



# The Internet Adoption In the Hotel Industry: A Multiple Case Study in Brazilian Hotels

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## ABSTRACT

*The Internet has altered the way in which many lodging companies handle business, both between customers and business-to-business exchanges. This article presents the opinion of the hotel managers in Natal (Brazil) on: what their perceptions, the benefits and the drawbacks of the Internet adoption at their properties. The survey consists of a multiple cases study that was applied in three different kinds of hotels: a small-size hotel, a mid-size hotel and a large-size hotel. The final conclusion was that these hotels have increasingly adopted the Internet as a way of gaining competitive edge at their properties.*

## INTRODUCTION

Nowadays, the world is experiencing some of the most dramatic social changes in history. Thus, borders are being dissolved and countries, societies, people and firms are connected more and in different ways than they ever have been in past. Increases in international trade agreements, global business activity, telecommunication networks and personal/educational travels link the planet together like never before. These bonds are being emerged and supported essentially by two of the largest and fastest growing industries in the world today: Tourism and Information Technology (Sheldon, 1997). To Poon (1993), there will be no player in the tourism industry be untouched by information technology.

According to Van Hoof, Collins, Combrink and Verbeeten (1995), more and more hotel managers are willing to make technology investments that support their business. In a survey applied in U. S. in 1994, 95.3% lodging properties answered that used some computer technology. On the other hand, this statistic contrasts sharply to a 1980 American Hotel and Motel Association technology survey, which reported that fewer than 10 percent of America's lodging properties were using in-house computers for reservations, rooms management, front-office cashiering and night audit, and marketing (Chervenak, Keane and Co. *apud* Van Hoof, Collins, Combrink and Verbeeten, 1995).

Buhalis (1998) thinks that the tourism enterprises need to understand, incorporate and utilize information technology strategically, in order to be able to serve their target markets, improve their efficiency, maximize profitability, enhance services and maintain long term prosperity for both themselves and destinations. In addition to this, he considers that the future success of tourism organizations and destinations will be determined by a combination of innovative management and marketing, intellect and vision, as well as strategic use of advanced information technologies.

To Phillips and Moutinho (1998), Information Technology (IT) is one of the critical success factors in the hotel sector. A hotel company that is using IT for competitive advantage is Marriott (Phillips and Moutinho, 1998). In a way that could force hoteliers to rethink selling strategies, Marriott has created an Internet department that will market its properties, and develop detailed travel guides and other features to lure travelers to its Web site. As well, Marriott is adopting a technique used by some airlines by sending out details of last-minute discounts weekly by e-mail.

Jeong and Lambert (2001) consider that the Internet has dramatically changed the competitive dynamics of the lodging industry. In contrast to the traditional ways of doing business, the Internet accommodates the many-to-many business environment that lodging

firms use to conduct business with their customers. As a result, customers are becoming more attached to the company via the Internet, easily acquiring needed information on products and services for their ultimate purchase decisions.

In 1997, Jupiter Communications predicted that travel bookings on the Internet would approach \$345 million in 1997 and hit \$3 billion by the year 2001 (Jeong and Lambert, 2001). Moreover, many travel-related Web sites (e.g., TravelWeb, Travelocity, HotelsOnline, Internet Travel Network) are available for customers to click for online room reservations in a convenient and timely manner.

On the other hand, hotels have been conservative when it comes to adopting new technology, including those innovations that might benefit guests (Namasivayam, Enz and Siguaw, 2000). The hospitality industry has often been accused of being "technology laggards." Some of those same detractors argue that while hospitality-industry executives purport to emphasize a customer-centered strategic focus, their technology initiatives do not support that contention. Moreover, technical problems continue to hinder the Web and the future is unclear. Connection and transmission speed to the internet, evolving technologies and browser compatibility are potential sources of problems (Murphy, Forrest, Wotring and Brymer, 1996).

Namasivayam, Enz and Siguaw (2000) summarize that almost 60 percent of the hotels in their study had few technologies. To Van Hoof, Verbeeten and Combrink (1996), a lack of proper training, high turnover rates and limited financial resources were major barriers to the successful use and implementation of new technologies. However, Namasivayam, Enz and Siguaw (2000) indicated that hotels of all types adopt Internet bookings, management e-mail, and in-room modems at the highest rate.

According to Namasivayam, Enz and Siguaw (2000), these technologies can be grouped into three categories, namely, those implemented to 1) increase efficiency and employee productivity (Management e-mail), 2) improve guest services (In-room Internet), or 3) serve as a source of revenue (Internet booking).

