

AN EVALUATION OF ASEAN TOURISM WEBSITES

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ABSTRACT

The Internet has proved to be a widespread medium and an integral part of the habits of millions of users. An effective online communication strategy is considered nowadays a key element to achieve a competitive advantage on the market, to satisfy actual and potential tourists' information needs in a highly competitive way and to acquire new clients. All the ASEAN countries have implemented some kind of official tourism portal to promote their own destinations. An analysis of these tourism websites has been performed by collecting end-user evaluations and mapping contents and services offered online. The results of this survey are presented and compared with the general behaviour of the European Internet users regarding the use of the network as a tool to gather information, and to acquire travel services.

Keywords: ASEAN, Internet, Web site analysis

INTRODUCTION

In less than 30 years, the Internet has become the most significant development in communications since the invention of the printing press and has deeply revolutionised the way in which we communicate. The number of users connecting to the Internet worldwide is estimated to be more than one billion and it is still growing (IWS 2006). Moreover, it has been the fastest growing communications medium ever and most of this diffusion is due to the development of the World Wide Web; its rate of diffusion has been much faster than radio in the 1920s, television in the 1950s and mobile phones in the 1980s (Odlyzko 2000). For these characteristics the Web has been defined, since the beginning of its mass diffusion, as the *Holy Grail of Marketing* (Foxworthy 1997). Its actual potential as a marketing tool is greatly enhanced when fully integrated with other functionalities of the Internet, such as e-mail or public discussion boards, supporting real-time *one-to-one* and *one-to-many* communications.

The Internet provides features that are especially relevant to the marketing of tourism. Travel is an experiential practice; travellers are not simply buying packages, accommodation, seats, or food and beverages, they are fulfilling fantasies (Archdale 1995). The Internet, with its wealth of information, pictures and multimedia has the capability to provide the appropriate stimuli to favour the purchase of a travel product or service. Recent demographic (IWS 2006) data show that the top 15 tourism-spending countries (UNWTO 2006) also exhibit (with the exception of China) the highest percentages of Internet users among the population (Table 1).

Rank	Country	Internet Users (% of population)
1	Germany	61.2%
2	USA	69.9%
3	UK	62.3%
4	Japan	67.1%
5	France	50.3%
6	Italy	51.7%
7	China	10.4%
8	Canada	67.8%
9	Russia	16.5%
10	Netherlands	73.3%

Table 1: Top tourism spending countries (2005) and Internet users' data (2006)

Furthermore, it is well-known that tourism is in the top place among the interests of the world's cybernauts: just to give an example almost 47% of European Internet users browse the Web while planning a trip and almost 23% of them actually buy tourist products online (ETC 2002). This wide utilization of the Internet for travel related purposes is confirmed by the revenues of e-commerce in this area. In Europe, online travel sales have risen from 4.8 billion Euro in 2001 (2.3% of the total tourism market) to 31.5 billion Euro in 2006 (13% of the market), and the growth is expected to continue (Marcussen 2006).

As the tourism business, like many others, continues its globalization process, the competitive pressure on individual destinations and attractions increases. The growing competition, the increasing range of travel markets, products and destinations, as well as the ever more difficult chore of finding new market segments and communicating with them, makes the Internet a valuable tool for marketing travel and tourism (Pollock 1995). This is particularly true for destination marketing, an activity in which the success is mainly due to the ease with which a good supply of information about places, facilities and events is transferred to the visitor (Sheldon 1993).

The aim of this paper is to provide a method for the evaluation of National Tourism Office (NTO) websites and to illustrate this method by applying it to the NTO websites of the ten member countries of ASEAN.

METHODOLOGY

By summarizing the ideas and the studies of a number of practitioners and researchers it is possible to compile a list of elements that are essential to the development of a successful web site (Morrison et al., 2004; Nielsen, 1994; Nielsen & Molich, 1990; Rachman & Buchanan, 1999a, 1999b). The list of the criteria based on these authors' works for the evaluation of websites is given in the following table.

