
Characteristics and Behavior of Top Chain-Restaurant CEOs

by Christopher Muller and Crist Inman

pp. 64-69

This study reveals the function and characteristics of a restaurant CEO. Based on 85 CEOs' responses, including 37 from the quick-service segment and 25 from the midscale (family) segment, the CEOs exhibited some fairly consistent attributes and traits: a reliance on a reasonably short-term planning horizon, an entrepreneurial rather than "rational" or hierarchical management style, and an operations- or field-management-based perspective of the critical skills necessary for success. When asked what are the most important issues facing them, they most frequently mentioned hiring quality people, rising to the challenge of greater competition, meeting government mandates, and identifying changing consumer needs. When they focused on the competitive nature of the restaurant business, they enlisted such terms as market saturation, risk aversion by their boards of directors and owners, and the changing market environment. Only three out of four thought that they would be as successful in the future given the changes they foresee in the critical skills required of restaurant CEOs.

HOTEL MARKETING

Hotel Management and Marketing on the Internet: An Analysis of Sites and Features

by Jamie Murphy, Edward J. Forrest, C. Edward Wotring, and Robert Brymer

pp. 70-82

Many hotel managers and hotel-operating companies are attempting to use the internet and worldwide web as an effective management and marketing tool. An exploratory survey finds thousands of hotel-related sites. Most such sites are hotel guides, chain hotels, and individual hotels, in that order. Current WWW hotel sites vary tremendously. Available functions of a web page include: travel information, reservations and payment, special promotions, links to partners, direct consumer feedback, employment opportunities, audio and video ads, gift certificates, shareholder information, newsletters, frequently asked questions, and a list of and links to individual hotels. The costs of establishing and maintaining a web site vary considerably, depending on the site-owner's commitment and objectives. The most effective hotel sites are those that give the consumer the easiest, most rewarding access to relevant and related information. For any web site, there are five important considerations for its successful management: defining the mission, calculating the margins, addressing the mechanics, planning the marketing, and performing the maintenance.

PROFILE

Lessons of a Lifetime: The Development of Hilton International

by Curt R. Strand

pp. 83-95

Hilton International began on a comparative shoestring, with \$300,000 in preopening money and an offer from the Puerto Rican government that Conrad Hilton could not refuse. With no further financial support from the parent company, a small staff expanded judiciously using profit-sharing leases and, later, management contracts. Each deal had to make sense on its own, and the company was ever sensitive to the potential impact on its good name of a bad deal. Cut loose from the domestic Hilton organization in 1963, Hilton International is now a multibillion-dollar company. In addition to pioneering leases and management contracts, the firm created an employee-development institute in 1968 that was instrumental in developing its key employees, which is one of the major contributions a management firm can bring to a hotel deal.

IN
Brief



executive summaries of this issue's feature articles

Hotel Management and Marketing on the Internet

An Analysis of Sites and Features

by Jamie Murphy, Edward J. Forrest,
C. Edward Wotrung, and Robert A. Brymer

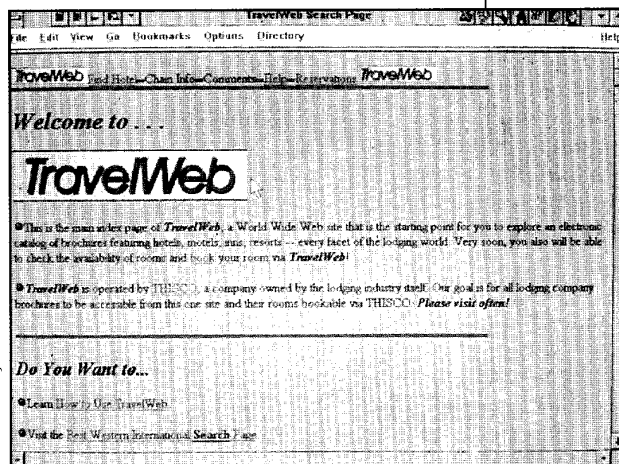


Photo courtesy of Best Western International

There are many practical, profitable, and creative business uses of the internet and its worldwide web that are valuable and affordable, and that go far beyond simply pitching products to consumers.

The ballyhoo surrounding the internet continues to intensify. To determine how the hotel industry is using this potentially revolutionary marketing and management tool, we took an exploratory look at the internet and at worldwide-web hotel sites. We looked at the type of hotel-related sites that exist on the web. We also surveyed the sites via e-mail, and the responses we gathered gave us valuable insights on current and potential web applications.

Jamie Murphy is a Ph.D. student in the interactive-communication program at Florida State University, where Edward J. Forrest, Ph.D., is a professor and program head, C. Edward Wotrung, Ph.D., is a professor, and Robert A. Brymer, Psy.D., is a professor in the department of hospitality administration.

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Earlier we undertook a similar survey to determine the restaurant industry's use of the internet and the worldwide web (WWW).¹ Hotels have some similarities with restaurants, but the WWW hotel sites we surveyed offer many more features; there were 32 separate features for hotels versus 10 for restaurants in our earlier survey. The difference may be due to the fact that the hotel survey took place more recently (and some if not most of the restaurant sites now have more features). Another explanation is that we compared independent restaurants to chain hotel companies. Or the difference may be simply because hotels offer a broader range of features than do restaurants.

We analyzed the practicalities and purposes of the site features, charting which ones each hotel offers, and developed a picture of how specific hotels use their WWW sites and which features work best.

Many companies may be questioning whether their WWW ventures are worth the effort, either economically or strategically. A recent study by the Boston-based Yankee Group notes that the "hype-fueled stampede to the Web is already beginning to slow... While the number of commercial sites grew at a weekly rate of 4.4 percent in the third quarter, that rate has slowed to just 2.8 percent in the fourth quarter as an increasing number of companies have begun leaving the Web."²

¹ Jamie Murphy, Edward J. Forrest, and C. Edward Wotring, "Restaurant Marketing on the Worldwide Web," *Cornell Hotel and Restaurant Administration Quarterly*, Vol. 37, No. 1 (February 1996), pp. 61-71.

² Paul Nogiows, "Internet Shakeout Predicted for 1996," *Inter@tive Week*, December 28, 1995. URL: <http://www.zdnet.com/~intweek/print/951218/money/doc2.html>
The Yankee Group was founded in 1970 and is today one of the world's leading technology research and consulting firms. URL: <http://www.yankeegroup.com/>

A company's good or bad experience depends on the amount of research it did before going on-line and its long-term financial commitment to maintaining a web site. Steve Franco, program manager at the Yankee Group, observes, "Few businesses have based their Internet investment on anything more than a back-of-the-envelope calculation... 18 percent have done no analysis at all, while only 12 percent have justified their investment plans under the scrutiny typically required within an organization."³ In our opinion, a hotelier should think long and hard before going on the WWW.

Jim Van Deusen, director of sales for Harvey's Hotel in Nevada, offers a sobering perspective on the use of the WWW: "It does not currently justify the resources necessary to initiate and maintain a presence. It is a toy and at the moment only duplicates the telephone and mail. I waste my time responding to reservation requests that should have come via phone and answering questions about the snow conditions. I am considering removing my e-mail address and inserting our regular 800 phone number. We have very effective systems in place to service customers, and this is not one of them. I believe the current best use of our home page is *only* as another advertising and marketing medium."⁴

To have a successful web site and realize the potential of that tool, one must do some careful planning. As Michel Bouquier, executive director for Relais and Chateaux, states: "Being on the internet requires a full marketing strategy. You must know your own personal goals... For Relais and Chateaux those goals are to increase worldwide visibility, upgrade public relations and pub-

³ Ibid.

