DETERMINATION OF ONLINE RESERVATION FOR HOTEL SERVICES

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ABSTRACT

Determination of Online Reservation for Hotel Services

Travel agency is an intermediary between suppliers of travel industries to customers who need their services. This intermediary is now developed as an online travel agency due to the involvement of the internet. With the emergence of internet and its application, allow the travellers to access for the information search and booking of hotel easily to be done in virtual environment. The objective of study is to explore the factor for online travel agency through exploratory factor analysis, to determine the relationship among the factors and lastly, to examine which factor influence the travellers when booking hotel through online travel agency. This research used nonprobability approach with convenience sampling method. About 450 questionnaire were given in the location of the survey, however only 410 were collected from the respondents. For the data analysis, the researcher used 398 questionnaires because the remaining 12 questionnaires were discarded. Result shows that exploratory factor analysis has identified 13 factors which were suitable for online travel agency. As for the Pearson correlation result, all the variables have positive relationships and significant with each other except for special events capabilities and repurchase intention as these two variables has negative relationships but significant between each other. Furthermore, the study extends the analysis through multiple regression analysis by considering repurchase intention as a dependent variable. Result indicates four factors (accessibility, online booking features, hotel basic infrastructure and special events capabilities) were found to be significantly influence the travellers.

ABSTRAK

Penentuan Tempahan Dalam Talian Untuk Perkhidmatan Hotel

Agensi pelancongan merupakan perantara diantara pembekal servis industri pelancongan dan pelanggan yang memerlukan servis mereka. Perkembangan internet ini telah menggalakan perantara agensi pelancongan kini berkembang sebagai agensi pelancongan atas talian. Kajian ini bertujuan untuk meneroka ciri-ciri untuk agensi pelancongan dalam talian melalui analisis faktor penerokaan, menentukan hubungan antara faktor dan akhirnya untuk mengkaji faktor yang paling mempengaruhi pelancong semasa membuat tempahan hotel melalui agensi pelancongan dalam talian. Kajian ini telah menggunakan pendekatan bukan kebarangkalian dengan kaedah persampelan mudah. Kira- kira 450 soal selidik telah diberikan dalam lokasi kajian, walau bagaimanapun hanya 410 soal selidik yang dapat dikumpulkan daripada responden. Untuk analisis data, penyelidik hanya menggunakan 398 soal selidik dan baki 12 soal selidik tidak termasuk dalam analisis data kerana soal selidik tersebut tidak lengkap. Keputusan menunjukkan bahawa analisis faktor penerokaan telah mengenal pasti 13 faktor yang sesuai untuk agensi pelancongan dalam talian. Keputusan analisis korelasi Pearson menunjukkan semua pembolehubah mempunyai hubungan yang positif dan signifikan antara satu sama lain kecuali untuk keupayaan acara-acara khas dan niat pembelian semula kerana kedua-dua pembolehubah ini mempunyai hubungan yang negatif tetapi signifikan diantara satu sama lain. Tambahan pula, kajian ini meliputi analisis regresi berganda dengan mempertimbangkan niat pembelian semula sebagai pembolehubah bersandar. Keputusan menunjukkan empat faktor (kemudahan, ciri tempahan dalam talian, infrastruktur asas hotel dan keupayaan acara-acara khas) telah didapati signifikan dalam mempengaruhi pelancong.

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LIST OF ABBREVIATIONS

- OTA Online Travel Agency
- SPSS Statistical Package for the Social Science
- RO Room
- $\rm FO-Food$
- CR Customer Review
- PRI-Price
- PRO Promotion
- LO-Location
- OF Other Facilities

OBI – Online Booking Intention

RI – Repurchase Intention

EFA – Exploratory Factor Analysis

CFA – Confirmatory Factor Analysis

- KMO Kaiser Meyer Olkin Measure of Sampling Adequacy
- PU Perceived usefulness Diversiti Utara Malaysia
- PEOU Perceived ease of use

TAM - Technology Acceptance Model

- F1-Factor 1
- F2 Factor 2
- F3 Factor 3
- F4 Factor 4
- F5- Factor 5
- F6-Factor 6
- F7 Factor 7
- F8-Factor 8
- F9-Factor 9

- F10-Factor 10
- F11 Factor 11
- F12 Factor 12
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- RO1 Room 1
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- PRO2 Promotion 2
- PRO3 Promotion 3



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- PRO4 Promotion 4
- PRO5 Promotion 5
- **PRO6-** Promotion 6
- LO1 Location 1
- LO2 Location 2
- LO3 Location 3
- LO4 Location 4
- LO5 Location 5
- LO6 Location 6
- LO7 Location 7
- OF1- Other Facilities 1
- OF2 Other Facilities 2
- OF3 Other Facilities 3
- OF4 Other Facilities 4
- OF5 Other Facilities 5
- OF7 Other Facilities 7
- OF8 Other Facilities 8
- OF9 Other Facilities 9
- OF10 Other Facilities 10
- OF11 Other Facilities 11
- OF12 Other Facilities 12
- **OBI1-** Online Booking Intention 1
- **OBI2-** Online Booking Intention 2
- **OBI3** Online Booking Intention 3
- **OBI4** Online Booking Intention 4
- **OBI5** Online Booking Intention 5



OF6 – Other Facilities 6 Universiti Utara Malaysia

OBI6 – Online Booking Intention 6

OBI7 – Online Booking Intention 7

- **OBI8** Online Booking Intention 8
- **OBI9** Online Booking Intention 9
- OBI10 Online Booking Intention 10
- OBI11 Online Booking Intention 11
- OBI12 Online Booking Intention 12
- OBI13 Online Booking Intention 13
- OBI14 Online Booking Intention 14
- RI1 Repurchase Intention 1
- RI2 Repurchase Intention 2
- RI3 Repurchase Intention 3
- RI4 Repurchase Intention 4
- ACC Accessibility
- PROA Promotional Advantage
- OBF Online Booking Features Versiti Utara Malaysia
- HBI Hotel Basic Infrastructure
- FBC Food and Beverage Capabilities
- SEC Special Events Capabilities
- PA Price Advantage
- LA Location Advantage
- CRAC Customer Review Accountability
- AC Accommodation Capabilities
- BAA Basic Amenities Advantage
- CRAD Customer Request Advantage

CHAPTER 1

INTRODUCTION

1.1 Introduction

Hotel industry is a business sector that provides accommodation for travellers. In fact, this reason is the main foundation of this industry. The important elements of this industry is mainly about fulfilling the needs of the clients, by not only creating a desirable environment, yet also a secure place for their temporary stay as well as provide them with a wide range of services as well as amenities to those travellers who stays at the hotel.

Besides that, as known to all, the hotel industry has become necessary to everyone from all over the world as nowadays people tend to travel a lot for various reasons and purposes, may it be for a vacation, a business tour or merely to visit their friends or family members (Alaine, 2014)

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With the emergence of internet and its application, it enables travellers to access any required information and therefore bookings are also easily done in this virtual environment (Morrison et al., 2004). Wymbs (2000), has emphasized that internet is a global medium as most of the companies nowadays are using it as a tool to address the global audience.

Furthermore, the internet has ability to disseminate large volumes of information quickly and efficiently at a minimum cost. Due to these factors, internet usage among the consumers has increased rapidly. The consumers have started using the internet for various purposes such as to gather any sort of information, as well as to purchase products and services and also to make reservations (Hueng, 2003).

By using the internet, travellers are able to access necessary information before hand and gather whatever information they need based on their expectations before planning for their vacations. Travellers can easily find out about the fares and room rates and even could compare the rates with other hotels. Once satisfied, the travellers can easily do booking through online.

Furthermore, the information that travellers get from the internet is constantly updated by authorized person. So, the room rates are normally the latest rates offered. Travellers can also check the availability status for the rooms as well as the weather condition of the place. Besides that, they can also fore see the upcoming events which will help them to plan and decide their vacations (Connolly et al, 1998). For example, in a research done by the Manson (2005), about 73 percent of the travellers who look out for tourism destinations especially if they are a first time travellers to a particular destination, used the internet search engine to gather information before making reservations.

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Moreover, it is an obvious fact that the younger generations more often opt to internet technology usage as they want to bring it along with them to their lodging and dining experiences (Robin et al. 2010). This situation arise because of their perception that travel is an information based service and the internet is one of the world's most comprehensive information based medium apart from the traditional method (Travel Trade Gazette, 2001).

Thus, it can be concluded that in the presence of a vast network of the global suppliers and widely distributed consumers, the distribution of the travel related services is ideally suitable for online channels (Morrison et al, 2004). Besides, as the major sector of the travel industry, hotel bookings also have been largely integrated

into the internet (Law et al., 2007). Therefore, this study attempt to explore the driving factors that leads the travellers to book hotel through online travel agency and most importantly, repurchase the services from the same service providers.

1.2 Background of Study

The development and improvement of internet has greatly affected the ways hotel distribute and price their products and services. It is proven when the advent of the World Wide Web has significantly changed and transformed the structure of tourism distribution from traditional era to modern era. Initially, the hotel industry was slow to adopt online distribution as it gives opportunities to third party wholesalers such as Expedia and Travelocity to dominate the industries (Law and Cheung, 2006).

Online travel agents joined the fray in the 1995 when the Internet Travel Network (ITN) became the first online agent in attempt to exterminate the traditional travel agents (Chircu and Kauffman, 2000a,). While in 1996, the global distribution system (GDS) owner introducing Travelocity and in the same year, Microsoft launched the Expedia (Chircu and Kauffman, 1999). Priceline was launched in 1998 where they start their business by selling the airline tickets. Priceline uses a "demand collection system" in which the demand is collected from the customers and conveyed to the suppliers (Priceline.com, 1998).

Travel agency is an intermediary between suppliers of travel industries to customers who need their services. This intermediary is now developed as an online travel agency due to the involvement of the internet. Unlike the other distributors in other industries, the travel agency do not deal with physical products but with information. This travel agency is also known as third party distributors, online wholesalers, or eintermediaries. All of them are carries the same meaning (Dale, 2003). E-intermediaries refer to the intermediaries that perform middleman activity with the support of electronic (Anckar, 2003). According to some researchers, e-mediaries is another word for e-intermediaries. They had mentioned that e-mediaries is usually used to encompass not only new electronic players, but also the traditional ones such as computer reservation systems (CRS's) and global distribution system (GDS's) (Daniele and Frew, 2004). While Buhalis and Licata (2002), has further extended the definition by including the suppliers such as airlines and hotels industry who utilize the internet service to facilitate commerce directly with consumers.

All the reasons mentioned earlier are some of the driving factors that has urged this travel agencies to change their business method by the implementation of internet usage. The factors for changes include the increased competition through globalization and deregulation, as well as increased customers demands and their expectations. Besides that, nowadays, the customers are becoming more knowledgeable and growing along with the automated technologies (Cheung and Lam, 2009).

It cannot be denied that the existence of internet in the travel industry gives both positive and negative impact to the industry. The use of internet gives positive impact as it is less costly, user friendly and all its strategies mainly focuses on customers. The use of internet helps the online travel agency to promote their services in a cheaper and interactive way. Through the use of multimedia, customers are able to understand the services better without the need for specialized personnel on the service provider side.

Moreover, the internet can help the online travel agency to maintain as well as enhance the relationships with their customers. At the same time, they can also use this opportunity to target the customers with specific offers and mass-customization. Besides that, the use of internet helps the online travel agency to enhance some service attributes on their websites by adding on some features that enables travellers to easily access for information from the website (Cheung and Lam, 2009).

The negative impacts is mainly reflected on the hotelier as the hoteliers views online travel agency as competitors who erode their brand equity as well as control their pricing decision. This is because the online travel agency has a sophisticated marketing strategy which enables them to go directly to the customers.

Moreover, the online travel agencies are able to effectively perform direct marketing and mass-customerization strategy. The online travel agency are able to understand the customers' needs and then develop their website accordingly to customer's preferences thus enable their services to reach the customer directly through their website (Jeong and Lambert, 2001).

On the other hand, traditional travel agency has their battle against its online counterpart due to the use of internet. For example, last time, customers used to visit the travel agency directly in order to purchase or gather information about vacation from the agency. But now, with the help of internet services, customers are able to search travel destinations and information and even book them through online easily at any time. When one realizes that the internet allows them to do travel arrangement easily and smoothly, it is difficult for them to use the traditional travel agency (Cheung and Lam, 2009).

Online travel agencies like Agoda.com, Expedia.com, Kayak.com and other related companies provide a variety of services to the travellers but this study emphases

more on lodging services. Thus, this study intends to explore the factors that lead travellers to book hotel through online travel agency.

1.3 Problem Statement

Online travel agencies have good demand in the travel industry market. However, they are still competing in terms of features among them. This situation is due to the information seeking behaviour by travellers. It is because the technology has the potential both in decreasing the cost of searching as well as evaluating the alternatives and increases the quality of the decision (Haubl & Trifts, 2000). For instance, the increasing number of online travel agents allows the travellers to access for information as well as compare other alternative service providers before making their decision.

According to Huang (2013), a stressful situation arises when there is a decline in customer loyalty towards the online travel agency services. This can be caused by lower degree of confidence in price and content accuracy. The customers expects this situation is in line with Asia Pacific hotel's survey finding which found that travellers are increasingly comparing travel agents offers and doing a review before making an online booking. Apart from that, customers usually tend to change to other online travel agency if a particular service provider does not provide convenient services to them (Parihar, 2014).

1.4 Research Questions

The research questions of this study are stated below.

1. What are the factors that travellers search for when booking hotel through online travel agency?

- 2. What are the relationships among the factors that support online travel agency?
- 3. Which of the factor influences the travellers most when booking hotel through online travel agency?

1.5 Research Objectives

The research objectives of this study are as follows:

- 1. To explore the factors that travellers search for when booking hotel through online travel agency.
- 2. To determine the relationship among the factors that support online travel agency
- 3. To examine which factor influence the travellers most when booking the hotel through online travel agency.

1.6 Significant of the Study

This study is focuses on the driving factors that lead travellers to book hotel through online travel agency such as Agoda.com, Expedia.com and the other companies which are providing the same services to the travellers. This study could benefit both parties which are online travel agency companies and the travellers as well.

This study can be a benefit to online travel agencies in many ways. For example, to have a better understanding regarding the wants and needs of potential customers who visits their website. Besides that, this study gives ideas to online travel agency companies on how to improve their website and to identify the features or elements that should be included in their website so that it will attract the travellers to revisit the websites. The online travel agency can prioritise their effort on website development by including the most relevant attributes which would eventually enables the online travel companies to get a larger share of the bookings through their own website (Law Cathy, and Hsu, 2005).

From the study, the travellers will have more knowledge on what are the features available at online travel agency website and this will minimize their workload when they search for hotels according to their budget, comfort and convenience. Moreover, the customer reviews which are available at the website could be a reference for them when searching for hotel. Apart from that, this study will help the travellers to identify which online travel agency provides a comprehensive package for them.

1.7 Motivation and Contribution

1.7.1 Motivation

According to the prior study, the development of internet has a greatly impact to the lodging industry in a positive way. This is because the emergence of internet allows the travellers to access for information search and reservations can easily do in virtual environment (Morrison et al., 2004). According to the Robin et al., (2010) the younger generations are easily adapted to the internet technology as it has become a trend nowadays where these generation prefer to purchase product and services using the online medium. This situation arises because they can easily access the internet with their smart phone or laptop without any limitation.

Moreover, this virtual environment is more time and cost saving as the travellers can gather the information they wanted and plan for their vacation from their own place. Comparisonly last time, the travellers use to visit the travel agency in order to gather information for their vacation which is time and money consuming. The motivation for this study is to explore which factors really influence the travellers when they book hotel through online travel agency. Indeed, this study also determines to examine the relationship among the factors. It is because the online travel agency have to compete with hoteliers, traditional travel agency and other travel related websites as well. At the same, the online travel agencies are also competing in terms of features among them. Therefore, this study will help the online travel agents to improve the websites according to the travellers needs. Indirectly, it will help improve their service performance and increases their revenue as well.

1.7.2 Research Contribution

There are some contribution from this study which could benefit for future studies and also the online travel agency companies such as Expedia.com, Agoda.com, Kayak.com, and other companies to improve their services and business further.

1.7.2.1 New Measurement for Online Reservation Study

In this study, the researcher developed a new measurement for online reservation studies as this measurement will give us an idea on what are the factors that influence travellers to choose a particular service provider. Furthermore, this measurement could help the online travel agency companies to improve their services better in future. Most importantly, the online travel agency will have a better understanding of their customer's wants and needs.

1.7.2.2 Food Services

Most of the online travel agency does not provide food services to the customers. It is good if the service provider include food services in their website which means the customer can order the food in advance. This concept is similar to Air Asia services where the customers will get a discount for pre-booked meals. This concept will surely attract the customers because food is an important element that travellers look for when they travel to certain destination. For instead, the Muslim travellers will search for halal food and in other situations they will look for fast food centres such as McDonalds, KFC or pizza but how long can they take fast food as their meals. So, if the travel agency can provide food services according to customer preferences, it will attract the customers to repurchase for their services in any of their upcoming vacations.

1.7.2.3 Interactive Communication Channel

Interactive communication is a communication that simultaneous or 'real time' exchange of information over a transmission medium such as during telephone conversation, video conferencing or internet relay chat (BusinessDictionary.com). Looking from the travel agency perspective, it will improve customer services system and from the perspective of customers, they can directly ask any question or clarify their doubts regarding the services provided by the online travel agency. This system allows them to easily gather the information that they need.

1.7.2.4 Membership

Membership means an individual being a member for a particular group, society, club or organizations. When an individual obtain the memberships title, they will have special privileges or benefits than the non-member. Memberships system can be a good marketing tool for online travel agency in order to gain customers. By giving special privileges and benefit such as free night stay or free transportation services, it will attract the customers to use their services more. Customers will feel appreciated by the service providers.

1.8 Scope of Study

This study discusses the driving factor of online reservations for hotel services through online travel agency. This study was carried out at the Penang International Airport. In terms of respondents, this study focuses on those travellers who has experienced using online travel agency such as Agoda.com, Expedia.com, Trivago.com, Kayak.com, Booking.com and TripAdvisor as well. The data collection was conducted on 14th February 2015.

1.9 Definition of Key Terms

1.9.1 Online travel Agency

Online travel agency is more like an online booking resources that make travel arrangements Pamela (2012).

1.10 Outline of the Chapters

This research study is divided into five chapters. The earliest part of the study is the introduction which comprises the background of study, problem statement, research question, research objectives, significance of the study, motivation and contribution, and also the scope of study. However, the second part of this research is literature reviews which will concentrate on literatures regarding the factors that lead the travellers to repurchase the services from the same service provider and also the underpinning theory. In this chapter, the researcher will propose the hypothesis for the study.

The third chapter focuses in the methodology where this chapter will explain the research design, population and sampling design of the study, measurement scales that will be used in the research, questionnaire design, data collection procedures as

well as data analysis technique. Besides, in this chapter, the method used to collect data from the respondent will be explained. This chapter also comprises of the measurement tools that will be used in order to process the data collected from the respondents and the techniques that will be used to analysis the data.

The fourth part of this study is the finding and analysis chapter and last chapter is the discussion. In this chapter, the overview of the study will be discussed. This chapter comprises of implication of the study, limitation, suggestion for future research, conclusion and also the recommendation.





Chapter 2

Literature Review

2.1 Introduction

This chapter explains about the overall picture of the study which highlights the factors that contributes to online travel agency. Generally, there are common factors such as room, food, price and many others. However, this study is tried to identify other factors which are popular among the travellers through exploratory factor analysis. The first parts of this chapter is the reviews of literature for room, food, customer review, price, promotion, location, other facilities, online booking intention and repurchase intention as well. Meanwhile at the second part, the researcher has discussed the underpinning theory and develops the hypotheses which help to guide the study.

2.2 Room

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Room is an important asset of any hotels and comfortable room facilities plays a very important role in order to popularize the hotels. For example, if a tourist enjoyed the stay, felt satisfied and felt comfortable with the rooms provided by the hotel, then they are bound to become attached to the particular hotel and might return to the same hotel in future (Paul, 2014). Therefore it is vital to provide comfortable room to customers in order to retain the customers.

In recent time, the distribution of hotel rooms through the internet has grown rapidly. The consumers are now using the internet to book hotel rooms more often than any other method (Shoemaker et al., 2007). While, Toh, Raven and Kay (2011) has identified that hotels have a variety of internet distribution channels in order to help them sell the rooms including the site which is known as online travel agents. Although, the hotels want to sell the rooms via their own websites, the hotels still heavily rely on efficient, effectiveness and convenient of online travel agents to sell their rooms. Moreover, the traveller especially the business travellers have expressed a strong interest in booking hotel rooms through the web (Caterer and Hotelkeeper, 1996).

