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WiFi AVAILABILITY AND ACCESSIBILITY AS STATED ON HOTEL WEBSITES

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ABSTRACT

Competition among hotels is increasing. As such, hotels are constantly looking for ways to increase both their competitive advantage and guest satisfaction. Hotels have discovered ways to do this through the use of technologies such as wireless networks. Wireless networks have the potential to provide guests with additional amenities as well as allow for greater productivity among staff members. This can both increase a hotel's competitive advantage, and satisfy guest expectations. The purpose of this exploratory study, therefore, is to determine if hotels are taking advantage of this opportunity by promoting wireless internet availability via their property's website and using it as a tool to attract customers. The findings of this study indicate that hotels are using their websites to provide information about availability of wireless access. However, limited information is indicated on the websites as to the location of access points and the charges related with use of the service.

KEY WORDS: Amenity; e-Marketing; Hotel; Website; WiFi; Wireless

INTRODUCTION

Technology has dramatically altered the way many businesses function. As the use of technology has become increasingly more common, organizations that do not keep up with advancements have a tendency to lose out to those that do (Pea & Hyun, 2006). This is particularly true for the hotel industry. As competition increases hotels must find new ways to satisfy guests while also increasing their competitive advantage. One way to do this is through the use of technologies such as wireless communication. In recent years wireless communication has become a hot topic in the technology industry (Wu & Wang, 2005). Wireless networks are beginning to revolutionize the way that companies conduct business activities and are changing commonly held beliefs about commerce (Lu, Yu, Liu & Yao, 2003).

Dependence on the Internet for communication is becoming more prevalent for both businesses and individuals in the hospitality industry. For example, hotels rely on the Internet for communication, via their websites, to returning or potentially new guests. Hotel's individual websites provide information about pricing, amenities, location, or possibly other nearby attractions. Most hotel websites also enable their users to book rooms, or to market different promotions and specials. In essence, the hotels can use their websites to provide a wealth of information about the property to clients. In the past, guests would need to call hotels to find out if certain amenities were available or to book a room. Today, via the Internet, hotels may use their websites to convey that information.

Individuals are also relying more and more on the Internet as a form of communication and are beginning to require Internet access for personal as well as business related activities, especially while traveling. Many travelers have begun to expect that they will be able to at least have access to their email while they are away. As a result, hotels have begun to provide guests with access to wireless networks while the guest is staying at their property. In order to meet the desires of their guests as well as stay competitive, hotels must tailor their services to what guests are expecting (Lee, Barker, & Kandampully, 2003). Because hotels enable guests to access their wireless networks, it can in turn, be marketed as an additional service and/or amenity for the guests. By accessing the wireless system, guests are potentially able to check their email and use the Internet from almost anywhere on the property. However, due to some technical issues as well as potential cost issues, some hotels that offer wireless Internet services only provide access in designated areas. Additionally, of those that offer wireless Internet access, there is a divide among those that charge guests a fee to use it and those that allow guests to use the service for free.

Research has been conducted on the general use of technology in the hospitality industry. However, there are currently a limited number of studies in academia that focus on wireless communication in hospitality. This study took an exploratory approach in analyzing the websites of hotels located throughout the United States to determine if they market the availability of wireless network access for guests through their hotel websites. If wireless availability was communicated on the hotels' websites, further analysis was conducted in order to determine the location on the property where wireless access was offered and if the property charged guests for the service. This research will add to the literature by providing information about wireless

communications in the hotel industry and it will assist managers in gaining a better understanding of marketing and promoting wireless systems on their websites.

LITERATURE REVIEW

Consumer Acceptance of the Internet

Due to rapid changes in technological advancements society has become vastly dependent on communication. As a result, the Internet has become increasingly important, and the effective use of the Internet has become essential. Additionally, many individuals see the Internet as an important part of their daily lives (Shu-Sheng, 2004). Since the early 1990s use of the Internet has been rapidly increasing. In 2004, nearly 70 percent of adults and approximately 90 percent of people between the ages of 12 and 17 in the United States used the Internet (Lenhart, Madden & Hitlin, 2005). Wide spread usage of communication technologies have altered individuals' everyday lives tremendously (Zhao, 2006). The use of the Internet has allowed individuals to conduct business in ways never before imagined.