⁴ URL: <http://www.harveys.com>

licity, develop sales, and include new technology in internal communication."⁵

Intranet. For Bouquier and other hotel-marketing practitioners, the internet also has a communication function for internal management tasks. Indeed, as Michael Lewinski of the Coburn Hotel in Boulder, Colorado, maintains, "The most valuable potential of the internet does not lie in better advertising and marketing for businesses but rather in new means of interpersonal communications."⁶ Managers can now communicate in a more timely, efficient, and cost-effective manner.

Referred to as the intranet, the internal corporate or management applications of WWW technology are being billed as the most practical management application of the information superhighway.⁷ A recent report by Zona Research estimates that "more than half of the 250,000 computers supporting World Wide Web services today are posting data exclusively as corporate Intranet sites and that more than 15 million workers are linked using Intranet applications."⁸

Tim Clark's 1996 predictions in his *Inter@tive Week* column perhaps best summarize the future of the WWW: "Business uses of the Web will far outstrip consumer activity. Not just the intranet for internal corporate use, but for collaboration, technical support and commerce with customers and

⁵ Relais and Chateaux is a French firm with over 400 chateaus, country houses, and restaurants worldwide. E-mail address: mb20@calvacom.fr

⁶ E-mail address: mjl@nile.com

⁷ "Bill Gates Unrolls Microsoft's Internet Map," *PC Magazine, Trends Online*, December 8, 1995. URL: <http://www.zdnet.com/~pcmag/trends/tr1208b.html>

⁸ Tom Steinart-Threlkeld, "Internet Growth in 1995 Unrelenting, Lycos and Zona Find," *Inter@tive Week*, December 11, 1995. URL: <http://www.zdnet.com/~intweek/daily/951211d.html>

WWW Addresses of the Hotel Sites Analyzed

Chain Hotels*

Choice Hotels	www.hotelchoice.com/
Colony	www.cybertours.com/colony/home.html
Crowne Plaza	www.crowneplaza.com/
Delta	www.deltaresorts.com/
Grand Heritage	www.grandheritage.com/index.html
Harrah's	harrahs.lv.com/
Hilton	www.hilton.com
Holiday Inn	www.holiday-inn.com/w_main.html
Hotel Equatorial International	www.equatorial.com
Hyatt	www.travelweb.com/hyatt.html
Marriott	www.marriott.com
Novotel	www.novotel.com
Outrigger	www.outrigger.com
Prince	ec.nri.co.jp/clclub/reservation_e/info1/05000000/08000000.html
Promus	www.promus-hotel.com/
Radisson	www2.pcy.mci.net/marketplace/radisson/
Relais and Chateaux	www.calvacom.fr/relais/accueil.html
Shangri-la	www.shangri-la.com
Sheraton	www.sheraton.com
Westin	www.westin.com/

Independent Hotels

Auburn U. Conference Center	www.viper.net/clients/HotelCC/
Coburn	www.nilenet.com/~coburn/hotel.html
Empress	vvv.com/empress/
Harvey's	www.harveys.com
HoJo St. Catharines	www.niagara.com/howardjohnson/
Hotel de la Montagne	www.isys.com/www/travel/canada/quebec/montreal/hotels/montagne/montagne.htm
Hotel du Parc	www.duparc.com
Hotel Durant	cyber.cclims.com/comp/hdur/hdur.html
Hotel Pendini	www.dada.it/pendini/hotel.html
J and J	www.venere.it/home/finenze/jandj/jandj.html
Omni Charleston	www.sims.net/organizations/omni/omni.html
Ridzene	www.latnet.lv/ligumi/RIDZENE/
St. James	199.171.16.53/stjames.html
Toll House	www.losgatos.scruznet.com/los_gatos/businesses/toll_house/storefront.html
Vanderbilt Beach	naples.com/vanderbilt/
Vienna City Club	www.Austria.EU.net/sca/CityClub/

*We expected the search engines to discover sites for Best Western, Doubletree Inns, and Ramada, but no such sites were revealed to us at the time of this study. Indeed, Best Western does have a site, as illustrated elsewhere in this article.—J.M., E.J.F., C.E.W., and R.A.B.

partners.”⁹ Intranet applications may hold the key to the development of the WWW as an effective management tool rather than just an efficient marketing tool.

In this paper we present some baseline data and methods that can help hoteliers make practical use of the WWW and may point to areas of future research. By analyzing the features of the existing WWW hotel sites and questioning the cyber-hoteliers, we provide both a snapshot of existing sites and a starting point for future research into how to use this efficient medium effectively.

Methodology

On December 17, 1995, we used the keywords *hotel*, *Florida hotel*, *Orlando hotel*, and *hotel reservation* with five separate search engines (a search engine is a WWW site that looks for keywords in a stored database of millions of WWW sites). The search engines were the same four as in our previous survey plus AltaVista, then the newest and “best” search engine.¹⁰

We then categorized the hotel sites based on their description or name or by actually visiting the web site (by directing our computers to the appropriate URLs—“universal resource locators,” or WWW addresses). We started from the top of each returned search list and worked our way down. While it is not a random sample, working from the top down on a returned list is the process many WWW surfers use. We categorized a site only once per

⁹ Tim Clark, “Peering Into the Web's Tangled Future,” *Inter@ctive Week*, December 18, 1995. URL: <http://www.zdnet.com/~intweek/print/951218/webguide/col2.html>

¹⁰ The URLs for the search engines we used are as follows:

AltaVista: <http://www.altavista.digital.com>
Lycos: <http://www.lycos.com/>
McKinley: <http://www.mckinley.com/>
WebCrawler: <http://www.webcrawler.com/>
Yahoo: <http://www.yahoo.com/>

search engine, regardless of how many times it appeared. We followed the same procedure on December 18 and 19 to check the search engine's consistency and to determine the stability of the web sites, with the same results.

Twenty chain hotels and 16 free-standing hotel sites were analyzed to see what features they contained (see the box on the facing page for URL addresses of the sites). We recorded which of 32 different features were on those 36 sites. The different features were then placed into four broad categories: promotion and marketing, service and information, interactivity and technology, and management. We analyzed all sites twice to determine consistency, and the results for each coding were similar.

We sent a standardized but personalized e-mail questionnaire to all 36 hotels asking specific questions about their WWW-site experiences (see the list on this page). Thirteen hoteliers responded; their insightful responses appear throughout this article. The response rate (36 percent) might have been greater except for these considerations: the timing of the survey coincided with winter holidays (late December); non-U.S. sites surveyed (e.g., Latvia, Japan, France, Italy, Austria) may have resisted spending resources on translating the survey; large organizations (hotel chains) included in the survey tend to ignore such requests for information; and the survey posed a set of questions that may have appeared to some to be overwhelming and hence the survey was ignored.