According to the research conducted by Ye, Zhang and Law (2011), they found out that travellers considered room quality as the most influential factor on their willingness for an hotel. In order to satisfy this type of customers, the hotels should focus and invest more on the quality of their hotel rooms which include room design, facilities and temperature control. The hoteliers or the online travel agents should highlight those available facilities inside the room at the websites when they design the advertisement as it can help them to attract the customers.

Besides, pictures and videos of room is one of the important elements to attract the customers. By having internet technology, the hotelier and online travel agents can upload the pictures and videos such as the views from the room, interior design in the room, and also the facilities inside the rooms. It is because a good quality pictures and videos of hotel room will provide potential hotel guests a clear picture of what they will expect prior to actually booking a reservation (Lizardos, 2013).

Furthermore, according to the study conducted by Stringam and Gerdes (2010), the importance of having photos on web sites was the most frequently mentioned factor in the participants' assessments of hotels websites. About 70% of the responses mentioned sites' use photographs and the importance to them as customers.

Therefore, the shift to an internet based room reservation systems has minimize the customers workload as the information about the room availability, room rates, room features and other related information regarding the rooms are available at the websites. Moreover, these information are reliable and updated regularly (Wong and Law, 2005). Besides, this internet based reservations are easily accessible 24 hours a day, seven days a week which means the customers can book their room via online at anytime and anywhere in the world.

Thus, this study is intended to explore the importance of room factor to the travellers when they book their hotel rooms through online travel agency websites. Therefore the researcher had proposed the hypothesis below.

H1: Rooms are an important factor in online booking which lead to repurchase intention.

2.3 Food

In hotel industry, Food and Beverage Department (F&B) is responsible for maintaining the high quality of food and service, food costing, managing restaurants and bars as well. Food and Beverage outlets were divided into various categories such as restaurant, lounge, bar and room service which is known as in room dining (Unknown,2010).

Recently, hotels emphasis more on food and beverage than in the past because it has been recognized as an important contributor to a hotel's positioning within its markets. For an example, a guest's experience with food and beverage play an important role in his or her overall hotel experience. Food with high quality and hygiene as well as good taste will encourage the guest to choose the same hotel service during their next vacation. Moreover, this factor has been credited as an important driver for room's revenue as well as overall asset value (Juliette, Boone, 2008). On top of that, good quality of food and beverage is a key to the hotel's ability to differentiate itself from other hotels (Khalifeh, 2012).

Patrick (2014), mentioned that hotels has to do with allergen and food – safety training as it increasingly important aspects for the hotel industry. In the survey done by State of Training & Development in the Hospitality Industry, about 84 percent of the respondent in the Council of Hotel and Restaurant Trainers' (CHART) gave more importance to food safety training. It is good if the ingredients and allergen listings are available both on online travel agency websites and at the menu card for the guests to order their meals at restaurants as it can help the travellers with food sensitivities to make better decisions about which menu items they can eat.

The number of Muslim tourists has increased from year to year and they represent a large tourist niche market (Shafaei and Mohamed, 2015). As the number increase, the demand for halal food also increased. Halal food defined as the food that does not contain any parts or products of animals that are non-Halal for Muslims or products of animals which are not slaughtered according to Shariah law, safe and not harmful, free from alcohol and the foods or its ingredients do not contain any human parts or its derivatives that are not permitted by Shariah law. Lastly, during the preparation, processing, packaging, storage or transportation, the food is physically separated from any other food that does not meet any requirements of Shariah Law (Razali, 2013). Therefore, understanding Muslim tourists' needs and behaviours is an important element in order to promote and differentiate the hotel from competitors. On top of that, better understanding of Muslims tourist help the hotel company to significantly improve the retention rates (Eid, 2013).

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The researcher argued that food is an important factor to travellers when they book the hotel. Thus this study is intended to explore the food as an important factor to travellers when they book the hotel through online travel agency websites. Therefore, the researcher had proposed the hypothesis below.

H2: Food is an important factor in online booking which lead to repurchase intention.

2.4 Customer Review

Guillet and Law (2010) state that the internet has becomes an essential part of everyday life as the growth of trip advice websites has presented customers with several alternatives to evaluate the hotels. As the service providers beliefs that prompt attention to customer feedback is a best practice that drives into e-business success (Barua et al., 2001). For instance, TripAdvisor.com provides millions of travellers' rating which describing their experiences of staying in the hotels (Zhang, Ye and Law, 2011). Besides, these ratings directly denote the user perceived quality and value of given properties.

The availability and easy access to travel websites, allow the customers to disseminate their viewpoints easily into the websites. It is because the customers are solicited to provide both quantitative and qualitative reviews such as their destinations, hotel or other travel experiences which they have experienced on the websites. Later on, this information is amalgamated in order to generate different types of ratings (Zhang, Ye and Law, 2011).

According to Park et al. (2007), online reviews play a dual role as it provides information about the products and services and at the same, serves as a recommendation to the customers. This dual role known as informants where the online reviewers deliver additional user oriented information. The recommenders provide reviews either positive or negative signal for certain products or services. In addition the travel reviews also provide up-to-date, enjoyable and reliable information in their websites (Gretzel & Yoo, 2008; Zhang et al., 2010).

Moreover, prior studies largely overlooked the issues related to hotel star ratings on online travel agency websites. According to survey conducted by Harris/VFM consulting firm, the property star rating is among the most important factors in customers' minds in selecting one hotel over the other (Boni, 2009). Hotel star ratings are the systems which rank the hotels according to the quality. This star rating system serves as guidelines to the guests who make a reservation of hotel room. Even though, it is helpful for the customers yet sometimes it might be confusing the customers as there is no standardized star rating system (EnlightenMe.com, 2015).

According to O'Connor and Piccoli, (2003), the leading online travel agencies like Expedia, Travelocity, Orbitz and Priceline have their own star rating systems as well as ratings by the customers are also available on some of these websites. For example, TripAdvisor and Expedia allow customers ratings which reflect their service quality from customers' perspectives on their websites.

As mentioned by the Guillet and Law, (2010) in their study about "Analyzing hotel star ratings on third-party distribution websites", the World Tourism Organization (UNWTO) and the International Hotel and Restaurant Association (IHRA) jointly define hotel rating systems as "accommodation establishments of the same type of hotels, motels and inns which have been conventionally broken down into categories, classes or grades according to their common physical and service characteristics and established at government, industry or other private levels".

Hewitt and Schilichter (2008) have conducted study which identified that internet's transparency enables customers to compare hotel ratings across multiple travel websites. If the star ratings vary illogically, this information will no more serve as a guideline for the customers because it can erode a hotel's long term business. While, in the study conducted by Fernandez and Bedia (2004), has indicated that the higher star rating is not necessarily as a good indicator of hotel quality. It is because quality in this context refers to being able to meet customer expectations during service delivery and different customers have different expectations.

Thus, this study is intended to explore the importance of customer reviews factor for travellers when they book their hotel through online travel agency websites. Therefore, the researcher had proposed the hypothesis below.

H3: Customer review is an important factor in online booking which leads to repurchase intention.

2.5 Price

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As the hotel room being sold electronically, customers browse different websites in order to check the availability, prices and additional benefits (O'Connor, 2002). Santoma and O'Connor (2006) has stressed that price is one of the key motivator for consumers to purchase online. It is because; these channels provide customer with an easy access to view information regarding the room rates such as seasonal price, discounted price and also the early booking discount (Law, Chan and Goh, 2007).

According to Pan et al., (2013), customers use price as their benchmark to narrow down their options, evaluate, look for an alternatives and then make a purchase decision. In online reservation contexts, price affects the booking decision of hotels room as well as shaping the customer perceptions of quality and value expectations (Schwartz and Chen, 2010).

Law and Huang (2006) found that customers often used multiple web sites to gather the information and compare the prices before making their booking. Moreover, such search and reserve behaviour is due to different prices offered by different websites. Apart from that, some of the online booking web sites provide the best guarantee rates to their customers and they use such methods to attract the customers to book the hotel room via their web sites (Dixit et al., 2005).

As the web sites offered different prices, customers spend a lot of time to search and compare the prices on the web sites in order to get the best as well as reasonable prices and services that they wanted (Law, Chan, and Goh, 2005). Furthermore, most of the past researches also indicate that online customers are sensitive to hotel room rates. It is because by comparing room rates among their selected distribution channels which includes hotel and online travel agents, customers would have more ideas and market information to book their hotel room (Law, Chan and Goh, 2005).

Customers tend to spend time to gather information regarding price due to price discriminations as the hotels do practice price discriminations concept. According to Weisman and Kulick (2010), price discriminations refer to the situations which a firm charges different prices for the same service. For instance in hotels context, it is well known that two customers may have paid very different price for the same room for the same night (Guillet, Liu, and Law, (2014).

The hotels implement price discriminations by using various rate restrictions in order to segment the customer's into different groups which are essential to implement
differential pricing. This restriction includes refundability, advance purchase requirements, day of the week and time of the day (Hanks et al., 1992; Kimes, 2002).

There are some researchers who have conducted studies regarding price differences between hotel websites and online travel agents. For instance, Gazzoli et al., (2008) has identified that rooms which are internationally located properties, the hotel chain web sites had prices higher than the online travel agents. Similarly, Tso and Law (2005) also found that most expensive prices were recorded on the hotels' own web sites. In addition the study found that, the prices are different among all the web sites which include the hotel chain and online travel agency. Therefore, knowledge of such pricing differences could be valuable to customers when they look for hotel room via online travel agency.

Thus, this study is intended to explore the important of price factor for the travellers when they book the hotel through online travel agency websites. Therefore, the researcher had proposed the hypothesis below.

H4: Price is an important factor in online booking which lead to repurchase intention.

2.6 Promotion

Promotion refers to the activity that raises customer's awareness of product, services or brand while generating sales and creating brand awareness. Moreover, it helps to stimulate demand for the product or services. Promotions is also one the basic elements of market mix, which is 4P's; price, product, promotion and place (Namara, 2014). Kotler (2002) has point out that sales promotions is used by the companies in order to encourage the consumers to buy a product or services and usually it is a short term activity which intents to stimulate the purchase. While Fill (2006) indicates that promotion is an activity which is used to attract and retain customers. At the same time the usage of sales promotion provides or creates an interest which makes the customers to visit the website again. On the other hand, Lamb et al., (2009), states that sales promotion is used by the companies who aim to promote their products or services directly to the consumer market.

Price promotion is a type of sales promotion which usually includes price discounts, coupons, wedding promotions rate, and membership promotions. According to Huff, Alden and Tietje (199), sales promotions comprise a wide variety of promotional tools such as price promotions and also non-monetary promotions. In addition, sales promotions are also believed to have positive effects on products evaluation and purchase intentions (Chang, 2009).

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Even though, there are different types of sales promotions, price promotions are the most common form of sales promotions used by the most companies (Montaner, de Chernatony and Buil, 2011). It is because price promotions tend to have positive impact on purchase volume (Christou, 2011). Furthermore, past researchers has found that customers may exhibit a favourable attitude towards price promotions due to their perceived monetary savings (Chandon et al., 2000).

In the context of hotel industry, nowadays the hoteliers use price promotions to increase their sales. It is because hotel rooms are perishable and cannot be stored for later sale. Therefore, an increasing numbers of hoteliers have started using price promotions to sell their unsold room inventory (Kang, Brewer and Baloglu, 2007).

The online travel agents also use price promotions which is cheaper than hoteliers to attract the customers.

Apart from that, the hotels also use membership rewards as their promotion tools in order to attract the customers to purchase their room. This membership programs cost nothing to join and reward the frequent guests with extra amenities, upgrades and also free nights. By having membership rewards, the guests are likely to look for and use their services in future (Morello and Media, 2015).

In this research, the researcher intends to explore the importance of promotion factor to the travellers when they book the hotel through online travel agency websites. Therefore, the researcher proposes the hypothesis as below.

H5: Promotion is an important factor in online booking which lead to repurchase intention.

2.7 Location

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Location is one of the most important factor for a hotel establishment as they heavily rely on effective location strategy to succeed in the competition to attract hotel guests to rent their rooms (Yang, Wong and Wang, 2012). Nicolau, (2002) indicate that a strategic location is a paramount importance as it promise a superior performance by the hotel in terms of revenue generation in the short as well as long term.

Moreover, the hotel location is an essential factor that strongly influences a tourist in their hotels selection decision. For an example Rivers et.al, (1991), mentioned that the convenience of location influences tourists' hotel selection. While, Lewis and Chambers (1989) point out that that location was the most influencing factor in hotel selection especially for the business tourist. However, leisure for the tourist also place high priority on location factor in selecting their preferable hotels for their locational advantage (Chu and Choi, 2000).

Besides, Tsaur and Tzeng (1995) provided evidence that hotel location factor such as convenience of transportation and parking area were the most important factor in assessing the service quality of hotel. Therefore, the hoteliers must take into consideration about the importance of location features and should highlight those location advantages and offer detailed travel routed and maps of their hotels when designing advertising and promotional activities.

Furthermore, past studies have repeatedly emphasized the importance and consequence of location factors in the future success of any hotel operation. For example, Newell and Seabrook (2006) have evaluated the decision making process of hotel investment and identified that location is one of the key factors for hotel success in future. Apart from that, many studies also have investigated the determinants of hotel location. For instance, Chou et al. (2008) has mentioned that these determinants include the geographical conditions, traffic conditions, hotel characteristics, and the operation management of the hotel itself. While Weaver (1993) argued that tourists prefer a location where various services are available which include the accessibility to other facilities such as airports, railway stations and tourism attractions.

Besides, there also theories from different disciplines have been introduced by the past researchers in order to explain the hotels' location selection from different perspectives which include geographical, economies and marketing theories (Urtasun and Gutierrez, 2006).

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Additionally, there is also some research about hotel location which concentrates on the distance and access component. For instance, Wind et al (1989), has stated that distances from shops, sightseeing attractions and highways as the sum of location in hotel product feasibility. Bull (1994), has pointed out, that there are two important factors to take into consideration when considering location factor in hotel industry. Firstly is the distance from or access to one or more specific places such as beaches, city centre, airport or highway. While, the second is the neighbourhood amenity or quality such as quietness, views from rooms and the nature of the property's surrounding. It is because an attractive neighbourhood with specific tourist interest will promise a hospitality business to gain better profit.

Therefore, location can be considered as important factor for hotel industry as good location clearly increases the values of lodging products. Moreover, this study also intends to explore the importance of location factor to the travellers when they book the hotel through online travel agency websites. Therefore, the researcher had proposed the hypothesis as below.

H6: Location is an important factor in online booking which lead to repurchase intention.

2.8 Other Facilities

Facilities refer to the premises and services that require accommodating and facilitating the business activity (Bernard, 1996). Hotel facility consists of hardware which is physical asset and excludes the software which is the services. However, since the hotel industry is a customer based industry, therefore the hotel's facility is closely related to the customers need and requirements (Richard, 2006).

In the hotel industry context, facility is an important factor in determining the grading of the hotel. It is because, as the demand for the hotel room increases, it affects the demand for its associated components of the hotels which are facilities. Moreover, most of the 5 stars hotels are proud of their facilities such as gym, spa, Wi-Fi connection, sauna and recreational tools. They indicate that facilities are one the important factor to attract the customers. Besides, the facilities are the tools that differentiate the hotel than their competitors (Richard, 2006).

In a past research, Losekoot et al. (2001), has examined the conceptual links between facilities and hospitality management in the context of customer satisfaction by investigating the facilities management through customer complaints in the hotels.

In this study, the researches intended to explore the importance of other facilities factor to the traveller when they book the hotel through online travel agency websites. Thus, the researcher had proposed the hypothesis as below.

H7: Other facilities are an important factor to online booking which lead to repurchase intention.

2.9 Online Booking Intention

Online booking constitutes as one of the largest and fastest-growing segments of business-to- customer (B2C) e-commerce (Parasuraman *et al.*, 2005). The internet based electronic commerce has transform considerably as the physical goods, digital products and services were sold online increasingly (Peng, Xu and Chen, 2013). Online booking is to purchase online in advance and then experience the services face to face later. For online booking situation, there is no physical distribution after it which is totally different from online shopping for physical goods (Peng, Xu and Chen, 2013).

According to Hahn and Kim (2009), the number of online business is rapidly increasing every year. It is happened not only because of the increasing number of web-based service provider but also due to the increase number in multi-channel service providers who conduct the business both online and offline basis. Izquierdo and Martinez (2011) has further explained that, this multi-channel strategy gives the service providers a competitive edge over the other service providers who are focusing solely on online distribution channel.

Peng, Xu and Chen (2013), mentioned that it is the inevitable choice for the travel enterprises to provide online booking for improving service efficiency, enhancing service quality and gaining the competitive advantages. For example, the online travel agents (OTA) such as Expedia, Priceline, Ctrip and Elong have gained extensive attention since in the beginning of electronic business development. The online travel agency mainly focus on online booking for hotel, travel car rental and other tourism related services. Now, they were well established as a successful model for tourism and electronic based business as the market of online travel agency is prosperous even in the developing countries.

Pavlou (2007) defined online booking intention as a customers' willingness and intention to participate in an online deal and it includes the evaluation processes of website quality and product information. Factors that influence online booking intentions from either hotel websites or online travel agents include information satisfaction, website quality and also online review (Xie et al., 2011). While according to Law et al., (2004), those travellers who use online booking, they can receive comprehensive, timely and relevant information which can help their decision making process.

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Moreover from the customers' point of view, online booking can be advantageous factor in many ways as it enables the customer do comparison and gather qualitative information that they wants, speed in transactions, cost advantages and rapid booking confirmations as well (Ip *et al.*, 2012). While, Emmer *et al.*, (1993), mentioned that most of the traveller are searching over the websites of hotels or online travel agents in order to check the prices before taking any decisions. Besides, online booking allow the customers to directly communicate with the suppliers at any time and any place (Waller, 2003)

Furthermore, the reservation transaction information is easily accessible and clearly display. At the same time, the information regarding the room rates, availability and policy are also display clearly at the website. As the room rates and availability are crucial information, the online travel agency provide accurate information and the website were updated in a regular basis. Moreover, the basic contact and access information such as telephone number, address, e-mail, and transportation options from airport to hotel also available at the website. That information also available in a printer friendly format, so if the traveller feels it is necessary for them, they can prepare a hard copy of it (Law, Cathy and Hsu, 2005).

Apart from that, the picture of hotel facilities, location, guest rooms and other features also available at the website and the travellers can view those pictures when the making their reservations. In addition, this websites are updated regularly in order to provide current information to the travellers (Law, Cathy and Hsu 2005).

Moreover, the determinants of online booking intention factor is derived from the characteristics of the Internet itself which includes perceived risk, security, convenience, time saving and usefulness. The researchers further explained that online booking intention decision is also influence by the characteristics of the online suppliers itself which were include information quality, competitive price, pricing patterns, service performance and reputation, terms and conditions and also the mean rating in online review sites (Peng, Xu and Chen, 2013)

At the same time, some researchers also believe that one's behavioural tendency for online booking factor is impacted by his or her personal characteristics which include educational background of the users, age, online shopping experience, timing and Internet experience (Peng, Xu and Chen, 2013).

In this study, the researcher assume that online booking intention could be a factor that lead the travellers repurchase the services through the same online travel agency. Thus in this study, the researcher intended to explore the relationship between online booking intention and repurchase intention. Therefore, the researcher had proposed the hypothesis as below.

H8: Online booking intention is an important factor that leads the travellers to repurchase the services through the same online travel agency.

2.10 Repurchase Intention

According to Zhang et al. (2011), consumer buying behaviours can be understood in two stages where the first stage is primarily concerned with encouraging people to purchase. While, the second stages, involves with encouraging them to repurchase the product or services. Most of the previous research were examines the direct or moderating effects on repurchase intention of buyer's past experience, perceived price, service quality, satisfaction, value, trust and loyalty (Rose et al 2012). Ha, Muthaly and Akamavi (2010), defined repurchase intention as a consumer's willingness to repurchase offerings in a particular website. While, Lacy and Morgan (2009), defined repurchase intention as an individual's judgement about buying again a designated service from the same company by taking into account his or her current situation and likely circumstances. Meanwhile, Morgan and Hunt (1994), point out that customer retention can be considered as an indication of customers' retention to repurchase a service from the same service provider.

Repurchase intention also refer to the psychological commitment towards the product or service that arises after using them which resulting in the idea for consumption again (Cronin and Taylor, 1992). Seiders et al (2005) explain that repurchase intention refers to the extent to which consumers are willing to purchase the product and services again. Similarly, Dodd et al, (1991) also defined that repurchase intention is the willingness to buy the same product or services by a customer.

