates the process of the booking.	Male	3.55	1.1		
	Female	3.58	0.95	0.071	0.79
Information for booking is linked with ID registration.	Male	3.8	1.04		
	Female	3.3	1.2	0.088	0.069
Confirmation email is accurate to the booking.	Male	4.36	0.95		
	Female	3.81	1.08	0.234	0.078
Confirmation email is directly sent to personal email right away.	Male	4.39	0.95		
	Female	3.99	1.18	0.137	0.244
Booking through website can be done in few clicks.	Male	3.74	0.86		
	Female	3.44	0.87	0.125	0.877
Booking through website is not complicated.	Male	3.18	1.02		
	Female	2.97	1.28	0.255	0.068
There are options of payment for users.	Male	1.32	0.55		
	Female	1.32	0.5	0.344	0.992

Table 4-16: The different perception between Gender and fulfillment

Core service of E-SERVQUAL	Gender	Mean	Std. Deviation	F	Sig.
Products or services are correct to what I have booked.	Male	3.58	0.55		
	Female	3.62	0.55	0.537	0.464
Products or services are delivered in the promised time.	Male	3.61	0.55		
	Female	3.62	0.54	0.045	0.832
There are clear processes of helping users from OTA company.	Male	4.21	0.46		
	Female	4.17	0.43	0.731	0.393
OTA's website provides personalized function allowing users to record travel preferences.	Male	3.83	0.83		
	Female	3.85	0.83	0.065	0.799
OTA's website utilizes travel preference to provide recommendation well.	Male	2.53	0.58		
	Female	2.45	0.52	1.77	0.184

The result in the table 4-16 presents no difference between gender and fulfillment of OTAs was found as $p>0.05$. Both male and female perceived fulfillment quality almost equally. Users perceived that there are clear processes of helping users from OTAs. Though, perceived level for the part of travel preference was average.

Table 4-17: The different perception between Gender and reliability

Core service of E-SERVQUAL	Gender	Mean	Std. Deviation	F	Sig.
Information is accurate.	Male	4.25	0.81		
	Female	4.31	0.77	0.553	0.457
Information is update.	Male	4.47	0.52		
	Female	4.52	0.51	0.787	0.376
Information detail is adequate for making decision.	Male	3.84	1.03		
	Female	3.77	1.03	0.412	0.521
Confirmation email is directly sent to personal email right away. (booking, cancelation, amendment)	Male	4.51	0.5		
	Female	4.52	0.5	0.053	0.818
Tracking order and order history are well-organized.	Male	3.17	1.29		
	Female	3.19	1.28	0.012	0.913

The result in the table 4-17 presents that there was no difference between gender and reliability of OTA was found as $p>0.05$. Both male and female had similar agreement to five statements.

Table 4-18: The different perception between Gender and privacy

Core service of E-SERVQUAL	Gender	Mean	Std. Deviation	F	Sig.
Website's privacy policy is not ambiguous.	Male	4.69	0.49		
	Female	4.69	0.46	0.002	0.966
There is informed consent before sending additional email, allowing users to not receive.	Male	4.26	0.45		
	Female	4.21	0.42	1.173	0.279
There is a warning before recording telephone call.	Male	2.72	1.29		
	Female	2.73	1.31	0.023	0.969
There is auto-sign-out when the users leave the payment page for long period.	Male	2.24	0.52		
	Female	2.29	0.51	0.84	0.36

The result in the table 4-18 presents that no difference between gender and privacy of OTA was found as $p>0.05$. From the table, both male and female perceived privacy almost the same. OTAs' provided privacy policy clearly, though for auto sign-out system was perceived low to average.

Table 4-19: The different perception between Gender and responsiveness.

Recovery service of E-SERVQUAY	Gender	Mean	Std. Deviation	F	Sig
The speediness of return email or telephone call is appropriate.	Male	4.06	0.69		
	Female	4.07	0.71	0.032	0.858
The time waiting on the telephone is appropriate.	Male	3.82	0.86		
	Female	3.87	0.82	0.373	0.542
The speediness of return email or telephone call is appropriate.	Male	3.25	1.07		
	Female	3.35	1.11	0.758	0.384
The time waiting on the telephone is appropriate.	Male	2.29	0.48		
	Female	2.31	0.48	0.156	0.693
When faced problem, representative can provide help step by step.	Male	2.27	0.58		
	Female	2.28	0.53	0.076	0.784
There is continuous help until the problem is fixed.	Male	2.11	0.71		
	Female	2.09	0.73	0.041	0.839

The result in the table 4-19 presents that no difference between gender and responsiveness of OTA was found as $p>0.05$. Responsiveness from OTAs was high in the period of before booking, though the performance dropped at the stage of after booking.

Table 4-20: The different perception between Gender and compensation

Recovery service of E-SERVQUAY	Gender	Mean	Std. Deviation	F	Sig
There is clear compensation or refund policy stated on the website.	Male	4.25	0.48		
	Female	4.29	0.46	0.587	0.444
There is clear instruction, rules and regulations for this policy.	Male	4.23	0.48		
	Female	4.26	0.47	0.43	0.512

The result in the table 4-20 presents that no difference between gender and compensation of OTA was found as $p>0.05$. Male and female participants perceived the appearance for compensation policy and instruction highly.