Technical complexity. This is an exploratory study of a medium that is growing rapidly. Lycos, for example, contained about 8 million URLs in November 1995 and about 16 million the next month. "Through November, the number of computers serving up at least one

file to the public...reached 125,592, ...a fivefold increase from January when 26,168 computers were serving files to the public, according to Dr. Michael Maulden, inventor of Lycos's World Wide Web searching technology."¹¹ We made no attempt to randomly select sites or search engines.

Technical problems continue to hinder the WWW, and the future is unclear. Connection and transmission speed to the internet, evolving technologies, and browser compatibility are potential sources of problems. Each time a new or upgraded version of browser software is released, for example, it supports additional functions that may be incompatible with earlier versions or rival browsers. The latest experimental release (as of December 31, 1995) of Netscape, 2.0b4, supports new multimedia software plug-ins not seen on Netscape 1.2.¹² Not only that but all technological pieces (e.g., browser, modem, WWW site, network server, transmission systems, and plug-ins) must work together.

A plug-in is an additional software package that enables a browser to perform more sophisticated multimedia functions. The plug-ins new to Netscape 2.0b4 include:¹³ Sun's Java, Adobe's 'Amber' Acrobat Reader, Corel's CMX Viewer, Tumbleweed's Envoy Plug-In, Visual Components' Formula One/Net,

¹¹ Steinart-Threlkeld, *op. cit.*

¹² Netscape's URL: <http://home.netscape.com>

¹³ The URLs for some Netscape plug-ins are:

Sun Microsystems: <http://www.java.com/>

Adobe: <http://www.adobe.com/>

Corel: <http://www.corel.com/corelcmx/>

Tumbleweed: <http://www.twcorp.com/>

Visual Component: <http://www.visualcomp.com/>

NC Compass: <http://www.excite.sfu.ca/>

NCompass/

Object Power: <http://www.opower.com/>

Progressive Network: <http://www.realaudio.com/>

Macromedia: <http://www.macromedia.com/>

Tools/Shockwave/sdc/Plugin/index.htm/

VDONET: <http://www.vdolive.com/>

newplug.htm/

Paper Software: <http://www.paperinc.com/>

Apple: <http://www.apple.com>

E-Mail Questions

- (1) Are you happy you put up the site?
- (2) Do you feel the site will be cost-effective?
- (3) How many monthly hits do you receive?
- (4) How many monthly e-mails do you receive?
- (5) How many monthly reservations do you receive?
- (6) How expensive was the site to create?
- (7) How expensive is the site on a monthly basis?
- (8) How many monthly person-hours does WWW-site maintenance take?
- (9) What would you like to say to your fellow hoteliers about using the WWW or the internet in the future?
- (10) Any other comments?

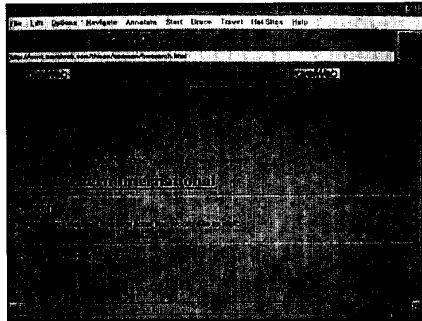
Exhibit 1**Hits for each search engine**

Keyword	AltaVista	WebCrawler	Lycos	Yahoo	McKinley
Hotel	~100,000	6,397	1,676	754	>60
Florida hotel	~10,000	641	83	39	>60
Orlando hotel	~5,000	201	58	6	2
Hotel reservation	~15,000	1,193	721	48	52

Exhibit 2**Classification of WWW hotel sites (in percentages)**

	Yahoo (N = 162)	Lycos (N = 105)	WebCrawler (N = 109)	McKinley (N = 103)	Total (N = 479)
Guide	46%	62%	61%	39%	51%
Hotel	19%	21%	36%	32%	26%
Conference or show	5%	5%	1%	19%	7%
Travel agency	12%	3%	0%	1%	5%
Product or service	9%	2%	0%	1%	4%
Game or humor	1%	2%	2%	3%	2%
Hotel school	4%	1%	0%	0%	1%
Mortgage lenders	2%	0%	0%	1%	1%
Miscellaneous	3%	5%	1%	4%	3%

Photo courtesy of
Best Western
International



NC Compass's OLE Control, Object Power's Openscape, Progressive Networks' Real Audio, Macro-media's Shockwave, VDONET's VDOLive, and Paper Software's WebFX; Apple's Quick Time will be added soon.

Evolving multimedia features will make today's best WWW sites soon seem primitive. Moreover, they will prove frustrating to site designers and users, owing to browser incompatibility, software requirements, and limitations on transmission speed.

Cyber-hoteliere such as Michael Lewinski, though, look forward to incorporating "new technologies (cable modems, AT&T Paradyne's GlobeSpan, and so on) that will provide bandwidth for uncompressed real-time video over existing delivery systems, allow us to provide video tours of our properties, and allow for videoconferencing for reservations and queries."

Although our analysis of the various hotel web sites was objective, it reflects our experiences using our computer system in December 1995. Using another browser or computer system, or choosing a different time for the study, would probably give different results. Best Western, for example, was not in our original analysis but announced its WWW site in late January 1996.¹⁴ Moreover, while revisiting some sites in January 1996, we noticed that features not present in our December analysis are now part of those sites.

We did not analyze the sites for "flow," a subjective term for WWW sites that means "fun, fast, intuitive, interesting, and easy to navigate."¹⁵

¹⁴ Best Western's URL:

<http://www.bestwestern.com/best.html>

¹⁵ For in-depth information about flow see, for example: Mihaly Csikszentmihalyi, *Flow: The Psychology of Optimal Experience* (New York: Harper and Row, 1990); and J. Webster, L.K. Trevino, and L. Ryan, "The Dimensionality and Correlates of Flow in Human Computer Interactions," *Computers in Human Behavior*, Vol. 9, No. 4 (Winter 1993), pp. 411-426.

We do, however, comment on flow whenever appropriate.

Lots of Locations

AltaVista reported a mind-boggling number of sites—about 100,000—containing the keyword *hotel*. As Exhibit 1 shows, no matter which search engine is used, focusing the keywords by being as specific as possible fine-tunes the search.

Types of hotel sites. Over half the hotel sites that we examined are hotel guides (see Exhibit 2), such as Casino Tour Listing, British Travel Information, and San Francisco Hotel Reservations.¹⁶ Most of the guides are sponsored by entrepreneurs or tourism associations.

Roughly a fourth of the web hotel sites are maintained by hotels—primarily hotel chains. The hotel sites vary enormously in content, quality, and flow.

Conferences, travel agencies, hotel schools, mortgage lenders, and product or service providers account for almost a fifth of the sites. They are among hotels' future partners for a variety of internet functions such as human resources, accounting, marketing, purchasing, and finance. For example, travel agencies may book hotels via worldwide-web sites, chain hotels may post job openings on their web page, and hotel schools can make available their students' résumés on the web. As the technologies improve and hotels' internet management evolves, hoteliers will increasingly and effectively use the net for purposes other than marketing.