1.	Strategies and objectives must be clearly stated and clearly understandable by the visitors.
2.	The target audience must be identified and the site must meet the needs expressed by it.
3.	Features that make possible an interaction between the user and the organisation must be present and designed in a fully usable way.
4.	A rational structure supported by navigation aids must avoid any risk of confusion and allow users to browse all of the sections with great ease.
5.	Other features adding functionality or aesthetic appeal must be designed in a coherent way and must be functional to the site contents.
6.	Informational content must be presented in a readable and correct way (colours, size, fonts, grammar, style etc.). The site must exhibit credibility, relevance and accuracy of the information presented.
7.	Content of high value must be provided to the users to encourage them to explore further and to return regularly to the site.
8.	Regular and frequent maintenance to add, revise or remove content and to correct errors and malfunctions must be accomplished.
9.	Promotion of the site must take place using an integrated approach that incorporates traditional media and online resources.
10.	The financial, human and physical resources required for the Internet marketing effort must be given the correct consideration and planned and controlled in a reasonable way.

Table 1: Elements of a successful website

Based on these characteristics a quality index has been developed that has two major components. The first is the user evaluation of the website content and the second is evaluation of the website's functionality. Combining these two use-based scales it is possible to derive a general quality index defined as (Baggio, 2003):

$$\text{QUALITY INDEX} = \text{CONTENT EVALUATION} \times \text{FUNCTIONALITY EVALUATION}$$

The number of evaluators (i.e., the sample size) is an important element to derive a significant result from these assessments. Classical statistical procedures have well grounded methodologies for estimating the ideal size of a sample depending on the population parameters. The range is typically of the order of magnitude of $10^2 - 10^3$. However, it has been shown (Antonioli Corigliano & Baggio, 2006) that the significance of these types of assessments can be quite satisfactory even employing a limited sample of evaluators. In fact, for the present case of 30 evaluators, the confidence interval for the results presented here can be estimated to be around 5%.

CONTENT EVALUATION

Starting from the general principles given in table 1, it is possible to define a list of content characteristics that can be evaluated by a sample of users of a specific website. These content characteristics used are:

1. First impact (FI): the general feeling during a first scan, before an accurate visit to the site;
2. Design and graphics (DG): the quality of graphical elements (pictures, symbols, photographs, etc.) and the balance between texts and images;
3. Information contents (IC): the thoroughness and usefulness of information, the clarity of language;
4. Interactivity and services (IS): the number and the quality of the interactive services and the tested user-friendliness of the functions;
5. Structure and navigation (SN): the rationality of the website structure and navigation aids;
6. Technical management (TM): the updating of the contents, the response times and the absence of errors or missing links.

The content evaluation of a website on each of these criteria is qualitative; visitors express their appreciation of various website usability features by means of a score from 0 (minimum) to 5 (maximum) for each item on the list.

FUNCTIONALITY EVALUATION

The second user evaluation is made on the basis of the functionality and services offered on the websites. The criteria here have been identified by examining a series of possible informational content and interactive services that are considered useful or appealing for a user of a tourist website (Morrison et al., 2004; Rachman & Buchanan, 1999a, 1999b).

The items list, comprising elements such as accurate geographical information, itinerary descriptions, interactive request forms, e-business functionalities etc., is structured in four main groups:

- Informational contents (IN): information and documentation contents;
- Customer relationship (CR): contents and services that favour relationships with clients and visitors;
- Interactive services (SV): general interactive functions and services;
- e-commerce (EB): commercial and e-business functions.

The evaluators are asked to check the existence of the items on the website under analysis and to assign a score (from 0 = min to 5 = max) taking into account the usability and the completeness of the single functionalities (Antonioli Corigliano & Baggio, 2004; Baggio, 2003).

In this study ten websites of the national tourism organizations of the ASEAN countries have been assessed using a methodology derived from these considerations. A representative sample of end-users (30 people) completed a

questionnaire evaluating the websites based on the above characteristics: The websites considered in the present work are listed in Table 1.

Site	URL
Singapore	www.visitsingapore.com
Malaysia	www.tourism.gov.my
Brunei	www.bruneitourism.travel
Thailand	www.tourismthailand.org
Philippines	www.wowphilippines.com.ph
Viet Nam	www.vietnamtourism.com
Cambodia	www.tourismcambodia.com
Indonesia	www.budpar.go.id
Laos	www.tourismlaos.gov.la
Myanmar	www.hotel-tourism.gov.mm

Table 1: Websites considered for the present evaluation

RESULTS

The results of the contents evaluations and the assessment of the contents map (functionality) are shown in Figure 1 and Figure 2. The percent values (number of features present/expected) of the contents map have been rescaled to a 0-to-5 scale to facilitate the comparison.