Table 4-21: The different perception between Gender and contact

Recovery service of E-SERVQUAY	Gender	Mean	Std. Deviation	F	Sig
Contact's detail is clearly found on the website.	Male	4.14	1.15		
	Female	4.05	1.17	0.581	0.446
Telephone number is shown in every page of the website.	Male	4.06	1.15		
	Female	4.04	1.17	0.045	0.832
The OTA company's electronic communication methods.	Male	3.93	1.53		
	Female	3.82	1.56	0.458	0.499
Electronic contact detail is clearly found on the website.	Male	3.07	0.7		
	Female	3.09	0.72	0.039	0.843
Frequently asked question (FAQ) is available for website usage.	Male	3.76	1.13		
	Female	3.73	1.15	0.061	0.805
Live chat program is reachable when needed.	Male	1.29	0.35		
	Female	1.3	0.46	15.872	0.715

The result in the table 4-21 presents that no difference between gender and contact of OTA was found as $p>0.05$.

The research found that male has the mean score for "The overall website design is visually appealing" (4.30) and "There is variety of search results for selection choices" (4.08). On the other hand, female has the mean score for "The overall website design is visually appealing" (4.51) and "There is variety of search results for selection choices" (3.68). From the statistics, it shows that female perceive the value of overall

website design higher that male. Though, female perceive the value of variety of search results for selection choices lower than men.

Discussion of different perception of gender and E-SERVQUAL

According to the result of comparison between independent variables, gender, and dependent variables, electronic service quality dimension (E-SERVQUAL), researcher found that there were differences between gender and perceived service quality towards OTAs, as described in table 4-16. Results showed that there were difference between gender and E-SERVQUAL scale on “the overall website design is visually appealing” and “there is variety of search results for selection choices” as $p<0.05$. For the first statement, “the overall website design is visually appealing”, mean score for female was at 4.51, and for male was at 4.30. It implied that female was pleased with the design and outlook of website more than male. The results visually appealing”, and “correspond with the previous research of Djamasbi et al. (2007). They also found that male and female find noticeable and/or appealing website differently. The authors suggested that gender preferences could influence the recognition of specific data or statistics provided by specific items on a web page.

Second statement having difference between genders and perceived service quality towards OTAs was “There is variety of search results for selection choices”. The mean score for female was at 3.68 and for male was at 4.08 score. It implied that with same OTAs’ operator, male preferred the offered products and services more than female did, while female preferred to have more choices of products and services for selection as to select the best destination at the reasonable price.

4.3.2 Age categories

The result in the table 4-22 presents the differences among respondents’ age categories and efficiency. Researcher found that there were significant different in scale on "The website has a user-friendly system", "Access to the website and information is effortlessness", "Booking through website can be done in few clicks" and "Booking through website is not complicated" as $p<0.05$.

Table 4-22: The different perception among age categories and efficiency

Core service of E-SERVQUAL	Age Categories	Mean	Std. Deviation	F	Sig
The overall website design is visually appealing.	18-25	4.47	0.51	0.667	0.055
	26-35	4.52	0.56		
	36-45	4.5	0.5		
	46-55	4.25	0.65		
	>56	4.2	0.45		
The website has a user-friendly system.	18-25	4.48	0.51	0.211	.004*
	26-35	4.15	0.45		
	36-45	4.25	0.44		
	46-55	3.12	1.1		
	>56	1.2	0.45		
Downloading speed of the website is appropriate.	18-25	3.5	1.13	0.451	0.068
	26-35	3.73	0.94		
	36-45	3.5	1.01		
	46-55	3.66	0.84		
	>56	3.69	0.84		
Access to the website and information is effortlessness.	18-25	4.5	0.51	0.877	.000*
	26-35	4.23	0.57		
	36-45	3.94	0.5		
	46-55	3.35	2.19		
	>56	1.3	0.34		
The search results are correct to the input data.	18-25	3.5	0.51	0.948	0.32
	26-35	3.72	0.77		
	36-45	3.25	0.83		
	46-55	3.67	0.52		
	>56	3.6	0.89		
There is variety of search results for selection choices.	18-25	3.75	1.1	0.902	0.08
	26-35	3.93	1.03		
	36-45	3.5	1.01		
	46-55	3.83	0.98		
	>56	3.71	0.71		
The search results are able to sort.	18-25	3.25	0.67	0.14	0.218
	26-35	3.54	0.73		
	36-45	3.13	0.33		
	46-55	3.24	0.65		
	>56	3.2	0.84		
The website page indicates the process of the booking.	18-25	4.5	0.88	0.128	0.436
	26-35	4.23	0.9		
	36-45	4.25	1.28		
	46-55	4.25	0.81		
	>56	4.4	0.89		
Information for booking is linked with ID registration.	18-25	4.06	1.24	0.049	0.064
	26-35	3.58	1.15		
	36-45	3.53	1.06		
	46-55	3.5	0.84		
	>56	4.09	1.22		

Table 4-22: The different perception among age categories and efficiency (cont.)

