



The web sites of international tourist hotels and tour wholesalers in Taiwan

C.-S. Wan

Kaohsiung Hospitality College, No 1 Sung-ho Road, Hsiao-kang, Kaohsiung City, Taiwan

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Abstract

This study evaluates the web sites of international tourist hotels and tour wholesalers in Taiwan. The evaluation system consists of three general user criteria: user interface, variety of information and online reservation. Results show that 50 percent of the total sample of hotels and tour wholesalers have already established web sites. Among these “user interface” was rated highest among the three categories. “Variety of information” received the lowest rating. More tourist hotels provide on-line reservation systems than do tour wholesalers. Results also indicate that the use of the Internet in Taiwan’s tourism/hospitality industry is primarily for advertising, not marketing. In conclusion, it is suggested that, in regard to Internet marketing, tourist hotels and tour wholesalers work closely with information industries. © 2002 Elsevier Science Ltd. All rights reserved.

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1. Introduction

In recent years, the development of the Internet has increased dramatically and many countries in the world have made efforts to improve their Internet services. Poel and Leunis (1999) believe that the Internet is an important channel of distribution for consumers. According to recent studies, the Internet is the most effective when used as an advertising and marketing tool (Hoof, Hubert, Collins, Combrink, & Verbeeten, 1995; Kasavana, Knuston, & Polonowski, 1997; Walle, 1996). It can be contended that the Internet is changing the daily lives of individuals, companies and organizations and the way they seek information. In addition, the validity of the Internet as an advertising and marketing tool has been proven (Kasavana et al., 1997).

In Burke (1997), the author found that a web site’s content has a significant effect on advertising and marketing and that new systems for interacting with the Internet are becoming increasingly user-friendly, thus broadening the user base. The tourism/hospitality industry is beginning to use the Internet as part of its marketing effort (Connolly, Olsen, & Moore, 1998). In Taiwan, professional interest in using the Internet as a marketing tool is also increasing in the tourism/

hospitality industry (Yang & Wan, 2000; Yung, 1997/1998).

Although a number of research studies regarding web sites relating to the tourism/hospitality industry have been conducted worldwide (Countryman, 1999; Park & Sohn, 2000), few have been found that deal specifically with Taiwan. The purpose of this study is to evaluate the web sites of tourist hotels and tour wholesalers in Taiwan using content analysis. Three evaluation criteria, user interface, variety of information and the presence or absence of an on-line reservation system were used and the contents of web sites were compared between hotels and tour wholesalers. The results of this study provide industry professionals with information with which they can build well-constructed and effective web sites.

2. Literature review

Addressability and responsiveness are two of the more important features of digital networked communication at the present time (Leighton, 1997). Studies focusing on the Internet have been conducted in recent years, particularly as it relates to advertising and marketing. Among all of the Internet’s resources, the WWW functions the best in advertising and marketing. The

E-mail address: won@cc.nkhc.edu.tw (C.-S. Wan).

Internet has proven to be an effective means of advertising, marketing, distributing goods, and information services (Hoffman & Novak, 1996).

As previously proposed, the application of the Internet plays a very important role within the development of information technology (IT). Walle (1996) has indicated that there is an increasingly available supply of travel and tourism resources on the Internet encompassing a broader base of users and potential users. In general, the Internet can be used in two distinct (but not mutually exclusive) ways: first, as a source of data by which the user accesses resources purely to get information; and second, as a means of marketing and facilitating business transactions. The Internet is changing the ways in which the hospitality industry plans, controls, operates, and integrates a majority of its business activities, including its marketing activities (Kasavana et al., 1997).