To O'Connor (1999), one of the problems in attempting to assess the impact of the Internet and World Wide Web on the tourism sector is its phenomenal growth rate. Statistics change daily, and thus, are inaccurate, even before they are published. But O'Connor (1999) concludes that one trend is clear – all the major players in the tourism sector are getting online.

As said by Werthner and Klein (1999), the real volume of Internet bookings can only be estimated. Verified numbers are not existing, on the contrary, several contradicting estimates from market research companies, Internet newsgroups and company press releases exist. According to Werthner and Klein (1999), the discrepancy of the fore-

casts is caused by three factors: 1) the Internet itself is a rather chaotic media with no central control and accounting structure; 2) companies are sensitive with their real transaction volumes, publishing only limited information; 3) interest from academia is still rather low.

To Jeong and Lambert (2001), Van Hoof and Combrink (1998), research examining the use of the Internet and its most famous offspring, the World Wide Web, has been relatively scarce in hospitality-management publications.

In order to improve research studies about Internet adoption in the hotel industry, this article presents the opinion of the hotel managers in Natal (Brazil) on: what are their perceptions, the benefits and the drawbacks of the Internet adoption.

## METHODOLOGY

This survey consists of a multiple cases study that was applied in three hotels located in Natal (Brazil): Laina's Place Apart Hotel, Carlton Natal and Pirâmide Palace Hotel. The first is a small-size hotel with 28 apartments, the second is a mid-size hotel with 189 apartments and the last is a large-size with 308 apartments.

The survey contained 20 questions, of which 4 were related to the respondents' perceptions about the importance of the Internet to their organization and the hospitality industry in general. Additionally, 8 questions were related to the opinion of the managers about the benefits of the Internet use at their properties and the other 8 were about the drawbacks.

The respondents were asked to rate the questions on a five-point scale: "very unimportant", "somewhat unimportant", "neutral", "somewhat important" and "very important".

The method of this research was the multiple cases study, because it is possible to do a comparative study among three different kinds of hotels. Hence, the data presented allow for better results than by using a case study method.

According to Yin (1994), when the frontiers between the phenomenon and its implications are not very clear, it is adequate to apply the case study method. For this reason, this method is perfect for the purpose of this research because the hotels have been adopting the Internet within the last few years.

## DATA ANALYSIS

The study discussed in this article has three different sections: 1) the respondents' perceptions about the importance of the Internet to their organization and the hospitality industry, which includes 4 questions: rating the effectiveness of the Internet, importance of Internet access and literacy, the Internet as a communication tool, future importance of the Internet; 2) the opinion of the hotel manager about the importance of 8 Internet use benefits: increase advertising and marketing, improve awareness of hotel, increase sales and reservations, improve customer service, improve relationship with the client, obtain more information about the client, save cost and time, increase the competitiveness; 3) the opinion of the hotel manager on the importance of 8 Internet use drawbacks: cost and time involved, security and confidentiality, maintenance and site-update costs, unauthorized staff use and wasted time, training/lack-of-knowledge/ignorance, loss of personal touch, lack of corporate support, increase the managerial complexity.

### The Perceptions of the Internet Adoption in the Hotel Industry

#### *Rating the Internet Effectiveness*

The managers of the three hotel managers rated the effectiveness of the Internet as very important in two points: making reservations and marketing/advertising purposes. Moreover, the manager of the large-size hotel rated the effectiveness of the Internet for checking out the competition and as a training tool are important for his hotel. The small-size hotel manager thought that the effectiveness of the Internet as a training tool was somewhat unimportant and check-

ing out the competition was only neutral. The manager of the mid-size property felt the effectiveness of the Internet for training was important and checking out the competition was only neutral.

#### *Importance of Internet Access and Literacy*

When asked what is the importance of Internet access and literacy, the three managers answered the same thing about two points: the respondent's access and offer Internet access to their guests were very important for their properties. On the other hand, the large-size hotel manager thought that employee's access was very unimportant. For the mid-size hotel manager, the employee's access was important and for the small-size hotel manager was very important.

#### *The Internet as Communication Tool*

In the question about the Internet as a communication tool, the managers of the large-size and mid-size hotels had the same judgment. They thought that the use of Internet to communicate with colleagues, guests/customers, suppliers/vendors and corporate office were very important or important for their hotels. However, the manager of the small-size property thought that the use of Internet to communicate with guests/customers, suppliers/vendors and corporate office were very important, but with colleagues was very unimportant.

#### *Future Importance of the Internet*

When asked how they felt about the future of the Internet, all three hotel managers found three points as very important to their hotels: security/confidentiality of data, the Internet to the hotel industry as a whole, the Internet to their properties.