Core service of E-SERVQUAL	Age Categories	Mean	Std. Deviation	F	Sig
Confirmation email is accurate to the booking.	18-25	4.8	1.24	0.384	0.326
	26-35	4.11	1.01		
	36-45	4.33	1.1		
	46-55	4.83	0.41		
	>56	4.3	1.82		
Confirmation email is directly sent to personal email right away.	18-25	3.75	1.1	0.448	0.225
	26-35	4.33	1.07		
	36-45	3.88	1.17		
	46-55	4.5	0.55		
	>56	4.68	1.22		
Booking through website can be done in few clicks.	18-25	2.75	0.44	0.021	.000*
	26-35	3.59	0.82		
	36-45	4.13	0.93		
	46-55	2.83	0.41		
	>56	2.6	1.82		
Booking through website is not complicated.	18-25	3.42	1.43	0.344	.001*
	26-35	3.12	1.12		
	36-45	2.75	1.21		
	46-55	3.52	1.1		
	>56	1.2	1.14		
There are options of payment for users.	18-25	1.39	0.65	0.948	0.436
	26-35	1.33	0.52		
	36-45	1.28	0.45		
	46-55	2.58	1.64		
	>56	2.4	1.95		

From the table 4-22, there were significant different in scale on "The website has a user-friendly system", "Access to the website and information is effortlessness", "Booking through website can be done in few clicks" and "Booking through website is not complicated" as $p<0.05$. All four statements were about the OTAs' website usage, how to access, how to book, and the designed program on the website. It showed that users at the age 56 years old and above did not agree to the process like users in other age categories did.

Table 4-23: The different perception among age categories and fulfillment

Core service of E-SERVQUAL	Age Categories	Mean	Std. Deviation	F	Sig
Products or services are correct to what I have booked.	18-25	3.57	0.55	0.943	0.439
	26-35	3.63	0.55		
	36-45	3.5	0.5		
	46-55	3.33	0.52		
	>56	3.4	0.55		
Products or services are delivered in the promised time.	18-25	3.61	0.58	0.976	0.42
	26-35	3.65	0.54		
	36-45	3.53	0.53		
	46-55	3.67	0.52		
	>56	3.2	0.45		
There are clear processes of helping users from OTA company.	18-25	4.09	0.42	0.998	0.409
	26-35	4.2	0.45		
	36-45	4.21	0.41		
	46-55	4.17	0.41		
	>56	4.2	0.45		
OTA’s website provides personalized function allowing users to record travel preferences.	18-25	3.84	0.83	0.512	0.727
	26-35	3.88	0.83		
	36-45	3.72	0.81		
	46-55	3.17	1.47		
	>56	3.2	1.1		
OTA’s website utilizes travel preference to provide recommendation well.	18-25	2.43	0.5	1.413	0.229
	26-35	2.51	0.55		
	36-45	2.39	0.55		
	46-55	3.28	-		
	>56	2.6	0.55		

The result in the table 4-23 presents that there was no difference among respondents’ age categories and fulfillment as $p>0.05$. Average score was high in the statement about having clear processes to help customers. However, customers perceived the travel preference and personalized service of OTAs quite low to average.

Table 4-24: The different perception among age categories and reliability

Core service of E-SERVQUAL	Age Categories	Mean	Std. Deviation	F	Sig
Information is accurate.	18-25	4.41	0.76	0.626	0.644
	26-35	4.25	0.79		
	36-45	4.31	0.8		
	46-55	3.67	1.03		
	>56	4.2	1.1		
Information is update.	18-25	4.57	0.5	1.115	0.349
	26-35	4.47	0.52		
	36-45	4.58	0.5		
	46-55	3.83	0.41		
	>56	4.4	0.55		
Information detail is adequate for making decision.	18-25	3.57	1.09	1.636	0.164
	26-35	3.88	0.97		
	36-45	3.65	1.14		
	46-55	4.48	0.63		
	>56	3.4	1.34		
Confirmation email is directly sent to personal email right away.	18-25	4.57	0.5	0.194	0.941
	26-35	4.51	0.5		
	36-45	4.53	0.5		
	46-55	4.33	0.52		
	>56	4.6	0.55		
Tracking order and order history are well-organized.	18-25	3.39	1.33	0.615	0.652
	26-35	3.12	1.24		
	36-45	3.25	1.4		
	46-55	3.17	0.75		
	>56	3.8	1.3		

The result in the table 4-24 presents that, there was no difference among respondents' age categories and reliability as $p>0.05$. Average score was high in three statements; information is accurate, information is update and confirmation email is directly sent to email. On the contrary, another two statements received average score which are adequate information for booking and well-organized booking history.

Table 4-25: The different perception among age categories and privacy

Core service of E-SERVQUAL	Age Categories	Mean	Std. Deviation	F	Sig
Website's privacy policy is not ambiguous.	18-25	4.7	0.46	0.257	0.905
	26-35	4.69	0.46		
	36-45	4.67	0.53		
	46-55	4.5	0.55		
	>56	4.8	0.45		
There is informed consent before sending additional email, allowing users to not receive. (such as news, or promotion or advertisement)	18-25	4.18	0.39	0.448	0.774
	26-35	4.24	0.45		
	36-45	4.22	0.42		
	46-55	3.88	0.63		
	>56	4.2	0.45		
There is a warning before recording telephone call.	18-25	2.91	1.33	0.656	0.623
	26-35	2.68	1.3		
	36-45	2.74	1.32		
	46-55	3.67	0.82		
	>56	3.6	0.89		
There is auto-sign-out when the users leave the payment page for long period.	18-25	2.34	0.48	1.753	0.138
	26-35	2.25	0.52		
	36-45	2.26	0.5		
	46-55	3.17	1.1		
	>56	2.8	0.84		

The result in the table 4-25 presents that there was no difference among respondents' age categories and privacy as $p>0.05$.