As technology has advanced so have the applications of the Internet. People use the Internet for various purposes in their personal and business lives. One study found that the four most common Internet related business activities were online shopping, online banking, online investing, and electronic payments (Eastin, 2002). Through the Internet, consumers can view products and services that are offered from various companies. This access to detailed information allows consumers to gain a better understanding of how a specific organization can meet their needs (Joines, Scherer, & Scheufele, 2003). Users have become dependent on this access to information and feel that they must be able to obtain it when ever and where ever they need it regardless of their location (Gregor, 2006). Wireless technology has played a critical role in the development of this ability to remotely connect to information at any moment (Shu-Sheng, 2004).

Increased Usage of Wireless Networks

Wireless network technologies and applications have recently seen tremendous growth in consumer demand. This boom has led to an increase in people accessing the Internet for personal and business reasons in locations such as airports, shopping malls, sports arenas, and hotels (Balachandran, Voelker, & Bahl, 2005). Currently, most wireless network architectures for public use are set up to use some form of an IEEE 802.11 access point. These public network access points are commonly referred to as WiFi hotspots (Anastasi, Conti, Gregori & Passarella, 2004). By January of 2006 the number of worldwide WiFi hotspots was estimated to be over 100,000. This is an increase of more than 87% from the previous year (Jwire, 2006). These factors have positioned WiFi to become a dominate standard for creating wireless networks.

WiFi has a multitude of potential applications. It can be used with wireless routers and hubs to create wireless local area networks (WLAN). In turn, these WLANs can be used to perform functions such as file sharing, printing, mp3 playing, Internet activities and general networking capabilities. The last two functions, Internet activities and general networking capabilities, have become the predominate functions of WiFi. Businesses, educational

institutions, and government agencies have begun to utilize WiFi networks to easily and efficiently conduct functions that require network or Internet access. In addition to being able to access the network, the end-users (i.e. employees and students) gain the benefit of mobility which is inherent in the use of a wireless network. This mobility results from the fact that cables are no longer needed. Users are able to move about freely as needed to conduct there business and can stay "continuously connected" to work or home (Lehr & McKnight, 2003, p. 357).

The Use of Wireless Networks in the Hotel Industry

The hospitality industry is typically slow in accepting technological changes (Donaghy, McMahon-Beattie & McDowell, 1997). There can be many reasons for this including an unwillingness to invest in unproven technology, uncertainty as to the effectiveness of the technology, unfamiliarity with the technology itself, a general disapproval of technology, and a lack of understanding in the value of the technology. Yet, there is one technological area in which the hospitality industry as been eager to embrace which is that of the Internet (Law, R. & Hsu, C., 2006). In order to effectively utilize the power of the Internet hotels have begun to install wireless networks.

If hotels are to remain competitive they need to tailor their services to the needs of the guests. The difficulty related with doing so is that guest needs are constantly changing (Lee, et al., 2003). As individuals become dependent on the Internet, they will need access to it from multiple locations. This is true not only for business related activities, but for individuals using the Internet for personal activities as well. An increasing number of individuals are becoming comfortable using wireless networks in their homes. Almost two out of every three home networks use some form of WiFi compatible devices (Microwave Journal, 2006). The ease with which individuals can access email and the Internet using wireless technology is becoming commonplace. Guests are starting to expect wireless access in hotels, and some hotels are starting to meet those expectations. For example, the Hotel @ MIT provides wireless Internet access in both guest rooms and in public spaces (Serlan, 2006). Some hotels are creating partnerships with Internet service providers to offer wireless capabilities to guests. Such is the case with Sheraton and Yahoo. A partnership between the two companies has allowed guests at certain Sheraton properties to have access to WiFi networks provided by Yahoo as well as have the ability to print documents for free within the lounge area of the hotel (Lawson, 2006).