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Seiders et al (2005) further explained that, repurchase intention is observable expected purchase behaviour. On the other side, Li et al (2002), indicated that repurchase intention is the anticipated response of the effectiveness of a transaction which make the customer is satisfied with the service provider. In repurchase intention situation, Jones et al (2000), point out that customer satisfaction is an important determinant. It is because the satisfying customer will purchase the product or service from the same supplier and it leads to increased future revenues to the organization (Bolton, 1998).

Moreover, some researchers for instance, Liao et al., (2009) state that some studies have reported customer satisfaction is an important predictor of repurchase intention while some have found that satisfaction has direct positive consequence on repurchase intentions (Andreassen and Lervik, 1999). Similarly some researchers agree that customer satisfaction positively affects repurchase intention. Therefore, it is most important factor in creating repurchase intention (Hartline and Jones 1996).

However, repurchasing intention is not only possible tendency of buying products or services but may also include the intention to recommend it to relatives or friends (Collier and Bienstock, 2006). Thus, repurchase intention is very important elements for business in terms of profit and also the evaluation of the stores (Jones and Sasser, 1995). Apart from that, previous researcher such as Dick and Basu (1994) has examined the sequential order of relative attitude, customer loyalty and repeat purchasing and they concluded that repurchase patronage is an outcome of customer loyalty.

Sivasailam et al. (2002) did a study regarding customer behaviours before and after purchase and found that the seller's honesty exhibited during a transaction, makes the buyers has a positive impression towards the seller and influence the buyers future purchase intentions. Good impression and trust over the time will leads in into long term relationships between the seller and buyer. Zboja and Voorhees (2006) have proved it through the research about customer's trust where the customers' trust towards the retailers will influence the customers' repurchase intentions.

Some researchers gives more attention on issues of online customer repurchase intention and the literature suggests that customers are motivated to remain with the particular service provider by benefit based drivers such as satisfaction, e-loyalty, and e-service quality, trust and value (Parasuraman and Grewal, 2000). Meanwhile, Kim et al (2008) has point out that online shopping involves with high risks due to the long spatial distances and weak seller buyer relationship. Thus a low level of trust will decreases customers' purchase intentions and even deters them from browsing the seller's website.

Some of the customers choose online purchase as their options because of time. According to Nah (2004), indicated that the length perceived waiting time influences the subsequent value judgement. Hence, the online stores should either provide customers with relevant information in order to offset their negative feelings and experiences which were caused by long waiting time. Therefore, the more positive experiences a customer accumulates for certain service, the more likely a customer will be to return (Jones and Peppiatt, 1996).

2.11 Technology Acceptance Model Theory (TAM)

The researcher used technology acceptance model (TAM) as an underpinning theory for this study as this study has an involvement of technology and the technology were accept widely by the users. This study mainly focuses on online travel agency websites. The rapid developments of technology allow the online travel agency easily penetrate into tourism and hospitality market. This online travel agency minimize the travellers' workload as they can easily access to the information that they wanted for through this websites.

The technology acceptance model (TAM) was developed by Davis in 1989. This model is intends to identify the factors that facilitate integration of technologies into an organization and discover why users accept or reject the technology (Lindsay *et al.*, 2011). TAM was developed based on theory of reasoned action (TRA) where this model concerned with determinants of consciously intended behaviours (Ajzen and Fishbein, 1980)

TAM is most widely used model for identifying factors that contribute towards acceptance of a technology. In this theory, there were three important elements were suggested. Firstly, when the users are presented with a new piece of technology, while secondly was a number of factors that influence their decision about how and lastly, when they will use the technology. In order to explain it, two attributes were used which are perceived usefulness (PU) and perceived ease of use (PEOU) (Lindsay *et al.*, 2011). Perceived usefulness is defined as the degree to which a user believes that using technology will increase his or her job performance. While, perceived ease of use is the degree to which a user believes that using technology is free of effort (Davis, 1989).

Moreover, TAM has been widely applied across different field as this model has been valuable in explaining user behaviour with regard to e-commerce, online learning systems, websites, online banking services, the use of intranets, tourism and other related websites and also the travel social networking sites (Leiva *et al.*, 2012).

In context of internet and particularly social network, Casalo *et al.* (2008) explained perceived usefulness as a degree to which consumer believes that the information obtained from the travel social network will provide wide range of benefits otherwise it would be difficult to obtained without participating in it. While, Leiva *et al.*,(2012), stressed that perceived ease of use is related to the website structure where the users find that the websites are easy to use, the content and the functions are easily understand and at the same time, they can quickly get the information that they wants.

Additionally, Davis (1989) has introduced a direct relationship between perceived usefulness and intention to use which implies that the individual will intend to use

the technological innovation if they realized that using the new technology will improve their job performance in an organizational context. In the classic formulation of TAM, attitude is constructed as a mediator between perceived usefulness, perceived ease of use and intended use. Furthermore, some researchers have argued that it is necessarily important to include attitude in the TAM in order to determine the acceptance of the technological innovation.

For this study, perceived usefulness can be defined as a degree to which users believe that using online travel agency websites will improve their performance when searching for information about hotel and other related information. Whereas, the perceived ease of use is defined as the degree to which users find it easy to search information at online travel agency websites such as Expedia.com, Agoda.com, Booking.com and others. Therefore in this study, attitude can defined as tourist preferences to use the online travel agency websites in order to find relevant as well as useful information about hotel and also other related information.

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Chapter 3

Methodology

3.1 Introduction

This chapter provides information regarding the research design, population and sampling design, data collection procedures, measurement, instrumentation and data analysis techniques which are used in this study. The objective of this chapter is to provide a clear view of the research process and also revealed how the entire research has carried out without any bias.

3.2 Research design

3.2.1 Quantitative Approaches

In this study, the researcher has chosen quantitative approaches as quantifiable data is appropriate and easier to investigate. Moreover, the researcher used self administered questionnaire in order to collect the data. Besides, the researcher has distributed the questionnaire by hand to each of the respondent and collects it once they had answered the questionnaire.

The researcher intended to use questionnaire survey because it is one of the popular methods of collecting data in quantitative approaches as it can cover huge numbers of people. Furthermore, this approach provides a quantitative or numeric description of trends, attitudes, or opinion of a population by studying a sample of that population (Creswell, 2014).

3.2.2 Exploratory Research

An exploratory research is undertaken when not much known about the situation at hand or no information is available on how similar problems or research issues have been solved in the past. Besides, exploratory research is also necessary when the facts are known but more information is needed in order to developing viable theoretical framework (Sekaran, 2013). In this study, the researcher intends to explore which factor most influences the travellers when booked hotel through online travel agency.

3.3 Constructs Measurement

3.3.1 Scale Measurement.

In this study, the data were obtained from the questionnaire. The questionnaire was consisted of close ended questions. Basically, there were four types of scales which were nominal, ordinal, interval and ratio. For this study, the researcher used nominal, ordinal and interval scale as a measurement in the questionnaire. The interval scale is best to use in order to study regarding opinion and characteristics of respondent.

While for the rating scale, the researcher used Likert scale. This scale is most frequently used in research as the Likert scales allow the researchers to collect data based on interval scale and capture the extent to which respondents agree or disagree with the statements. Basically, the Likert scales comprises of an odd number of items such as 3-point Likert scale, 5-point Likert scale or 7-point Likert scale (Bhatti, Hee & Sundram, 2012)

For this study, the researcher used 5-point Likert scale as this scale is suitable to examine which factor most influence the travellers when book hotel through online travel agency. This 5-point Likert scale was used for both independent and dependent variables which are shown in the table below.

Not important	Less important	Not sure	Important	Very
at all	(2)	(3)	(4)	important
(1)				(5)

 Table 3.1
 5-point Likert scale for independent variables

 Table 3.2
 5-point Likert scale for dependent variables

Strongly	Disagree	Not sure	Agree	Strongly Agree
Disagree (1)	(2)	(3)	(4)	(5)

As for the demographic profile section, the researchers used dichotomous and category scale. Category scale is used for question 10, 11 and 12 as the respondents need to choose one option from the given multiple options. While, the dichotomous scale were used for the remaining demographic questions as this scale enables the researcher to collect data based on nominal measurement scale.

3.4 Measurement Scale for Each Variable

The questionnaire comprises of 63 items in which most of the items were taken from past literature and hotel's website. Meanwhile, only four items which was for repurchase intentions were adapted from previous questionnaire study. The items were listed out into table forms which are demonstrated below.

3.4.1 Room

The table below shows the items for Room and these items were taken from the past literature such as Wong and Law (2005) and Lizardos (2013). Moreover, some of the

items were taken from hotel websites such as Lone Pine Hotel, Hard Rock Hotel and G Hotel Gurney.

Table 3.3 Room

Item	Original Version	Taken From:
RO1	Room availability	Wong and
		Law,(2005)
RO2	Room categories (Single, Standard, Deluxe,	Lone Pine Hotel
	Family and etc	website
RO3	Type of room (Seaview, beach side and etc)	Lone Pine Hotel
	TTA D	website
RO4	Room picture	Lizardos, (2013)
RO5	Size of room	Hard Rock Hotel website
RO6	Room features (Hair dryer, boiler, mineral water	Hard Rock Hotel
	and etc)	website
RO7	Special request room (No smoking area)	G Hotel Gurney
		websites
RO8	Room complementary	Hard Rock Hotel
		website

3.4.2 Food

The table below shows the items for Food and these items were taken from past literature such as Patrick (2014) and Razali (2013) while one item was taken from Lone Pine hotel website.

Table 3.4 Food

Item	Original Version	Taken From:
FO1	Free breakfast	Lone Pine Hotel
		websites
FO2	Types of food	Patrick (2014)
FO3	Halal food	Razali (2013)
FO4	Food based on request	Patrick (2014)

3.4.3 Customer Review

The table below shows the items for Customer review and the items were taken from past literature such as Zhang, Ye and Law (2011) and Park et al (2007). Meanwhile, one of the items for this variable was taken from "minimum requirements for star ratings of tourist accommodation premises website".

Universiti Utara Malaysia

Table 3.5 Customer Review

Items	Original Version	Taken From:
CR1	Rating (Star rating, points rating)	Zhang, Ye and Law,
		(2011)
CR2	Customer feedback	Park et al (2007)
CR3	Accreditation and rewards	Minimum Requirements
		for Star Ratings of Tourist
		Accommodation Premises.

3.4.4 Price

The table below shows the items for Price. For this variable, two items were taken from past literature such as Law, Chan and Goh (2007). Meanwhile, the remaining items were taken from Hard Rock hotel and Golden Sands Resort websites.

Items	Original Version	Taken From:
PRI1	Price information	Law, Chan and
		Goh (2007)
PRI2	Price discount	Hard Rock Hotel
	UTARA	website
PRI3	Seasonal price	Law, Chan and
AIND		Goh (2007)
PRI4	Early booking discount	Hard Rock Hotel
ALL	BUDI BUDI CONTROL UNIVERSITI Utara Mal	website
PRI5	Group price	Golden Sands
		Resort Website

Table 3.6 Price

3.4.5 Promotion

The table below shows the items for Promotion. One item was taken from past literature such as Noone and Mount (2007). While the remaining five items were taken from hotels websites such as Golden Sands Resort, Lone Pine Hotel and Hard Rock Hotel as well.

Table 3.7 Promotion

Items	Original Version	Taken From:
PRO1	Membership promotion	Noone and Mount
		(2007)
PRO2	Promotion rate for second visit	Golden Sands
		Resort Website
PRO3	Promotion coupon for lunch and dinner	Lone Pine Hotel
		websites
PRO4	Early bird promotion (20% off for those advance	Hard Rock Hotel
	booking before 14 days)	website
PRO5	Minimum 2 nights promotion (15% discount when	Golden Sands
VERG	check in more than 2 nights)	Resort Website
PRO6	Wedding promotion	Lone Pine Hotel
·	Universiti Utara Mal	websites

3.4.6 Location

The table below shows the items for Location. For this variable, the items were taken from past literature such as Arbel and Pizam (1977), Bull (1994), Tsaur and Tzeng (1995), Wind et al (1989), Wall et al (1985) and Lizardos (2013). While, the first item for this variable was taken from Lone Pine Hotel websites.

Table	3.8	Location
-------	-----	----------

Items	Original Version	Taken From:
LO1	Location map	Lone Pine Hotel

		websites
LO2	Near to tourist attractions	Arbel and Pizam
		(1977)
LO3	Near to beach side	Bull (1994)
LO4	Easy access to public transport	Tsaur and Tzeng
		(1995)
LO5	Near to shopping complex and amenities	Wind et al (1989)
LO6	Near to basic infrastructure facilities (Clinic, food	Wall et al (1985)
	outlets, petrol station, hospital)	
LO7	Environment of hotel	Lizardos, (2013)

3.4.7 Other Facilities

The table below shows the items for Other Facilities. Most of the items were taken from hotel website such as The Fern An Ecotel hotel, Lone Pine hotel, Hard Rock hotel, Golden Sands Resort and Shangri-La's Rasa Sayang Resort and Spa. Meanwhile, one item was taken from Tsaur and Tzeng (1995).

Table 3.9 Other Facilities

Items	Original Version	Taken From:
OF1	Facilities for disables (OKU)	Shangri-La's
		Rasa Sayang
		Resort and Spa
OF2	Car park	Tsaur and Tzeng
		(1995)

OF3	Swimming pool	The Fern An
		Ecotel Hotel
OF4	Spa	Lone Pine Hotel
		websites
OF5	Gym, sport facilities & games room	Lone Pine Hotel
		websites
OF6	Shop	Lone Pine Hotel
		websites
OF7	Bar, pub & karaoke room	Hard Rock Hotel
		website
OF8	Wi-Fi	Hard Rock Hotel
E C		website
OF9	Free transportation service (free fetching and send	The Fern An
2	off to airport)	Ecotel Hotel
OF10	Doctor-on-call	The Fern An
		Ecotel Hotel
OF11	Safety lock to keep valuable things	Golden Sands
		Resort website
OF12	Business center for business travellers (fax,	Lone Pine Hotel
	scanner, printer, computer)	websites

3.4.8 Online Booking Intention

The table below shows the items for Online Booking Intention. For this variable, the items were taken from past literature such as Dutta and Manakotta (2009), Wong and

Law (2005), Cheung and Law (2009), Law et al (2004), Bender, John and Gerdes (2010), Law, Cathy and Hsu (2005) and Wind et al (1989).

Items	Original Version	Taken From:
OBI1	Content easily understand and sufficient	Dutta and
	information	Manakotta (2009)
OBI2	Easily accessible	Wong and Law
		(2005)
OBI3	Open 24hours/7days to receive reservations	Wong and Law
	UT A D	(2005)
OBI4	Price comparison	Cheung and Law
VER		(2009)
OBI5	Room rate and availability	Wong and Law
	BUDY BART Universiti Utara Mal	(2005)
OBI6	Time savings	Law et al (2004)
OBI7	Online reservations system is very quick	Law, Cathy and
		Hsu (2005)
OBI8	Easy for travellers to change or cancel online	Law, Cathy and
	reservations	Hsu (2005)
OBI9	Ability to view customer review	Bender, John and
		Gerdes (2010)
OBI10	Many choices of hotel in one area	Wind et al (1989)
OBI11	Minimize customer workload during reservations	Wong and Law
		(2005)

 Table 3.10 Online Booking Intention

OBI12	Easy access to special offers and promotions	Dutta and
		Manakotta (2009)
OBI13	Secure payment method	Law, Cathy and
		Hsu (2005)
OBI14	User friendly system	Law, Cathy and
		Hsu (2005)

3.4.9 Repurchase Intention

The table below shows the items for Repurchase Intention and the items were adapted from previous study which was done by Yen, Hsu and Chang (2012) and Chen, Shan and Hsieh (2010).

 Table 3.11 Repurchase Intention

Items	Original Version	Adapted Version	Adapted
13	Universi	iti Utara Malavs	la
	BUDI BA		Enom
			r rom:
RI1	I intend to continue	I will booked through this	Yen Hsu and
IXI1	i intend to continue	i win booked through this	1 cm, 1150 and
	purchasing in this online	online travel agency	Chang (2012)
			U ()
	,• •,	•	
	auction site	again	
RI2	I plan to continue purchasing	I will continuously use	Ven Hsu and
1112	I plan to continue parenasing	i will continuously use	1 cm, 1150 und
	in auctions in the future	this online travel agency	Chang (2012)
			-
		in future	
		in iuture.	
RI3	I will continue bidding in this	I will use this online	Yen, Hsu and
100			i en, i isa ana
	online auction site	travel agency on a regular	Chang (2012)
		_	
		basis	
		Uasis.	

RI4	I will recommend this	I will strongly	Chen, Shan
	supermarket to my friends	recommend to others to	and Hsieh
		use this online travel	(2010)
		agency	

3.5 Research Instrument

In order to achieve the objectives and hypothesis of the study, the primary data has been collected through field survey. Therefore, self administered questionnaire were developed and the items were taken from previous literature, hotel website and also adapted from previous studies. In this study, the questionnaires were given to those respondents who have experienced using online travel agency services.

The researcher used self administered questionnaire as a research instrument because this study is applying quantitative approach. Besides that, this method enables the researcher to get the data fast and it is more efficient to collect information from the respondents regarding their perceptions about the online travel agency services. Moreover, pilot test has been carried out in order to ensure the measurement scale and components in the questionnaire are properly designed and understood by the respondents.

3.5.1 Questionnaire Design

The questionnaire was revised and amended from previous literature and experts opinions before pre-testing. The questionnaire was prepared in English language and consists of 63 items and the researcher used close ended questions. There are three sections in this questionnaire.

The first part is Section A which consists of respondent's demographic profile such as do they have experience in using online travel agency, destination of travel, gender, age, education levels, citizenships, race, income, purpose of trip, hotel category to stay, frequency of staying at hotel in a year, average length of stay at hotel, preferred days of advance hotel reservations and lastly was which online travel agency that the respondents used.

While, in Section B, the items were based on important features that the travellers need when making a hotel reservation through online travel agency. This section consists of seven elements namely room, food, customer review, price, promotion, location, and other facilities. Meanwhile, Section C consists of two elements which were online booking intention and repurchase intention.

3.5.2 Pilot Test

Before the questionnaires were distributed to the actual respondents, a pilot test was conducted in order to verify the validity and reliability of the questionnaire. For the pilot test, the researcher has distributed 50 questionnaires to the lecturers, staffs, and postgraduate as well as undergraduate students in UUM. This pilot test was conducted in order to examine the respondents understanding towards the questions and also to test reliability of the items in the questionnaires.

3.5.3 Reliability Test

Cronbach's alpha was used in order to identify the reliability of those items used in the questionnaire. By using SPSS statistical software, the reliability values for 50 respondents were demonstrated below.

Variables	Items	Cronbach's
		Alpha
Room	RO1. Room availability	0.645
(RO)	RO2. Room categories (Single, Deluxe, Family	
	and etc)	
	RO3. Type of room (Sea view, beach side and	
	etc)	
	RO4. Room picture	
	RO5. Size of room	
- TT - 1	RO6. Room features (Hair dryer, boiler, mineral	
ST UTA	water and etc)	
IVER	RO7. Special request room (No smoking area)	
	RO8. Room complementary	
Food	FO1. Free breakfast siti Utara Malay	Sia 0.616
(FO)	FO2. Types of food	
	FO3. Halal food	
	FO4. Food based on request	
Customer	CR1. Rating (Star rating, points rating)	0.727
Review	CR2. Customer feedback	
(CR)	CR3. Accreditation and rewards	
Price	PRI1. Price information	0.641
(PRI)	PRI2. Price discount	
	PRI3. Seasonal price	
	PRI3. Early booking discount	

Table 3.12 Reliability Test (Pilot Test, N=50)

	PRI5. Group price	
Promotion	PRO1. Membership promotion	0.874
(PRO)	PRO2. Promotion rate for second visit	
	PRO3. Promotion coupon for lunch and dinner	
	PRO4. Early bird promotion (20% off for those	
	advance booking before 14 days)	
	PRO5. Minimum 2 nights promotion (15%	
	discount when check in more than 2 nights)	
	PRO6. Wedding promotion	
Location	LO1. Location map	0.711
(LO)	LO2. Near to tourist attractions	
AL AL	LO3. Near to beach side	
IVER	LO4. Easy access to public transport	
	LO5. Near to shopping complex and amenities	
ALANU BUDA	LO6. Near to basic infrastructure facilities	sia
	(Clinic, food outlets, petrol station, hospital)	
	LO7. Environment of hotel	
Other	OF1. Facilities for disables (OKU)	0.813
Facilities	OF2. Car park	
(OF)	OF3. Swimming pool	
	OF4. Spa	
	OF5. Gym, sport facilities & games room	
	OF6. Shop	
	OF7. Bar, pub & karaoke room	
	OF8. Wi-Fi	

	OF9. Free transportation service (free fetching
	and send off to airport)
	OF10. Doctor-on-call
	OF11. Safety lock to keep valuable things
	OF12. Business center for business travellers
	(fax, scanner, printer, computer)
Online	OBI1. Content easily understand and sufficient 0.870
Booking	information
Intention	OBI2. Easily accessible
(OBI)	OBI3. Open 24hours/7 days to receive
17.4	reservations
ST OTA	OBI4. Price comparison
IVER	OBI5. Room rate and availability
	OBI6. Time savings
ILSTU BUDA	OBI7. Online reservations system is very quick
	OBI8. Easy for travellers to change or cancel
	online reservations
	OBI9. Ability to view customer review
	OBI10. Many choices of hotel in one area
	OBI11. Minimize customer workload during
	reservations
	OBI12. Easy access to special offers and
	promotions
	OBI13. Secure payment method
	OBI14. User friendly system

Repurchase	RI1. I will booked through this online travel	0.804
Intention	agency again	
(RI)	RI2. I will continuously use this online travel	
	agency in future	
	RI3. I will use this online travel agency on a	
	regular basis	
	RI4. I will strongly recommend to others to use	
	this online travel agency.	

