Impact of e-commerce towards hotel management in Malaysia

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ABSTRACT

The purpose of this study is to investigate the impact of e-commerce towards yield management in Malaysia hotel industry. This study will give significance benefits to the hotel industry in Malaysia since there is no research that has been done previously on the matter to investigate the impact of e-commerce towards hotel yield management.

Application of technology in the hotel industry includes e-reservation via global distribution system (GDS) and online travel agents (OTAs). Other technology that has been applied into the industry recently include mobile reservation via phone for online reservation and check-ins. Online reviews by customers can be an important in influencing to customers choose a hotel. Hotels sometimes invest significant amount of resources to entice potential customers to stay at their hotel. An attractive, interactive and intuitive website that is full of information to potential customers is also another factor to be consider.

An in-depth interview will be conducted with Revenue Manager of hotels in Malaysia about how each individual hotel implements e-commerce in the context of the hotel's website for purpose of online booking and how the manager set up online pricing on website in order to maximize the hotel revenue (yield management). From the interviews, authors will examine and analyze what is the booking trends in Malaysian hotels; either using more online bookings or offline booking. Questionnaires will be distributed to hotels to examine the impact of e-commerce practices towards the hotel yield management. Questionnaires will be design based on the interviews that will be conducting will Hotel Revenue Managers. Besides that, authors will be conducting website content analysis to evaluate the effectiveness of hotel website in Malaysia.

Keywords: E-Commerce, yield management, hotel website, online reservation and online travel agents (OTAs), internet.

INTRODUCTION

This research project proposes to explore the e-commerce elements in the hotel industry. E-commerce is a new paradigm for most businesses as a point of sales for their product and services via online. Internet is the medium of distribution channel to link the supplier directly with the customers. By offering 24 hours services, customers can perform online purchase whenever they want (Clemons, Hann and Hitt, 1999). Since technology has been fully adopted in hotel industry, most of the booking or reservation is done online as compared to offline and has since been a standard of practice in the hotel industry in the past decade. In mid 1990s, Expedia and Travelocity are the pioneer of online travel agents (OTA) that partnered with hotels and flights to offer online ticketing for both airlines ticket and hotel room direct to customers. (Caroll and Siguaw, 2003).

Online purchasing via internet is growing as this is one of the many elements of e-commerce. According to Forrester Research (2001), internet sales by customers via online purchasing totaled $48.3 billion in 2000, and online hotel sales represented $3.7 billion in the same year.

Hotels developing their own website in order to promote the product and services online since the introduction of internet are a good platform and the cheapest cost of distribution channel. (Kim, Ma and Kim, 2005). E-reservation is the most efficient booking via internet for the customers as it provides real time information as well the ability to offer a lower rate compare to other offline methods. (Kim and Kim, 2004).

Since online travel agents (OTA) are more popular amongst customers in order to purchase hotel rooms via online, hotels have created their own website so that, customers can make online reservation directly from the hotel's website. Hotel website's provides more information about the hotel as compared to online travel agents (OTA). This ensures that trust can be built between the potential customers and the hotels as trust is an important phase for an online purchase activity (Lee and Lin, 2006).

Previous researches of e-commerce in tourism and hospitality focus on hotel's website effectiveness (Baloglu and Pekcan,2006;Chung and Law,2003), the utilization of internet based technologies in the hotel industry (Siguaw et al.,2003,Wei et al.,2001);emerging trends in electronic hotel distribution (Carroll and Siguaw,2003); hotels' online pricing practices (O'Connor, 2003); differences in customer making hotel reservation using an online versus offline medium (Shankar et al.,2003).

The other few studies that focuses on yield management and revenue management in hotel are (Ishii and Koide, 2005; Badinelli, 2000; Lee-Ross and Johns, 1997). A few research study on hotel revenue management and the internet (Noone and Mattila, 2009).

This study will emphasize more on investigating on the relationship between e-commerce and yield management in the hotel industry. The authors choose Malaysia, as a study context as Malaysia is one of the most popular tourist destination in South East Asia and as a developing country, the local hotel industry will be facing a lot of challenges in adapting to the changes that comes with the fast moving trend of e-commerce.

All hotels practice revenue or yield management as the major indicator to evaluate the success or the failure of its operations. The internet era started in mid-1990s created a new platform for the hotel industry. The growing of internet as medium channel has significantly increased customer exposure to revenue management practices. (Noone and Mattila, 2009). Traditionally hotels will not reveal their room prices online but since the emerging of online

booking and reservations, it is now a standard for them to release their prices either on their own website or on the online travel agents (OTA) sites to potential customers. This allows them to make comparison between a few different choices.

