

E-COMMERCE AND THE HOTEL/RESORT INDUSTRY

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ABSTRACT

This paper examines the Hotel and Resort Industries' use of Electronic- Commerce as part of its overall business strategy. An assessment of the impact of the Internet on the Hotel and Resort Industries is also discussed.

INTRODUCTION

The Hotel and Resort Industry (HRI) can potentially use E-Commerce to enhance its primary and support activities by leveraging this new technology in the value chain. To investigate the potential for enhanced sales activity and revenue generation, a literature review of the industry's involvement with E-Commerce and the Internet was conducted to identify trends and the areas where HRI and E-Commerce integration shows the greatest potential. In its simplest form the model of the HRI is a one room/one customer proposition. However, the HRI operates in a much more complicated environment consisting of a network of support and marketing functions and profit centers.

The typical HRI organization has many facets of its operation to be considered, such as: an internal organizational fit, a business to multicustomer fit, and a business to business fit with both external suppliers and networked businesses as part of the actual firm's business processes. E-Commerce can enhance and extend this complex web of interactions and business processes. Most, if not all, of an HRI organization's business processes lend themselves to use of information systems and E-Commerce technology. Timesharing is an example of how E-Commerce technology can be used. Timesharing fills the gap between the one room / one customer concept and can be leveraged through the use of E-Commerce to establish a virtual connection between customers and rooms.

BACKGROUND

The hotel industry is about as brick-and-mortar as it can get, but smart hotel management is beginning to recognize the great potential represented by the Internet and E-Commerce. Hilton Hotels, for instance, wants to put to rest the idea that the world is divided between dotcom companies that understand the Internet and old-economy companies that don't. To that end it is pursuing an aggressive online strategy to include doing about 30 percent of its \$1 billion annual procurement over the web (Wagner, 2000 June).

A primary reason that E-Commerce has such great potential for the HRI is because the hotel business is basically a one room / one customer business. Everything in between the customer and the room is marketing, support, and profit centers. The current high cost of finding that one customer who needs that one room and the supply chain required to support him provides unlimited opportunity to integrate information systems to reduce costs along the value chain. Inge in her article for Update states:

"It's not too hard to look into the future to see your life-both professionally and personally becoming fully dependent on the Internet. At your hotel, the web will drive reservations directly from consumers and intermediaries at a fraction of the costs associated with today's 800-number and GDS-based systems. Customers will be able to directly book the last room you have to rent each night, and you'll have the power to manipulate room rates at will-not in line with month-old forecasts, but hour by hour or minute by minute." (1999).

Priceline.com supplies statistics showing ECommerce revenues growing at a compound annual growth rate of 104% through 2002, with travel related purchases representing the biggest growth area. With 15% of all travel expected to be purchased online by 2003. The top priority for business travelers in the hotel room of the future, according to a survey sponsored by Kimberley- Clark was to have a computer with Internet access and a printer in every guestroom (Inge, 1999).

An Internal and External Fit

The Internet provides a means to internally network the hotel's business processes together from bookings, food service, and housekeeping to car rental, tours and even kennel services for dogs and cats. Centralized, Internet-based property management systems will eliminate the need for expensive on-site computer hardware and software. The Internet may also control such routine hotel processes as credit card authorization, travel agent commissions and point of sale transactions. Station Casinos, Inc. has ordered InfoGenesis <<http://www.infogenesis.com/>>' Revelation POS for an innovative "complexed" installation for its four Las Vegas hotel-casino properties. The four separate properties will use more than 190 POS terminals linked via a high-bandwidth wide area network (WAN) to a server cluster located at one property. The InfoGenesis POS check detail data warehouse will also be linked to Station's player-tracking application to enhance guest recognition and service (Inge, 1999). The Internet also provides a way for hotels to integrate external businesses into their supply chain as when Omni Hotels upgraded its reservations system to a seamless environment for agents both within and outside the company.