The table 3.12 demonstrates the results of reliability level of each variable. According to Sekaran (2013), the reliability level less than 0.60 is considered poor, while those in the level of 0.70 is acceptable and those over 0.80 is good. In this study, the Cronbach's alpha for four variables namely promotion, other facilities, online booking intention and repurchase intention were above 0.80 which are considered good. While, another two variables which were customer review and location were above 0.70 and it were acceptable. Meanwhile, the remaining variables which were room, food and price were above 0.60.

3.6 Sampling Design

3.6.1 Target Population

Population refers to the entire group of people, events or things of interest that the researcher wishes to investigate (Sekaran and Bougie, 2013). The target population for this study are those travellers who have experienced in booking hotel through online travel agency. The researcher choose those travellers who has experienced in

using this services as the respondents because they have some knowledge and own perceptions regarding the services provided based on their previous experience.

3.6.2 Sampling Techniques

This study based on non-probability sampling methods which applied convenience sampling. Non-probability sampling designs refer to the elements in the population that do not have any probabilities attached to their being chosen as sample subjects (Sekaran and Bougie, 2013). While, convenience sampling refers to the collection of information from members of the population who are conveniently available provide it (Sekaran and Bougie, 2013).

This sampling method is suitable for this study as the researcher will request to distribute the questionnaire to those respondents who are available and have experienced before in using online travel agency services. Convenience sampling method was applied in this study because it is the best way of getting some basic information quickly and efficiently.

3.6.3 Sampling Size

According to Creswell (2005), a bigger sample size is more accurate compare to smaller sampling size as it may also decrease the sampling error. For this study, about 450 questionnaires were given at the location of the survey. However, only 410 questionnaires were collected from the respondents. From the collected 410 questionnaires, only 398 questionnaires can be used in this study because the remaining 12 questionnaires were discarded as the respondents does not answering the questionnaire fully and properly.

The researcher distributed 450 questionnaires because in this study the researchers used exploratory factor analysis in order to explore which factors most influence the travellers when reserved a hotel through online travel agency. In order to run exploratory factor analysis, larger sample size is required. The table below demonstrated the appropriate sample size for exploratory factor analysis according to Tabachnick and Fidell (2012).

Table 3.13 Sample size for Exploratory Factor Analysis



3.7 Data Collection

The elementary sources for conducting this research were based on primary and secondary data. The research used both primary and secondary data as the sources in order to have sufficient information to be implemented in this study.

3.7.1 Primary Data

There are several methods in order to gather the primary data. One of the methods is questionnaire survey where this method is widely used by most of the researchers. In this study, the researcher used self administered questionnaire survey as method to gather the primary data from the respondents. In this study, the questionnaires were distributed to 450 respondents at Penang International Airport. The purpose of select this place because the researcher can easily obtained information from the travellers who have experienced in using online travel agency services. Apart from that, the researcher distributed the questionnaires to the respondents by face to face and the respondents also responses spontaneously. Besides, this questionnaire survey was conducted from 14th February 2015 to 6th March 2015. The table below demonstrates the numbers of days by the number of respondents that attained during the data collection.

Date	Number of	Place
STI UTARA AL	Respondent	
14 th February 2015	30	Penang International Airport
15 th February 2015	26	Penang International Airport
16 th February 2015	Uni ¹⁹ ersit	Penang International Airport
17 th February 2015	32	Penang International Airport
18 th February 2015	37	Penang International Airport
22 nd February 2015	28	Penang International Airport
23 rd February 2015	18	Penang International Airport
24 th February 2015	31	Penang International Airport
25 th February 2015	18	Penang International Airport
26 th February 2015	22	Penang International Airport
27 th February 2015	15	Penang International Airport
28 th February 2015	26	Penang International Airport
1 st March 2015	20	Penang International Airport

Table 3.14 Data Collection

2 nd March 2015	11	Penang International Airport
3 rd March 2015	24	Penang International Airport
4 th March 2015	17	Penang International Airport
5 th March 2015	27	Penang International Airport
6 th March 2015	9	Penang International Airport
Total (N)	410 respondents	

The data collection process begins by asking whether the respondents approached has experienced in using online travel agency services and then explaining the purpose of the study. Moreover, the researcher only distributed the questionnaires to those travellers who have experienced in using the online travel agency services only and collected it once they answered the questionnaire. Each of the respondents spends about ten minutes to complete the questionnaire. Additionally, total 410 questionnaires were collected and 12 were incomplete. Therefore, the 12 incomplete questionnaires were discarded and were not used in data analysis. Thus, the remaining 398 questionnaires were usable in data analysis.

3.7.2 Secondary Data

The data used in this study were collected from online information database such as journal from Emerald-insight, Science Direct, JSTOR, EBSChost and SAGE journals. Moreover, the researcher used internet search engine such as Google Scholar, Yahoo, Research Gate, and hotels websites in order to obtain more related material for this study.

3.8 Data Analysis Techniques

Statistical methods were used to analyse raw data which were obtained from respondents. In this study, IBM Statistical Package for the Social Science 20 (IBM SPSS 20) was chosen to analyse the raw data. First, the data screening was conducted in order to identify any irregularities. Then the data was analysed for mean standard deviation, frequency, maximum and minimum. The mean and standard deviation were tested in order to measure the central tendency and dispersion as this test will reveal how the respondents react to the items in questionnaire (Sekaran and Bougie, 2013).

Then, the researcher run exploratory factor analysis in order to identify which factor had influenced the travellers most when they reserved the hotel through online travel agency. Previously, the researcher proposed nine variables but after the exploratory factor analysis, the researcher obtained 13 new factors. It is because some of the variables were split into two factors.

After the exploratory factor analysis, the researcher run descriptive analysis again for 13 new variables, followed by validity test, reliability test and normality test. Content validity and face validity were applied in order to test the validity of each item in the questionnaire. Apart from that, the researcher use Cronbach's alpha in order to test the reliability. Cronbach's alpha was used to measure the internal consistency (Sekaran and Bougie, 2013). Meanwhile, for normality test, the researcher used graph and numbers to spot normality. For the graph, the researcher used P-P plot graph while for the numbers, the researcher used skewness and kurtosis.

Additionally, the hypotheses were tested using Pearson Correlation and Multiple Regressions. Pearson Correlation was used in order to identify the direction,
significance and strength of relationships among the variables. Furthermore, the study extends the analysis through Multiple Regression by considering repurchase intention as a dependent variable. This analysis is used to explore the relationships between one continuous dependent variable and number of independent variables or predictors (Pallant, 2013).

3.9 Conclusion

Basically, this chapter summarized the details on the research methodology that were used in this study. Besides, the researcher also highlighted that IBM SPSS 20 software was used for data analysis. In next chapter, the finding from data analysis will be discussed.



Chapter 4

Data Analysis

4.1 Introduction

In this chapter, the analysis of the collected questionnaires is presented. The objective of this chapter is to analyse the data and presents the results on relationship between independent variables and dependent variables. The data analysis comprise of descriptive statistics, normality, reliability, exploratory factor analysis, correlation and also multiple regression. Those analyses were used in order to attain the objectives of this study. Collected data were analyzed through SPSS version 20 and the findings results were reported below.

4.2 Descriptive Analysis

The researcher used descriptive analysis in order to analyze the demographic profile of targeted respondents. For this analysis, the demographic profile question consist of 14 questions which include the gender, age, education, citizenship, race, income, did the respondent use online travel agency to book hotel, purpose of trip, hotel category, frequency of staying at hotel in a year, average length of stay at hotels, preferred days of advance hotel reservations, which online travel agency is used by the respondent.

 Table 4.1 Respondents Demographic Profile

Characteristics of Respondents	Frequency	Percentage
		(%)
Respondents	398	100
Have you ever used travel website search	398	100

engine for booking hotel		
Destination of travel		
Domestic	163	41.0
International	158	39.7
Both	77	19.3
Gender		
Male	196	49.2
Female	202	50.8
Age		
Below 20	12	3.0
21 - 30	220	55.3
31-40	109	27.4
41 - 50	49	12.3
Above 50	8	2.0
Education levels University Uta	ra Malay	/sia
School leaver	29	7.3
Diploma	80	20.1
Bachelor Degree	203	51.0
Master Degree	73	18.3
Other	13	3.3
Citizenships		
Malaysian	333	83.7
Foreigners	65	16.3
If Malaysian, please state your race below.		
Malay	117	29.4

Chinese	107	26.9
Indian	81	20.4
Christian	28	7.0
Income		
Below RM 3000	116	29.1
RM 3001 – RM 5000	162	40.7
RM 5001 – RM 10 000	90	22.6
RM 10 000 above	30	7.5
Main purpose of trip		
Business / meeting	50	12.6
Holiday	293	73.6
Visiting friends / relatives	52	13.1
Others	3	0.8
Hotel Category to stay		
Budget or economy hotel Driversiti Uta	ra 136 a	/\$134.2
Medium level hotel (3-star)	178	44.7
Upscale hotel (4-star)	67	16.8
Luxury hotel (5-star)	17	4.3
Frequency to stay at hotel in a year		
1 – 3 times	254	63.8
4 – 6 times	106	26.6
7 times or more	38	9.5
Average length of stay at hotel		
1 day	9	2.3
2 – 4 days	278	69.8

4 – 6 days	73	18.3
More than 6 days	38	9.5
Preferred days of advance hotel reservation		
One week or less	110	27.6
Two weeks	155	38.9
Three to four weeks	108	27.1
Five weeks or more	25	6.3
Which one of the following online travel agent		
that you used?		
Trivago.com	63	15.8
Agoda.com	146	36.7
Kayak.com	9	2.3
Expedia.com	41	10.3
TripAdvisor	58	14.6
Booking.com Universiti Uta	ra Malay	/Si20.4
N = 398	I	1

In this study, the questionnaires were given only to the respondents who have experience in using online travel agency service to book the hotel room. Around 41.0 % of the respondents travelled domestically, while 39.7% travelled internationally and the remaining 19.3% travelled both international and also domestic.

Out of 398 respondents, 202 were female and the remaining 196 were male. Almost 55.3% of respondents were fall into 21 - 30 years age group, followed by 27.4% were 31 - 40 years, 12.3% were 41 - 50 years, 3.0% were below 20 years and the remaining 2.0% were above 50 years.

Apart from that, 51.0% of respondent obtained bachelor degree qualifications, while 20.1% were diploma holders, 18.3% have master degree qualifications, 7.3% were school leavers and 3.3% o respondents have other qualifications.

For this study, the majority respondents were Malaysians which are 83.7% and the remaining 16.3% were foreigners. There were four major races has participate in this study. Malay recorded the highest percentage with 29.4%, followed by Chinese 26.9%, Indian were consist of 20.4% and about 7.0% were Christian.

On the other hand, about 40.7% of respondents earning income were in range between RM 3001 – RM 10 000, followed by 29.1% of respondents income were below RM 3000, 22.6% of respondents earning income were in ranged RM 5001 – RM 10 000 and the remaining 7.5% were earned RM 10 001 and above.

Every traveller has different purpose of trip. In this survey, 73.6% of respondents choose holiday as their purpose of trip, 13.1% respondents choose visiting friends and relatives, followed by 12.6% were choose business or meeting as their purpose of trip and 0.8% had choose others as their purpose of trip.

Besides, almost 44.7% respondents stayed at medium level hotel (3-star), 34.2% respondents stayed at budget or economy hotel, followed by 16.8% respondents stayed at upscale hotel (4-star) and 4.3% were stayed at luxury hotel (5-star). Furthermore, 63.8% of respondents stayed in hotel at least 1-3 times in a year, followed by 26.6% stayed 4-6 times in a year at hotel and 9.5% stayed 7 times or more in a year.

Majority of the respondents stayed at least 2-4 days at hotel as it recorded the highest percentage with 69.8%. About 18.3% of respondents stayed 4-6 days, followed by

9.5% respondents stayed more than 6 days and only 2.3% of respondents stayed 1 day at hotel during their trip.

Around 38.9% of respondents preferred to reserve hotel in two weeks advanced, while 27.6% reserve the hotel in one week or less, followed by 27.1% respondents were reserve three or four weeks in advance and only 6.3% of the respondents reserve the hotel five weeks or more in advance.

Even though, there are many online travel agencies, the researcher choose only few online travel agency for this study which is Agoda.com, Trivago.com, Kayak.com, Expedia.com, TripAdvisor and Booking.com. Out of six online travel agency, 146 respondents choose Agoda.com, followed by 81 respondents choose Booking.com, 63 respondents choose Trivago.com, 58 respondents choose TripAdvisor, 49 respondents choose Expedia.com and only 9 respondents choose Kayak.com

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Items	Total	Mean	Std.
	(N)		Deviation
D1. Have you ever used travel website search	398	1.0000	0.00000
engine for booking hotel			
D2. Destination of travel	398	1.7839	0.74681
D3. Gender	398	1.5075	0.50057
D4. Age	398	2.5503	0.82238
D5. Education levels	398	2.9020	0.89383
D6. Citizenships	398	1.1633	0.37012
D7. If Malaysian, please state your race below	398	2.0601	0.96443
D8. Income	398	2.0854	0.90213

 Table 4.2 Descriptive Statistics for Demographic Profile

D9. Main purpose of trip	398	2.0201	0.53549
D10. Hotel category for stay	398	1.9121	0.82150
D11. Frequency to stay at hotel in a year	398	1.4573	0.66350
D12. Average length of stay at hotel	398	2.3518	0.68218
D13. Preferred days of advance hotel	398	2.1206	0.88681
reservation			
D14. Which one of the following online travel	398	3.3216	1.85007
agent that you used?			

The table above shows the summarized output of mean and standard deviation for each item in demographic profile. There are 14 items in demographic profile section and the respondents have to answer all the questions. For the first items, the output shows the mean is 1.0000 and the standard deviation is 0.00000 because this survey covers the consumers who have experienced using online travel agency to book for hotels.

The highest mean and standard deviation for this section is 3.3216 and 1.85007 for online travel agency, which is item number 14. For this item, the respondents were asked to choose which online travel agency they used the most when they booked the hotel. There are six online travel agency were listed in the questionnaire which are Trivago.com, Agoda.com, Kayak.com, Expedia.com, TripAdvisor and Booking.com.

 Table 4.3 Descriptive Statistics for Independent and Dependent Variables.

Variables	Total	Minimum	Maximum	Mean	Std.
	(N)				Deviation
Room	398	1.00	5.00	3.9253	0.63129

Food	398	1.00	5.00	3.5302	1.10159
Customer	398	1.00	5.00	3.5017	0.83472
Review					
Price	398	2.80	5.00	4.3497	0.52147
Promotion	398	1.17	5.00	3.8995	0.61646
Location	398	1.57	5.00	4.2003	0.64135
Other	398	2.00	5.00	3.5593	0.59319
Facilities					
Online	398	1.86	5.00	4.3812	0.45765
Booking					
Intention					
Repurchase	398	1.75	5.00	4.1137	0.64036
Intention	R			_	

Table 4.3 shows the descriptive statistics for independent and dependent variables for this research. There are nine variables in this study where the seven were independent variable and the remaining two is dependent variable. Based on the table above, the highest mean value is 4.3812 for online booking intention, followed by price which has 4.3497, repurchase intention is 4.1137 and location is 4.2003. While the mean value for remaining variables were in a range between 3.5017 to 3.9253. Apart from that, the second independent variable which is food has recorded highest standard deviation with 1.10159 and the remaining variables fall in range between 0.45765 to 0.83472.

Table 4.4 Descriptive Statistics for Item in Independent and DependentVariables.

Variables	Items	Mean	SD	Ν
Room	RO1. Room availability	4.6683	0.65095	398
(RO)	RO2. Room categories (Single,	4.3794	0.87753	398
	Deluxe, Family and etc)			
	RO3. Type of room (Seaview, beach	3.5628	1.33159	398
	side and etc)			
	RO4. Room picture	3.8015	1.23684	398
	RO5. Size of room	3.4322	1.18945	398
AL U	RO6. Room features (Hair dryer,	4.1533	0.83024	398
E C	boiler, mineral water and etc)			
	RO7. Special request room (No	3.4874	1.36106	398
	smoking area)	e Mel		
SATU BI	RO8. Room complementary	3.9171	0.99907	398
Food	FO1. Free breakfast	4.2362	1.09935	398
(FO)	FO2. Types of food	3.6055	1.3755	398
	FO3. Halal food	3.0352	1.66116	398
	FO4. Food based on request	3.2437	1.45578	398
Customer	CR1. Rating (Star rating, points	3.5477	1.00451	398
Review	rating)			
(CR)	CR2. Customer feedback	3.6709	0.99607	398
	CR3. Accreditation and rewards	3.2864	1.00546	398
Price	PRI1. Price information	4.7638	0.50138	398

(PRI)	PRI2. Price discount	4.6533	0.57695	398
	PRI3. Seasonal price	4.4497	0.83152	398
	PRI4. Early booking discount	4.6658	0.61990	398
	PRI5. Group price	3.2161	1.50014	398
Promotion	PRO1. Membership promotion	4.0025	0.98477	398
(PRO)	PRO2. Promotion rate for second	4.2010	0.90884	398
	visit			
	PRO3. Promotion coupon for lunch	4.2085	0.91955	398
	and dinner			
	PRO4. Early bird promotion (20%	4.2965	0.82011	398
	off for those advance booking before			
(ST)	14 days)			
INEX	PRO5. Minimum 2 nights promotion	4.1809	0.89636	398
NA.	(15% discount when check in more			
ILNU B	than 2 nights) niversiti Utar	a Mal	aysia	
	PRO6. Wedding promotion	2.5075	1.32547	398
Location	LO1. Location map	4.5377	0.80448	398
(LO)	LO2. Near to tourist attractions	4.5201	0.82977	398
	LO3. Near to beach side	3.9497	1.19507	398
	LO4. Easy access to public transport	4.3417	1.03043	398
	LO5. Near to shopping complex and	4.2035	1.00442	398
	amenities			
	LO6. Near to basic infrastructure	3.9749	1.03070	398
	facilities (Clinic, food outlets, petrol			
	station, hospital)			

	LO7. Environment of hotel	3.8744	1.12418	398
Other	OF1. Facilities for disables (OKU)	2.9573	1.33757	398
Facilities	OF2. Car park	3.4246	1.30610	398
(OF)	OF3. Swimming pool	3.1231	1.27064	398
	OF4. Spa	3.0050	1.27758	398
	OF5. Gym, sport facilities & games	3.1709	1.29364	398
	room			
	OF6. Shop	4.1206	1.01650	398
	OF7. Bar, pub & karaoke room	2.5980	1.51871	398
	OF8. Wi-Fi	4.8643	0.41591	398
11	OF9. Free transportation service	4.3090	1.04675	398
ST	(free fetching and send off to airport)			
	OF10. Doctor-on-call	3.4975	1.23090	398
J. I.S	OF11. Safety lock to keep valuable	4.5302	0.77287	398
IINIU B	things Universiti Utar	a Mal	aysia	
	OF12. Business center for business	3.1106	1.56242	398
	travellers (fax, scanner, printer,			
	computer)			
Online	OBI1. Content easily understand and	4.4824	0.70510	398
Booking	sufficient information			
Intention	OBI2. Easily accessible	4.5025	0.61365	398
(OBI)	OBI3. Open 24hours/7days to	4.6407	0.56252	398
	receive reservations			
	OBI4. Price comparison	4.5302	0.62108	398
	OBI5. Room rate and availability	4.5427	0.65970	398

	stated clearly			
	OBI6. Time savings	4.4397	0.71341	398
	OBI7. Online reservations system is	0.3543	0.72911	398
	very quick			
	OBI8. Easy for travellers to change	3.9497	0.95884	398
	or cancel online reservations			
	OBI9. Ability to view customer	4.2186	0.80299	398
	review			
	OBI10. Many choices of hotel in one	4.4246	0.70127	398
	area			
T	OBI11. Minimize customer	3.9648	0.90271	398
SI	workload during reservations			
IVER	OBI12. Easy access to special offers	4.3392	0.73284	398
J.	and promotions			
ILSIU B	OBI13. Secure payment method	4.4598	0.72532	398
	OBI14. User friendly system	4.4874	0.68139	398
Repurchase	RI1. I will booked through this	4.2387	0.68139	398
Intention	online travel agency again			
(RI)	RI2. I will continuously use this	4.1683	0.65384	398
	online travel agency in future			
	RI3. I will use this online travel	3.9899	0.79349	398
	agency on a regular basis.			
	RI4. I will strongly recommend to	4.0578	0.82418	398
	others to use this online travel			
	agency			

The table 4.4 shows the mean and standard deviation value of each item in variables. As such, ROOM's mean were ranged from 3.4322 to 4.6683 and its standard deviation were between 0.65095 to 1.36106. Meanwhile, the mean and standard deviation for FOOD were ranged from 3.0352 to 4.2362 and 1.09935 to 1.66116 respectively. For CUSTOMER REVIEW, the highest mean and standard deviation were 3.6709 and 1.00546 and the lowest mean and standard deviation were 3.2864 and 0.99607.