Most hotel chains and brand hotel develop their Central Reservation System (CRS) and it is link electronically to the online booking agents or Global Distribution System (GDS) and they are then required to pay booking and commission fees (Tang and Zong, 2008).

Although the trend of e-commerce is increasing worldwide, there is still a gap between developing and developed countries in the use of Internet and web technologies in e-business. According to a report of e-readiness research (Economic Intelligence Unit, 2010), which rates each country's preparedness for e-business, Malaysia ranks 36th out of 70 countries worldwide.

Internet infrastructure first started in Malaysia in 1995 but the growth of internet host in the country began around 1996. There were 17,723,000 internet users in Malaysia (representing 60.7% of the populations) at mid-year 2012, according to Internet World Stats (Internet World Stats, Dec 2012). Since the internet and web technologies is important and is becoming a direct marketing tool for improving the success of a business in the online environment worldwide, hotel industry in Malaysia should take full advantages to capitalize on this opportunity. The researchers proposed to investigate the e-commerce practices in Malaysia hotel industry and to study the percentage of yield management and revenue management of the hotel based on the online booking sources via hotel website, online travel agents (OTAs) and global distribution system (GDS). At the end, this research also evaluates the effectiveness of hotel website in Malaysia and the patterns of booking a hotel room by tourist in Malaysia recently.

Research Objectives

The aim of this proposed research is to investigate the relationship between the e-commerce and the hotel yield management. Specifically, the proposed of the research is to evaluate the effectiveness of the e-commerce practices in the Malaysian hotel industry and to identify how establish and efficient it is in the yield management system in its operations.

E-commerce gave significance impact on pricing over the internet. Online pricing allows customer to make their own comparison between different prices on offer thus creating an even more competitive business environment. Hotel rooms are a very suitable for product and services to be sold online via internet. (Yelkur and DaCosta, 2001).

Hotel industries adopt discounted pricing policies online or known as e-commerce before the booking date in case the room(s) remain unsold. This concept really attracts the customers since they will enjoy discounted price when purchasing the hotel rooms earlier or at last minute. Hotel will apply the policy of no cancellation or refund since the hotel room offers is very cheap compare to standard rack rate of the room. Using online payment and e-commerce helps the hotel to safe guard their margins for no shows or cancellation since customer(s) have already made the payment by using credit card and is a guaranteed payment (Koide and Ishii, 2005).

The purpose of yield management is to maximize the profit in the context of hotel is the number of rooms. Managers will try to manage the capacity in order to maximize profit and revenue since the operating cost is fixed. Overbooking is also another practice in most hotels and they hedge on no shows or cancellation to avoid losses in profit (Koide and Ishii, 2005).

Research Questions

The following are the research questions (RQ) that will guide this study:

1. What are the impacts of e-commerce towards hotel yield management?
2. How e-commerce will increases the hotel room revenue?
3. How hotel managers maximize the hotel yield management by e-commerce

Significance of study

The proposed project will be highly significant as it represents the e-commerce and internet study on yield management practices in hotel industry. In addition, the research project will also refine new elements in e-commerce that should be adopted in the hotel industry in order to maximize the hotel revenue.

The adoption and usage of e-commerce in the tourism and travel industry has not been very uniform. The extent of adoption and usage has varied across the countries as well as among enterprises within a country. This adoption depends on the size of the enterprise and target market of the enterprise (Sahadev and Islam, 2005).

This research will contribute on the development of e-commerce practices and adoption in hotel industry in Malaysia since most of the hotel in the local industry in the country are still not aware of the impact of using internet and e-commerce in their business and how it will contribute to the revenue and work as a promotion tools to the audience which is customers.

E-Commerce in Hotel

Internet been described as interactive, connectivity and convergence which allows real time and online true interactivity which is extremely needed since most of business activity consist of interaction (Sigala, 2001). The growth of the internet ad worldwide has revolutionized the way hotel industry operated. Traditionally, reservation in hotel are done through travel agents and hotel chains call Centre, but nowadays generated online by individuals customers and corporate travel planners, who then uses online intermediaries as they contact the hotels or its chains directly (Carrol and Siguaw,2003).

Hospitality industry including hotel, travel agents and airlines have taken advantages offered by e-commerce by creating their own website for engaging business using an internet because internet very compatible channels compare to other distribution channel (Rayman-bacchus and Molina,2001).

Hotel as an example uses internet as a distribution channel for one of the effectiveness marketing strategies in this competitive business (Connolly *et* al., 1998; Pernsteiner and Rauseo, 2000; Van Hoof, Ruys, and Combrink, 1999). Nowadays, customers prefer on purchase online since it less expensive compare to traditional booking via travel agent. Perhaps, customer can get best price on online booking since variety of online booking website compete to offer the best price.