Many researchers have used content analysis to evaluate the web sites of related industries (Murphy, Forrest, Wotring, & Brymer, 1996; Bell & Tang, 1998; Countryman, 1999). Murphy and his colleagues used five search engines to search hotel web sites in Florida and identified 32 different features from 36 hotel web sites that provide on-line reservations. They pointed out that using another browser would probably yield different results. The 32 features were divided into four categories: promotion and marketing, service and information, interactivity and technology and management. Countryman (1999) used content analysis to evaluate the official tourism web sites of all 50 states in the United States. Bell and Tang (1998) examined the effectiveness of the current Internet web sites from the user's perspective and claimed that 30 percent of the companies had facilities for conducting on-line transactions.

Many technical studies regarding the Internet have also been conducted. The tourism/hospitality industry is no exception, especially those companies concerned with IT. Yet, this has not been discussed widely in recent years. Cash, McFarlan, McKenney and Applegate (1992) have proposed a model showing how industry can use IT to improve both, a particular company's production as well as its marketing. The tourism/hospitality industry, in particular, depends on IT for the bulk of its business.

The use of Internet applications in the tourism/hospitality industry is a recent development. This study evaluates the web sites of tourist hotels and tour wholesalers in Taiwan.

3. Methodology

3.1. Population and sample

This study analyzed the web site content of 60 international tourist hotels and 78 tour wholesalers in

Taiwan. For the purpose of this study, an international tourist hotel is defined as a hotel that is rated three stars or higher. A tour wholesaler is defined as a travel agency with a minimum of US\$ 650,000 in capital. Two search engines Yam (<http://www.yam.com.tw>) and Kimo (<http://www.kimo.com.tw>), were used to search the web sites. The survey was conducted in a two-week period from June 1–15, 1999.

3.2. Rating system

Taylor (1986) describes three parts of the information process: the user, the interface, and the system. Taylor's Value-Added Model comprises six general user criteria (ease of use, noise reduction, quality, adaptability, time-savings, and cost-savings) that add value to an information system. Small (1997) believes that four of these six are particularly relevant to a web site's quality: ease of use, noise reduction, quality and adaptability. This study adopts Taylor's Value-Added Model, in conjunction with Small's (1997) findings, and adds comments from interviews with industry professionals to form the evaluation system. The evaluation instrument is divided into three categories of criteria: user interface, variety of information and on-line reservations. A 5-point rating scale was used to evaluate the categories of user interface and variety of information. The appendix provides an in-depth analysis of the rating scale. The yes–no evaluations were used in the "on-line reservations" criteria. Table 1 shows the rating system for evaluating web sites of hotels and tour wholesalers.

3.3. Data collection

In order to reduce bias in the evaluation process, two research assistants, whose expertise is in the field of hotel management and tourism management, examined the web sites of hotels and tour wholesalers, using an evaluation instrument. Each web site was evaluated by rating the overall excellence of user interface and variety of information on a 5-point rating scale. When the two ratings for each web site differed by one point or less, the average of the two ratings was taken as the final rating. When the two ratings differed by more than one point, then the two research assistants examined the web site together and determined the final rating. Fig. 1 illustrates the flowchart of the rating system. The difference between ratings by the two research assistants was more than two points for six hotels and five tour wholesalers. The two research assistants examined these 11 web sites together to determine the final ratings. Results show that 50 percent of the total sample examined had their own web sites. These consist of 30 tourist hotels and 39 tour wholesalers.

Table 1
Rating systems for evaluating web sites of hotels and tour wholesalers^a

A. <i>User interface</i> ^b	
(1)	Ease of physical access to the web site
(2)	Ease of accessing specific information within the web site
(3)	Standardized format (e.g. site directory maintains consistency)
(4)	Ability to access information in multiple ways and from various points in the system
(5)	An interface that provides both help and orientation
B. <i>Variety of information</i> ^b	
(1)	Simplicity (e.g. clarity of directions)
(2)	Current and reliable information (only includes information relevant to the topic)
(3)	Comprehensive coverage (sufficient amount of information provided)
(4)	Hyperlinks to relevant web sites
C. <i>Online reservations</i>	
(1)	Capacity to make reservations or remit payment by credit card directly through the Internet
0	No
1	Yes

^a If an online reservations service is provided, take note of the means of customer–company interaction (e.g. credit card, fax, telephone, E-mail, etc.).