Table 4-26: The different perception among age categories and responsiveness

Recovery service of E-SERVQUAL	Age Categories	Mean	Std. Deviation	F	Sig
The speediness of return email or telephone call is appropriate.	18-25	3.95	0.75	1.676	0.155
	26-35	4.11	0.68		
	36-45	3.93	0.72		
	46-55	4.33	0.52		
	>56	3.8	0.84		
The time waiting on the telephone is appropriate.	18-25	3.8	0.82	2.492	0.349
	26-35	3.91	0.82		
	36-45	3.74	0.8		
	46-55	3.17	1.47		
	>56	3.2	1.1		
The speediness of return email or telephone call is appropriate.	18-25	3.18	1.15	2.13	0.076
	26-35	3.37	1.07		
	36-45	3.25	1.15		
	46-55	2.5	0.55		
	>56	2.4	0.55		
The time waiting on the telephone is appropriate.	18-25	2.27	0.45	0.475	0.754
	26-35	2.33	0.5		
	36-45	2.25	0.44		
	46-55	2.33	0.52		
	>56	2.2	0.45		
When faced problem, representative can provide help step by step.	18-25	2.3	0.46	0.876	0.478
	26-35	2.25	0.58		
	36-45	2.31	0.46		
	46-55	2.5	0.55		
	>56	2.6	0.55		
There is continuous help until the problem is fixed.	18-25	2.02	0.79	1.597	0.174
	26-35	2.14	0.69		
	36-45	1.97	0.75		
	46-55	2.5	0.55		
	>56	1.8	0.84		

The result in the table 4-26 presents that there was no difference among respondents' age categories and responsiveness as $p>0.05$. Customers perceived highly in the responsiveness before booking, though the lever of perception dropped in the after booking period. As well, OTAs' representative did not perform well in term of providing continuous help when the problem occurs.

Table 4-27: The different perception among age categories and compensation

Recovery service of E-SERVQUAL	Age Categories	Mean	Std. Deviation	F	Sig
There is clear compensation or refund policy stated on the website.	18-25	4.25	0.49	3.057	0.701
	26-35	4.29	0.46		
	36-45	4.29	0.46		
	46-55	3.67	0.82		
	>56	3.84	0.54		
There is clear instruction, rules and regulations for this policy.	18-25	4.27	0.45	0.469	0.759
	26-35	4.26	0.49		
	36-45	4.18	0.45		
	46-55	4.33	0.52		
	>56	4.2	0.45		

The result in the table 4-27 presents that no difference among respondents' age categories and compensation as $p>0.05$.

Table 4-28: The different perception among age categories and contact

Recovery service of E-SERVQUAL	Age Categories	Mean	Std. Deviation	F	Sig
Contact's detail is clearly found on the website.	18-25	3.84	1.27	2.751	0.28
	26-35	4.18	1.1		
	36-45	3.85	1.26		
	46-55	4.21	1.16		
	>56	3.8	1.64		
Telephone number is shown in every page of the website.	18-25	3.75	1.26	1.745	0.139
	26-35	4.14	1.09		
	36-45	3.89	1.28		
	46-55	4.17	1.17		
	>56	3.6	1.52		
The OTA company's electronic communication methods (E-mail, frequently asked question, live chat program)	18-25	3.55	1.72	2.598	0.063
	26-35	3.99	1.45		
	36-45	3.56	1.7		
	46-55	4.02	1.64		
	>56	3.4	2.19		
Electronic contact detail is clearly found on the website.	18-25	3.00	0.78	1.696	0.15
	26-35	3.13	0.69		
	36-45	2.93	0.72		
	46-55	3.33	0.52		
	>56	2.8	0.84		
Frequently asked question (FAQ) is available for website usage.	18-25	3.55	1.25	1.255	0.287
	26-35	3.8	1.12		
	36-45	3.61	1.13		
	46-55	4.33	0.52		
	>56	3.4	1.34		

Table 4-28: The different perception among age categories and contact (cont.)

Recovery service of E-SERVQUAL	Age Categories	Mean	Std. Deviation	F	Sig
Live chat program is reachable when needed.	18-25	1.11	0.32	1.575	0.18
	26-35	1.26	0.44		
	36-45	1.22	0.42		
	46-55	1.37	34		
	>56	1.2	0.45		

The result in the table 4-28 presents below, no difference among respondents' age categories and contact as $p>0.05$. Customers perceived the availability of traditional communication methods and electronic methods well.

Discussion of different perception of age group and E-SERVQUAL

From the table 4-30 showing the mean score towards perceived service quality of OTAs, first statement that has difference is "The website has a user-friendly system". Mean score for respondents at the age between 18-25 was 4.48, and for age 26-35 was 4.15, and for age 36-45 was 4.25 and for age 46-55 was 3.12, and for the age of 56 and above was at 1.20 score. This implied that OTAs' customers especially at the age 46 years old and above still find it difficult to make a booking for an airplane ticket or make a reservation of a hotel room.