A Business to Multi-Customer Fit

The Internet facilitates the hotel's interaction and helps to transform relationships with three distinct customer groups: individuals as tourists; individuals on business, and businesses looking for support facilities. Bruce Rosenberg, Hilton Hotel's senior vice president for e-business and distribution states:

"The Internet thus makes it easier for Hilton to book rooms and meeting facilities." ... "We believe content is crucial ... People who visit our web site stay on the site for five or six minutes... want to know more about the hotel, destination, services and rooms. The online environment is less structured, [than the telephone] and people will spend the time they think they need to spend at the web site they go at their own pace; they feel comfortable asking questions, digging deeper and have no pressure to make up their mind." (Wagner, 2000, June).

Web interaction with the tourist customer is evolving so fast that Trump Casino Services in Atlantic City plans to teach visitors to its web site how to play casino games (Adhikari, 1998).

Individuals on business provide another opportunity for integration of web technology to attract and provide service to this unique client base. LodgeNet Entertainment Corp. will add Internetbased services to all the 6,000 guest rooms LodgeNet serves. This will allow guests to access the chain's web-based hotel directory, reservations service and E-Commerce sites, in addition to having high- speed, general Internet access via the television's remote control or wireless keyboard. Meanwhile, GuesTech, LLC will install its SuiteLink product at the 150-room Annapolis Marriott Waterfront in Annapolis, Maryland, and the 103- room Key West Inn and Suites in Huntsville, Alabama. SuiteLink includes a flat-panel-display PC in each room, and provides hotel guests with access to the Microsoft Office Standard Suite application and free in-room highspeed Internet access. Use of the Microsoft applications is subject to a nominal daily charge (Inge, 1999).

The third opportunity for web business is with external businesses looking for support facilities. Here the HRI becomes part of other external companies' support activity when they supply meeting and function rooms and function planning. They can also supply business services including access to information systems and the Net. The literature search showed that this area is virtually unexplored except for booking reservations through the Internet.

A Business to Business Fit

The Internet provides the ability for the HRI to engage in two types of business to business E-Commerce: back office integration with external suppliers and network integration with external businesses. "Hotel industry purchasing has long been regarded as a painful process - inefficient and bureaucratic - and certainly ripe for radical overhaul," Starwood chief executive Barry S. Stemlicht said (Liddle, 2000). The functionality of a web-based hotel purchasing system lies in its ability to provide substantial savings to hotels, both in decreased product costs and increased departmental efficiency. Increased functionality, efficiency and savings can only come about through back office integration (Capozzoli, 2000).

Back office integration allows suppliers direct access to the operation center of the hotel which reduces ordering time and inventory storage, thus reducing transaction cost. The Internet gives small suppliers an equal footing with larger suppliers and allows the hotel to find the best possible fit. Hilton Hotel views buying materials online as critical. They have formed a partnership with E-Commerce service and software provider PurchasePro.com to build Hilton's next-generation procurement system and start a purchasing exchange that will be opened up to other hotel chains. Hilton also provides hardware [digital distribution] to franchisees that lack their own systems for accessing the Internet (Wagner, 2000). Marriott International Inc., Starwood Hotels & Resorts Worldwide Inc. and Hyatt Hotels Corp., whose nearly 3,000 hotels make them heavyweight consumers of food and other supplies, are jumping on the e-procurement bandwagon but are rolling in different directions. Marriott of Bethesda, Md., and Hyatt of Chicago have agreed to leverage their combined \$5 billion a year in domestic purchases and streamline their purchasing by jointly forming an online procurement network. They said it ultimately would become an Internet portal open to the entire supply chain of the U.S. hospitality industry whose aggregate purchases are some \$150 billion annually (Liddle, 2000). Since most of these hotel chains are international, one can envision an independent global E-Commerce company for the hospitality industry specializing in representing worldwide hotel purchasing.

In addition to allowing two-way access to suppliers, the Internet makes possible the networking of suppliers and support companies directly into the value chain allowing them to replace functions normally carried on by an organization. It even provides a platform to permit competitors to share individual core competencies, thus increasing the worth of both companies. As noted above, Hyatt Corp. and Marriott International Inc. have teamed up on an E-procurement network for hotels that they will introduce in 2001. The joint venture has a potential market of \$100 billion for operating supplies, food and beverages, and capital expenditures such as furniture in 50,000 hotels in the United States alone. While many hotel companies have internal E-procurement initiatives, this is the first time competitors have formed a separate E-Commerce entity and invited others to participate (Greenemeier & Rosen). In two other examples of external businesses networking directly into a hotel's processes online travel service, Preview Travel has formed a broad alliance with Hotel Reservation Network to make HRN's negotiated hotel room rates available to Preview Travel's over nine million members, also Omni Hotels upgraded its reservations system to a seamless environment for agents both within and outside the company using Pegasus Systems' GDS interface. The seamless environment also includes the company's on-line reservations system as well as Pegasus' Internet-based reservations system Travelweb (Inge, 1999).