Even hotel's websites introduces best rate guarantee on their website; if a customer is able to purchase and even better deal via a third party booking website, the hotels will match the price (Gazzoli *et* al., 2008). Hotel takes effort on promoting and selling product online and fully utilize the website as effective tools and cheapest marketing strategies because not involve high costs. (Kim,Ma and Kim,2006). E-Commerce and online internet booking

reduce the cost such as no commission been charged to the customer since it purchase directly to the supplier (hotel). (Borbely and Vasudavan, 1999; (Kim,Ma & Kim, 2006).

Hotel websites not only provide information about the product and services provided by the hotel but the website function for influences the customer to book the property. This is because website is an important indicator of trust for purchasing online and in long term it generates revenue to the hotel. (Lee, 2002).

According to Starkov and Price (2006), the trends on booking a hotel room using internet are common. 33% of all hotel reservations will be made online in year 2007 and 33% of hotel booking will influenced by internet but booking offline. It also been estimated that end of 2010, 45% of all hotel bookings will be completed online.

Due to this, hotels have been creating and designing an even more effective website to increase their revenue. At the same time, their website works as an effective tool to gain a greater market share and it cost less as compare to other marketing tools (O'Connor, 2003).

Nowadays, when individual are looking for extra information, he or she will directly check on the hotel's website. For example, he or she checks on the hotel product and services. The hotel website is a virtual lobby as it create the first impression of the customer about the hotel. From the online visit, the customer will create their own opinion on the hotel based on what he or she seen through the hotel website. The website could be the pre-determined of the customers to book the room(s) or find another hotel instead (Musante, Bojanic and Zhang, 2008).

Most of the study about online booking shows that the trends on booking via internet are experiencing growth year by year. The internet booking is the most convenience way to purchase since individual can purchase it anytime and anywhere as long as they have internet access. It is a mind-set of a customer that if they booked a hotel room online, they will be getting the best possible deal. (Toh, Raven and Dekay, 2011).

Online travel agents (OTAs) are the most popular online booking avenue for hotel rooms, airlines, car rental that provide price and product comparison between suppliers. (Rao and Smith, 2005). When customers book online via online travel agents(OTAs) such as from Expedia, Travelocity or Orbitz, he or she will been given booking confirmation number as guaranteed that the booking is confirm and as proof that arrangement already made between the online travel agents(OTAs) with the particular hotel.(Toh,Raven and Dekay, 2011).

Customer found that searching availability of hotel using the hotel website it quite hard and difficult especially if customers have limited time for booking. Online travel agents (OTAs) offer most convenience to the customers by easily search by location, price, star rating, length of stay and many more options. Customers will make their own decision by compare the price.

Methodology

Following an extensive review of the innovation and hospitality literature exploratory in depth interviews that will be conducted with the Revenue Manager of hotels in Malaysia. From the interviews, authors will gather as much information regarding the trends of booking in hotel. Author will interview the hotels that has their own website for online booking. The purposes are to know effectiveness of the website and how the manager set up the online rate

to the customers. From the interview also, author will find out the impact of online booking towards hotel room revenue.

Besides in-depth interview which also known as qualitative survey, the quantitative survey will be the main method for this study. The questionnaire will be answer from selected person in the hotel whether Revenue Manager or Room Division Director only. Questionnaire will be distributed and be analysis to get result whether the implementation of e-commerce have impacts to the average occupancy room rate.

CONCLUSION AND FUTURE RESEARCH

This study will examine the impact of e-commerce towards hotel yield management in Malaysia. Basically, most of the booking of the hotel rooms are influences by the internet and most of the traveler usually will search on website before make a booking. The challenge for hotels in Malaysia are to upgrade the hotel website for the convenience of the users to perform the online booking. Consumers will be more confident to stay and book the hotel rooms if the hotel have their own website and the website is updated and fully functional. To ensure Malaysia to become one of the most popular destination in world, hotels play a vital role in tourism industry. The internet is widely used in the hotel industry globally especially in developed country such as United States, United Kingdom and Australia. In order to attract more tourist to visit the country, hotels should have their own website that not only work as a platform to promote their product and services but more importantly are able to work flawlessly and provide real time information, make online booking that consumers can made book, pay, modify and even cancel the reservation if needed.

There are few more areas in this research that is still open for future in-depth research. This is fuel by the fact that the internet and its functions are still rapidly growing in our daily life. There is also a chance that due to these changes in the future, hotel websites or Online Travel Agents (OTAs) will no longer be significance for online booking in the future. Hotel industry trends will change accordingly to technology expand globally. Future studies can investigate the new e-commerce technologies in hotel and the relationship with hotel yield management.