Second statement that has difference is "Access to the website and information is effortlessness". Mean score for respondents at the age between 18-25 was 4.50, and for age 26-35 was 4.23, and for age 36-45 was 3.94 and for age 46-55 was 3.35, and for the age of 56 and above was at 1.30 score. This implied that OTAs' customers especially users the age 46 years old and above still face difficulties to find information from the website.

Third statement that has difference is ""Booking through website can be done in few clicks". Mean score for respondents at the age between 18-25 was 2.75, and for age 26-35 was 3.59, and for age 36-45 was 4.13 and for age 46-55 was 2.83, and for the age of 56 and above was at 1.60 score. It implied that for making a booking or making a reservation of tourism and hospitality products and services, processes must be done through various click for the website which can be time consuming.

Finally, the fourth statement is "Booking through website is not complicated" Mean score for respondents at the age between 18-25 was 3.42, and for age 26-35 was 3.12, and for age 36-45 was 2.75 and for age 46-55 was 3.52, and for the age of 56 and above was at 1.60 score. It implied that using OTAs' website for booking can be confusion to users especially at the age of 56 and above.

Table 4-29: E-SERVQUAL statements that have difference between age categories

Core service of E-SERVQUAL	Age Categories	Mean	Std. Deviation	F	Sig.
The website has a user-friendly system.	18-25	4.48	0.51	.211	.004
	26-35	4.15	0.45		
	36-45	4.25	0.44		
	46-55	3.12	1.10		
	>56	1.20	0.45		
Access to the website and information is effortlessness.	18-25	4.50	0.51	.877	.000
	26-35	4.23	0.57		
	36-45	3.94	0.50		
	46-55	3.35	2.19		
	>56	1.30	0.34		
Booking through website can be done in few clicks.	18-25	2.75	0.44	.021	.000
	26-35	3.59	0.82		
	36-45	4.13	0.93		
	46-55	2.83	0.41		
	>56	1.60	1.82		
Booking through website is not complicated.	18-25	3.42	1.43	.344	.001
	26-35	3.12	1.12		
	36-45	2.75	1.21		
	46-55	3.52	1.10		
	>56	1.20	1.14		

Different perception between demographic characteristics and E-SERVQUAL dimensions

According to the reviewed literature, there were argument about different perception between demographic characteristics and E-SERVQUAL dimensions as mentioned in table 4-30.

Table 4-30 describes the differences of the research result from previous studies and current study. Fulfillment dimension, Pesonen (2013) examined that there were difference in perceived service quality of fulfillment in term of personalized

service. Women perceived personalized function more than men did. However, no difference was found in this study.

Reliability dimension, research by Ganguly et al. (2011), demonstrated that there were different in perceived service quality of reliability among different age categories that older customers give emphasis to the repute of the online portal more than customers in other age group. However, no difference was found in this study.

Table 4-30: Comparison of research result of customer perceived service

Dimension	Research by	Demographics	Test of different	This study
Fulfillment	Pesonen (2013)	Gender	Yes	No
Reliability	Ganguly et al. (2011)	Age Categories	Yes	No
Privacy	Ganguly et al. (2011)	Gender	Yes	No
Privacy	Ganguly et al. (2011)	Age Categories	Yes	No
Contact	Pesonen (2013)	Gender	Yes	No
Contact	Pesonen (2013)	Age Categories	Yes	No

Privacy dimension, research by Ganguly et al. (2011) proved that that there were different in perceived service quality of privacy between different genders. To elaborate, women concerned about the privacy more than men did. Nevertheless, for this study both male and female participant perceived it similarly. Moreover, this group of researchers presented that there were different in perceived service quality of privacy among different age categories. Older people concerned about privacy more than customers in other age groups. Yet, participants for this research perceived it at the same degree.

Contact dimension, Pesonen (2013) examined that there were difference in perceived service quality of FAQ. Women perceived several services including FAQ, links to other websites, map, booking and contact information more important than what men did. Men, however, regarded mobile access more important attribute than what women do. Moreover, Pesonen tested that there was different in perceived service quality of contact information provided. Younger people do not concern about this part like the customers in the older age. However, this study did not find any differences.

4.4 Influential factors affecting customer satisfaction

This part identified the Influential factors affecting customer satisfaction the most and the least. The research found that these participants ranked important factors differently.

Table 4-31: The most influential factor (7)

Dimension	Frequency	Percent
Efficiency	47	11.8
Fulfillment	195	48.8
Reliability	132	33
Privacy	6	1.5
Contact	20	5

Result shown in table 4-31 indicated that fulfillment dimension of OTAs was the most important criteria for customer satisfaction.

Table 4-32: The most influential factor (6)

Dimension	Frequency	Percent
Efficiency	225	56.3
Fulfillment	84	21
Reliability	86	21.5
Privacy	5	1.3

Result shown in table 4-32 indicated that efficiency dimension of OTAs was the important criteria for customer satisfaction**.**

Table 4-33: The influential factor (5)

Dimension	Frequency	Percent
Efficiency	121	30.3
Fulfillment	88	22
Reliability	158	39.5
Privacy	32	8
Contact	1	0.3

Result shown in table 4-33 indicated that reliability dimension of OTAs was the important criteria for customer satisfaction.