Timesharing

A check of Interval International's Corporate Profile and Home Page reveals that the vacation ownership (timesharing) industry can be traced back to its European origin in the 1960's. Interval is the second leading Timesharing Vacation Exchange company in the world. Vacation Ownership "Timesharing" is the right to use specific weeks of a resort during a specific time period. Ownership of a timeshare is very similar to ownership of a condominium except that rights are limited to a certain week during the year. The Timeshare business got a bad name in the 70's because of badly managed properties and widespread fraud but their popularity enjoys a resurgence in the 90's with major players entering the industry such as Disney, Hilton, Ramada, and Marriott. If one looks at the math, timeshare seems like a dream business. One room currently sells for about \$12,000 per week. When multiplied by 52 potential weeks, it yields a gross profit of \$624,000 and a net profit of about \$575,000 considering a \$40,000 to \$50,000 price to build. Two problems with timeshare are an incredibly high marketing cost and the fact that most people do not want to vacation in the same spot and at the same time each year. However, the venture becomes viable by adding the Internet. Developers can find customer leads cheaply over the Net and owners can exchange their weeks through "virtual" Timesharing Vacation Exchange companies like Interval and travel anywhere in the world. Interval International's director of E-Commerce, Bill Brown, states that for vacation-ownership companies, this powerful medium [the Internet] is proving to be an effective vehicle for reaching potential customers and generating sales leads, as well as providing a service to its members. "Nine out of 10 of our members have access to the Internet and are in some way using it," Brown said... "The Internet has created a powerful opportunity for vacation ownership firms to better communicate, do business and provide services to its members." (Baumann, 2000). As an example of the kind of faith people have in this concept, TELUS, Canada's second largest telecommunications company, signed a five-year, \$6.5 million agreement with Intrawest Corp., a leading developer and operator of mountain resorts across North America, to jointly fund the development of state-of-the-art Internet services for Intrawest's North American timeshare resorts. TELUS will provide web site hosting, design and development, E-Commerce, Internet platform support services, web advertising and joint-content initiatives to Intrawest and its North American divisions. TELUS and Intrawest said they plan to develop highly personalized web sites for each of Intrawest's resorts and real-estate developments in North America. The sites will be interactive so visitors can personalize content based on their preferences (e.g. skier or snowboarder oriented information). "We intend to capitalize on the benefits of the Internet in every aspect of our business," said Daniel Jarvis, executive vice president and chief financial officer of Intrawest (TELUS, 1999).

RESEARCH DESIGN

To assess the potential use of E-Commerce by the HRI, fifteen hotel and resort and three Timesharing Vacation Exchange companies' Internet sites were surveyed to check their current involvement with the web. Relevant service industry survey questions were taken from a questionnaire developed for product sales over the Internet (contained in Appendix A). Finally, a summary is provided to put into perspective the current relationship between the potential and actual use of Internet technology to involve the HRI in ECommerce. The report shows a slow but growing movement of the HRI into E-Commerce.

Survey Results

Fifteen web sites in five categories of hotels (three per category) were surveyed in order to determine first hand the current use of the Internet by the industry. Also the sites of three leading Timesharing Vacation Exchange companies were surveyed. Questions were answered on a yes or no basis or by giving a numerical rating from one to five with five being the highest. Due to the small sample size, no attempt was made at coding or real quantitative or qualitative analysis. Data was used to get a sense of where the industry stands with regards to Internet use. Categories, query topics, and numerical results are shown in Appendix A, Table 1, attached to this report.

A review of the Timeshare companies shows that all have professionally done sites, all are global, and use all media of communication to interface with customers. Unfortunately one cannot interact with their sites unless one is a member. The basic site is only to distribute information and to solicit membership inquiries. Membership is beyond the scope and time limitations of this paper.