References

Badinelli, R.D. (2000). An optimal, dynamic policy for hotel yield management. *European Journal of Operational Research, 121,* (3), 476-503.

Baloglu, S., & Pekcan, Y.A. (2006). The website design and Internet site marketing practices of upscale and luxury hotels in Turkey. *Tourism Management, 27* (1), 171-176.

Borbely, S., & Vasudavan, T. (1999). A study of web diffusion in travel agencies. *Proceedings of the 32nd Hawaii International Conference on System Sciences.*

Carol, B., & Siguaw, J. (2003). The evaluation of electronic distribution. *Cornell Hotel and Restaurant Administration Quarterly, 44(*4), 38-50.

Chung, T., & Law, R. (2003). Developing a performance indicator for hotel websites. *International Journal of Hospitality Management. 22,* (1), 119-125.

Clemons, E.K., Hann, I., & Hitt, L.M. (2002). Price Dispersion and Differentiation in Online travel: An Empirical Investigation. *Management Science, 48(*4), 534-549

Connolly, D.J., Olsen, M.D., & Moore, R.G. (1998). The internet as a distribution channel. *Cornell Hotel and Restaurant Administration Quarterly, 39* (4), 42-54.

Gazzoli, G., Kim, G.W., & Palakurthi, R. (2008). The internet as a distribution channel. *Cornell Hotel and Restaurant Administration Quarterly, 39,* (4), 42-54.

Internet World Stats (2012). *Internet usage in Malaysia*. Retrieved August, 20, 2013 from www.internetworldstats.com

Lee, G.G., & Lin H.F. (2006). Customer perceptions of e-service quality in online shopping. *International Journal of Retail & Distribution Management, 33,* (2), 161-176.

Kim,W.G & Kim D.J. (2004). Factors affecting online hotel reservation intention between online and non-online customers. *International Journal of Hospitality Management, 22*, 381-395.

Kim, W.G., Ma, X., & Kim, D.J. (2006). Determinants of Chinese hotel customer's e-satisfaction and purchase intention. *Tourism Management, 27*, 890-900

Koide, T., & Ishii, H. (2005). The hotel yield management with two types of room prices, overbooking and cancellations. *International Journal of Production Economics, 93-94*, 417-428.

Noone, B.M., & Mattila, A.S. (2009). Hotel revenue management and the internet: The effect of price presentation strategies on customers' willingness to book.

Musante, M.D., Bojanic, D.C., & Zhang, J. (2009). An evaluation of hotel website attribute utilization and effectiveness by hotel class. *Journal of Vacation Marketing, 15,* (3), 203-215.

O'Connor, P. (2003). Online pricing: An analysis of hotel-company practices. *Cornell Hotel and Restaurant Administration Quarterly, 44,* (1), 88-96.

Pernsteiner, C., & Rauseo, N. (2000). Transforming the hospitality industry into e-business. *FIU Hospitality Review, 18,* (2), 10-21.

Rayman-Bacchus, L., & Molina, A. (2001). Internet based tourism services: business issues and trends. *Futures, 33*, (7), 589-605.

Sahadev, S., & Islam, N. (2006). Why hotels adopt ICTs: a study on the ICT adoption propensity of hotels in Thailand. *International Journal of Contemporary Hospitality Management, 17,* (5), 391-401.

Sigala, M. (2001). Modelling E-Marketing strategies: Internet presence and exploitation of Greek Hotels. *Journal of Travel & Tourism Marketing. 11*, (3), 83-103

Starkov, M., & Price, J. (2006*). Hoteliers' 2006 Top Ten Internet Marketing Resolutions.* Retrieved August 20, 2003 from www.hospitalitybusiness.com

Tang, F.F., & Zing, J. (2008). Hotel electronic marketing and online price dispersion in mainland China. *China Economic Journal, 1*, (3), 303-315.

Toh, R.S., Raven, P., & Dekay, F. (2011). Selling Rooms: Hotels vs. Third Party Websites. *Cornell Hospitality Quarterly, 52,* (2), 181-189.

Van Hoof, H.B., Ruys, H.F., & Combrink T.E (1999). Global Hoteliers and the internet: Use and perceptions. *International Journal of Hospitality Information Technology, 1*, (1), 45-62.

Wei, S., Ruys, H.F., Van Hoof, H.B.., & Combrink, T.E (2001). Uses of the internet in the global hotel industry. *Journal of Business Research, 54*, (3), 235-241.

Yelkur, R., & DaCosta, M.M.N (2001). Differential pricing and segmentation on the Internet: the case of hotels. *Management Decision, 39*, (4), 252-262.