Next is the PRICE's mean were ranged from 3.2161 to 4.7638 and its standard deviation were between 0.50138 to 1.50014. Moreover, for PROMOTION the mean were ranged from 2.5075 to 4.2965 and its standard deviation were between 0.82011 to 1.32547. The highest mean and standard deviation for LOCATION were 4.5377 and 1.19507, while the lowest mean and standard deviation were 3.8744 and 0.80448.

Furthermore, the Wi-Fi has recorded highest mean with 4.8643 and Bar, pub & karaoke room were recorded the lowest mean with 2.5980 for OTHER FACILITIES variables. While, standard deviation ranged between 0.41591 to 1.56242. For the ONLINE BOOKING INTENTION which is the dependent variable, the mean were ranged between 3.9497 to 4.6407 and its standard deviations were ranged from 0.56252 to 0.95884.

The last variables were REPURCHASE INTENTION which is also the dependent variables for this study. The mean were fall in a ranged from 3.9899 to 4.2387, while its standard deviation were fall in a ranged from 0.65384 to 0.82418.

4.3 Exploratory Factor Analysis

According to Yong and Pearce (2013), there are two main factor analysis techniques which are exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). EFA is used when the study wants to discover the number of factors influencing variables as well as analyze which variable 'go together' (DeCoster, 1998). In this study, the researcher has implement EFA and results were demonstrated below.

4.3.1 Correlation Matrix

Yong and Pearce (2013), mentioned that correlation matrix is a method to identify whether there is a patterned relationship among the variables. While Field (2013) stressed that analyzing the correlation matrix is a useful method as it takes the standardized form of the matrix. So, if the variables are measured using different scales, it will not affect the analysis. In this research all the variables are measured using the same scale which is 5-point Likert scale.

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Moreover, the correlation coefficient value should be 0.3 and above, any value lower than 0.3 indicate as weak relationship between the variables (Tabachnick &Fidell, 2007). Furthermore, if the value 0.3 and above not many in the correlation table, then the researchers should consider to use factor analysis. It is because the variables which have large number of low correlation coefficient value demonstrate that there is lack of patterned relationships and it should be removed.

While the variable which has correlation coefficients value above 0.90 is indicate that the data have a problem of multicolonearity and this item also should removed from the analysis (Yong and Pearce, 2013). In this study, the researcher does not found any issue of multicollinearity and there are seem to be patterned relationships among the variables. Based on the output result of this analysis, about 20 items out of 60 items has a low correlation coefficient value which is below 0.3 and the items are listed in the table below. Most of the items are from other facilities and it shows that travellers do not give much importance towards 'other facilities' features when they book the hotel through online travel agency.

Items	Variables	Correlation
		Coefficients
		Value
RO6. Room features (Hair dryer, boiler,	Room	0.211
mineral water and etc)		
RO7. Special request room (No smoking area)	Room	0.239
FO4. Free breakfast	Food	0.217
CR1. Rating (Star rating, points rating)	Customer	0.141
Universiti U	Review	ysia
PRI1.Price information	Price	0.110
PRI5. Group price	Price	0.135
PRO1. Membership promotion	Promotion	0.129
PRO6. Wedding promotion	Promotion	-0.031
LO1. Location map	Location	-0.068
LO4. Easy access to public transport	Location	0.259
OF1. Facilities for disables (OKU)	Other	0.285
	Facilities	
OF6. Shop	Other	0.174
	Facilities	
OF7. Bar, pub & karaoke room	Other	-0.024
	Facilities	

Table 4.5 Correlatio	n coefficient values	less than 0.3
-----------------------------	----------------------	---------------

OF8. Wi-Fi	Other	0.285
	Facilities	
OF9. Free transportation service (free	Other	0.230
fetching and send off to airport)	Facilities	
OF10. Doctor-on-call	Other	0.138
	Facilities	
OF12. Business center for travellers (fax,	Other	0.129
scanner, printer, computer)	Facilities	
OBI10. Many choices of hotel in one area	Online	0.050
	booking	
	Intention	
RI1. I will booked through this online travel	Repurchase	0.198
agency again	Intention	
agono, again		

4.3.2 KMO and Bartlett's Test

Table 4.6 KMO and Bartlett's Test Siti Utara Malaysia

Kaiser-Meyer-Olkin	805	
Adequacy.	.805	
Bartlett's Test of	Approx. Chi-Square	12152.478
	df	1953
sphericity	Sig.	.000

Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) is a method to verify the data set whether it is suitable for factor analysis. For KMO, the value must be 0.6 and above (Pallant, 2013). While according Yong and Pearce (2013), the value above 0.50 still accepted. For the Bartlett's Test of Sphericity, the significance level should be 0.05 or less and this test is used to identify whether the items has patterned relationships. Based on the result from above table, the output demonstrated that this factor analysis is appropriate and do have patterned relationships amongst the variables as the KMO value is 0.805 and the Bartlett's test also significant as the p = .000.

4.3.3 Anti-image Correlation

Anti-image correlation is the KMO values for individual variables which are produced on the diagonal of the anti-image correlation matrix (Field, 2013). The values of anti-image correlation matrix should be 0.5 and above. The higher values are more preferable. Besides, if there are any items with value below 0.5, the researchers should consider on excluding that particular item from the analysis. Removal of item will affect the KMO statistics. Therefore, if the researchers do remove the variables, it is advisable to re-examine the new anti-image correlation matrix.

For this study, all the values for anti-image correlation are above 0.5 which is a good result. So, the researcher does not need to remove any of the items.

Table 4.7 Anti-image Correlation

Anti-image	RO1	0.822				
Correlation	RO2	0.779		Anti-image	PRO4	0.700
	RO3	0.773		Correlation	PRO5	0.724
	RO4	0.720			PRO6	0.773
	RO1	0.792			LO1	0.836
	RO5 RO6	0.792			LO2	0.748
	RO0 DO7	0.785			LO3	0.778
		0.723			LO4	0.780
	RU8	0.762			LO5	0.824
	FOI	0.806			1.06	0.879
	FO2	0.785				0.877
	FO3	0.735			LU/	0.844
	FO4	0.766			OFI	0.799
	CR1	0.738			OF2	0.750
	CR2	0.791			OF3	0.797
	CR3	0.728			OF4	0.794
	PRI1	0.838			OF5	0.722
NU1	PRI2	0.738			OF6	0.724
5	PRI3	0.813			OF7	0.660
	PRI4	0.750			OF8	0.852
	PRI5	0.745			OF9	0.702
	PRO1	0.685			OF10	0.780
-	PRO2	0.813			OF10	0.780
(i)	PRO3	0.838	/e	rsiti Utara	OFII	0.826

20101		
Anti-image	OF12	0.676
Correlation	OBI1	0.894
	OBI2	0.898
	OBI3	0.900
	OBI4	0.883
	OBI5	0.912
	OBI6	0.881
	OBI7	0.869
	OBI8	0.856
	OBI9	0.847
	OBI10	0.815
	OBI11	0.855
	OBI12	0.864
	OBI13	0.839
	OBI14	0.839
	RI1	0.823
	RI2	0.800
	RI3	0.794
	RI4	0.798

4.3.4 Communalities

Communalities table gives information about how much of the variance is in each item. The value of extraction should not be less than 0.3 as this low value could indicate that the item does not fit well with the other items in the factor. In this study all the items were 0.3 and above. Therefore, the researcher does not need to remove the items as all the items fit well with the other items in the factor.

Item	Initial	Extraction	Item	Initial	Extraction
RO1	0.452	0.407	FO2	0.681	0.773
RO2	0.434	0.362	FO3	0.652	0.725
RO3.	0.559	0.598	FO4	0.629	0.621
RO4	0.528	0.545	CR1	0.621	0.673
RO5	0.566	0.579	CR2	0.632	0.699
RO6	0.400	0.473	CR3	0.568	0.644
RO7	0.508	0.533	PRI1	0.607	0.645
RO8	0.514	0.583	PRI2	0.636	0.709
FO1	0.420	0.448	PRI3	0.584	0.635
	0.120	Unive	PRI4	0.628	0.552

Table 4.8 Communalities

Item	Initial	Extraction	Item	Initial	Extraction
PRI5	0.413	0.343	LO5	0.546	0.630
PRO1	0.510	0.518	LO6	0.435	0.395
PRO2	0.647	0.630	LO7	0.537	0.552
PRO3	0.696	0.724	OF1	0.552	0.547
PRO4	0.730	0.762	OF2	0.432	0.474
PRO5	0.641	0.589	OF3	0.623	0.615
PRO6	0.399	0.392	OF4	0.657	0.689
LO1	0.393	0.336	OF5	0.560	0.555
LO2	0.607	0.580	OF6	0.470	0.463
LO3	0.492	0.460	OF7	0.476	0.422
LO4	0.436	0.422	OF8	0.485	0.456

Item	Initial	Extraction	Item	Initial	Extraction
OF9	0.422	0.519	OBI8	0.568	0.537
OF10	0.548	0.537	OBI9	0.557	0.552
OF11	0.526	0.467	OBI10	0.548	0.592
OF12	0.425	0.380	OBI11	0.563	0.664
OBI1	0.451	0.438	OBI12	0.544	0.454
OBI2	0.566	0.566	OBI13	0.562	0.532
OBI3	0.595	0.651	OBI14	0.678	0.750
OBI4	0.578	0.587	RI1	0.742	0.744
OBI5	0.573	0.544	RI2	0.780	0.819
OBI6	0.516	0.507	RI3	0.734	0.737
OBI7	0.555	0.554	RI4	0.709	0.655

4.3.5 Total Variance Explained

Total variance explained is a method to determine of significant factors (Yong and Pearce, 2013). According to Pallant (2013), the factors which have an eigenvalues of 1 and above are accepted. For this study, only extracted and rotated values are meaningful for interpretation and the factors are arranged in the descending order.

The table 4.9 below has listed the eigenvalues which is associated with each factor before and after extraction. Before extraction the SPSS has identified 63 factors within the data set and 17 factors have an eigenvalues above 1. The first factors explain relatively large amount of variance, while the other factor explained only small amounts of variance. After the extraction, 17 factors were left and out of 17 factors only 11 factors has value above 1 which has display in the column labelled Extraction Sums of Squared Loadings.

For the Rotation Sums of Squared Loadings, the rotation has effect of optimizing the extracted factor and 17 factors have been equalized a bit. Before rotation, factor 1 has high percentage of variance which is 15.400% compare to remaining factors. But after rotation, factor 1 has 5.926 % and the remaining factors have equalized.

Fact	Initial Eigenvalues		Ext	Extraction Sums of			Rotation Sums of		
or		1		Squ	uared Loa	dings	Squ	ared Loa	dings
	Total	% of	Cumula	Total	% of	Cumula	Total	% of	Cumul
		Varia	tive %		Varian	tive %		Varia	ative %
		nce			ce			nce	
1	9.703	15.400	15.400	9.281	14.732	14.732	3.734	5.926	5.926
2	4.739	7.523	22.922	4.324	6.683	21.595	3.099	4.920	10.846
3	3.948	6.267	29.189	3.558	5.647	27.241	2.672	4.241	15.087
4	3.560	5.651	34.840	3.176	5.041	32.283	2.595	4.119	19.206
5	2.811	4.462	39.303	2.383	3.783	36.065	2.548	4.044	23.250
6	2.547	4.043	43.346	2.101	3.335	39.400	2.521	4.002	27.251
7	2.105	3.342	46.688	1.701	2.701	42.101	2.501	3.969	31.221
8	1.891	3.001	49.689	1.499	2.379	44.480	2.425	3.849	35.070
9	1.700	2.699	52.388	1.269	2.015	46.494	2.227	3.534	38.604
10	1.528	2.425	54.813	1.109	1.760	48.254	2.137	3.392	41.996
11	1.436	2.280	57.092	1.041	1.653	49.907	1.930	3.064	45.059
12	1.274	2.022	59.114	0.830	1.317	51.224	1.506	2.391	47.451
13	1.241	1.970	61.084	0.773	1.228	52.452	1.367	2.170	49.620
14	1.169	1.855	62.939	0.682	1.083	53.535	1.216	1.931	51.551
15	1.094	1.737	64.676	0.647	1.026	54.561	1.119	51.777	53.328
16	1.035	1.643	66.319	0.583	0.925	55.486	1.076	1.707	55.035
17	1.022	1.622	67.941	0.563	0.893	56.380	0.847	1.344	56.380

4.3.6 Scree Plot



From the graph above, around 17 factors have high eigenvalue which were above 1, while the remaining factors are considered has low eigenvalue. Moreover, FACTOR 1 explained more variance compared to the remaining factors as there is a huge gap between FACTOR 1 to FACTOR 2.

4.3.6 Rotated Factor Matrix

Factor matrix is a table where the factor loading before rotation is displayed while rotated factor matrix is a table where the rotated factor loading is displayed. For rotated factor matrix, it is ideal if three or more items loaded on each factor and the value for loaded factor should be 0.3 and above (Pallant, 2013).

The output shows that most of the items were loaded quite strongly above 0.3 on 13 factors and very few items were loaded on factor 14 until factor 17. Therefore, 13 factor solution is likely more appropriate as the items were loaded strongly above 0.3 in 13 factor and fairly desirable with at least three items per factor.

Factor	Loading Items	Factor	Loading Items	
1	5 items	8	4 items	
2	4 items	9	5 items	
3	4 items	10	3 items	
4	6 items	11	4 items	
5	4 items	12	3 items	
6	4 items	13	3 items	
7	3 items			
	S U	nivers	iti Utara M	lalavs

 Table 4.10 Items Loaded on Each Factor

Previously, the researchers proposed nine variables where seven were driving features which lead to Online Booking Intentions and Repurchase Intention. After exploratory factor analysis, the result shows that there were 13 factors were identified as crucial driving features for online travel agency. Moreover, some of the variables were split into two factors. For example, the Online Booking Intention were loading strongly in Factor 1 and Factor 4, Other Facilities were loading strongly in Factor 12, while Room were loading strongly in Factor 11 and Factor 13. Apart from that, Factor 7 was a combination of three variables which are Promotion, Location and Price. The table 4.11 below demonstrates the new important driving features for online travel agency and Repurchase Intention which

were obtained from exploratory factor analysis. Factor 1 known as Accessibility, Factor 2 were Repurchase Intention, Factor 3 were Promotional Advantage, Factor 4 were Online Booking Features, Factor 5 were Hotel Basic Infrastructure, Factor 6 were Food and Beverage Capabilities, Factor 7 were Special Events Capabilities, Factor 8 were Price Advantage, Factor 9 were Location Advantage, Factor 10 were Customer Review Accountability, Factor 11 were Accommodation capabilities, Factor 12 were Basic Amenities Advantage and Factor 13 were Customer Request Advantage.

Table 4.11 Driving factors for Online Travel Agency and Repurchase Intention

Factor 1: Accessibility	
Item	Value
OBI3. Open 24hours/7 days to receive reservations	0.761
OBI4. Price comparison	0.662
OBI2. Easily accessible Universiti Utara Malaysia	0.633
OBI5. Room rate and availability stated clearly	0.629
OBI6. Time savings	0.486

Factor 2: Repurchase Intention	
Item	Value
RI2. I will continuously use this online travel agency in future	0.863
RI3. I will use this online travel agency on a regular basis	0.820
RI1. I will booked through this online travel agency again	0.790
RI4. I will strongly recommend to others to use this online travel agency	0.706

Factor 3: Promotional Advantage	
Item	Value
PRO4. Early bird promotion (20% off for those advance booking before	0.810
14 days)	
PRO5. Minimum 2 nights promotion (15% discount when check in	0.688
more than two nights)	
PRO3. Promotion coupon for lunch and dinner	0.642
PRO2. Promotion rate for second visit	0.496

Factor 4: Online Booking Features	
Item	Value
OBI7. Online reservations system is very quick	0.622
OBI9. Ability to view customer review	0.567
OBI11. Minimize customer workload during reservations	0.554
OBI8. Easy for travellers to change or cancel online reservations	0.524
OBI1. Content easily understand and sufficient information	0.432
OBI12. Easy access to special offers and promotions	0.376

Factor 5: Hotel Basic Infrastructure	
Item	Value
OF4. Spa	0.741
OF5. Gym, sport facilities & games room	0.709
OF3. Swimming pool	0.686
OF2. Car park	0.376

Factor 6: Food and Beverage Capabilities	
Item	Value
FO2. Types of food	0.769
FO3. Halal food	0.757
FO4. Food based on request	0.721
FO1. Free breakfast	0.492

Item	Value
PRO6. Wedding promotion	0.586
LO7. Environment of hotel	0.501
PRI5. Group price	0.499

Item	Value
PRI2. Price discount	0.760
PRI1. Price information	0.668
PRI3. Seasonal price	0.614
PRI4. Early booking discount	0.580

Factor 9: Location Advantage	
Item	Value
LO5. Near to shopping complex and amenities	0.697

LO2. Near to tourist attractions	0.655
LO3. Near to beach side	0.574
LO4. Easy access to public transport	0.452
LO6. Near to basic infrastructure facilities (Clinic, food outlets, petrol	0.364
station, hospital)	

Factor 10: Customer Review Accountability	
Item	Value
CR3. Accreditation and rewards	0.743
CR1. Rating (Star rating, points rating)	0.737
CR2. Customer feedback	0.700

Factor 11: Accommodation Capabilities	
BUDY BUDY BUDY UNIVERSITI Utara Malaysia	Value
RO3. Type of room (Sea view, beach side and etc)	0.669
RO4. Room picture	0.616
RO5. Size of room	0.592
RO2. Room categories (Single, Deluxe, Family and etc)	0.403

Factor 12: Basic Amenities Advantage			
Item	Value		
OF11. Safety lock to keep valuable things	0.523		
OF6. Shop	0.522		

OF10. Doctor-on-call	0.468

Factor 13: Customer Request Advantage	
Item	Value
RO8. Room complementary	0.618
RO6. Room features (Hair dryer, boiler, mineral water and etc)	0.603
RO7. Special request room (No smoking area)	0.415

4.4 Descriptive Statistics after Exploratory Factor Analysis

51 14					
Variable	Ν	Mean	Std.	Minimum	Maximum
			Deviation		
Accessibility (F1)	398	4.5312	0.48761	1.60	5.00
Repurchase Intention	398	4.1137	0.64036	1.75 ay	STO 5.00
(F2)					
Promotional	398	4.3348	0.60737	1.75	5.00
Advantage (F3)					
Online Booking	398	4.2182	0.56119	1.67	5.00
Features (F4)					
Hotel Basic	398	3.1809	0.96797	1.00	5.00
Infrastructure (F5)					
Food and Beverage	398	3.5302	1.10159	1.00	5.00
Capabilities (F6)					
Special Events	398	3.1993	0.98969	1.00	5.00

Table 4.12 Descriptive Statistics for New Factor

Capabilities (F7)					
Price Advantage	398	4.6332	0.49096	2.50	5.00
(F8)					
Location Advantage	398	4.1980	0.70807	1.00	5.00
(F9)					
Customer Review	398	3.5017	0.83472	1.00	5.00
Accountability (F10)					
Accommodation	398	3.7940	0.84744	1.00	5.00
Capabilities (F11)					
Basic Amenities	398	4.0494	0.75640	1.00	5.00
Advantage (F12)	-				
Customer Request	398	3.8526	0.80687	1.00	5.00
Advantage (F13)					

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The above table shows the descriptive statistics for new factors which were obtained through exploratory factor analysis. There were 13 new factors. The highest mean was 4.6332 for FACTOR 8 (F8) which was Price Advantage and the lowest mean was 3.1809 for FACTOR 5 (F5) which was Hotel Basic Infrastructure. While the, remaining factors were fall in the range from 4.5867 to 3.1993. Besides, FACTOR 6 (F6) which is known as Food and Beverage Advantage has recorded highest standard deviation with 1.10159 and lowest standard deviation is 0.48761 for FACTOR 1 (F1) namely Accessibility.