Hotel-site features. We observed 32 separate features on the 36 analyzed hotel sites (see Exhibit 3). Typically, the opening screen of a

Exhibit 3
Features found on WWW hotel sites

	Percentage of chains	Percentage of independents	Percentage of total	Classification*
E-mail	60	81	69	S, I
Travel information	60	81	69	S
Reservations offered	60	50	56	P, I
Own URL	75	13	47	I
Direct e-mail	60	32	47	I
Reservations functioning	45	50	47	P, S, I
What's new	65	19	44	P, S
Special promotions	55	32	44	P, S
Group promotions	35	56	44	P, S
Links to partners	45	32	39	P, S, I
Feedback form	40	19	31	P, I
Frequent-visitor program	35	6	22	P, S
Reservation payment	10	32	19	P, S, I
Business-travel promotion	25	6	17	P, S
Multilingual site	15	19	17	P, S
Family or kids promotion	20	6	14	P, S
Download or view documents	15	0	8	P, S, I
Secure reservation payment	5	6	6	P, S, I
Employment opportunities	10	0	6	S, M
Audio	10	0	6	S, I
Video	10	0	6	S, I
Gift certificates	10	0	6	P, S, I
Shareholder information	10	0	6	S, M
Employee of the month	5	0	3	S, M
Safety and security tips	5	0	3	P, S
E-mail newsletter	5	0	3	P, S, I
On-line forum	5	0	3	S, I
Frequently asked questions	5	0	3	S
Restaurant promotion	†	69	—	S, I
List of all hotels	90	†	—	P, S
Links to individual hotels	80	†	—	P, S, I
Hotel-search capability	35	†	—	P, S, I

* Key:
P = promotion and marketing;
S = service and information;
I = interactivity and technology; and
M = management.
† = Not measured

¹⁶ *Casino Tour Listing's URL:* <http://www.vegas.com/vegascom/castour/castour.html/>
British Travel Information's URL: <http://www.inect.co.uk/vacation/>
San Francisco Hotel Reservations' URL: <http://www.hotelres.com>

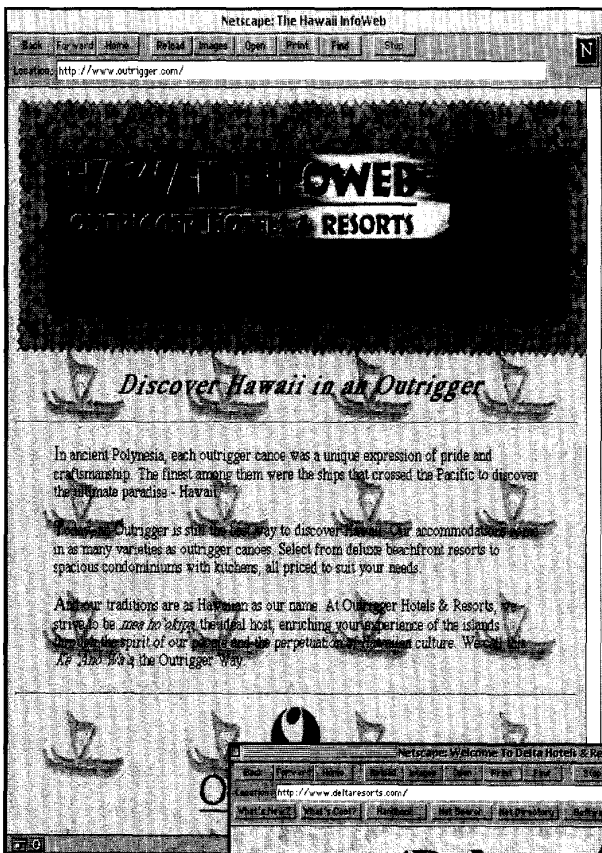
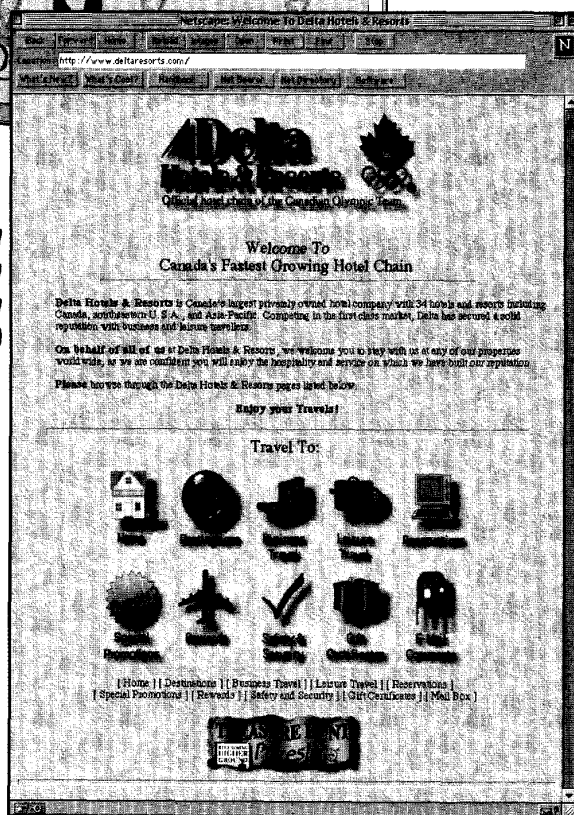


Exhibit 4
Opening
screen of
Outrigger's
web site
(as seen
using
Netscape)

Exhibit 5
Opening
screen of
Delta's web
site (as seen
using Netscape)



web site displays the features available at that site (see Exhibits 4 and 5). E-mail and some type of travel information were the most common features, found on about seven out of ten sites. About half the sites had direct e-mail; in theory that provides for more direct communication between the hotel and the cyber-guest. A company URL address that includes the firm's name or some other company-specific identifier, which we found on roughly half the sites, is another feature that shows the hotel's commitment to the WWW (see Exhibits 4 and 5 for examples, and the accompanying sidebar on page 78 for information about how to register for a URL). Chain hotels used that identifying feature six times more often than independent hotels.

While over half the hotel web sites we looked at offered web users the means to make reservations over the internet, less than half had a functioning reservation system, only seven suggested how to make payment for the reservation, and only two of the 36 sites offered a secure (encrypted) method for making payment directly via the web site. There is a huge chasm between offering reservations and completing the transaction. Independent hotels seem more eager than chain hotels to encourage payment using the web (about one in three versus one in ten), often by simply suggesting e-mailing, faxing, or calling-in the necessary credit-card information.

Promotions such as special or seasonal (16 sites), group or conference (16 sites), frequent-visitor (8 sites), business-travel (6 sites), and family or children (5 sites) were also popular features. Two of the sites we looked at offered gift-certificates. "Linking" to the WWW sites of a chain's individual hotels (16 of the chains did that) or linking to other on-line partners (9 of the 20 chain hotels and 5 of the 16 independent

hotels did so) is another popular, useful function. "Linking" refers to clicking highlighted text on a web page to automatically transfer to another web site.

A few hotels used their sites for management activities other than marketing. Two sites listed employment opportunities and one announced the employee of the month. Two sites listed shareholder-related information.

Several sites experimented with some relatively new internet technologies. Over a third of the chain-hotel sites provided the means to search for and connect with specific hotels in that chain (via an interactive search engine). Roughly a third of the sites offered the opportunity to complete an electronic feedback form—a perfect example of a simple, effective use of the WWW that is a mid-1990s version of the decades-old in-room comment card.