Wireless networks within a hotel have the potential to not only provide guests with additional amenities and services, but can also allow for greater productivity among the hotel staff members. "Technology elevates the competitive advantage of a service organization only if it can support the employees and enhance their capacity to offer superior service to the customer" (Lee et al., 2003, p. 424). This statement is best illustrated by the Talbott Hotel in Chicago. This property installed a WiFi network which has allowed employees to communicate with one another through communications badges. This has eliminated the need for bulky two-way radios and allowed for speedier communication among employees (Ostrowski, 2006). Wireless technology has also been utilized in hotels to track mini-bar consumption (Inge, 2004). Consumed items can instantly be added to the guest's room charges when the items are removed from the mini-bar, while at the same time alerting hotel staff as to the specific items that need to be replaced. The Opryland Hotel in Nashville uses a wireless network to efficiently

accommodate large groups. Employees of the hotel use wireless handheld devices to check in members of large groups, encode their room keys, and take credit card payments without the need for the guests to visit the front desk (Terry, 2002). WiFi in these instances are a win-win situation for the hotel employees as well as guests. The hotel guests receive the benefit of the improved service that WiFi enables employees to provide.

Wireless Networks as a Potential Marketing Tool

The importance of the Internet as a marketing tool has received serious attention in recent years. In 2005, 79 million Americans used the Internet to search for information on categories such as hotels, flights, and restaurants in order to plan trips. Of that 79 million, 65 million actually booked their vacations online (Travel Industry Association of America, 2006). One report indicated that the amount of Internet bookings for major hotels increased by almost 20% between 2005 and 2006 (Internet Travel News, 2006). This increasing number of Internet users indicates the critical role the Internet plays as a medium for commerce. As a result there has been an increase in the amount of money spent on Internet marketing (Joines, et al., 2003). As the value of electronic marketing (e-marketing) increases, attracting new customers will become more competitive. This competitiveness has already led some companies to implement new strategies for online marketing (Werthner & Ricci, 2004). Additionally, in an attempt to attract customers and increase revenue, a growing number of businesses are providing Internet access in order to entice consumers to engage in business with them (Joines et al., 2003). Such is the case with Starbucks, which offers free wireless Internet access in most of its stores as a way to attract customers (Liff & Laegran, 2003).

Website Usage in the Hospitality Industry

The Internet is a useful tool for organizations to present information to potential customers. Companies that effectively exploit the marketing potential of websites are positioned to increase their advantage over their competition (Palmer & Griffith, 1998). However, if users do not enjoy the experience of using a specific company's website this potential competitive advantage is lost. Previous research on the effectiveness of hospitality websites has found that several customers believed that the websites were difficult to use (Law & Hsu, 2006). This study also found that many customers felt that the websites did not meet their needs (Law & Hsu, 2006). If potential customers experience difficulties in obtaining information from online sources they are less like to reuse those specific sources (Rosen & Purinton, 2004). Therefore, it is critical that the design of a website be such that users are able to easily navigate them and obtain the desired information for which they are searching (Baloglu & Pekcan, 2006).

The dynamic nature of websites allows organizations the ability to communicate up-to-date information to clients that was not possible in recent decades. In the hotel industry an effectively designed website can provided guests with information such as property details, electronic brochures, virtual tours, promotions, and available amenities (Zafiropoulos, Vrana, & Paschaloudis, 2006).

Hotel websites are popular, as is indicated by the increasing number of people booking hotel rooms online. Many hotel guests, especially those traveling on business, would like to

know ahead of time whether a specific hotel has wireless Internet access. The hotel's website, therefore, is the ideal place to find information about such services. By providing information on a hotel website about the services and amenities offered by the hotel, including the availability of wireless communications, hotel guests can determine if the property will meet their needs. Thus, communicating the availability of wireless services to guests should be an important part of marketing the hotel.

METHODOLOGY

Content analysis was used to analyze the websites of hotels located throughout the United States. Leedy and Ormrod define content analysis as a "detailed and systematic examination of the contents of a particular body of material for the purpose of identifying patterns, themes, or biases" (2004). It is a marketing research technique used to provide new insights, information and representations of facts. The material for a content analysis may include any form of written communication such as magazines, email messages, websites, newspapers, or novels (Marshall & Rossman, 1999). This type of content analysis, also known as manifest content analysis, is reliable because the content can be easily counted and coded (Fennell, 2001).

In this study, the written communication that was analyzed was hotel websites. Content analysis was chosen for this study because it is a straightforward process, easy to replicate for possible future studies, and it could be conducted without intruding upon the subjects in any way.