Variable	Items	Mean	SD	N
Accessibility	OBI3. Open 24hours/7 days to	4.6407	0.56252	398
(F1)	receive reservations			
	OBI4. Price comparison	4.5302	0.62108	398
	OBI2. Easily accessible	4.5025	0.61365	398
	OBI5. Room rate and	4.5427	0.65970	398
	availability stated clearly			
	OBI6. Time savings	4.4397	0.71341	398
Repurchase	RI2. I will continuously use this	4.1683	0.65384	398
Intention	online travel agency in future			
(F2)	RI3. I will use this online travel	3.9899	0.79349	398
	agency on a regular basis.	Mala		
SATU BUDI BIS	RI1. I will booked through this	4.2387	0.68139	398
	online travel agency again			
	RI4. I will strongly recommend	4.0578	0.82418	398
	to others to use this online travel			
	agency.			
Promotional	PRO4. Early bird promotion	4.2965	0.82011	398
Advantage	(20% off for those advance			
(F3)	booking before 14 days			
	PRO5. Minimum 2 nights	4.1809	0.89636	398
	promotion (15% discount when			

 Table 4.13 Descriptive Statistics for Item in Each Factor

	check in more than 2 nights)			
	PRO3. Promotion coupon for	4.2085	0.91955	398
	lunch and dinner			
	PRO2. Promotion rate for	4.2010	0.90884	398
	second visit			
Online Booking	OBI7. Online reservations is	4.3543	0.72911	398
Features	very quick system			
(F4)	OBI9. Ability to view customer	4.2186	0.80299	398
	review			
	OBI11. Minimize customer	3.9648	0.90271	398
TAD	workload during reservations			
	OBI8. Easy for travellers to	3.9497	0.95884	398
	change and cancel online			
	reservations			
TEMU BUDI BAY	OBI1. Content easily understand	4.4824	0.70510	398
	and sufficient information			
	OBI12. Easy access to special	4.3392	0.73284	398
	offers and promotions			
Hotel Basic	OF4. Spa	3.0050	1.27758	398
Infrastructure	OF5. Gym, sport facilities &	3.1709	1.29364	398
(F5)	games room			
	OF3. Swimming pool	3.1231	1.27064	398
	OF2. Car park	3.4246	1.30610	398
Food and	FO2. Types of food	3.6055	1.37545	398
Beverage	FO3. Halal food	3.0352	1.66116	398

Capabilities	FO4. Food based on request	3.2437	1.45578	398
(F6)	FO1. Free breakfast	4.2362	1.09935	398
Special Events	PRO6. Weeding promotion	2.5075	1.32547	398
Capabilities	LO7. Environment of hotel	3.8744	1.12418	398
(F7)	PRI5. Group price	3.2161	1.50014	398
Price Advantage	PRI2. Price discount	4.6533	0.57695	398
(F8)	PRI1. Price information	4.7638	0.50138	398
	PRI3. Seasonal price	4.4497	0.83152	398
	PRI4. Early booking discount	4.6658	0.61990	398
Location	LO5. Near to shopping complex	4.2035	1.00442	398
Advantage	and amenities			
(F9)	LO2. Near to tourist attractions	4.5201	0.82977	398
	LO3. Near to beach side	3.9497	1.19507	398
	LO4. Easy access to public	4.3417	1.03043	398
ILAN BUDI BA	transportniversiti Utara	n Mala	ysia	
	LO6. Near to basic infrastructure	3.9749	1.03070	398
	facilities (Clinic, food outlets,			
	petrol station, hospital)			
Customer	CR3. Accreditation and rewards	3.2864	1.00546	398
Review	CR1. Rating (Star rating, points	3.5477	1.00451	398
Accountability	rating)			
(F10)	CR2. Customer feedback	3.6709	0.99607	398
Accommodation	RO3. Type of room (Sea view,	3.5628	1.33159	398
Capabilities	beach side and etc)			
(F11)	RO4. Room picture	3.8015	1.23684	398

	RO5. Size of room	3.4322	1.18945	398
	RO2. Room categories (Single,	4.3794	0.87753	398
	Deluxe, Family and etc)			
Basic Amenities	OF11. Safety lock to keep	4.5302	0.77287	398
Advantage	valuable things			
(F12)	OF6. Shop	4.1206	1.01650	398
	OF10. Doctor-on-call	3.4975	1.23090	398
Customer	RO8. Room complementary	3.9171	0.99907	398
Request	RO6. Room features (Hair dryer,	4.1533	0.83024	398
Advantage	boiler, mineral water and etc)			
(F13)	RO7. Special request room (No	3.4874	1.36106	398
	smoking room)			

The table 4.13 demonstrates the mean and standard deviation for each item in every **oniversition and standard deviation** for each item in every factor. For Accessibility, there were five items where the mean were ranged from 4.4397 to 4.6407, while the standard deviation were fall in a ranged from 0.56252 to 0.71341. Whereas, Repurchase Intention were consists of four items where the highest mean was 4.2387 and the lowest was 3.9899. The standard deviations were fall between 0.65384 to 0.82418.

Next is Promotional Advantage factor where the mean were in ranged between 4.1809 to 4.2965 while, the standard deviation were in a ranged between 0.82011 to 0.91955. For the Online Booking Features, the highest mean and standard deviation were 4.4824 and 0.95884, while the lowest mean and standard deviation were 3.9497 and 0.70510. Moreover, for Hotel Basic Infrastructure, the highest mean was 3.4246

followed by 3.0050 as the lowest mean for this factor. The highest standard deviation was 1.30610 and the lowest was 1.27064.

Besides, for Food and Beverage Capabilities, FO1 has recorded highest mean with 4.2362 followed by item FO3 which has recorded the lowest mean value with 3.0352. While the standard deviation were fall in a ranged between 1.09935 to 1.66116. Apart from that, the mean for Special Events Capabilities, were ranged between 2.5075 to 3.8744, while the highest standard deviation was 1.50014 followed by 1.12418 as lowest standard deviation.

For Price Advantage, the mean were ranged between 4.4497 to 4.7638 while, the standard deviations were ranged from 0.50138 to 0.83152. Furthermore, for Location Advantage, the mean were ranged from 3.9497 to 4.5201 and the standard deviations were ranged from 0.82977 to 1.19507. On the other hand, the highest mean and standard deviation for Customer Review Accountability were 3.6709 and 1.00546 while the lowest were 3.2864 and 0.99607.

Moreover, for Accommodation Capabilities, the mean were between 3.4322 to 4.3794 while the standard deviations were fall between 0.87753 to 1.33159. For Basic Amenities Advantage, the highest mean was 4.5302 and the lowest was 3.4975, while for the standard deviation, the highest was 1.23090 and the lowest was 0.77287. The last variable is Customer Request Advantage, where this variable consists of three items. The mean were ranged from 3.4874 to 4.1533 while the standard deviations were fall in a ranged between 0.83024 to 1.36106.

4.5 Validity Test

Validity test determines whether the research is truly measures that which it was intended to measure or how truthful the research results are (Bhatti, Hee, and Sundram, 2012). Therefore, it is vital to conduct a validity test before the result can be accurately interpreted and applied. In this study, content validity and face validity were applied in order to test the validity of each item in the questionnaire.

Content validity refers to the extent which the elements within a measurement produce are relevant and the representative set of items are tap to the concept (Haynes et al., 1995). According to Bhatti, Hee, and Sundram, (2012), content validity can determined through the literature and panel experts. In this study, the questionnaire was evaluated by a lecturer for three times before the questionnaires were distributed for pilot test.

Face validity refers whether the items in a questionnaire are clear and understandable for respondents (Bhatti, Hee and Sundram, 2012). Moreover, face validity can be determined during a pilot test where a small group of respondents can provide feedback about the items of the questionnaire in terms of clarity of the items. In this study, about four lecturers have given their comments regarding the questionnaire. Three lecturers have complaint that there were grammar mistakes in the questionnaire. While, another lecturer has complaint that the questionnaire consist of one double barrelled question and two leading questions. A double barrelled questions exist when more than one issue are asks in one single question (Olson, 2008). While, leading questions refer to bias respondents by subtly directing them towards particular answers (Gingery, 2009). Therefore, the researcher has done
correction based on the feedback given by the lecturers before distribute the questionnaire to the actual respondents.

4.6 Reliability Test

Reliability test refers to the measure that indicates the extent to which it is without bias and also to ensure the consistent measure across time as well as across the various items in the instrument (Sekaran & Bougie, 2013). For this study, researcher used Cronbach's Alpha to test the reliability of the items in every factor.

Variable	Items	Ν	Cronbach's
UTAR			Alpha
Accessibility	OBI3. Open 24 hours/7 days to receive	398	0.825
(F1)	reservations		
	OBI4. Price comparison		
ILANU BUDI B.S.	OBI2. Easily accessible Utara Ma	lays	ia
	OBI5. Room rate and availability stated		
	clearly		
	OBI6. Time savings		
Repurchase	RI2. I will continuously use this online	398	0.886
Intention	travel agency in future		
(F2)	RI3. I will use this online travel agency		
	on a regular basis		
	RI1. I will biked through this online		
	travel agency again		
	RI4. I will strongly recommend to		

	others to use this online travel agency		
Promotional	PRO4. Early bird promotion (20% off	398	0.819
Advantage (F3)	for those advance booking before 14		
	days)		
	PRO5. Minimum 2 nights promotion		
	(15% discount when check in more than		
	2 nights)		
	PRO3. Promotion coupon for lunch and		
	dinner		
	PRO2. Promotion rate for second visit		
Online Booking	OBI7. Online reservations system is	398	0.782
Features	very quick	$\mathbf{\nabla}$	
(F4)	OBI9. Ability to view customer review		
	OBI11. Minimize customer workload		
ALIAN BUDI BA	during reservation Siti Utara Ma	lays	ia
	OBI8. Easy for travellers to change or		
	cancel online reservations		
	OBI1. Content easily understand and		
	sufficient information		
	OBI12. Easy access to special offers		
	and promotions		
Hotel Basic	OF4. Spa	398	0.744
Infrastructure	OF5. Gym, sport facilities & games		
(F5)	room		
	OF3. Swimming pool		

	OF2. Car park		
Food and	FO2. Types of food	398	0.785
Beverage	FO3. Halal food		
Capabilities	FO4. Food based on request		
(F6)	FO1. Free breakfast		
Special Events	PRO6. Wedding promotion	398	0.603
Capabilities	LO7. Environment of hotel		
(F7)	PRI5. Group price		
Price Advantage	PRI2. Price discount	398	0.759
(F8)	PRI1. Price information		
UT A D	PRI3. Seasonal price		
2 COLORA	PRI4. Early booking discount		
Location	LO5. Near to shopping complex and	398	0.726
Advantage	amenities		
(F9)	LO2. Near to tourist attractions	lays	ia
	LO3. Near to beach side		
	LO4. Easy access to public transport		
	LO6. Near to basic infrastructure		
	facilities (Clinic, food outlets, petrol		
	station, hospital)		
Customer	CR3. Accreditation and rewards	398	0.779
Review	CR1. Rating (Star rating, points rating)		
Accountability	CR2. Customer feedback		
(F10)			
Accommodation	RO3. Type of room (Sea view, beach	398	0.697

Capabilities	side and etc)		
(F11)	RO4. Room picture		
	RO5. Size of room		
	RO2. Room categories (Single, Deluxe,		
	Family and etc)		
Basic Amenities	OF11.Safety lock to keep valuable	398	0.601
Advantage	things		
(F12)	OF6. Shop		
	OF10. Doctor-on-call		
Customer	RO8. Room complementary	398	0.621
Request	RO6. Room features (Hair dryer, boiler,		
Advantage	mineral water and etc)		
(F13)	RO7. Special request room (No		
	smoking area)		
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Table 4.14 demonstrates the result of reliability level of each variable. According to Sekaran & Bougie (2013), the reliability level less than 0.60 is considered poor, while those in the level 0.70 is acceptable and those over 0.80 is good. In this study, the Cronbach's alpha for three variables which were Accessibility, Repurchase Intention and Promotional Advantage were above 0.80 and it is considered good. While about six variables which were Online Booking Features, Hotel Basic Infrastructure, Food and Beverage Capabilities, Price Advantage, Location Advantage and Customer Review Accountability were above 0.70 which are acceptable. For the remaining four factors such as Special Events Capabilities, Accommodation Capabilities, Basic Amenities Advantage and Customer Request Advantage were above 0.60 and it is still acceptable.

4.7 Normality Test

A normality test is used to determine whether the sample data has been drawn from a normally distributed population. For this study, the researcher has used normality with plot and numbers to identify the normality level of data.

4.7.1 Skewness and Kurtosis

Skewness is a measure of the asymmetry while kurtosis is a measure of peakedness of distribution. The values for asymmetry and kurtosis between -2 and +2 were considered acceptable in order to prove that the data were normal (George & Mallery, 2010). While West et al. proposed that when the sample size is greater than 300, the absolute skewness value should be less than 2 while the absolute kurtosis value should be less than 7 in order to prove that the data is normal. The table below shows the values of skewness and kurtosis for four factors.

Variables	Skewness	Kurtosis
Online Booking Features (F4)	854	1.710
Hotal Pasia Infrastructura (E5)	244	244
noter Basic Infrastructure (F3)	244	244
Special Events Capabilities (F7)	080	824
Customer Request Advantage (F13)	690	.716

Table 4.15 Skewness and Kurtosis

For this study, the value for skewness and kurtosis meet the prerequisite as the value of skewness and kurtosis for four variables were between -2 and +2. Therefore, the data were normally distributed.



4.7.2 Normal Probability P-P Plot

Figure 4.2 Normal P-P Plots

According to Field (2014), the points were expected to be almost falling on straight line or nearly around the diagonal axis. The data for this study were normally distributed as all the points were falling on the and nearly around the diagonal axis.

4.8 Hypothesis Testing

4.8.1 Pearson Correlation

Correlation analysis is used to describe the strength and the direction of the linear relationship between two variables (Pallant, 2013). While according to Sekaran &

Bougie (2013), pearson correlation matrix analysis indicates the direction, strength and significance of the bivariate relationships among all variables that were measured at an interval or ration level.

Pearson correlation coefficients (r) can only take on values from -1 to +1 as this sign indicate whether there is a positive correlation or negative correlation. While the size of absolute value shows the strength of the relationship as this value can range from -1 to 1. A correlation of 0 values demonstrated no relationships at all, a correlation of 1 shows a perfect positive correlation and a value of -1 value shows a perfect negative correlation. Cohen (1988) has gives some guidelines on how to interpret the value between 0 to 1.



Table 4.16 Pearson Correlation

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13
Accessibility	1.00												
Repurchase Intention	.340**	1.00											
Promotional Advantage	.259**	.125**	1.00										
Online Booking Features	.563**	.382**	.278**	1.00									
Hotel Basic	.054	.167**	.087*	.132*	1.00								
Infrastructure		UT	ARA	100	1.00	10.1	100						
Food and Beverage	.114*	019	.212**	.111*	.260**	1.00							
Capabilities	(
Special Events	031	084*	.032	.148**	.263**	.140**	1.00						
Capabilities		2116	Ð,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,										
Price Advantage	.372**	.077	.329**	.258**	.028	.125**	.150**	1.00	sia				
Location Advantage	.192**	.052	.246**	.237**	.221**	.175**	.411**	.304**	1.00				
Customer Review	.203**	.128**	054	.261**	.040	.144**	.220**	.178**	.189**	1.00			
Accountability													
Accommodation	.213**	.145**	.087*	.292**	.211**	.266**	.059	.056	.305**	.159**	1.00		
Capabilities													
Basic Amenities	.205**	.012	.392**	.250**	.166**	.321**	.163**	.256**	.243**	012	.097*	1.00	
Advantage													
Customer Request	.097*	028	.168**	.156**	.083*	.267**	.089*	.112*	.245**	.173**	.394**	.318**	1.00
Advantage													

**Correlation is significant at the 0.01 level (1-tailed) *Correlation is significant at the 0.05 level (1-tailed)

Table 4.16 shows the result of Pearson Correlation for this study. The output shows that most of the variables have positive relationship and significant between each other expect for Special Events Capabilities and Repurchase Intention as there are negative relationship but significant between these two variables. The negative relationship here means that the high score variable are associated with low scores variable. Therefore, there is a negative relationship between these two variables.

Apart from that, the strength of relationship between two variables can be identified through coefficient of determination. The values of coefficient of determination can identified when square root the r value. Besides, the correlation values should be below the usual threshold of 0.50 (Hair, Black, Babin & Anderson, 2010). Moreover, this coefficient of determination value explained how much variance was shared between two variables (Pallant, 2013).

Table 4.17 below shows the output for coefficient of determination for this study. From the table 4.15, the variance shared by two variables can identify by multiply the r square value by 100. For instance in study, Repurchase Intention and Accessibility has recorded highest shared variance where these two variables shared about 11.56% of variance, followed by Customer Request Advantage and Basic Amenities Advantage as these two variables shared about 10.11% of variance. On the other hand, Basic Amenities Advantage and Accommodation Capabilities have recorded the lowest shared variance where these two variables only shared 0.94% of variance. While the remaining shared variance of the variables were ranged from 9.24% to 1.56%.

Variabl	1	2	3	4	5	6	7	8	9	10	11	12	13
es													
ACC	1.00												
RI	.1156**	1.00											
PA	.259**	.0156**	1.00										
OBF	.563**	.382**	.0772**	1.00	10.0	10.10							
HBI	.054	.167**	.087*	.0174*	1.00								
F&BC	.114*	019	.212**	.111*	.0676**	1.00							
SEC	031	084*	.032	.148**	.263**	.0196**	1.00						
PA	.372**	.077	.329**	.258**	.028	.125**	.0225**	1.00					
LA	.192**	.052	.246**	.237**	.221**	.175**	.411**	.0924**	ay1.00				
CRAC	.203**	.128**	054	.261**	.040	.144**	.220**	.178**	.0357**	1.00			
AC	.213**	.145**	.087*	.292**	.211**	.266**	.059	.056	.305**	.0252**	1.00		
BAA	.205**	.012	.392**	.250**	.166**	.321**	.163**	.256**	.243**	012	.0094*	1.00	
CRAD	.097*	028	.168**	.156**	.083*	.267**	.089*	.112*	.245**	.173**	.394**	.1011**	1
N=398,p*	N=398,p**<0.1,p**<0.05,p**<0.01												

Table 4.17 Coefficient of Determination

4.8.2 Multiple Regressions

Multiple regressions are technique used to explore the relationship between one continuous dependent variable and a number of independent variables. Apart from that, multiple regression technique is based on correlation but it allows more sophisticated exploration of the interrelationship among set of variables. Moreover, it can be used to address a variety of research questions and also gives information on how well a set of variables is able to predict a particular outcome (Pallant, 2013).

In this study, the researcher used hierarchical multiple regression which is also known as sequential regression. This analysis is useful for evaluating the contributions of predictors. Moreover, hierarchical regression is a sequential process which involving the entry of predictor variables into the analysis in steps (Lewis, 2007).

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Model Summary								
R	R	Adjusted	Std.		Change	e Statis	tics	
	Square	R	Error of	R	F	Df1	Df2	Sig. F
		Square	the	Square	Change			Change
			Estimate	Change				
0.484 ^a	0.234	0.210	0.56912	0.234	9.800	12	385	0.000

Table 4.18 Model Summary for Multiple Regressions

a. Predictors: (Constant), Customer Request Advantage, Hotel Basic Infrastructure, Price Advantage, Customer Review Accountability, Online Booking Features, Food and Beverage Capabilities, Location Advantage, Basic Amenities Advantage, Accommodation Capabilities, Promotional Advantage, Special Events Capabilities, Accessibility.

b. Dependent Variable: F2

Table 4.18 demonstrates the model summary for multiple regressions. Based on the above result, R square is 0.234 and significant at 0.000. According to the decision rule, the null hypothesis is rejected because the independent variables have positively significant with dependent variable. Therefore, H1 for all the variables were accepted and the null hypotheses were rejected.