Three sites provided the opportunity to either download or view a multitude of brochures. Two sites had audio capabilities and two had video capabilities. One site had an e-mail newsletter, and another had an on-line forum for travel discussions.

Analysis of Features

An impressive array of features and evolving technologies await the WWW site designer or site visitor. Cyber-hoteliere must, though, analyze how these features effect or enhance the mission, margins, mechanics, marketing, and maintenance of their web site. If on-line reservations do not work, and if no one subscribes to the e-mail newsletter or watches the video, all that high-tech work and expense is for naught.

To assess the functions and potential of the 32 features, we divided them into four nonexclusive categories: promotion and marketing, service and information, interactivity

and technology, and management (refer back to Exhibit 3). Ten of the features serve three functions, and most of the other features serve two functions. Web-site design, though, should focus not on multiple-function features (i.e., lots of bells and whistles)

but on the mission of the site. At present, management functions are the least utilized, and service and information functions are the most common. As hoteliers realize the WWW's potential as a management tool, site features and functions will evolve.

Using the various features, we determined which of the surveyed hotel chains made the most use of the WWW site for the four separate functions (see Exhibit 6). As this study uses exploratory methodologies, the ratings are by no means definitive. Delta, Grand Heritage, Hilton, and Outrigger scored well on three functions. We did not, however, analyze the sites for flow, and as we noted earlier, the WWW does not always work smoothly. Surfing the web is sometimes exciting and sometimes frustrating. A poorly designed, slow-to-download, boring site gets little repeat business. The bells and whistles one does choose to use are of little use if the site does not flow.

Cyber-hoteliere's experiences. All cyber-hoteliere who responded to our e-mail (including Jim Van Deusen, whom we quoted at the start of this article and who was not happy with some of his company's site's functions) were happy that they had put up a WWW site; most

Exhibit 6
Top WWW sites of hotel chains, by number of functions (listed alphabetically)

	Promotion	Service	Interactivity	Management
Delta	◆	◆	◆	
Grand Heritage		◆	◆	◆
Hilton	◆	◆	◆	
Holiday Inn	◆			
Hotel Equatorial	◆		◆	
Marriott				◆
Outrigger	◆	◆	◆	
Promus				◆
Radisson	◆			
Relais and Chateaux	◆	◆		
Westin	◆	◆		

were very happy. Marion Darby of Shangri-La Hotels says: "We are very pleased. It has given us favorable publicity within the meeting-planner community, and we are pleased to have exposure to leisure travelers and to travel agents."¹⁷ Most respondents thought their site was cost-effective, and all others felt that it would soon be cost-effective.

Respondents reported that they received from less than 100 to about 100,000 monthly "hits." Monthly e-mail messages received ranged from one (Michael Lewinski says: "Thus far, a grand total of two counting yours. We have not yet actively marketed our site, as we are working to get [visual] images of the hotel up.") to about 400. Most cyber-hoteliere reported 30 to 60 e-mail messages a month. Monthly on-line reservations varied from none up to about 200. Novotel, for one, does not feature reservations via the web site, because, as Thomas McCaffrey of Novotel North America said, "It isn't fair to our travel-agent partners."¹⁸

The reported cost of creating a site ranged from \$120 to \$15,000, and the monthly costs ranged from none to about \$1,000. Time spent on site maintenance each month

¹⁷ E-mail address: Mdarby6326@aol.com

¹⁸ E-mail address: tjmccaff@ix.netcom.com

Finding Yourself in Cyberspace

Hotel chains spend millions of dollars to maintain their corporate and brand identities with logos, advertising, and carefully designed collateral material. Those brand identities extend to the distribution chain in many cases with toll-free reservation numbers chosen to reinforce the brand name. Hilton's 800-HILTON is an example, as is 800-4CHOICE, 800-HAMPTON, and the charming 800-ILUVTAJ. Now, the internet and worldwide web present a new challenge to maintaining brand identity and an opportunity to use the internet in strategic planning.

The current public-relations and marketing approach to the internet involves developing a web page, which requires, among other things, an address with a registered domain name. A domain is a unique address that identifies a computer or network that is connected to the internet. While any domain name not already registered can be used, the logical approach is to reinforce a company's brand name as the domain. For example, it's easy to determine who maintains such web pages as "www.disney.com," "www.ibm.com," or "www.cbs.com."

Many lodging chains have registered their brand names as domain names. Registration allows a company to protect its corporate identity on the internet, maintain its brands' competitive advantage, and present an easy-to-remember address for e-mail and the worldwide web. The low cost and relatively simple registration procedure make the corporate and brand name vulnerable to preemption by other parties.

While conducting a December 1995 study on alternative distribution systems for hotels, we searched for hotel companies' corporate and brand names on the domain-name-registration database maintained by Network Solutions. Our list of logical domain names for the top-100 hotel-management companies extended to 214 names.¹ Of the 214 names we tested, only 32, or 15 percent, were registered by lodging companies. We found that 61 names (29 percent) had been registered by other firms, and 121 (56 percent) were unregistered at the time and up for grabs.

Domain Name System

The domain name system (DNS) emerged in the 1980s as a system of hierarchical names used to refer to computers connected to the internet.² All domain names in the United States are registered within seven generic, or top-level domains: .com, .edu, .gov, .int, .mil, .net, and .org. Most corporations register their names under the .com domain, which is reserved for commercial entities. Countries other than the United States have their own top-level domain name, such as .uk for the United Kingdom, .au for Australia, and .it for Italy.

The Internet Assigned Numbers Authority coordinates and manages the DNS through a central internet registry. In the U.S., applications for second-level domains in .com are registered at InterNic, which is sponsored by the National Science Foundation.³ Would-be registrants in outside the U.S. should contact their regional registrar.

First come. InterNic registers domain names on a first-come, first-served basis, and it does not screen requested domain names to determine whether a requested name infringes on a trademark or other rights of a third party. InterNic recognizes that an internet domain name may conflict with an existing trade or service mark, but the holder of that mark may not have the exclusive right to use the name on the internet. Ownership of a trade or service mark does not automatically include rights to a domain name, although InterNic recognizes trademarks as evidence in the case of a domain-name dispute.

If a trademark holder demonstrates to InterNic that a domain name already assigned to an internet user is identical to that trademark, InterNic then asks the user to submit proof that the user also holds a trademark for that name. For example, Nikko is the trademark both of Nikko Hotels and Nikko Securities Company. If the internet user cannot provide proof of trademark, the holder of the domain name is given a reasonable amount of time to change to a different domain name. The disputed name is placed on hold (not used by anyone) until a court can resolve the dispute. InterNic's policy is intended to be neutral to the rights of both the registrant and trademark holder.

On the other hand, if the user provides proof of its trademark, the user can continue to use the registered domain name, as long as the user agrees to protect InterNic from the costs of any potential lawsuits with regard to that domain name. Without such agreement, the domain name again goes on hold.

Act soon. Given the internet's growth, InterNic is considering subdividing the .com domain. Should that happen, all future registrations would be in a subdomain of the name of the industry (e.g., .services.com; .manufacturing.com). The longer name would be less readily used and perhaps be more difficult for customers to remember.