^b 5-point scale: 1 = Very poor, 2 = Poor, 3 = Fair, 4 = Good, 5 = Excellent.

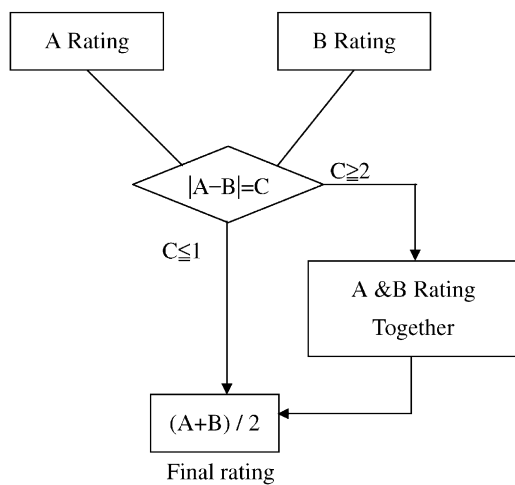


Fig. 1.

3.4. Data analysis

The data obtained from the rating system were coded, verified and keyed into a computer data file. The descriptive statistics of mean, and standard deviation were computed from the ratings for the 11 items. A *t*-test, at the 0.05 confidence level, was used to determine if significant differences exist between the groups of international tourist hotels and tour wholesalers. All data were analyzed using the Statistical Analysis System (SAS version 6.12) a data analysis software.

4. Results

Table 2 shows the results from a content analysis of the three criteria (i.e. interface, variety of information and on-line reservations system). A discussion of each is as follows.

4.1. User interface

It is very important to consider user interface while designing web sites. The user interface category in the evaluation instrument includes five items: (1) ease of physical access, (2) ease of accessing specific information within the web site, (3) standardized format, (4) ability to access information in multiple ways and (5) an interface that provides both help and orientation. Results show that the average rating scores among the five items are close to 3.0 for hotels, indicating that user interface of hotel web sites is generally good. Compared to the hotel ratings, however, the ratings of user interface as a whole among tour wholesalers are significantly lower ($p < 0.01$). The standard deviation of user interface is also significantly larger for tour wholesalers (0.84) than for hotels (0.20). This indicates that the design of user interface for tour wholesalers is quite mixed, some being very good while others being poor.

4.2. Variety of information

Web sites are primarily designed for introducing and advertising a company's products and/or services.

Table 2
t-Test comparison of ratings for web sites of international tourist hotels and tour wholesalers^a

Item	Mean ^b (SD)	Mean ^c (SD)	<i>p</i> -value
<i>User interface</i>	2.88(0.20)	2.29(0.84)	0.0012 ^d
Ease of physical access	2.93(0.25)	2.93(0.66)	0.9718
Ease of accessing specific information within the web site	2.97(0.18)	2.61(0.99)	0.0697
Standardized format	2.97(0.18)	2.46(0.79)	0.0027 ^d
Ability to access information in multiple ways	2.60(0.49)	1.79(1.34)	0.0027 ^d
An interface that provides both help and orientation	2.93(0.25)	1.68(1.38)	0.0001 ^d
<i>Variety of information</i>	2.13(0.29)	1.91(1.08)	0.3086
Simplicity	3.00(0.01)	2.86(0.75)	0.3048
Current and reliable information	2.63(0.49)	1.57(1.39)	0.0006 ^d
Comprehensive coverage	2.47(0.50)	2.04(1.40)	0.1337
Hyperlinks to relevant web sites	2.43(0.50)	2.00(1.44)	0.1410

^a Means were calculated from a 5-point rating scale (1 = Very poor, 2 = Poor, 3 = Fair, 4 = Good, 5 = Excellent).

^b N = 30 International tourist hotel web sites.

^c N = 39 Tour wholesaler web sites.