### The Benefits of the Internet Adoption in the Hotel Industry

#### *The Benefits for the Large-Size Hotel*

The most important benefits identified by the manager of the large-size hotel were: increased advertising/marketing, improvements of the hotel awareness, increased sales/reservations and improvements of the customer service. Moreover, he rated as somewhat important other three benefits: increased competitiveness, savings in cost/time and improved relationship with the client. In his opinion, one benefit was rated as neutral: obtain more information about the client.

#### *The Benefits For the Mid-Size Hotel*

To the manager of the mid-size property, the most important benefits in favor of his hotel were: increased advertising/marketing, improvements of the hotel awareness, increased sales/reservations and improvements of the customer service. Also, he rated four benefits as somewhat important: obtain more information about the client, increase competitiveness, saving in cost/time, increase competitiveness and improve relationship with the client.

#### *The Benefits For the Small-Size Hotel*

The small-size hotel manager rated that the increasing sales/reservations, the improvements in customer service and the savings in cost/time, as the most important benefits to his hotel. This manager rated four other benefits as somewhat important: increased advertising/marketing, improvement of hotel awareness, relationship with his clients and increased the competitiveness. Further, he identified only one benefit as neutral: obtain more information about the client.

### The Drawbacks of the Internet Adoption in the Hotel Industry

#### *The Drawbacks For the Large-Size Hotel*

The opinion of the full-service hotel manager was that the cost/time involved was the most important drawback from the Internet at his hotel. However, he rated the unauthorized staff use and wasted time, training/lack-of-knowledge/ignorance and loss of personal touch, as a somewhat unimportant drawbacks. He rated the majority of the drawbacks as very unimportant: security and confidentiality, maintenance and site-update costs, lack of corporate support and increasing the managerial complexity.

### *The Drawbacks For the Mid-Size Hotel*

The most important drawbacks identified by the mid-size hotel manager at his hotel were: cost/time involved and loss of personal touch. He rated five drawbacks as somewhat unimportant or very unimportant: security/confidentiality, maintenance and site-update costs, training/lack-of-knowledge/ignorance, lack of corporate support and increased managerial complexity. He identified only one drawback as neutral: unauthorized staff use and wasted time involved.

### *The Drawbacks For the Small-Size Hotel*

When asked about the importance of the drawbacks of the Internet use, the manager of the small-size property rated the following as very important: maintenance and site-update costs, and unauthorized staff use and wasted time. He rated as somewhat unimportant drawbacks: cost/time involved, security and confidentiality, and training/lack-of-knowledge/ignorance. He identified as very unimportant drawback: loss of personal touch, lack of corporate support and increase the managerial complexity.

## CONCLUSIONS

The conclusion about the perceptions of hotel managers was that the effectiveness of the Internet for making reservations and marketing/advertising purposes was the most important aspect for their properties. Moreover, the three managers answered the same thing about the importance of Internet access and literacy: the respondent's access and offered Internet access to their guests were the most important point. In the question about the Internet as a communication tool, the three managers answered that the use of Internet to communicate with guests/customers, suppliers/vendors and corporate office were very important or important for their properties. In respect of the future of the Internet, all three hotel managers found three points as very important to their hotels: security/confidentiality of data, the Internet to the hotel industry as a whole, the Internet to their properties.

Regarding the benefits of the Internet use at the hotels, the managers agreed that the two most important benefits were: increased sales/reservations and improvements of the customer service. The opinion of the mid-size and large-size hotel managers was that cost/time involved was the most important drawback from the Internet adoption at their hotels. However, the opinion of the small-size hotel manager was maintenance and site-update costs was the most important drawback for him.

The Internet has already become an important marketing and communication tool, and hotels which operations lack a significant presence on the Internet risk losing competitive advantage. On the other hand, it is tempting to conclude that the Internet is not yet living up to its promise.

If customers become accustomed to browsing for rooms and making reservations through the Internet, more and more properties will be forced to get on the Internet as well. Therefore, concerns about the security of data and information storage on the Internet might be an important barrier to future use and implementation.

Finally, hotel sites that are on the forefront of the electronic commerce are those that give the consumer the easiest, most rewarding access to relevant information, take a personal approach, and facilitate the exchange of mutually beneficial information.

For that reason, the hotel manager will have to define the mission (the web site's objectives and constituencies), calculate the margins (the web site's return on investment or costs and benefits), address the mechanics (its design, features, and content), plan the marketing (both internally through related web sites and externally through traditional media advertising), and perform the maintenance (the ongoing construction and improvement of the site).

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