METHODS

Three hundred and twenty four hotels located in the United States were randomly selected from the 2005 Directory of Hotel & Lodging Companies published by the American Hotel & Lodging Association. In addition, the geographic location within the United States and the number of rooms of each property was obtained from the directory. To obtain the hotels' individual website addresses, searches were conducted via the use of Internet search engines such as Google and Yahoo. If a hotel did not have a website, it was removed from the list. Once the individual addresses were obtained, the analysis of each website was conducted.

Criteria that were examined included the advertisement of wireless communication on the website. If wireless communication was advertised, further analysis was conducted to determine if the site specified whether there was a charge for such services and where in the hotel (in the guest room, in public areas, in multiple locations, throughout the entire property, or no specification) service was available. It was also noted whether the property was affiliated with any sort of corporate franchise or chain.

In addition to collecting data about wireless availability, the same criteria were used to collect data about general Internet availability listed on each hotel's website. This information was used as a comparison to those hotels, and their websites, that provide information about wireless Internet access. In order to ensure consistency in the collection of data, all of the data collection was conducted by one individual.

RESULTS

The original sample size consisted of 324 hotels within the United States. Website addresses for 20 properties could not be obtained resulting in a final sample of 304 hotels. Of these properties, 85.9% had corporate affiliated websites. Analysis of the geographic location indicated that 10.9% of the hotels were located in the Northeastern United States, 23.4% were located in the Midwest, 42.1% were located in the Southern United States, and 23.4% were located in the Western United States. Out of the valid sample 31.6% of the properties had less than 75 rooms, 45.1% had between 75–149 rooms, 14.8% contained 150–299 rooms, 4.9% had between 300–500 rooms, 2.0% had more than 500 rooms, and 1.6% did not specify the number of rooms at the property.

| Table 1. Property Location | | |
|----------------------------|------------|--|
| U.S. Geographic | Percent of | |
| Location | Sample | |
| Northeast | 10.9 | |
| Midwest | 23.4 | |
| South | 42.1 | |
| West | 23.4 | |
| N = 304 | | |

| Table 2. Property Size | |
|------------------------|------------|
| Number of | Percent of |
| Rooms | Sample |
| < 75 | 31.6 |
| 75–149 | 45.1 |
| 150-299 | 14.8 |
| 300-500 | 4.9 |
| > 500 | 2.0 |
| Unknown size | 1.6 |
| N = 304 | |

Out of the 304 hotel websites analyzed, 86.2% advertised some form of Internet availability on their website. The websites indicated that availability of Internet access was most common in either guest rooms (42.5%) or throughout the entire property (10.3%). About 5% of the websites advertised that Internet access was available in public areas (4.6%) or in multiple locations (5.0%). A large number of websites (36.8%) did not specify where in the hotel Internet access was available. Furthermore, 44.1% of the websites revealed that there was no charge for the service, while 53.5% provided no information about costs, if any, for the service. Only 2.7% indicated that there was a charge Internet access.

Of the hotel websites that advertised Internet services, 65.7% of them specified that the Internet access was available wirelessly. Of that 65.7%, 39.1% of the websites stated that wireless Internet was available in either the guest rooms, public spaces (20.7%) or throughout the entire property (15.5%). Twenty two percent of the websites provided no information about where in the hotel wireless access was available. A majority of the websites (58.6%) also did not indicate whether there was a charge for the wireless service, while 40.8% did indicate that there was no charge.

| Table 3. Internet Availab | ility |
|---------------------------|-------|
| Advertised Availability | • |
| Yes 86.2% | |
| No 13.8% | |
| Location on Property | |
| Guest Rooms | 42.5% |
| Entire Property | 10.3% |
| Public areas | 4.6% |
| Multiple Locations | 5.0% |
| Not Specified | 36.8% |
| Charge | |
| Yes | 2.7% |
| No | 44.1% |
| Not Specified | 53.5% |
| N=304 | |

| Table 4. Wireless Availability | |
|--------------------------------|-------|
| Advertised Availability | |
| Yes 65.7% | |
| No 34.3% | |
| Location on Property | |
| Guest Rooms | 39.1% |
| Entire Property | 15.5% |
| Public areas | 20.7% |
| Multiple Locations | 2.3% |
| Not Specified | 22.4% |
| Charge | |
| Yes | 0.6% |
| No | 40.8% |
| Not Specified | 58.6% |
| N-174 | |

N=174

DISCUSSION

The findings of this study show that a vast majority of hotels in the United States use their websites in order to promote the availability of Internet access within their property. However, the number of hotels using their websites to market wireless Internet access is considerably lower. Further research should be conducted in order to determine if this is due to limited availability of wireless networks within hotels or simply a result of not using websites for the marketing of such services.