^d $p < 0.01$.

Therefore, business web sites should contain varied and timely information to attract as many users and potential customers as possible. The four items in the category “variety of information” include: (1) simplicity; (2) current and reliable information; (3) comprehensive coverage and (4) hyperlinks to relevant web sites. As a whole, the international tourist hotel web sites examined in this study provide a greater quantity and variety of information than the web sites of tour wholesalers. As far as variety of information is concerned, all of the tour wholesalers’ standard deviations are larger than those for the hotels. However, there was no significant difference in the ratings of variety of information between the two groups ($p > 0.05$).

4.3. *On-line reservations system*

The results of this study also found that 23 of the 30 hotels (76 percent) that have web sites provide an online reservation service. However, only five of the 39 tour wholesalers (13 percent) that have web sites provide an online reservation service. Online reservations are primarily made through e-mail (90 percent) and fax or telephone (80 percent). Only five hotels and one tour wholesaler provide a credit card payment system.

5. Conclusion

Although the number of people using the Internet in Taiwan has now surpassed four million, amazingly only 50 percent of this country’s international tourist hotels and tour wholesalers have established web sites. Among the three criteria in this study used for analyzing the content of web sites, the “user interface” category was rated good for both hotels and tour wholesalers. The “variety of information” category was rated fair for both hotels and tour wholesalers. In regard to the category “online reservations system” more hotels have web sites providing this function than do tour wholesalers. This is to be expected since a hotel’s services are much simpler than are those of a tour wholesaler. Online reservations are most commonly made through e-mail, fax, and telephone correspondence. Very few web sites provide a credit card payment system when making online reservations, indicating that many people in Taiwan are reluctant to make credit card transactions online. The present study uses the value-added model for analyzing the web sites of hotels and tour wholesalers. The implication of this study is the need for the tourist industry to have well-designed web sites, in order to enhance the consumer business online.

6. Discussion

As the number of web sites continues to grow at an explosive rate, how the web sites of each industry attract

customers will become increasingly critical for business survival. The methodology the author has adopted in this study is the value-added model based on information systems. The key elements of this model are user interface (accessibility, formatting, help and flexibility) and system quality (simplicity, currency and comprehensiveness). The author has adopted this model in designing a simple web site rating system to evaluate international tour hotels and wholesalers. This rating system emphasizes the user interface and variety elements, particularly from the user’s perspective. Online reservations were another evaluated item in regard to its convenience for industries and consumers alike. Berelson (1952) poses that content analysis can be used to evaluate different types of information in various media forms, as well as to evaluate web site (Salam, Rao, & Pegels, 1998). Therefore, we know that content analysis is suitable for evaluating web sites. Since the object of this research is web sites, a media form dealing with, the instantaneous presentation of products and industries, content analysis was deemed the most appropriate method of analysis. However, there are still some issues to carefully consider when using this method of evaluating web sites. First, all participants are given explicit details concerning the criteria of each rating scale, in order to avoid results that are too subjective. Second, participants should be on the web in approximately the same period of time to avoid widely different results. Third, participants should use both major browsers (i.e. Netscape and Internet Explorer) to evaluate each web site in case the sites are displayed differently on the different browsers.

6.1. *Implications*

The use of web sites in the tourism/hospitality industry as well as other business enterprises in Taiwan will undoubtedly become more significant in the 21st century. Therefore, tourism/hospitality professionals should frequently evaluate the content of their web sites in order to meet the needs of consumers. Moreover, “information industries”, such as Amazon have started to integrate multiple marketing services on the Internet, which poses a threat to the hospitality industry. However, as indicated by Graham (2000), traditional marketing channels are still valid and the full-range of marketing techniques available are needed. A recent study indicates that the final step of a one-to-one marketing program is to customize your product or service to meet each customer’s needs (Peppers, Rofers, & Dorf, 1999). For example, American Airlines provides helpful, up-to-date information on its web site thus improving the company’s effectiveness by generating timely, relevant information. This in turn, provides better insight into a customer’s needs. The traditional travel/hospitality industry should apply the full range of

the Internet's potential to its field so that integrating the travel/hospitality industry with the information industry will result in a win–win situation for both. Regardless of what avenues are adopted, it is certain that international tourist hotels and tour wholesalers will continually evolve in the future. Future research should focus on this developing interaction between the traditional travel/hospitality industry and the information industry.