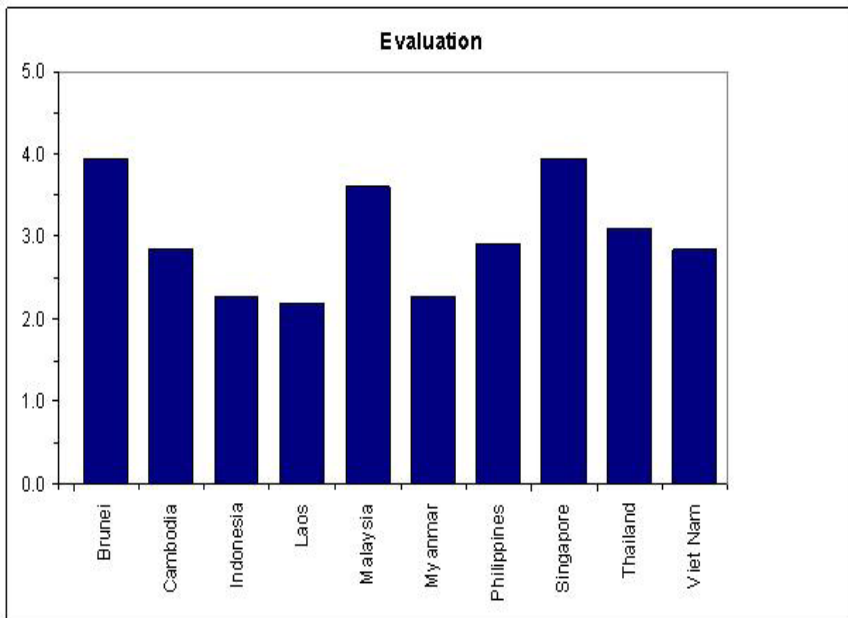


Figure 1: Websites content evaluations

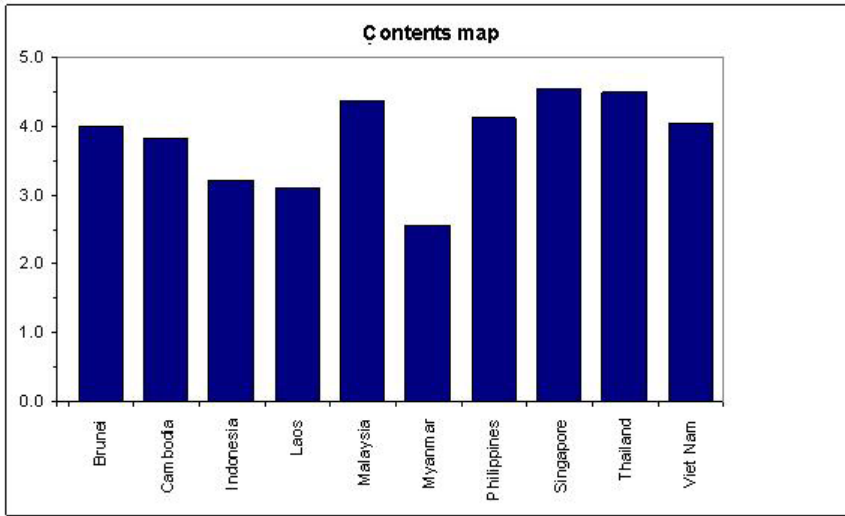


Figure 2: Contents map (functionality)

The combined quality index for the websites examined is shown in Figure .