Survey Results

Court action is not the only resort if a company has registered a domain name that would be desirable for a lodging chain. It is possible to negotiate a change in registration or use a variant of the name. Sheraton made such an arrangement in September 1995, gaining "sheraton.com" through a deal with the Sheraton Fallsview Hotel and Conference Center. Holiday Inn Worldwide uses holiday-inn.com because Holiday Inn by the Falls, a Canadian franchisee registered holidayinn.com 38 days before HIW inquired with InterNic. Likewise, Choice Hotels uses hotelchoice.com because a computer firm holds choice.com.—*Richard G. Moore, M.B.A., associate professor of information technologies at the Cornell University School of Hotel Administration, followed his own advice and registered his family Christmas-tree business as www.mooretrees.com. Coauthor Zhiqiang Cao, also at Cornell, is a candidate for the degree of Master of Management in Hospitality.*

Domain name	Domain registrant	Registration date
Selected registered lodging firms' domain names, Dec. 1995		
crowneplaza.com	Crowne Plaza Hotel, San Marcos, CA	Nov. 14, 1995
hilton.com	Hilton Reservation Center (Hilton Hotels Corporation)	Nov. 23, 1994
holidayinn.com	Holiday Inn by the Falls, Canada	March 21, 1995
holiday-inn.com	Holiday Inn Worldwide	April 27, 1995
hotelchoice.com	Choice Hotels International	June 13, 1995
hyatt.com	Hyatt Technical Center	Feb. 13, 1994
marriott.com	Marriott Corporation	Jan. 5, 1993
redroof.com	Red Roof Inns, Inc.	Oct. 3, 1995
ritz.com	Ritz-Carlton Hotels	March 21, 1995
sheraton.com	Sheraton Fallview Conference Center, Canada (acquired by Sheraton Hotels)	Nov. 22, 1994

Selected non-hospitality registrants, Dec. 1995

ana.com	ANA-SYSTEM, San Francisco	Aug. 3, 1989
choice.com	Peripheral Test Instruments	Dec. 1, 1992
fourseasons.com	Four Seasons, Santa Monica	June 1, 1995
forte.com	Forte Software, Oakland	Aug. 15, 1991
inter-continental.com	Nejla Elmukhtar, Los Angeles	March 29, 1996
regent.com	Regent Associations, UK	Dec. 13, 1994
ritz-carlton.com	Blue Chair Media, Los Angeles	Aug. 24, 1995
sleep.com	John Weymouth, Provo, UT	Feb. 23, 1996

Sample names not registered, December 1995

accor.com	kempinski.com	sleepinn.com
four-seasons.com		stouffer.com

¹ We used *Hotels* magazine's June 1995 ranking. A logical domain name in our view takes the form of "companyname.com" or "brandname.com."

² See: J. Postel, "Domain Name System Structure and Delegation," *RFC 1591*, UCS/Information Sciences Institute, March 1994.

³ InterNic's home page, which offers more information about registering domains, is found at: <http://rs.internic.net/rs-internic.html>

varied from "almost none at this time, but we want to do more interactive stuff, which will take time" to 50 person-hours. Jim Van Deusen noted, "As we implement additional enhancements, maintenance could increase ten- to twenty-fold."

The cyber-hoteliere's comments to their fellow hoteliers about the internet's future were frank and mostly optimistic:

- Joe Durocher of Outrigger Hotels says: "While the direct business resulting from the web is small today, we expect it to grow. As the number of sites increases, it will become harder to break through the clutter and catch the user's eye. Those on early will have a distinct advantage."¹⁹
- Thomas McCaffrey advises: "They should stay away from it at all costs! I don't need the competition, thanks! Clearly this is the most efficient way of getting to an enormous segment of the worldwide marketplace, and the future looks to be unlimited."
- Charles Lim of Hotel Equatorial says: "It will be a new way of reaching out to the customer, something to consider besides print, television, radio, and other [traditional] media. The internet creates a level playing field where size is no longer apparent; a small group can appear to be as big as a large group."²⁰
- Scott Allison of Delta Hotels looks to the future: "The internet is increasingly becoming the source of information for a growing segment of the customer base in today's economy. The increase in bookings and requests for information through this new medium is surpassing expectations, and the volume is growing every day. Delta Hotels is committed to establishing a leadership

position in this important new medium."²¹

Hypermarketing on the Internet

The new character and capabilities that the web offers have marketing theoreticians grasping for new concepts and paradigms. Hoffman and Novak have introduced the concept of "hypermarketing" to help explain the peculiar aspects of conducting business in computer-mediated environments (CMEs). They argue that "the hypermedia CME presents a fundamentally different environment for marketing activities than traditional media and interactive multimedia" and that the "differences are so great that conventional marketing activities have become transformed and cannot be implemented in their present form."²²

They go on to say: "Most important from a marketing perspective, however, is the manner in which the hypermedia CME transforms the marketing function... [and] turns traditional principles of mass media advertising... inside out, rendering application of advertising approaches which assume a passive, captive consumer impossible. Thus, marketers must reconstruct advertising models [because]... consumers actively choose whether or not to approach firms through their web sites, and [the consumers] exercise unprecedented control over the management of the content they interact with."

To the point, in the immediate interactive future, hotel marketing will need to pay homage to more than just the marketing concept. In addition, as Hoffman and Novak decree, the marketer will also need

to engage "the Hyper-Marketing Concept, [wherein] the firm not only attempts to uncover and satisfy customer needs at a profit, but also engages in marketing activities that contribute positively to the development of the hypermedia CME itself, by developing new paradigms for electronic commerce."

The communication concept.

In our evaluation, the hotel sites that are on the forefront of defining those new paradigms of electronic commerce on the web are those that give the consumer the easiest, most rewarding access to relevant and related information; take a personal approach; and facilitate the exchange of mutually beneficial information. They are the sites designed and developed in accordance with what we define as the communication concept: an enabling, engaging, facilitating, sustaining, and rewarding interaction between the consumer and the hotelier.

In our marketing future, conversation with one's customers will prove the key to conversion, as pointed out by Schrage and others: "Successful advertisers will have to stop their frenetic shouting at customers, and will instead offer polite invitations designed to initiate or continue individual customer dialogues. Starting a dialogue, either with a current customer or with a potential new customer, will be the primary goal of any marketer hoping eventually to sell products or services. Advertisers will no longer find it beneficial to irritate viewers into remembering their brands. Not only is this a bad way to begin a dialogue, but it is very likely that in the interactive future a consumer who feels irritated with a certain ad or brand will be capable of forbidding that brand from appearing on his own set again."²³

¹⁹ E-mail address: delta@inforamp.net

²² Donna Hoffman and T. Novak, "Marketing in Hypermedia Computer-Mediated Environments" (working paper, Vanderbilt University, December 15, 1994). URL: http://www2000.ogsm.vanderbilt.edu/cmepaper/section5.html#trans_market_act

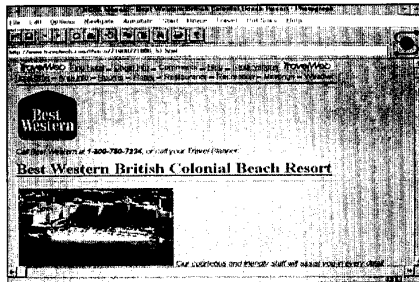
²³ M. Schrage, Don Peppers, Martha Rogers, and Robert D. Shapiro, "Is Advertising Finally Dead?," *Wired Magazine*, No. 2.02 (February 1994). URL: <http://vip.hotwired.com/wired/2.02/features/advertising.html>

¹⁹ E-mail address: joe.durocher@outrigger.com

²⁰ E-mail address: Charleslim@aol.com

Some Hotel Sites on the Worldwide Web

Best Western. Pegasus Systems' TravelWebSM (<http://www.travelweb.com>) maintains sites for Best Western hotels. By its own accounting, Best Western International boasts the largest volume of lodging information and booking facilities on the worldwide web. In January the



company claimed that web pages for more than 3,000 Best Western hotels were accessible through Travel-Web at <http://www.bestwestern.com/best.html>. Best Western web sites provide information on individual Best

Western hotels around the world, including facilities, services, amenities, property photographs, area information, maps, directions, bookings, on-line reservations, and confirmations.