This study also found that a similar percentage of the websites indicated that they provided Internet access, in general, as those that stated that wireless Internet access was available. The similarities were found between offering the service in guest rooms, offering service in multiple locations on the property, and offering service throughout the entire property. However, there was a difference between websites listing Internet access locations and those listing wireless access locations for the characteristic availability in public areas. It was found that properties which listed wireless access in public areas did so nearly 4.5 times greater than those that just listed Internet access. The reason for more properties providing wireless access just in public spaces may be because existing construction prohibits them from adding the wireless related technology in each room. The hotels may also have had enough money to only install it in public areas and not throughout the rest of the hotel. It is also possible that an older hotel, previously had no type of Internet access, and so quickly installed access points in the lobby so the hotel could claim the availability of wireless access for guests.

The results of this study indicated that that while over 85% of the properties in the sample advertised the availability of Internet access only about 65% of those properties indicated that they had wireless networks. There are two potential explanations for this difference. One possibility is that properties which have older, wired networks have not upgraded to new wireless networks, either due to a lack of capital, an inability to realize the benefit of such a

system, or some form of technical issue preventing the property from upgrading. The other possibility is that the properties may in fact utilize wireless networks, but they did not relay this information on the hotel's website. While both of these factors are areas worthy of investigation, the latter could be of greater interest as it indicates possible missed opportunities for revenue generation as potential guests may base their booking decisions on availably of the services listed on the properties website.

Through this research it was discovered that a noteworthy portion of the sample simply mentioned on their website the availability of Internet and/or wireless access and did not indicate the location on the property from where it was available. This finding could indicate a flaw in the marketing strategy of several hotels as they are underutilizing the true potential of their websites as a marketing tool. In addition to this, the majority of the sample did not indicate if the property charged guests for Internet and/or wireless services. This suggests that the properties which do not charge for these services are once again underutilizing the marketing potential of their websites. It also indicates that organizations which do charge for network access may not be stating this fact on their websites because they believe it will deter guests from booking at their property.

LIMITATIONS AND RECOMMENDATIONS

It is not possible to conduct a flawless research study. Thus, like all others this study has its limitations. One of the limitations of this study is that the sample was obtained from a list of hotels that were members of the American Hotel & Lodging Association. It is possible that hotels belonging to this group exhibit different characteristics than those of the general population.

Another limitation of this study is the lack of quantitative data on the actual level of usage and availability of wireless networks within hotels in the United States. Additional research in this area could provide a better understanding of the overall scope of the impact of wireless networks in the hotel industry. Future researchers may wish to focus on the types of clientele to which specific hotels consider to be their target market in relation to the type and amount of information provided on the hotel websites. A correlation may exist between hotel status and quantity/quality of information provided on a website. Researchers may also find it relevant to examine the motivations behind why hotel corporations provide specific information on a property's website. It may also be of interest to conduct research on the specific factors that cause hotels to install wireless networks in specific locations within their properties. In addition, it would be beneficial, for the continuation of this topic area, to conduct additional research on the relationship between information listed on a hotel's website and the actual services that the property provides. This follow-up study may give a better explanation and a more thorough understanding of the actual factors that effect hotel's decisions to use websites to promote the availability of WiFi access within their properties.

CONCLUSION

This exploratory study investigated the current utilization of hotel websites as marketing tools for the services of wireless networks. It was found that several hotels are using their

websites to communicate information about the availability of wireless services. However, the results also reflect a lack of detailed information about these services on hotel websites. As such, this could indicate that hotels are not fully utilizing the marketing potential of websites. As a result, it is possible the some properties may be losing potential guests to those hotels that are more efficiently using their website as a marketing tool.

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