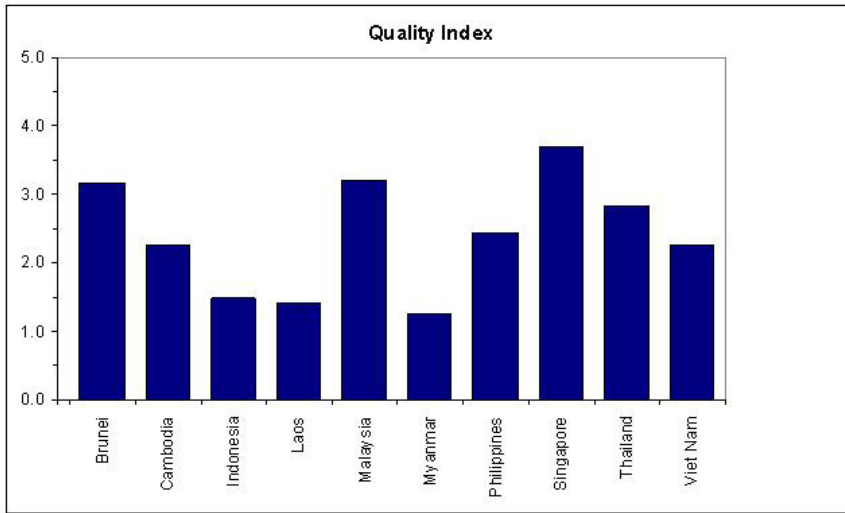


Figure 3 Quality index

DISCUSSION

It is clear from the results reported above that there is a wide variety in the websites and their satisfaction rating from evaluators. A number of the results score below a “sufficiency” mark (2.5). Websites that perform well include Singapore, Malaysia and Brunei. Many of the websites are lacking in content and services especially relating to interactivity and tools to facilitate participation by the users.

CONCLUSIONS

ASEAN countries are among the most popular tourist destinations in the world and the promotion of their resources is a crucial activity, mainly performed by the various national tourism organizations. The Internet and the Web have proved, in the last few years, to be a widespread communication and business environment and have rapidly become an important part of the habits of millions of users. An effective online communication strategy is considered nowadays a key element to achieve a competitive advantage on the market, to satisfy actual and potential tourists' information needs in a highly competitive way and to acquire new clients. All the ASEAN countries have implemented some kind of official Internet tourism portal to promote their own destinations. An analysis of these tourism websites has been performed collecting end-user evaluations and mapping contents and services offered online.

The results of this survey show that, even considering the relatively young age of these implementations, the websites presently available can be improved. While the potential of the Internet has been much discussed most of the websites do not meet their potential. Users' evaluations and mapping of contents and services offered attain a generally low quality index, mainly in the area of the customer relationship functionalities. Organizations may be handing over to close competitors' significant parts of their market share because their websites deliver a poor quality of experience to their users. Moreover, given the relationship between online buyers and website quality, some of the countries do not take full advantage of the e-commerce capabilities of the Internet, thus risking loss of significant business for the companies involved. In performing the analysis a quality index has been defined by combining user evaluations and level of contents and services provided.

Finally, the lack of interactive services and functions might prove a serious handicap in the near future. In fact, the most recent developments in this area show a strong push by the cybernauts towards tools and technologies that enforce an active collaborative usage of the Network. Web 2.0 (O'Reilly, 2005), and its travel-related adaptation Travel 2.0 (Bray, 2006; Wolf, 2006), as they have been named, are already on the stage, and the experts forecast an explosive success for these environments, considering them, for commercial companies, the new ways to achieve a competitive advantage on the Web.

Obviously, no claim of "absolute validity" of such a measurement can be made. The attempt to quantify quality characteristics may prove useful in comparing different implementations and, also, if the assessment is performed at regular intervals during the life of a website, such an index can help designers to better meet user needs and preferences easing the way to achieve a good success. While it may be difficult to be able to design a good quality website at its first publication online, a regular evaluation of target users' acceptance of the implementation provided should become common practice in order to derive the elements needed to review, modify or update the contents, services and the graphical aspects of

a tourism destination website. On the other hand, the comparison of the online presence provided by different subjects is a good way to assess one's own position among the competitors.

The main limitation of studies such as the present one on the evaluations of a website is the lack of common and generally accepted assessment principles. Many different research works propose different although similar approaches (see for example, many of the papers in Frew 2004). A more uniform methodology could prove extremely valuable in comparing the evaluations performed by different groups in different conditions, thus increasing the usefulness of the approach and of the indications that can be derived from such works. The website of a tourism destination can give a competitive advantage especially in the main tourism spender countries, where the Internet technologies have nowadays reached a real mass diffusion. The implications of a methodology to assess the quality of a website as perceived by the casual user are very important. Even though theories about design and implementation techniques of usable software products exist, without doubt the success of a website is guided by the appreciation of the users and their criteria are the most important determinants.