Table 4-34: The influential factor (4)

Dimension	Frequency	Percent
Efficiency	3	0.8
Fulfillment	1	0.3
Reliability	18	4.5
Privacy	127	31.8
Responsiveness	31	7.8
Contact	220	55

Result shown in table 4-34 indicated that contact dimension of OTAs was the main criteria for customer satisfaction.

Table 4-35: The influential factor (3)

Dimension	Frequency	Percent
Efficiency	2	0.5
Fulfillment	22	5.5
Reliability	3	0.8
Privacy	166	41.5
Responsiveness	41	10.3
Compensation	131	32.8
Contact	35	8.8

Result shown in table 4-35 indicated that privacy dimension of OTAs was the main criteria for customer satisfaction.

Table 4-36: The less influential factor (2)

Dimension	Frequency	Percent
Efficiency	2	0.5
Reliability	1	0.3
Privacy	30	7.5
Responsiveness	109	27.3
Compensation	164	41
Contact	94	23.5

Result shown in table 4-36 indicated that compensation dimension of OTAs was the less criteria for customer satisfaction.

Table 4-37: The least influential factor (1)

Dimension	Frequency	Percent
Fulfillment	10	2.5
Reliability	2	0.5
Privacy	34	8.5
Responsiveness	219	54.8
Compensation	105	26.3
Contact	30	7.5

Result shown in table 4-37 indicated that privacy dimension of OTAs was the least criteria for customer satisfaction.

Discussion of influential factors affecting customer satisfaction

From table 4-31 to table 4-37, the conclusion of the finding is listed in table 4-38 presenting the influential factors affecting customer satisfaction of online travel agents.

Table 4-38: The influential factor affecting customer satisfaction

Level to satisfaction	Factor
7 (The most)	Fulfillment
6	Efficiency
5	Reliability
4	Contact
3	Privacy
2	Compensation
1 (The least)	Responsiveness

From the Table 4-39, respondents provided opinion about which factors affect their satisfaction, and the results are fulfillment and efficiency, which are the top most important factors that can lead to customer satisfaction. Many respondents said that they rely on the online travel-booking website, as the website is efficient in providing products and services to them. Moreover, the fulfillment was the most important factor that many people agree with. Since the website was reliable in providing products and services that suit customer' needs, users still wanted to use the same website to book for their traveler. On the contrary, respondents concerned about privacy, compensation and responsiveness in the last factors. The reason is that, normally user who does not have to face with the difficulties of using the website or

the products received, then, there is no reason to contact the company. However, many respondents stated that all the components are very important parts of the website that they decide to use the service to buy travel products and service online.

CHAPTER V
CONCLUSION AND RECOMMENDATIONS

The main purpose of the study is to examine the level of perceived service quality towards online travel agents especially from foreign users in Bangkok, Thailand. This chapter presents conclusion of the study relating to this research objectives.

5.1 Conclusion

The internet development has brought many benefits in many industries as well as the tourism and hospitality industry. Many tourism and hospitality institutions use the internet as a platform of information about their products and services, also some of them use it for making a reservation or book for those service. Traditional travel agents and online travel agents both use the internet as a source of information about products and service, as a communication method between customers and companies. OTAs has especially increased the ability for customers to access tourism and hospitality products and services, at the same time OTAs provide comfort ability to customers around the world to book for their services.

This research had a framework of study by Zeithaml et al. (2000) named E-SERVQUAL. There were seven dimension of electronic service quality consisting of efficiency, reliability, fulfillment, privacy, responsiveness, compensation, and contact. The research found out customers perceived online travel agents' service well in all essential quality of website service, although, there were two main areas that companies should pay more attention to. The first one was supporting services before booking, at the moment of booking, and after booking. The second one was the continuous support from OTAs' representatives.

5.1.1 Customer perceived service from OTAs

The objective of this study was to access customer perceived service quality towards OTAs in order to gather current performance of OTAs. The dependent variable were service dimensions of E-SERVQUAL; efficiency, fulfillment, reliability, privacy, responsiveness, compensation and contact. The independent variables were factors such as gender, age, occupation, purpose of using OTAs, and frequency of using OTAs.

A structured questionnaire was used as a study instrument for data collection which consists of two sections in the questionnaire: general information regarding the respondents, and respondent's attitude towards service quality of OTAs. A quantitative research approach was applied to collect data and analysis. Survey questionnaire was used as a data collection tool. The target population was 400 foreign users in Bangkok which age 15 and above who have used the online travel agents services such as booking airplane tickets, other tourism products and services. Collected data was analyzed, firstly, by using Cronbach's alpha. Cronbach's alpha was adopted to ensure the reliability and consistency of the survey questionnaires. Secondly, descriptive statistic was obtained for all personal data by using frequency distributions. Thirdly, measures of central tendencies and dispersion of interval-scale were done by identifying means and standard deviation. The results were presented by using frequency, percentage, mean and standard deviation.