In reviewing the purpose of the sites one finds that only 3 of the 15 companies or 20% are involved in business to business while all three of the Bed and Breakfast resorts are for information only and have no Internet contact with businesses or customers.

Looking at the business strategy area we see that 10 of 15 or 67% use promotions as a customer magnet and forty percent are using their site to replace value usually provided by others and are thus functioning as "value chain pirates." Being a value chain pirate works by capturing someone else's margin by displacing them from their value chain (Treese). Some direct site visitors to see a tour or travel agent of the customers choosing and some have travel agencies and rent-a-car companies linked to their site. All the sites had great potential for value chain piracy, but most were not taking advantage of it. Two of the Timeshare companies could be considered channel masters, but this could not be verified as only members have access to the full site. All the companies were traditional companies with the exception of two of the Timeshare companies that are totally virtual in operation. Eighty-nine percent of the sites were global with several using more than one language.

Site appearance and function were professionally done pretty much across the board with average ratings for the 18 sites, based upon a five point scale, of 3.6 for color, 4.9 for graphics, 4.0 for lack of clutter and 4.3 for organization. The Bed and Breakfasts scored the lowest, which would be expected as the quality of the web site is, to a great extent, a function of money invested. It was refreshing to visit sites that were not in a contest to see how much stuff they could cram into a page and how many flashing and moving objects they could display. In this respect they are ahead of many other commercial marketing sites. All the sites but one had search capability using defined categories from pull down menus. Sixty-two of the 13 hotel sites with search capability had key word search in addition to defined categories. Content was current (4.1), navigation was easy (4.2) and the information was relevant with respect to what a customer might want to know (4.0).

Customer Service was available from most sources. Eleven out of the 18 sites, or 61%, provided on-line help. All but four of the sites could be contacted by E-mail and only four sites did not provide a 1-800 number. Only two sites did not have a commercial phone number. Three sites provided questions and answers with just 50% linking to other sites for more information or help. Fully two-thirds did not have any policy on use of customers' information. For those who made reservations online, 67% could track that reservation on-line. Of the five remaining sites, four could be tracked by E-mail and only one required a phone call.

Yahoo and Excite search engines were evaluated for ease of use as part of the survey. Neither site did well, with both companies rating less than 4. Excite rated best at 3.75 with Yahoo rating only 2.75. Yahoo consistently failed to bring up the homepage of a given company on the first shot. If one knew the URL one could get it, but if one just typed in Marriott, for example, one got information about Marriott Hotels. The Marriott Hotel web page was not in the first twenty hits. Excite would go directly to the reservation sites, which sometimes would not lead the site visitor back to a home page or other information. Both search engines continually bombard users with advertising, contests, flashing lights, and offensive color combinations. Perhaps these sites appeal to the video game generation, but they do not do much for the middle-aged business person who might actually buy something.

SUMMARY and CONCLUSIONS

Actual use of E-Commerce by the HRI

With all this great potential, how is the HRI doing? "In general, the sense is that hotels have been rather late getting into the Internet game," says analyst Alan Alper (Wagner, 2000). Statistics from InternetWeek, Benchmarking Partners <http://www.internetwk.com/> show that the industry has expanded its customer base because of the Internet by 15% and has moved supply purchases to the Internet by approximately the same amount (16%). The HRI is achieving 8% of revenue via the Internet and cutting costs from indirect materials procurement, customer management, and in fulfillment and delivery via the Internet an average of 8%.

Bass, the brewer and world's second largest hotel operator, predicted it would hit its \$1 billion annual target for Internet room booking revenues within four years. The company, with 2,800 hotels with 450,000 rooms is already taking in \$12 million a month of hotel bookings over the Net. This figure represents nearly 3% of the company's global revenue and it is growing every day. (Macalister, 2000, May).