The Colony Beach & Tennis Resort. In early 1996 the Colony Beach & Tennis Resort announced the address of its home page: <http://www.colonybeachresort.com>. Visitors to Colony's home page can explore the resort's accommodations, restaurants, tennis facilities and programs, children's programs, and other amenities.

A response screen allows visitors to send e-mail directly to the resort, where requests are handled by the reservations staff. Links to other internet sites are currently under development.

"In the hospitality industry it's important to use technology to reach the greatest number of new potential guests," said Phil Anderson, director of sales and marketing. "We're having a lot of success with our home page and we've found that many home-page visitors are asking for information and rates to book short-term vacations either next week, in a month, or in two months."



Choice Hotels International. Travelers are offered a 10-percent discount when they use the internet to book rooms with Choice Hotels: <http://www.hotelchoice.com>. Choice's on-line booking system, which is fully secure, was tested in February and was fully operational by the end of March 1996.

Hawthorn Suites. Hawthorn Suites' worldwide-web site, which became available in February 1996, can be visited at <http://www.hawthorn.com>. The site gives users a thorough overview of Hawthorn Suites Hotels locations, accommodations, amenities, special promotions, and company news. The Hawthorn Suites web site also allows users to view several pages on each of the 18 Hawthorn Suites locations, with information about each hotel's accommodations, amenities, meeting facilities, and proximity to local attractions and corporate centers.

Other site pages include Hawthorn Suites news and highlights, including information about property acquisitions. The company reports that on-line reservations capabilities will soon be available, and that users will be able to enroll electronically in Hawthorn Suites' corporate-account program once the site is fully active.

Hilton Hotels and Conrad International. Hilton Hotels announced in January that consumers can book reservations at 58 U.S. Hilton hotels using Pegasus Systems' internet TravelWebSM site, <http://www.travelweb.com>. Hilton Hotels' remaining 165 properties in the U.S. were scheduled to be on the TravelWeb site by the end of March 1996. The site provides real-time access to Hilton Hotels property descriptions, rates, and room availability; the ability to make reservations and to receive a confirmation number; and the opportunity to cancel bookings. Reservations at Conrad International hotels can be booked through the same TravelWeb site using the **Trisico** link.

Internet users can "hyperlink" from the Hilton Hotels' web site, called **HiltonNet** (<http://www.hilton.com>), to the TravelWeb site. Links to Hilton property descriptions are available at both the HiltonNet site and the TravelWeb site.

Holiday Inn. Holiday Inn's Web site (<http://www.holiday-inn.com>) debuted in June 1995 and was the first in the industry to allow customers to book rooms over the internet. Today the company handles about 700 internet-generated reservations per week—not a high percentage of overall bookings, but enough to pay for the service, according to Les Ottolenghi, director of emerging technologies for Holiday Inn Worldwide.

The competition soon followed suit so that internet reservations are no longer a novelty. Holiday Inn, however, continues to create increasingly sophisticated web pages, such as by adding real-time electronic brochures and virtual-reality tours of its **Crowne Plaza** product (<http://www.crowneplaza.com>). And with dozens of company employees assigned to web-page development, Holiday Inn continues to generate new products, services, and ideas for its web site. For example, there's **Holiday Inn OnLine**, which makes available training information and updates for employees and franchisees alike; and hardware that will allow hotel guests to use their in-room television sets to reach the WWW and the internet in a simple and convenient fashion.

Eventually Holiday Inn would like to introduce what Ottolenghi calls a "cyberhotel," a place on the web where on-line guests can hang out, hold meetings, store web-related data in a "closet," and have access to an electronic concierge that can find specific information on the internet. The cyberhotel would include a "cybercafe," to which hardworking cyberguests could adjourn to relax and where they would find a variety of entertainment options.

A full description of the ongoing development of the Holiday Inn web site is available at http://www.cio.com/WebMaster/0396_rooms.html, where there's an article entitled "Internet Booking Profitable for Holiday Inn," by Leigh Buchanan (*e-mail*: buchanan@cio.com). That article was first published in the March-April 1996 issue of *WebMaster* magazine (<http://www.cio.com/WebMaster/>).

Microtel Inns. The budget chain Microtel Inns announced its web page in late March (<http://www.microtelinn.com>). The company is using its web site to attract, entertain, inform, and study its customers. For example, the Microtel web pages include a detective game that encourages visitors to learn more about Microtel properties while another feature of the site is a survey to determine the needs of travelers who have disabilities.

Westin Hotels & Resorts. Westin Hotels is among the hotel companies that are using TravelWeb resources to acquire an internet presence and to generate secure, on-line bookings: <http://www.westin.com>. The Westin web site allows users to view property descriptions, receive reservation-confirmation numbers, cancel a booking, and see a list of pending reservations.

"Hotel Jobs" on the 'Net. "Hotel Jobs" is a WWW site devoted exclusively to advertising hospitality-related management positions available. The job postings are categorized under these headings: accounting, management, rooms, food and beverage, sales, and other. The web site can be reached at <http://www.hoteljobs.com/jaeg>. For \$100 or less advertisers may post their available positions. Applicants then respond according to whatever procedure the advertiser chooses: directly by fax or phone, or through an anonymous mail box whereby the web-page manager forwards responses to the employer for a nominal charge. For more information, call 214-492-0725.—*F.L.C.*

M, M, M, M, and M. The importance of regular and meaningful dialogue with one's customers (as well as with one's employees, suppliers, and investors) should be apparent. As it is, the WWW provides the hotelier with a unique channel to extend and improve that dialogue. Accordingly, internet-savvy hoteliers will ensure that the communication concept is adhered to as they go about defining the **mission** (the web site's objectives and constituencies), calculating the **margins** (the web site's return on investment or costs and benefits), addressing the **mechanics** (its design, features, and content), planning the **marketing** (both internally through related web sites and externally through traditional media advertising), and performing the **maintenance** (the ongoing construction and improvement of the site).