The results revealed that 55% of respondents were female, and the largest age group was 26 to 35 years old (68.3%). Among this number, 38.8% was employee, and 62% of these respondents used the OTAs for booking service for vacation. There were 41.3% of all respondents use the OTAs 2-3 times per year, and frequently used website was Agoda, (29.3%), Expedia (15%), Travelocity (14.5%), and Priceline (13.5%).

For the part of customer perceived service quality towards service of OTAs, there were seven dimensions of E-SERVQUAL used to measure which are efficiency, fulfillment, reliability, privacy, responsiveness, compensation and contact. First of all, efficiency dimension, among 14 statements in this dimension, 11 of them were perceived in high level of agreement. Those statements are such as the website overall looking, booking process and downloading speed. Still, statement about search

result and easiness of booking through website were perceived in the average agreement. Payment methods, however, was perceived in the lowest agreement for this study. Next dimension was fulfillment, four statements about booking and correctly delivering products and service were perceived in high agreement. Next dimension, reliability of the OTAs was perceived highest agreement in statement about confirmation email, and information provided on the website. Though, statement about adequate information for making decision was perceived in the high level only, and record of booking history was perceived in the average agreement. Last dimension for core service, two statements of privacy dimension were perceived highest; clear privacy policy and notice before sending additional email. While another two were perceived in the average agreement, notice before recording phone call, and auto sign out system.

Next main part of the questionnaire was about recovery service of E-SERVQUAL, three statements about responsiveness were perceived high to average agreement; rapidness of return email, and time waiting for phone call before booking. On the other hand, time waiting for phone call after booking, and support of OTAs' representatives were perceived low agreement. Another dimension in recovery service was compensation; two statements in this part were perceived highest agreement; clear compensation policy and clear instruction for making compensation. Last but not least, contact was perceived high in four statements about traditional and electronic contract details, and availability of live chat program. However, a statement about frequently asked question (FAQ) was perceived in the average agreement.

5.1.2 Perception of Customer in different genders and age categories

Since this study collected data from both male and female, researcher observed the different perception between gender and perceived service quality, and found that male and female perceived differently in the statement of "the overall website design is visually appealing and there is variety of search results for selection choices". To explain, female perceived the overall website design higher than male. On the other hand, male perceived service about variety of search results more that female.

For the different perception among age categories and perceived service quality, researcher found out that one main different was the computer and website for booking system. There were 4 statements that containing significant differences which are "The website has a user-friendly system", "Access to the website and information is effortlessness", "Booking through website can be done in few clicks" and "Booking through website is not complicated". The results clearly showed that OTAs customers in the age of 46 and above perceived the quality lower than customer in other age groups. This evident revealed that customers in this age still had difficulties in accessing the website, complete the reservation and payment.

5.1.3 Influential factors affecting customer satisfaction

According to the literature review, seven dimensions of E-SERVQUAL were used to measure level of customer perceived service. To any electronic company, all seven dimensions were significant to customers. Therefore, researcher discovered antecedent of customer satisfaction relating to these dimensions. Efficiency and fulfillment of the website were the top most important factors leading to customer satisfaction. Then, fulfillment dimension was the third factor that many people agreed. Reliability, the fourth factor, was also essential as customers relied on the information provided on the website and reputation of companies. Finally, privacy, compensation and responsiveness affected customer satisfaction in the last dimensions. Still, all seven dimensions are important to customer satisfaction, and OTAs must not avoid any part by trying to maintain and improve them.

5.2 Recommendation

5.2.1 Implication of this research

The study leads to many recommendations for guiding the improvement of the service quality of OTAs as to better serve the customers to what they need and want, and also to minimize complaints for unsatisfied customers.

1. For OTAs, convenience of booking for products and services is counted to be the most essential part of OTAs, therefore process of booking should be done

effortlessly. OTAs should provide step-by-step of booking for first time user in order that they can complete the booking by themselves.

2. Also, some process of booking can be complex, frequently asked question (FAQ)s should be provided for users to find answers by themselves first. FAQ is useful for OTAs as it can be time-saving for OTAs' representatives.

3. The results of the study revealed that responsiveness from OTAs was perceived low in the statement about time waiting for phone call after booking. Hence, OTAs can improve this after-sale service part by recruiting more customer contact representatives to the department. Also, importantly, providing frequent training to the representative on how to respond the customers and help customers step by step.

4. Privacy of consumer information is one of the important features that online travel companies must securely protect. Researcher suggested that OTAs should make certain that they do not collect information lacking of customer consent, and the website should not asked any irrelevant personal information during the process.

5. To directly assist customers at the moment, OTAs should provide more web-enabled communication such as "Live support" on the website. Communication can be further improved by sending personalized messages to individual customers and responding to inquiries rapidly.

5.2.2 Recommendation for future research

This research study scoped down to the foreign users staying in Bangkok, Thailand, at the moment of data collection, also target destinations for collecting data were only at Suvarnabhumi Airport, Chatuchak weekend market, Central World department store, and Khaosan Road. Therefore, the result of the research was analyzed from these limitations. In order to observe perceived service quality of OTAs in other circumstances, researchers or persons in other tourism and hospitality related business providers can conduct research in other areas.

1. Research can be done with the OTAs' first time users and frequent user in order to observe the different perception of customers.

2. Research can be done with Thai users in order to observe the different perception of Thai customers. This could also be a process to know how thai people observe the website and customer care services.