Model	Unstandardized		Standardized	t	Sig.	Collinea	arity
	Coefficients		Coefficients			Statist	ics
	В	Std.Error	Beta			Tolerance	VIF
1	2 003	0 356		5 633	0.000		
Constant	2.005	0.550		5.055	0.000		
F1	0.226	0.076	0.172	2.980	0.003	0.595	1.681
F3	0.056	0.047	0.062	1.189	0.235	0.724	1.381
F4	0.323	0.066	0.283	4.860	0.000	0.587	1.703
F5	0.122	0.032	0.185	3.799	0.000	0.841	1.189
F6	-0.049	0.029	-0.084	-1.668	0.096	0.778	1.285
F7	-0.099	0.034	-0.152	-2.907	0.004	0.724	1.381
F8	-0.054	0.068	-0.041	-0.797	0.426	0.736	1.358
F9	-0.006	0.049	-0.007	-0.129	0.897	0.664	1.505
F10	0.059	0.038	0.076	1.541	0.124	0.808	1.237
F11	0.033	0.041	0.044	0.818	0.414	0.692	1.455
F12	-0.053	0.046	-0.062	-1.154	0.249	0.687	1.457
F13	-0.066	0.041	-0.083	-1.591	0.112	0.733	1.365

Table 4.19 Coefficients

a. Dependent Variable F2

Multicollinearity is one of the assumptions in multiple regressions as it refers to the relationship among the independent variables. Multicollinearity exist when the independent variables are highly correlated where the r value are 0.9 and above. Moreover, the multicollinearity does not contribute to a good regression model as

well (Pallant, 2014). The data in this study are free from multicollinearity problem as the r value less than 0.9 which is 0.484.

While collinearity statistics is another type of assumption for multiple regressions where it can identified through the Variance Inflation Factor (VIF) and tolerance. According to Hair et al. (1998), collinearity problem occurs when the VIF is more than 5. While, according to Field (2013), the tolerance is below 0.1 indicates a serious problem and tolerance value below 0.20 indicates a potential problem. According to the results from table 4.16, collinearity problem does not exist in this study as all the VIF values are less than 5 which is ranged from 1.189 to 1.703 and the tolerance values also ranged from 0.587 to 0.841.

Moreover, the outcomes show that there are four independent variables namely Accessibility, Online Booking Features, Hotel Basic Infrastructure and Special Events Capabilities has significant relationship with dependent variables which is Repurchase Intention. According to Pallant (2013), if the Sig.value is less than 0.05, the variable is making a significant unique contribution to the prediction of the dependent variable.

Based on the outcomes, the beta for Accessibility is 0.172 and significant at 0.003 followed by Online Booking Features where the beta is 0.238 and significant at 0.000. Next is Hotel Basic Infrastructure where the beta is 0.185 and significant at 0.000. While the beta level for Special Events Capabilities is -0.152 which is significant at 0.004.

CHAPTER 5

DISSCUSSION AND CONCLUSION

5.1 Introduction

This chapter discusses the outcomes of the study. There were objectives developed earlier in this study. It was further discussed based on the results finding from chapter four. The research implication, limitation and suggestion for future study are included at the end of this chapter.

The primary focus of this study was to identify the most influence factor to the travellers when they book hotel through online travel agency. The questionnaires were delivered to 450 respondents from Penang International Airport, however only 410 were returned from the respondents. For data analysis, 398 questionnaires were usable while the remaining 12 questionnaire were discarded as it was incomplete. The following discussion was based on the objectives which were developed at the beginning of the study.

5.2 Research Question One

5.2.1 What are the factors that travellers search for when booking hotel through online travel agency?

The researcher use exploratory factor analysis in order to explore the factors that the travellers look for in online travel agency. Previously, the researcher had proposed nine variables but after the variables were gone through exploratory factor analysis, there were 13 variables identified as crucial variables for online travel agency. These 13 variables were strongly loading above 0.30 in 13 factors. The table below

demonstrates the new variables which were obtained from exploratory factor analysis.

Factor	Variables	
Factor 1	Accessibility	
Factor 2	Repurchase Intention	
Factor 3	Promotional Advantage	
Factor 4	Online Booking Features	
Factor 5	Hotel Basic Infrastructure	
Factor 6	Food and Beverage Capabilities	
Factor 7	Special Events Capabilities	
Factor 8	Price Advantage	
Factor 9	Location Advantage	
Factor 10	Customer Review Accountability	
Factor 11	Accommodation Capabilities	
Factor 12	Basic Amenities Advantage	
Factor 13	Customer Request Advantage	a Malaysia
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Table 5.1 Variables after Exploratory Factor Analysis

Moreover, some of the variables were split into two factors. For instance, online booking features loaded strongly in factor 1 and 4, while basic amenities advantage loaded strongly in factor 5 and 12. Meanwhile, accommodation capabilities loaded strongly in factor 11 and 13.

Besides, factor 7 was combination of three variables which were promotion, location and price. Factor 7 known as special events capabilities because the items in this factor more related to special events such as wedding. Moreover, this factor 7 which was known as special events capabilities could be suitable features for online travel agency as nowadays there is trend that weddings are conducted in hotels. According to White (2015), the couples want the high level of services which can provided luxury hotel or resort.

Factor 1 known as accessibility because the items in this factor more to give convenience to travellers and the systems are user friendly as well. According to Wong and Law (2005), the travellers preferred to make reservations through online due to the information are easily accessible and it open 24 hours as well as 7 days to receive the reservations. Moreover, Law, Cathy and Hsu (2005), emphasized that reservations through online travel agency is very quick and this online medium easily allow the travellers to change or cancel the reservations.

Factor 5 is regarding the hotel basic infrastructure that provided by the hotel. Furthermore, hotel basic infrastructure factor also one of the elements that the travellers looking for before book a hotel through online travel agency. Apart from that, hotel basic infrastructure also a tool that differentiates the online travel agents from their competitors (Richard, 2006).

Factor 13 was known as customer request advantage as the items in this factor is something that can be specially requested by certain travellers. Not much hotels were practicing customer request factor for accommodation. Therefore, it can be plus point for online travel agency if they practicing customer request advantage factors. By having customer request advantage factor at online travel agency's websites, it will attract the travellers to use the online travel agency services as the online travel agency allow them request what they need in their accommodation during their booking.

5.2.2 What are the relationships among the factors that support online travel agency?

The researcher used Pearson Correlation analysis to examine the strength and the direction of the relationships among the factors. Based on the result, the output shows that the variables have significant and positive relationships between each variable except for special events capabilities and repurchase intentions as there were significant but has negative relationships between these two variables. This situation happened because most of the customers will use this factor only once in their lifetime.

While, the remaining factors were significant and have positive relationships among each other as these factors lead the travellers to repurchase the services from the same online travel agency. For instance, promotional advantage has positive relationships with repurchase intention. It is because promotion can be used as tool to attract and retain the customers (Fill, 2006). Moreover, promotion creates an interest to which makes the travellers to visit the online travel agency website again.

5.2.3 Which of the factor influences the travellers most when booking hotel through online travel agency?

Based on result from multiple regressions, the variables namely accessibility, online booking features, hotel basic infrastructure and special events capabilities has significant relationship with repurchase intention. Based on the outcomes, the beta for accessibility is 0.172 and significant at 0.003. This factor has significant relationship because this factor allows the travellers to easily accessible to the information they needed. Besides online booking were open for 24 hour and 7days to receive reservations (Law, Cathy and Hsu 2005). These convenience elements will attract them to repurchase the services through the same online travel agency.

Online booking features have significant relationship with repurchase intention where the beta is 0.238 which is significant at 0.000. By using online booking system, it will minimize the customer workload during reservations compare to last time where the customer used visit the travel agent office in order to collect the information and make reservations as well (Wong and Lau, 2005). Moreover, online booking allow the customers to easily access to special offers and promotions (Dutta and Manakotta, 2009). These elements will attract the customers to repurchase the services through the same online travel agency.

Next is hotel basic infrastructure where the beta is 0.185 and significant at 0.000. Hotel basic infrastructure factor will lead to repurchase intention because nowadays the travellers looking for what kind of basic infrastructure the service provider can give them and are the basic infrastructure useful for them. These are the aspects the travellers look for before booking the hotel. Moreover, Richard (2006) has point out that; basic infrastructure such as facilities is the tools that differentiate the hotel from their competitors.

Special events capabilities have negative relationships with repurchase intention as the beta level is -0.152 which is significant at 0.004. Special events capabilities in this study refer to the special occasion such as wedding. Even though, there is a trend in conducting the wedding at hotel, the customers would not look for the same service again as the customer will use this feature only once in their life time which is on their wedding. According to White (2015), the couples want the high level of services that a luxury hotel or resort can deliver.

5.3 Research Implications

This study has identified a number of factors and features that are highly desired by the travellers but not yet implement by the travel service providers. Therefore, this study contributes in a way as it provides a clear understanding for online travel agency regarding the needs of the travellers. Firstly, this study helps the online travel agency to identify the factors that lead the travellers to repurchase their services. As it indirectly helps the online travel agency in generate profits. While secondly, this study helps the online travel agency to identify suitable features to be available at their websites. By having suitable features, the travellers will have an interest to use the same services through the same online travel agency.

Furthermore, this study will help them to standardize the features in their websites as the online travel agency are competing between each other in terms of features. Moreover, the understanding regarding the features are important as this knowledge will help the online travel agency to cater to the travellers taste and expectations where it will make the travellers more satisfied with the services they received from online travel agency. Apart from that, this study also contributes a better understanding about the potential customers as the customers review will help the online travel agency to improve their performance in a better way.

5.4 Limitation

There are several limitations in this study. Firstly, it is difficult to generalise the result for the whole Malaysia as the researcher conducted this study at only one place which is Penang International Airport and the respondents are the travellers who had travelled through flights from Penang International Airport. Secondly, there are difficulties in order to get cooperation from the respondents as some of the

respondents were busy with their departure process while some were in a hurry to go back home or to reach their destinations.

5.5 Suggestion for Future Research

There are several suggestions for this study. Firstly, the future researchers should go in-depth study through interview method and open ended questionnaire to gain the data from the respondents.

Secondly in future, the survey should cover at least Peninsular Malaysia in order to obtain more accurate data from the respondents. By obtaining data from larger number of respondents from various places, it will help the online travel agency to have better understanding about the potential customers.

The third suggestion is the future studies should be conducted based on the age of online travel agency's users. From this study, the researcher found that there is gap between the ages of users. For instance in study, about 55.3% of the user fall in aged ranged between 21-30 years followed by 27.4% fall in age categories between 31-40 years , 12.3% were age categories between 41-50 years, 3% were below 20 years and the last 2% were aged above 50.

Finally, the last suggestion is regarding the goods and service tax (GST). Have the implementation of GST, affected the online travel agency business in Malaysia. It is because foreigners have special privileges where they can claim the taxes that they had paid at the airport before they leave Malaysia. But the Malaysians do not have such privileges. So, does this situation affect the business of online travel agency?

5.6 Conclusion

At first this study proposed nine variables. After the exploratory factor analysis, the result shows 13 variables which are crucial factors for online travel agency and lead the travellers to repurchase the services from the same online travel agency in future. Moreover all the variables have positive relationship between each other. It is in line with literature where Santoma and O'Connor (2006) have emphasized that price is one of the key motivator for consumers to purchase online. While, Fill (2006) indicates that promotion is an activity which is used to attract and retain the customers. Besides, promotion creates an interest to travellers to visit the online travel agency website again and again.

However in this study, four factors have been identified as a crucial factor for online travel agency. These four factors were accessibility, online booking features, hotel basic infrastructure and special events capabilities has significant relationship with repurchase intention. But unfortunately, special events capabilities have negative relationship with repurchase intention. Special events capabilities in this study refer to special occasion such as wedding.

Even though, there is a trend nowadays for weddings to be conducted in hotels, White (2015) stressed that the couples want the high level of services which can be provided by luxury hotel or resort, but the customer will look for this feature only once in their lifetime which is only for their wedding. Therefore, this is the reason that leads the result to show negative relationship between these two variables even though it is significant.

In conclusion, this study achieved the objectives where this study has identified the factors that travellers search for when booking hotel. At the same time, this study

also identifies the relationships and the factor that most influence the travellers when booking hotel. Therefore, this study is in line with the objectives of the study.



REFERENCE

- Alaine, T., (2014). *What is hotel industry?*. Retrieved from http://www.wisegeek.com/what-is-the-hotel-industry.htm.
- Ajzen,I. and Fishbein,M., (1980). Understanding attitudes and predicting social behaviour. Prentice Hall, Englewood Cliffs, NJ.
- Anckar,B.(2003). Consumer intentions in terms of electronic travel distribution implications for future market structures. *e-Service Journal*, Vol.2 No.2, pp.68-86.
- Andreassen, T.W. and Lervik,L., (1999). Perceived relative attractiveness today and tomorrow as predictors of future repurchase intention. *Journal of Service Research*, 2(2): 164-179.

Arbel,A., Pizam, A., (1977). Some determinants of urban hotel location: the tourists' inclinations. *Journal of Travel Research*, 15 (3), 18 – 22.

Barua, A., Konana, P., and Whinston, A., (2001). Driving e-business excellence. MIT Sloan Management Review, Vol. 43 No.1, pp.36-44.

- Bernard, W.A, (1996), "Cost effective facilities management: a practical approach, *Facilities*, 14 (5/6), pp. 26-38.
- Bender, B., John, S., and Gerdes, Jr. (2010). Are pictures worth a thousand room nights? Success factors for hotel web site design. *Journal of Hospitality and Tourism Technology*, Vol.1, Iss. 1, pp. 30-49.
- Bhatti, M.A., Hee, C.H., and Sundram, V.P.K., (2012). A Guide for Beginners : Data Analysis using SPSS and Amos. Malaysia. Pearson.

- Bolton, R.N., (1998). A dynamic model of the duration of the customer's relationship with a continuous service provider: the role of satisfaction. *Marketing Science*, Vol. 17(1), pp. 45-65.
- Boni,P. N.D., (2009), "*The distance between a hotel's keywords and bookings*", Retrieved from www.

Vfmleonardo.com/media/pdfs/distance_between_hotel%27s_keywords_and_b ookings.pdf.

- Buhalis.D., Licata.M.C., (2002). The future eTourism intermediaries. *Tourism Management*, Vol.23, No.3, pp.207-20.
- Bull, A.O., (1994), "Pricing a motel's location", *International Journal of Contemporary Hospitality Management*, Vol.6 Iss 6 pp.10-15.
- BusinessDictionary.com (2014). Interactive communications. Retrieved from http://www.businessdictionary.com/definition/interactive-communications.html

Caterer and Hotelkeeper (1996). Hoteliers told of net assets. Caterer & Hotelkeeper.

- Casalo,L.V., Flavian, C. and Guinaliu, M. (2008). The role of security, privacy, usability and reputation in the development of online banking. *Online Information Review*, Vol. 31 No. 5, pp. 583-603.
- Chandon, P., Wansink, B., and Laurent, G., (2000). A benefit congruency framework of sales promotion effectiveness. *The Journal of Marketing*, Vol 64 (4): pp. 65-81.
- Chang, C., (2009). Effectiveness of promotional premiums: the moderating role of affective state in different context. *Psychology & Marketing*, 26(2): pp.175-94.

- Chen, H.S., Shan, C., Shan, C., (2010). A study of antecedents of customer repurchase behaviours in chain store supermarkets. Dept. Of Hospitality Management, Taiwan Hospitality & Tourism College, Taiwan
- Cheung, R., Lam, P., (2009). How Travel Agency Survive in e-Business World? Communication of the IBIMA, Vol.10.
- Cheung, C. and Law, R. (2009). Have the perceptions of the successful factors for travel we sites changed over time? The case of consumers in Hong Kong. *Journal of Hospitality and Tourism Research*, Vol.33 No.3, pp. 438-446.
- Chircu, A.M.and Kauffman, R.J. (1999), "Analyzing firm-level strategy for internet-focused reintermediation", in Sprague, R.(Ed.), Proceedings of the 32nd Hawaii International Conference on System Sciences- 1999, Maui, Hawaii, January 5-8, IEEE Computer Society Press, Los Alamitos, CA, pp.181-190
- Chircu, A.M. & Kauffman, R.J.(2000a). "A framework for performance and value assessment of e-business systems in corporate travel distribution", working paper, Carlson School of Management, Management Information Systems Research Center, University of Minnesota, Minneapolis, MN
- Christou, E. (2011). Exploring online sales promotions in the hospitality industry. Journal of Hospitality Marketing and Management, Vol. 20(7): pp. 814-29.
- Chou,T.-Y., Hsu, C.L., Chen, M.C., (2008). A fuzzy multi-criteria decision model for international tourist hotels location selection. *International Journal of Hospitality Management*, 27 (2), 293-301.
- Chu, R.K.S., Choi, T., (2000). An importance-performance analysis of hotel selection factors in the Hong Kong industry: a comparison of business and leisure travellers. *Tourism Management* 21 (4), 363-377.

- Cohen, J.W. (1988). Statistical power of analysis for the behavioural sciences. (2nd ed.) Hillsdale, NJ: Lawrence Erlbaum Associates.
- Collier, J.E. and Bienstock, C.C., (2006). Measuring service quality in e-retailing. Journal of Service Research, 8; 260.
- Connolly, D.J.,Olsen, M.D. and Moore, R.G. (1998). The Internet as a distribution channel. *Cornell Hotel and Restaurant Administration Quarterly*, Vol.39 No.4, pp.42-54.
- Cronin, J. and Taylor, S.A., (1992). Measuring service quality: a re-examination and extension. *Journal of Marketing*, 55-67.
- Creswell, J.W., (2005). Educational Research: Planning, conducting and evaluating quantitative and qualitative research. (2nd Ed). Upper Saddle River: Pearson Education.
- Creswell, J.W., (2014). Research Design: Quantitative, Qualitative & Mixed Methods Approaches (4th Ed). Thousands Oaks, Callifornia, Sage Publications.
- Dale, C. (2003). The competitive networks of tourism e-mediaries: new strategies, new advantages. *Journal of Vacation Marketing*, Vol.9 No.2, pp.109-18.
- Daniele,R., & Frew,A., (2004). From intermediaries to market-makers: an analysis of the evolution of e-mediaries. *Information and Communication Technologies in Tourism.* pp.546-57.
- Davis, F.D., (1989). Perceived usefulness, perceived ease of use and user acceptance of information technology. *MIS Quarterly*, Vol.13, No.3, pp.319-40.
- DeCoster,J. (1998), "Overview of factor analysis", Retrieved from http://www.stathelp.com/notes.html

- Dick, A.S., and Basu, K., (1994). Customer Loyalty: Toward an integrated conceptual framework. *Journal of the Academy of Marketing Science*, Vol. 22 No.2, pp. 99-113.
- Dixit, A., Braunsberger, K., Zinkhan, M., and Pan, Y., (2005). Information technology-enhanced pricing strategies: managerial and public policy implications. *Journal of Business Research*, Vol. 58, No. 9, pp. 1169-77.
- Dodds,W.B., Monroe, K.B. and Grewal,D. (1991). The effects of price, brand, and store information on buyers' product evaluations. *Journal of Marketing Research*, Vol.28 (8), pp. 307-319.
- Dutta, K., & Manakotta, K., (2009). Managing online distribution for tourism growth in India. *Worldwide Hospitality and Tourism Themes*, Vol. 1, Iss. 1, pp.40-51
- Eid,R., (2013). Integrating Muslim customer perceived value, satisfaction, loyalty and retention in the tourism industry: an empirical study. *International Journal of Tourism Research*, Vol.30 No.8.
- Emmer, R.M., Tauck, C., Wilkinson,S. and Moore, R.G. (1993). Marketing hotels using global distribution system. *Cornell Hotel and Restaurant Administration Quarterly*, Vol.34 No.6, pp. 80-9.
- EnlightenMe.com., (2015). *Hotel star rating explained*. Retrieved from http://enlightenme.com/what-is-the-star-rating-for-hotels/
- Fernandez, M.C.L., and Bedia, A.M.S., (2004). The customer's perception of tourism accreditation. Melbourne:RMIT University, Centre for Management Quality Research.

- Fill, C. (2006), "Simply marketing communications", Pearson Education Limited, Essex.
- Field, A. (2013). Discovering statistics using IBM SPSS statistics. (4th ed.), Thousand Oaks, CA: Sage Publications.
- Gazzoli, G., Kim, W.G., and Palakurthi, R., (2008). Online distribution strategies and competition: are the global companies getting it right. *International Journal of Contemporary Hospitality Management*, Vol. 20, No. 4, pp. 376-387.
- George, D., & Mallery, M., (2010). SPSS for windows step by step: a simple guide and reference. (10a ed.) Boston : Pearson
- G Hotel Gurney. Retrieved from http://www.ghotel.com.my/
- Gingery, T., (2009). Survey design pitfalls: leading questions and loaded words. Retrieved from http://survey.cvent.com/blog/market-research-design-tips-2/survey-design-pitfalls-leading-questions-and-loaded-words
- Gretzel, U., and Yoo, K. (2008). Use and impact of online travel reviews, in O'Connor, P., Hooken, W., and Gretzel, U. (Eds), *Information and Communication Technologies in Tourism 2008*, pp. 35-46.
- Golden Sands Resort. Retrieved from http://www.shangrila.com/penang/goldensandsresort/
- Guillet, B.D., and Law, R. (2010). Analyzing hotel star ratings on third-party distribution web sites. *International Journal of Contemporary Hospitality Management*, Vol. 22, No. 6, pp. 797-813.