Appendix A

Detailed definition of rating criteria for evaluating web sites:

A. User interface.

Q1: Ease of physical access to the web site.

- (1) *Very poor.* Access to the web site is very difficult and frequently causes the system to crash.
- (2) *Poor.* Access to the web site is difficult and occasional the system crashes.
- (3) *Fair.* Access to the web site is straightforward.
- (4) *Good.* The web site can be accessed easily.
- (5) *Excellent.* The web site is very easy to access quickly.

Q2: Ease of accessing specific information within the web site.

- (1) *Very poor.* The web site is difficult and unappealing to use.
- (2) *Poor.* The web site can be understood, but with some difficulty.
- (3) *Fair.* The specific information is easily found.
- (4) *Good.* The specific information is easily accessed.
- (5) *Excellent.* The web site is very appealing to the user, and easy to access.

Q3: Standardized format.

- (1) *Very poor.* The design of the web site is confusing.
- (2) *Poor.* The design of the web site is inappropriate.
- (3) *Fair.* The design of the web site is in standardized format.
- (4) *Good.* The design of the web site is in standardized format and has structure.
- (5) *Excellent.* The design of web the site is hierarchical.

Q4: Ability to access information in multiple ways and from various points in the system.

- (1) *Very poor.* In fractional ways and from certain points in the system.
- (2) *Poor.* In few ways and from little points in the system.
- (3) *Fair.* In indifferent ways and from decent points in the system.
- (4) *Good.* In heavy ways and from general points in the system.

- (5) *Excellent.* In many-sided ways and from miscellaneous points in the system.

Q5. An interface that provides both help and orientation.

- (1) *Very poor.* Does not provide any help function.
- (2) *Poor.* Provides simple help function.
- (3) *Fair.* Provides both simple help and orientation.
- (4) *Good.* Provides both complete help and orientation.
- (5) *Excellent.* Provides both complete graphics help and orientation.

B. Variety of information.

Q1: Simplicity.

- (1) *Very poor.* The direction of the web site is remote and indirect.
- (2) *Poor.* The direction of the web is insignificant and weak.
- (3) *Fair.* The direction of the web is adequate but without the mark.
- (4) *Good.* The direction of the web is unmistakable.
- (5) *Excellent.* The direction of the web is enough, distinct and with sidelight.

Q2. Current and reliable information.

- (1) *Very poor.* The web site offers non-relevant information.
- (2) *Poor.* The web site only offers a little relevant information some of the time.
- (3) *Fair.* The web site offers relevant information, but not enough.
- (4) *Good.* The web site offers enough relevant information.
- (5) *Excellent.* The web site offers enough relevant information that is so useful.

Q3: Comprehensive coverage.

- (1) *Very poor.* The web site offers almost no other cognate information.
- (2) *Poor.* The web site offers a little cognate information.
- (3) *Fair.* The web site offers some cognate information, but not enough.
- (4) *Good.* The web site offers enough cognate information.
- (5) *Excellent.* The web site offers an abundance of cognate information.

Q4: Hyperlinks to relevant web sites.

- (1) *Very poor.* The web site provides no hyperlinks to relevant web sites.
- (2) *Poor.* The web site provides few hyperlinks to relevant web sites.
- (3) *Fair.* The web site provides some hyperlinks to relevant web sites.
- (4) *Good.* The web sites provide many hyperlinks to relevant web sites.
- (5) *Excellent.* The web site not only provides many hyperlinks to relevant web sites but clearly clarifies them as well.

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