3. Research can be done with other types of business as different businesses might have varied users' opinions. Businesses are such as online governmental services, and online shopping stores

4. Research can be done with the customer repurchase intentions and loyalty, as businesses would concern about how to maintain customers.

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APPENDIX

Questionnaire

This questionnaire is a part of a study for a Master's Degree (Master of Management in Tourism and Hospitality Management) at Mahidol University International College. The objective of the research is to evaluate customer satisfaction towards service quality of Online Travel Agents (OTA) website and personalized service.

OTA is an organization which offers services about tourism products and services such as booking air ticket, or booking hotel room, train, and car rental service. OTA serve customer by providing website for book and arrange the tourism products and services online.

Part I: Personal Data

1. Gender

□ 1) Male □2) Female

2. Age

□ 1) Below 25 years old □ 2) 25-35 years old

□ 3) 36-45 years old □ 4) Over 45 years old

3. Which country are you from? ……. (Please inform)

4. Occupation

□ 1) Employee □ 2) Owner / Private Business

□ 3) Student □ 4) Others

(……..……..…….)

Part II: Your experience using Online Travel Agents or online booking website

5. Purpose of trip (Choose 1)

□ 1) Vacation □ 2) Honeymoon □ 3) Seminar

□ 4) Business □ 5) Education □ 6) Others

(…….)

6. How often do you use the online travel agents services?

□ 1) Once a year □ 2) 2-3 times a year □ 3) 4 times or more per year

7. What is online travel agent that you choose to perform bookings? (Choose 1)

□ 1) Expedia □ 2) Priceline □ 3) Travelocity

□ 4) Orbitz □ 5) Cheapticket.com □ 6) Booking.com

□ 7) Agoda □ 8) Others (……..…)

Part II: Survey of your perception towards service quality of Online Travel Agent (OTA). Please put a mark (x) in a box, which mostly explains your attitudes.
Scores are divided into 1 = strongly disagree (SD), 2 = disagree, 3 = moderate 4 = agree, 5 = strongly agree (SA)

	Efficiency	(SD)	(D)	(M)	(A)	(SA)
	Efficiency of website functional quality	1	2	3	4	5
1	The overall website design is visually appealing.					
2	The website is easy to use.					
3	Downloading speed of the website is appropriate.					
4	Access to the website and information is effortlessness.					
	Efficiency of the search engine and search results					
5	The search results are correct to the input data.					
6	There is variety of search results for selection choices.					
7	The search results are able to sort.					
	Efficiency of booking process and e-commerce system.					
8	The website page indicates the process of the booking.					
9	Information for booking is linked with ID registration.					
10	Confirmation email is accurate to the booking.					
11	Confirmation email is directly sent to personal email.					
12	Booking through website can be done in few clicks.					
13	Booking through website is not complicated.					
14	There are various payment methods.					
	Fulfillment					
	Fulfillment of the products and services delivered.					
15	Products or services are correct to what I have booked.					
16	Products or services are delivered in the promised time.					
17	There are clear processes of helping users from online travel agent (OTA) company.					
	Fulfillment of personalized services.					
18	OTA's website provides personalized function allowing users to record travel preferences.					

19	OTA's website utilizes travel preference to provide recommendation well.					

Reliability

Reliability in information about products or services.

20	Information is accurate.					
21	Information is update.					
22	Information detail is adequate for making decision.					

Reliability in website's process

23	Confirmation email is directly sent to personal email right away. (booking, cancelation, amendment)					
24	Tracking order and order history are well-organized.					

		(SD)	(D)	(M)	(A)	(SA)
	Privacy	1	2	3	4	5
25	There is a clear privacy policy.					
26	There is a notice before sending additional email, allowing users to not receive. (such as news, or promotion or advertisement)					
27	There is a notice before recording telephone call.					
28	There is auto-sign-out when the users leave the payment page for long period.					

Responsiveness

Responsiveness of the company's representative before booking

29	The speediness of return email or telephone call is appropriate.					
30	The time waiting on the telephone is appropriate.					

Responsiveness of the company's representative after booking

31	The speediness of return email or telephone call is appropriate.					
32	The time waiting on the telephone is appropriate.					
33	When faced problem, representative can provide help					

	step by step.					
34	There is continuous help until the problem is fixed.					

Compensation

Compensation or refund policy from the website

35	There is clear compensation or refund policy stated on the website.					
36	There is clear instruction, rules and regulations for this policy.					

Contact

The OTA company's traditional communication methods (office's address, telephone, and facsimile)

37	Contact details are clearly found on the website.					
38	Telephone number is shown in every page of the website.					

The OTA company's electronic communication methods (E-mail, frequently asked question(FAQ), and live chat program)

39	Electronic contact details are clearly found on the website.					
40	Frequently asked question (FAQ) is available for website usage.					
41	Live chat program is provided on the website.					

Part III : Please give your comments on which factors are important to you the most and the least (1 is the least, an 7 is the most)

Dimensions	Rank
Efficiency	
Fulfillment	
Reliability	
Privacy	
Responsiveness	
Compensation	
Contact	

This is the end of questionnaires, thank you for your kind cooperation.

BIOGRAPHY

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PUBLICATION	MU Research Expo 2013