Hoffman and Novak admonish those who do not have that enlightened perspective: "Marketers must focus on playing an active role in the construction of new organic paradigms for facilitating commerce in the emerging electronic society underlying the Web, rather than infiltrating the existing primitive mechanical structures. This means that the effective marketer on the Web will not be the one, for example, who posts 'politically correct' advertisements on Usenet Newsgroups in order to avoid repressive negative word-of-mouth 'flaming.' Rather, the effective marketer will be actively constructing new models for marketing on the Web, based upon an increasingly diverse and complex virtual society. Such efforts will contribute to the establishment of organic solidarity within the heterogeneous market defined by segments of consumers and firms doing business in the hypermedia CME."²⁴

The WWW offers the cyber-hotelier a revolutionary management

²⁴ Hoffman and Novak, *op. cit.*

Reality Check: The Next Step

It is tempting for today's hotelier to be seduced by the information superhighway. Tom Forester, in "Megatrends or Megamistakes? What Ever Happened to the Information Society," gives a short, entertaining, and perceptive article about predictions on technology's effects on our society, touches on such topics as the robot revolution, the paperless office, the leisure society, and the fully automated factory. The prognostications, he says, often miss the mark by a wide margin, because the prognosticators are seduced by the technological wonders.*

The internet will affect the way the hospitality industry operates in the future and, as such, hoteliers would do well to join the 21st century now, go on-line, and see for themselves. They must keep in mind, however, that the five Ms of internet management—mission, margins, mechanics, marketing, and maintenance—must guide the web-site strategy. Also, while there are benefits to using the internet, electronic communication will not supplant tried-and-true management principles. Instead it should abet good management.

A hotel manager may not have the time or the inclination to personally take the hotel on-line. The speed of change in the technology and the seemingly endless possibilities can be overwhelming. However, it is important to be aware of new developments and to have a working knowledge of the technology. It is here to stay. If your hotel does not keep pace, the added success the WWW can offer will pass your hotel by.

What is a hotel manager to do? Here is a brief checklist for the hotel manager who wants to enter his or her hotel into the world of cyberspace.

Define the mission. Set objectives with your hotel's owners, corporate office, and executive committee. What do you want to accomplish by going on-line? Here are some possible marketing objectives:

- Improve sales by increasing communication with meeting planners, incentive markets, corporate business travelers, travel agents, and associations
- Expand public relations and publicity
- Offer special promotions to frequent, special, or seasonal guests
- Make available a guest newsletter, brochures, and on-line forum for travel discussions

And some possible management objectives:

- Improve internal communications with the management team in your hotel, other hotels in your company, and the corporate office (could include internal memos and follow-ups to personal conversations)
- Transfer data, for example, financial reports and purchasing information, in a timely and inexpensive way
- Notify the management team and other hotels of security-related issues
- Broadcast human-resource issues and announce the employee of the month and other quality-team members
- Increase the speed and accuracy of purchasing and working with suppliers

A hotel may want to start with only a few objectives. A prudent approach may be to consider objectives that best fit the needs of your hotel at this time. Gradually increase the number of functions your system is capable of as your management team acquires the skills and knowledge to use them.

Calculate the margins. A site on the WWW should be treated like any other allocation of resources. What are the expected fixed and variable costs for setting up and maintaining a site? What are the expected cost savings or increased sales (or both) that will result from a site? Is a WWW site a good investment of time and money?

Study the mechanics. Look at the costs associated with designing the system you need to accomplish your objectives. Do you have someone on staff who can design a system for the hotel and train the managers to use it? If not, hire a consultant who is familiar with hotel operations and computer technology, knows how to integrate the objectives, and can train the staff.

Plan the marketing. If your hotel's internet and WWW objectives include marketing, the hotel's overall marketing plan or strategy must incorporate those objectives. If you have selected management objectives, they must be fully integrated into the hotel's business plan. The internet and the WWW, to be most effective, must be marketed internally and externally with the entire hotel, as part of the overall marketing package.

Schedule maintenance. Every good hotel manager has a preventive-maintenance plan. Technology also needs maintenance. Every system has glitches and requires improvements to enhance its efficiency, and better options become available every day. A hotel will not want to change its system every day, of course, but it is important to stay abreast of ways to improve it and to maintain the easiest, most personal, and relevant access possible.—J.M., E.J.F., C.E.W. and R.A.B.

*Tom Forester, "Megatrends or Megamistakes? What Ever Happened to the Information Society," *Information Society*, Vol. 8, No. 3 (September 1992), pp. 133-146.

All of the hoteliers who responded to our survey were happy that they had put up a WWW site; most were very happy.

and marketing tool. As the web evolves, it will offer enhanced features, an expanding base of users, and better site-development tools. While it will not entirely replace traditional means of management and marketing, it is the wave of the future and brings with it new rules of communication. Most of our respondents indicated positive experiences with their web sites and a commitment to this new means of commerce. They realize, however, that successful WWW marketing requires not just the initial creation and steady maintenance of their site but also the willingness to adapt to this evolving environment.

"In this digital economy, individuals and enterprises create wealth by applying knowledge, networked human intelligence, and effort to manufacturing, agriculture, and services. In the digital frontier of this economy, the players, dynamics, rules and requirements for survival and success are all changing."²⁵

Future Research

Since little research has been done on the hospitality industry's use of the new internet technologies, there are a multitude of research possibilities. We believe that business functions such as human resources, finance, accounting, purchasing, real estate, insurance, and management-information systems on the internet will prove at least as beneficial as the currently predominating marketing function. Kimberley Harris and Joseph West provide an excellent reference for the human-resources possibilities of multimedia in their article "Using Multimedia in Hospitality Training."²⁶

Future research should address the financial aspects of WWW sites. How much do they cost to establish, man-

age, and maintain? What are the fixed and variable costs associated with such a site? How much money will a WWW site save through reduced telephone inquiries or information dissemination (e.g., brochures)? How many rooms will be sold through a web site? Financial ratios such as return-on-investment or payback-period should be applied to web sites.

We did not look at hotel-guide or hotel-listing sites, although they make up most of the hotel sites. Questions about the nature of the site owners and the cost and benefits of the sites need to be discussed. Travel-agency sites and their relationship with hotels would also fit in with an analysis of hotel-guide sites.

Log files are the recorded behavior of site visitors. Unlike questionnaires about usage, log files show exactly how long a visitor stays on each page of a site. They also indicate the visitor's country and domain.²⁷ In addition to a statistical analysis of the visitor, controlled experiments with page design (layout, graphics, color, interactive features, and so on) would aid in future site design.

Ours was a rudimentary, exploratory content analysis. Sophisticated content analysis and random-sampling techniques should be applied to hospitality-industry sites. While some web-site features can be objectively measured (e-mail, file size, video, audio), others are more difficult to assess (flow, navigability, graphics). What functions the features serve and, more important, what mission a site serves should also be investigated. As baseline data are established, trend analysis becomes possible. **CQ**

²⁵ Don Tapscott, *The Digital Economy: Promise and Peril in the Age of Networked Intelligence* (New York: McGraw-Hill, 1996), p. xiii.

²⁶ Kimberley J. Harris and Joseph J. West, "Using Multimedia in Hospitality Training," *Cornell Hotel and Restaurant Administration Quarterly*, Vol. 34, No. 4 (August 1993), pp. 75-82.

²⁷ Internet addresses are broadly classified into several domains, and the domain of a specific address is indicated by the last two or three letters of the address. Among the most common domains are: "com" (commercial enterprises), "edu" (educational institutions), "mil" (military), and "org" (organization). Not all domains are generic, however; consider, for example, that "au" represents Australian internet addresses. (See the box on page 78 for more details.)