REFERENCES

- Antonioli Corigliano, M., & Baggio, R. (2004). *Italian Tourism on the Internet - New Business Models*. In K. Weiermair & C. Mathies (Eds.), *The Tourism and Leisure Industry - Shaping the Future* (pp. 301-316). New York: The Haworth Press.
- Antonioli Corigliano, M., & Baggio, R. (2006). *On the Significance of Tourism Website Evaluations*. In M. Hitz, M. Sigala & J. Murphy (Eds.), *Information and Communication Technologies in Tourism 2006 - Proceedings of the International Conference in Lausanne, Switzerland* (pp. 320-331). Wien: Springer.
- Archdale, A. (1995) New frontiers for tourism technology. *Insights: Tourism Marketing Intelligence Service*. 6(9):D27- 31
- Baggio, R. (2003). *A Websites Analysis of European Tourism Organizations*. *Anatolia*, 14(2), 93-106.
- Bray, J. (2006). *Web 2.0 Begins To Sprout In Travel*. Retrieved June, 2006, from <http://www.phocuswright.com/fyi/>.
- Cyberatlas (2002). *Global Online Populations*. Online at <http://www.cyberatlas.com/> [last access: February 2003].
- ETC (2002). *European Travel Commission New Media Monitor*. Online at <http://www.etcmonitor.com/> [last access: October 2002].
- Foxworthy, R. (1997). "Suiting up for multimedia . *Marketing*, April: pp.12-20.

- Frew, A. J. (2004). *Information and Communication Technologies in Tourism 2004*. Proceedings of the International Conference in Cairo, Egypt, Wien: Springer Computer Science.
- IWS. (2006). Internet Users and Population Statistics. Miniwatts Marketing Group. Retrieved September, 2006, from <http://www.internetworldstats.com/>.
- Morrison, A. M., Taylor, J. S., & Douglas, A. (2004). Website Evaluation in Tourism and Hospitality: The Art Is Not Yet Stated. *Journal of Travel & Tourism Marketing*, 17(2/3), 233-251.
- Marcussen, C. H. (2006). Trends in European Internet Distribution of Travel and Tourism Services - 7th revision. Centre for Regional and Tourism Research, Denmark. Retrieved April, 2007, from <http://www.crt.dk/uk/staff/chm/trends.htm>.
- Odlyzko, A. M. (2000). The history of communications and its implications for the internet. <http://www.research.att.com/~amo/> [last access: September 2002].
- Nielsen, J. (1994). *Heuristic evaluation*. In J. Nielsen & R. L. Mack (Eds.), Usability Inspection Methods. New York, NY: John Wiley & Sons.
- Nielsen, J., & Molich, R. (1990). *Heuristic Evaluation of User Interfaces*. Proceedings of the CHI Conference on Human Factors in Computing Systems, New York, 249-256.
- O'Reilly, T. (2005). What Is Web 2.0: Design Patterns and Business Models for the Next Generation of Software. Retrieved February, 2006, from <http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html>.
- Pollock, A. (1995). "Occasional Studies: the impact of information technology on destination marketing". *EIU Travel and Tourism Analyst*. 3:66-83.
- Rachman, Z. M., & Buchanan, J. T. (1999a). Effective Tourism Web Sites, Part 1: Literature Review and Features Survey (Research Report Series No. 99-12): Department of Management Systems, University of Waikato, Hamilton, New Zealand.
- Rachman, Z. M., & Buchanan, J. T. (1999b). *Effective Tourism Web Sites, Part 2: Expectation versus Delivery of Tourism Web Sites* (Research Report Series No. 99-13): Department of Management Systems, University of Waikato, Hamilton, New Zealand.
- Sheldon, P. J. (1993). "Destination Information Systems, *Annals of Tourism Research*, 20 (4): 633-649.
- UNWTO (2006). UNWTO Tourism Highlights, Edition 2006. Madrid: UNWTO
- Wolf, C. P. (2006). Travel 2.0 Confronts the Establishment. Retrieved September, 2006, from <http://www.phocuswright.com/fyi/>.