- Guillet, B.D., Liu, W., and Law,R., (2014). Can setting hotel rate restrictions help balance the interest of hotels and customers?. *International Journal of Contemporary Hospitality Management*, Vol. 26, Iss 6, pp. 948-973.
- Ha, H.Y., Muthaly,S.K., Akamavi, R.K., (2010). Alternative explanations of online repurchasing behavioural intentions: a comparison study of Korean and UK young customers. *European Journal of Marketing*, Vol. 44 Iss 6 pp. 874-904.
- Hair, J.F.Jr., Anderson, R., Tatham, R., & W.C. (1998). Multivariate Data Analysis. (5th Ed). Upper Sadle River, NJ: Prentice Hall.
- Hair, J.F., Black, W.C., Babin,B., & Anderson, R.E., (2010). Multivariate data analysis. (7th ed.), Englewood Cliffs, NJ: Pearson Prentice Hall
- Hanks, R.D., Noland, R.P., and Cross, R.G., (1992). Discounting in the hotel industry: a new approach. Cornell Hotel and Restaurant Administration Quarterly, Vol. 33, No. 3, pp. 15-23.
- Hahn, K. and Kim, J., (2009). The effect of offline brand trust and perceived internet confidence on online shopping intention in the integrated multi-channel context. *International Journal of Retail and Distribution Management*, Vol. 37 No. 2, pp. 126-41.

Hard Rock Hotel websites. Retrieved from http://penang.hardrockhotels.net/

Hartline, M.D., and Jones, K.C., (1996). Employee performance cues in a hotel service environment: influence on perceived service quality, value and wordof-mouth intentions. *Journal of Business Research*, Vol. 35 (3), pp. 207-215.

- Haubl,G., & Trifts, V., (2000).Consumer decision making in online shopping environments: the effects of interactive decision aids. *Marketing Science*, 19(1), pp. 4-21.
- Haynes, S.N., Richard, D.C.S., & Kubany, E.S., (1995). Content validity in psychological assessment: a functional approach to concepts and methods. *Psychological Assessment*, 7(3), 238-247.
- Heung, V.C.S (2003). Internet usage by international travellers: reasons and barriers. International Journal of Contemporary Hospitality Management, Vol.8 No.2, pp.155-65.
- Hewitt, E., and Schlichter, S., (2008). *Star quality: what is a star rating?*. Retrieved from

www.Independenttraveler.com/resources/article_print.cfm?AID=629&categor y=13.

- Huang, E., (2013). 3 challenges and opportunities online hotel booking sites face. Retrieved from http://e27.co/3-challenges-and-opportunities-online-hotelbooking-sites-face/
- Huff, L.C., Alden, D.L., and Tietje, B.C., (1999). Managing the sales promotion mix: brand managers' response to sales promotions. *Journal of Promotion Management*, Vol. 5(1): pp. 77-89.
- Ip, C., Lee, H.A. and Law, R. (2012). Profiling the users of travel websites for planning and online experience sharing. *Journal of Hospitality and Tourism Research*, Vol. 36 No. 3, pp. 418-426.

- Izquierdo,Y.A. and Martinez,R. M. (2011). Assessing the consumer's choice of purchase channel in the tourism sector: evidence from Spain. *Euromed journal* of Business, Vol. 6 No. 1, pp. 77-99.
- Jeong, M., & Lambert, C.U., (2001). Adaption of an information quality framework to measure customers" behavioural intentions to use lodging websites. *International Journal of Hospitality Management*, Vol 20 (2), pp. 129-146.
- Jones, T.O., and Sasser Jr, W.E., (1995). Why satisfied customers defect. *Harvard Business Review*, 73 (6), 88-89
- Jones, P., and Peppiatt, E. (1996). Managing perceptions of waiting times in service queues. *International Journal of Service Industry Managemnt*, 7(5), 47-61.
- Jones, M.A., Mothersbaugh, D.L., and Beatty, S.E., (2000). Switching barriers and repurchase intentions in services. *Journal of Retailing*, Vol. 79 (2), pp. 259-274.

Universiti Utara Malaysia

- Juliette, M., Boone, (2008). Increasing Importance of Hotel Food and Beverage is Reflected in Food & Beverage Staffing Trends. Retrieved from http://www.hvs.com/article/3589/increasing-importance-of-hotel-food-andbeverage-is/
- Kang, B., Brwer, K., and Baloglu, S., (2007). Profitability and survivability of hotel distribution channels. *Journal of Travel & Tourism Marketing*, Vol. 21(1): pp. 37-50.
- Khalifeh,A.A.N., (2012). Guest satisfaction and loyalty in food and beverage service department in the hotel industry. 2nd International Conference on Management.

- Kimes, S.E., (2002). Perceived fairness of yield management. *Cornell Hotel and Restaurant Administration Quarterly*, Vol. 43, No. 1, pp. 21-30.
- Kim,D.J., Ferrin,D.L., and Rao, H.R., (2008). A trust-based consumer decision making model in electronic commerce: the role of trust, perceived risk, and their antecedents. *Decision Support Systems*, 44, 544-564.

Kotler, P., (2002), Marketing Management. Upper Saddle River: Pearson Education

- Lacey, R. Morgan, R.M., (2009). Customer advocacy and the impact of B2B loyalty programs. J. Bus. Ind. Mark., 24 (1): 3-13. Department of Management and Marketing, University of Alabama, Tuscaloo.
- Lamb,C., Joseph, F., Hair, Jr., Carl McDaniel, (2009), "Essentials of marketing, 6e. South-western Cengage Learning: Mason, USA.
- Law, R., Leung, K. and Wong, R., (2004), "The impact of the internet on travel agencies", International Journal of Contemporary Hospitality Management, Vol. 16 No. 2, pp. 100-107.
- Law, R., Cathy H.C., Hsu (2005). Customers' perceptions on the importance of hotel web site dimensions and attributes. *International Journal of Contemporary Hospitality Management*, Vol.17 Iss 6 pp. 493-503
- Law,R., Chan,I., Goh,C., (2007).Where to find the lowest hotel room rates on the internet? The case of Hong Kong. *International Journal of Contemporary Hospitality Management*, Vol.19, No.6, pp. 495-506.
- Law,R., & Cheung, C., (2006). A study of perceived importance of the overall website quality of different classes of hotels. *International Journal of Hospitality Management*. Vol 25(3), pp. 525-531.

- Leiva, F.M., Mendez, J.H., and Fernandez, J.S., (2012). Generalising user behaviour in online travel sites through the Travel 2.0 website acceptance model. *Online Information Review*, Vol.36 No.6 pp.879-902.
- Lewis, R.C., Chambers, R.E., (1989). Marketing leadership in hospitality. Van Nostrand Reinhold, New York.

Lewis.M., (2007). Stepwise versus hierarchical regression: pros and cons. Educational Research Association, Retrieved from http://www.academia.edu/1860655/Stepwise_versus_hierarchical_regression_P ros_and_cons

- Liao, C., Palvia, P. and Chen, J.L.(2009). "Information technology adoption behaviour life cycle: toward a technology continuance theory (TCT)", *International Journal of Information Management*, 29 (4): 209-320.
- Lindsay, R., Thomas, W., Jackson and Cooke, L., (2011). Adapted technology acceptance model for mobile pricing. *Journal of Systems and Information Technology*. Vol.13 Iss 4 pp. 389-407.
- Li, Y.N., Tan, K.C. and Xie, M., (2002). Measuring web-based service quality. *Total Quality Management*, Vol. 13 (5), pp. 685-700.
- Lizardos,G. (2013). *The importance of hotel photography*. Online Marketing Experts, Retrieved from http://www.panadvert.com/importance-hotel-photography/
- Lone Pine Hotel. Retrieved from http://www.lonepinehotel.com/main.php

- Losekot,E., Wezel, V.R., and Wood, R.C., (2001). Conceptualising and operationalising the research interface between facilities management and hospitality management. *Facilities*, Vol.19, No.7/8, pp. 296-303.
- Manson, E. (2005). Keep up with the internet or lose business, hoteliers told. *Caterer* & *Hotelkeeper*, Vol.194 No.4382, p.14.
- Minimum Requirements for Star Ratings of Tourist Accomodation Premises. Retrieved from https://www.spip.gov.my/public/files/hotel.pdf
- Montaner, L.,L., de Chernatony, and Buil, I.,(2011). Consumer response to gift promotions. *Journal of Product and Brand Management*, Vol. 20(2): pp. 101-10.
- Morello, R., and Media, D., (2015). *Sales strategies for hotels*. Hearst Newspapers, LLC. Retrieved from http://smallbusiness.chron.com/sales-strategies-hotels-55910.html

Universiti Utara Malaysia

Morgan, R.M. and Hunt, S.D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58, 20-38.

- Morrison, A.M., Taylor, J.S. and Douglas, A. (2004). Website evaluation in tourism and hospitality: the art is not yet stated. *Journal of Travel and Tourism Marketing*, Vol. 17 Nos 2/3, pp. 233-51.
- Nah, F.H. (2004). A study on tolerable waiting time: how long are web users willing to wait?. *Behaviour and Information Technology*, 23, 153-163.
- Namara, Mc.C., (2014) "One definition of promotion", Online Integrated Library for Personal, Professional and Organizational Development, Retrieved from http://managementhelp.org/marketing/advertising/defined.htm.

- Newell, G., Seabrook, R., (2006). Factors influencing hotel investment decision making. *Journal of Property Investment & Finance* 24(4), 279-294.
- Nicolau, J.L., (2002). Assessing new hotel openings through an event study. *Tourism Management* 23 (1), 47-54.

Noone, B.M., & Mount, D.J., (2007). The effect of price on return intentions: Do satisfaction and reward programme membership. *Journal of Revenue and Pricing Management*, Vol. 7, pp. 357-369

- O'Connor, P. (2002). An empirical analysis of hotel chain online pricing strategies, cognizant communication corporation. *Information Technology and Tourism*, Vol.5 No.2, pp.65-72.
- O'Connor, P. and Piccoli, G., (2003). Marketing hotels using global distribution systems revisited. *Cornell Hotel and Restaurant Administration Quarterly*, Vol. 44, pp. 105-14.
- Olson, K., (2008). Encyclopedia of survey research methods. Sage Research Methods. Retrieved from http://srmo.sagepub.com/view/encyclopedia-ofsurvey-research-methods/n145.xml
- Pallant, J., (2013). A step by step guide to data analysis using IBM SPSS. (5th Ed).Town Penn Plaza, New York. McGraw Hill Companies.

Pamela, B., (2012). *The travelling clown*. Retrieved from http://www.slideshare.net/Daboney/online-travel-agent-what-does-that-mean

Pan, B., Zhang, L., and Law, R., (2013). The complex matter of online hotel choice. *Cornell Hospitality Quarterly* 54(1),: pp.74-83.

- Parihar, P., (2014). The challenges and opportunities in online travel and hotel booking. Online travel reservations and management system. Retrieved from http://www.otrams.com/blog/trends/the-challenges-and-opportunities-inonline-travel-and-hotel-booking/
- Parasuraman, A., Grewal, D. (2000). The impact of technology on the quality-valueloyalty chain: a research agenda. *J Acad Mark Sci* 28(1): 168-174.
- Parasuraman, A., Zeithaml, V.A. and Malhotra, A. (2005). ESQUAL: a multiple item scale for assessing electronic service quality. *Journal of Science Research*, Vol 7 No. 3, pp. 213-34.
- Patrick,Y., (2014). *Hospitality Trainers More Important Than Ever*. Retrieved at http://www.qsrmagazine.com/outside-insights/hospitality-trainers-more-important-ever
- Park, D.H., Lee, J., and Han, J., (2007). The effect of online consumer reviews on consumer purchasing intention: the moderating role of involvement. *International Journal of Electronic Commerce*, Vol. 11, No.4, pp. 125-48.
- Pavlou, P.A., Liang, H., Xue, Y., (2007). Understanding and mitigate uncertainty in online exchange relationships: a principal agent perspective. MIS Q 31 (1), 105-136
- Peng, H., Xu, X., and Chen, W., (2013). Tourist behaviours in online booking: a new research agenda. *Communication in Information Science and Management Engineering*, Vol.3 Iss 6, pp. 280-285.
- Paul, E.J.E., (2014). Accommodation a vital component in tourism industry. EnuguState Tourism Board, Retrieved from
http://enugustatetourismboard.com/p.php?t=accommodation-a-vitalcomponent-in-touri&id=51

- Priceline.com (1998), Leisure Travellers Can Now Name Their Own Price for Airline Tickets, Press Release, April 6, available at: http://phx.corporate-ir.net
- Razali.M.R., (2013). A framework of halal certification practices for hotel industry. *Asian Social Science*, Vol.9, No.11; 2013.
- Richard, C.C.L., (2006). Significance of facility design in medium grade hotels in Hong Kong. Retrieved from

http://hub.hku.hk/bitstream/10722/132129/3/FullText.pdf?accept=1.

- Rivers, M.J., Toh, R.S., Alaoui, M., (1991). Frequent-stayer programs: the demographic, behavioural, and attitudinal characteristics of hotel steady sleepers. *Journal of Travel Research* 30 (2), 41-45.
- Robin B. Dipietro, Youcheng, R., Wang, (2010). Key issues for ICT applications: impacts and implications for hospitality operations. *Worldwide Hospitality and Tourism Themes*, Vol.2 No.1,pp. 49-67.
- Rose, S., Clark, M., Samouel, P., Hair, N., (2012). Online customer experience in eretailing: an empirical model of antecedents and outcomes. *Journal of Retail* 88(2): 308-322.
- Santoma, R. and O'Connor, P., (2006). The online pricing practices of up-market Barcelona hotels: an international comparison. *Information and Communication Technologies in Tourism*, pp.221-33.

- Schwartz, Z. and Chen, C.C., (2010). The peculiar impact of higher room rates on customers, propensity to book. *International Journal of Contemporary Hospitality Management*, 22(1): pp. 41-55.
- Sekaran,U., Bougie, R., (2013). Research methods for business: A skill building approaches. (6th Ed). New York: John Wiley and Sons, Inc
- Sivasailam, N., Kim, D.J., and Rao, H.R., (2002). What companies are (n't) doing about website assurance. *IT Professional Magazine*, 4(3), 33-40.
- Seiders, Kathleen, Glenn, B., Voss, Dhruv Grewal, and Andrea L., Godfrey (2005).Do satisfied customers buy more? Examining moderating influences in a retailing context. *Journal of Marketing*, 69 (40), 26-43.
- Shafaei.F., and Mohamed.B., (2015), Involvement and brand equity: a conceptual model for Muslim tourists. *International Journal of Culture, Tourism and Hospitality Research*, Vol.9 Iss 1 pp. 54-67
- Shangri-La's Rasa Sayang Resort and Spa. Retrieved from http://www.shangrila.com/penang/rasasayangresort/
- Shoemaker,S., Lewis, R., and Yesawich, P. (2007). Marketing leadership in hospitality and tourism: strategies and tactics for competitive advantages. Pearson Prentice-Hall. Upper Saddle River, NJ.
- Stringam, B.B., and Gredes, Jr.J., (2010). Are pictures worth a thousand room nights? Success factors for hotel web site design. *Journal of Hospitality and Tourism Technology*, Vol. 1, Iss 1, pp. 30-49.

- Tabachnick, B.G., & Fidell, L.S., (2007). Using multivariate statistic. (5th ed.) Botson, MA: Allyn & Bacon
- Tabachnick, B.G., & Fidell, L.S., (2012). Using Multivariate Statistics. (6th Ed). Boston: Pearson Education
- The Fern An Ecotel Hotel. Retrieved from http://www.fernhotels.com/ahmedabadhotels/fern-ahmedabad/eco-features.php
- Toh, R.S., Raven, P., Kay, F.D., (2011).Selling rooms: hotels vs. third-party websites. *Cornell Hospitality Quarterly*, Vol. 52, pp. 181-189.
- Travel Trade Gazette (2001). Holidays rank among top five online sales. *Travel Trade Gazette*, Tonbridge, 12 November, p.26.
- Tsaur, S.-H., Tzeng, G.-H., (1995). Multiattribute decision making analysis for customer preference of tourist hotels. *Journal of Travel & Tourism Marketing* 4 (4), 55-69.
- Tso, A., and Law, R., (2005). Analysing the online pricing practices of hotels in Hong Kong. *International Journal of Hospitality Management*, Vol. 24, No.2, pp. 301-7.
- Unknown (2010). Importance of F&B Department in a Hotel. Redcarpetacademy's Blog. Retrieved from https://redcarpetacademy.wordpress.com/2010/05/13/importance-of-f-bdepartment-in-a-hotel/
- Urtasun, A., Gutierrez, I., (2006). Hotel location in tourism cities: Madrid 1936-1998. Annals of Tourism Research, 33 (2), 382-402.

- Wall, G., Dudycha, D., Hutchinson, J., (1985). Point pattern analyses of accommodation in Toronto. Annals of Tourism Research, 12 (4), 603 – 618.
- Waller, R. (2003). *Seven point checklist*. Available at www.waller .co.uk/usability16.htm
- Weaver, D.B., (1993), "Model of urban tourism for small Carribean islands", Geographical Review 83 (2), 134-140.
- Weisman , D.L., and Kulick, R.B., (2010). Price discrimination, two sided markets and net neutrality regulation. *Tulane Journal of Technology and Intellectual Property*, Vol. 13, No.1, pp. 81-106.
- White, M.C., (2015). *Finding a hotel for Big Destination Weddings*. The New York Times, Retrieved from http://www.nytimes.com/2015/02/24/business/findinga-hotel-for-supersize-weddings.html?_r=0
- Wind,J., Green, P.E., Shifflet, D., and Scarbrough, M., (1989). Courtyard by Marriott: designing a hotel facility with consumer-based marketing models. *Interfaces*, Vol.19, No.1, pp. 25-47
- Wymbs,C., (2000). How e-commerce is transforming and internationalizing service industries. *Journal of Services Marketing*, Vol.14, pp. 463-78.
- Wong, J. and Law, R., (2005). Analysing the intention to purchase on hotel websites: a study of travellers to Hong Kong. *International Journal of Hospitality Management*, Vol. 24, No. 3, pp. 311-29.
- Xie, H., Miao, L., Kuo, P.J., Lee, B.Y., (2011). Consumers' responses to ambivalent online hotel reviews: the role of perceived source credibility and pre-decisional disposition. *IJHM* 30 (1), 178-183.

- Yang,Y., Wong, K.K.F., Wang, T., (2012). How do hotels choose their location? Evidence from hotels on Beijing. *International Journal of Hospitality Management.* 31, 675-685.
- Ye,Q., Zhang, Z., and Law, R., (2011). Determinants of hotel room price: an exploration of travelers' hierarchy of accommodation needs. *International Journal of Contemporary Hospitality Management*, Vol. 23, Iss 7, pp. 972-981.
- Yen, C., Hsu, M.H., and Chang, C.M., (2012). Exploring the online bidder's repurchase intention: a cost and benefit perspective. *Inf.Syst E-Bus Manage*. Vol.11, pp. 211-234
- Yong, A.G., & Pearce, S., (2013). A beginner's guide to factor analysis: focusing on exploratory factor analysis. *Tutorials in Quantitative Methods for Psychology*, Vol. 9(2), pp. 79-94.
- Zboja, J.J., and Voorhees, C.M., (2006). The impact of brand trust and satisfaction on retailer repurchase intentions. *Journal of Service Marketing*, 20, 381-390.
- Zhang, Z., Ye, Q., Law, R. and Li, Y. (2011). The impact of e-word-of-mouth on the online popularity of restaurants: a comparison of consumer reviews and editor reviews. *International Journal of Hospitality Management*, Vol.29, No.4, pp. 694-700.
- Zhang, Y., Fang, Y., Wei, K.K., Ramsey, E., McCole, P., Chen, H., (2011). Repurchase intention in B2C e-commerce a relationship quality perspective. *Inf Manag* 48(6): 192-200.

Zhang, Z., Ye, Q., and Law, R., (2011). Determinants of hotel room price. International Journal of Contemporary Hospitality Management, Vol.23, Iss 7, pp. 972-981.