However, planning a trip on the web is still a difficult, unrewarding hassle, according to an analysis of 20 U.S. travel industry web sites, such as Excite, Preview Travel, Priceline and others, by Quidnunc, a global e-business consultancy. Most non-buyers object to the Internet's lack of human contact, personal privacy and credit card security, and cite a need for more time to make a decision. (Inge, 1999). The report shows a slow but growing movement of the HRI onto the web. Given that only 1.5 to 2.5% of the globe is using the Internet, 15% generation of revenues is not too bad. The business to business aspect of the industry is lagging behind at 8%, which is not good considering that 90% of global E-Commerce is business to business. The current thrust appears to be one of replacing the phone and fax with Email and a web site. Also web sites are being used as an advertising tool like fancy yellow pages with a bad index. The reality is that in today's global economy, one must spend money on E-Commerce just to stay competitive. With 59% of business travelers making Internet connections and printers in the room a number one priority, and Wal-Mart Stores Inc. providing on-line hotel reservations on its new web site, an organization must participate in E-Commerce activities or get left behind.

One problem in developing a web strategy is apparent from the sites and the literature is that the customer's point-of-view and the hotel's point-of-view are different. The customer is looking for a satisfying accommodation at the best possible price. The hotel is trying to isolate the customer and bring him or her to its facilities. It is currently so difficult to compare hotels on the Net and work with a hotel on price that customers will simply replace physical travel agencies with on-line ones like Travelocity.com or Priceline.com.

The most frequently mentioned challenge facing hotel operators in a web-based reservations environment is how to keep control of room inventories. Online travel agencies like Travelocity already book about half of the hotel rooms reserved on the web. The growing popularity of travel auction sites, of which Priceline.com is the biggest and most well-known, but there are many others, threatens to radically change the buying mentality of hotel consumers. But as in any business situation, challenge also means opportunity. Hotel owners and operators who understand and master the nuances of E-Commerce will be able to permanently leapfrog the competition. Those who do not may be out of business. (Wakins, 2000, March)

The one customer / one room proposition of the HRI lends itself to an E-Commerce approach. Hotels already function as networked systems and currently connect themselves by phone and fax to external companies that do their marketing and provide support services. HRI organizations must focus on what, where, why, when and how customers buy and then determine those customers' desired level of service in terms of waiting time, special convenience and product variety (Kottler, 1994). Given a focus on the basics, HRI should and will continue to exploit E-Commerce technologies from both a business to customer and business to business point of view.

REFERENCES

Anonymous (1999), "TELUS, Intrawest Announce E- Commerce Partnership," *Hotel and Motel Management*, 214, (March), 14, 10.

Adhikari, R. (1998), "Sifting for Online Gold," *Computer Reseller News*, 800, (July), 48.

Baumann, M. (2000), "Internet a Powerful Sales Tool for Vacation Ownership," *Hotel and Motel Management*, 215, (January), 1, 20.

Capozzoli, E. A., S. L. True, and T. K. Pritchett (2000), "E-Commerce a Conceptual Framework," *Advances in Marketing*, Proceedings of the Southwestern Marketing Association, San Antonio, Texas, March, 23-28.

Inge, J. (1999), "Technology Newstand, Update This," (8), <http://www.updateplus.com/>

Greenemeier, L., and C. Rosen (2000), "Hospitality Industry Joins the E-Marketplace Push," *Information week*, 785, (May), 6.

Kottler, P. (1994), *Marketing Management: Analysis, Planning, Implementation and Control*, 8th edition, Englewood Cliffs, NJ: Prentice Hall, 531-532.

Liddle, A. (2000), "Starwood, Marriott, Hyatt Shifting \$8B budgets to E-Purchasing," *Nation's Restaurant News*, 34, (23), (June), 6-22.

Macalister, T. (2000), " E-finance: Bass Predicts \$1bn Net Bookings The Price May Be Fight, But Analysts Wonder Whether E-tailers Can Deliver," *The Guardian; Manchester*, (May), 1.

Treese, W. G, and L.C. Stewart, (1998), *Designing Systems for Internet Commerce*, Addison Wesley and Longman, Reading, MA, 37.

Wagner, M., (2000), "Hilton's Online Strategy Nets Four- Star Rating -- Hotel Chain Uses Internet to Increase Sales, Link to Customers and Cut Procurement Costs, *Internetweek*, (817), (June), 89-90.

Watkins, E., (2000), "E-Commerce: Promise or Threat?," *Lodging Hospitality*, 56, (3), (March), 6.