

A CROSS-CULTURAL WEB USABILITY ANALYSIS OF ASIAN COUNTRIES' OFFICIAL TOURISM WEBSITES

Jaslin Md. Dahlan¹; Awang Rozaimie Awang-Shuib²

¹Faculty of Business Management, Universiti Teknologi MARA Johor, Malaysia

²Faculty of Business Management, Universiti Teknologi MARA Sarawak, Malaysia

abadiat@yahoo.com

ABSTRACT

Demands for tourism websites from worldwide providers is now surging. It is a quality measurement of advertising, information providing and persuasive marketing all in one. The evaluation of website's usability illuminates the specific strengths and weaknesses of each websites studied. A selection of 39 Asian countries was studied. A criterion for selection was for the country to have an official tourism website hosted and managed by a government agency. This non-commercial study is to ensure the reliability of information. A walkthrough content analysis method was used for the evaluation. The month-long evaluation experiments the seven elements of webs' features and functions with 44 attributes. Results were varied with highest and lowest scores were tabulated and discussed. Tourism websites that scored the highest overall and categorical sections obviously placed tourism as their main industry of the economy. The study is limited by the availability of the websites during the evaluation period. No re-evaluation on another date was done, as to avoid biasness.

Keywords: website usability, travel, tourism, content analysis

ABSTRAK

Permintaan website pariwisata dari penyedia seluruh dunia kini sedang melonjak. Ini merupakan ukuran kualitas periklanan sekaligus penyediaan informasi dan pemasaran persuasif. Evaluasi kegunaan website menyorot kekuatan dan kelemahan tertentu dari masing-masing website yang dipelajari. 39 negara Asia yang terseleksi telah dipelajari dengan kriteria memiliki website pariwisata resmi yang disediakan dan dikelola oleh badan pemerintah. Penelitian non-komersil ini bertujuan untuk menjamin keandalan informasi. Sebuah panduan metode analisis konten digunakan untuk evaluasi. Evaluasi selama sebulan ini mengujicobakan tujuh unsur fitur web dan fungsi dengan 44 atribut. Hasilnya bervariasi dengan nilai tertinggi dan terendah ditabulasi dan dibahas. Website pariwisata yang mencetak nilai keseluruhan dan kelompok tertinggi menempatkan pariwisata sebagai industri utama perekonomian mereka. Penelitian ini dibatasi oleh ketersediaan situs selama periode evaluasi. Tidak ada evaluasi ulang yang dilakukan pada waktu lain untuk menghindari keberpihakan.

Kata kunci: kegunaan website, perjalanan, pariwisata, analisis isi

INTRODUCTION

The use of Internet among frequent travelers and potential travelers is increasing. 70% of them use the Internet (Travel Industry Association of America, 2007) for planning purposes. Frequent travelers have a higher tendency to use the Internet for planning activities, searching for maps and directions and looking for places to stay. Potential travelers use the Internet to find out information about any countries, cities, theme parks or beaches in a click. They do not have to engage in any interactions with a sales person or be limited by the different time zone. Some tourism websites even have pictures and videos of attractive places to visit.

Usable websites are websites that are easy to use, have simple navigation features, provide useful information and enable users to seek further clarification from the website provider for issues they have. Attractive websites are websites that are colorful, not overloaded with advertisements, and have good text layout, appropriate font size and type, and lots of images.

Different types of websites cater for different target audiences with different usage purposes. An entertainment website will have contrast colors, attractive multimedia contents, music videos and interviews, information about celebrities, gossips and many other features. It is more likely designed to cater for the younger audiences. A news portal, on the other hand, will be more serious and formal looking. It will have useful information, latest news updates, multimedia contents, videos and interviews and minimal use of colors. Unfortunately, a tourism-related website is not as straightforward as those examples above. One major reason is because a tourism website will have audiences from around the world. It is not possible to have one website to sell to all. A common problem is the language because 80% of tourism websites are in English.

Travel and tourism providers utilize the Internet to market their products because it operates 24-7 hour; has no-boundary coverage; is able to put a massive amount of information on the web. In comparison to prints, electronic media or billboards, Internet offers almost no-cost promotions on social networking platforms available. Airline companies reported fewer sales from travel agents in the past decade. The convenience of online search and making reservations is no compromise.

Tourism websites are visited at all stages of travel purchase, namely: pre-purchase, purchase and post-purchase. During the pre-purchase stage, websites are consulted for ideas, planning and decision making on travel. Official tourism websites are viewed in getting a rough idea of what each destination has to offer. Attractive websites with lots of useful information are often appreciated. Comments and testimonies from past travelers made in the forum or guestbook of the tourism websites are always useful too. Actual travel-provider websites – for example, websites of airlines, hotels, car rentals, train ticket and even theme parks – are often visited during the purchase stage. At the post-purchase stage, travelers are either happy or not with their visits. They then will leave comments and views in tourism-related forum or discussions boards or even Facebook.

Website Usability Evaluation

The art of evaluating websites usability was pioneered by Jakob Nielsen, the world's leading expert on web usability (US News and World Report, 2000). He has listed good design attributes that should be considered by website designers. Ironically, designers think that those standard guidelines will make websites boring and not so attractive.

The website evaluation is drawn upon prior research, broadly classified into four complementary research areas (Wang and Liu, 2007). The first focused on website functionalities (e.g. design, hypertext links, and response time and search engines) and content. They include functional

and navigational issues like speed, ease of navigation, content and style, and contact information. Navigation simply means the ability to move around the website and pages. They are usually represented by hyperlinks or tabs. A high usability website should enable users to move around the website and move from one page to another; have similar links or tabs on all those pages, throughout the website.

The second focus is how the authors (not designers) consider the information quality, systems quality, service quality and attractiveness are essential to the website. It is common that authors and designers are two different groups of people. Authors are owners of the website, in this study would be official tourism agency. Designers on the other hand, may be part of the agency (as a staff) or engaged as an external contractor. Both the parties *may* have different ideas on what should and must be available on the particular website.

The third focus highlighted service quality as a fundamental aspect of the overall quality of the website. Emphasizes are put onto its reliability, responsiveness, assurance, empathy and tangibility. In marketing, these are closely related to customer service and support. Unlike the physical organization, the website lacks personalized service to its audiences. However, more interactive interactions are made possible online, including features like online feedback, search function, email, and access through social networking portals like Facebook and Twitter. The fourth focus is customers' perceptions of a website quality. Studies have included perceptual opinions from customers on their experience with a website, in terms of quality of information, responsiveness, friendliness and reliability.

There are many terms used to describe the usability and effectiveness of a website which are often wrongly used. A usable website does not necessarily mean an effective website. According to ISO 9241-11 (Huang et al., 2006), usability is defined as *an extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use.*

Effectiveness here means how the website is able to fulfill users' goals in using the website. In our study, the users visit the websites to gather tourism-related information. When they are able to find some information about attractive locations to visit, where to stay, how to go there, weather, exchange rate, events and celebrations, they will find that the website is able to fulfill their goals in making that searches. Moreover, when the website is able to provide more information and services expected, the users' positive perception of the website will increase.

Efficiency means how accurate and extensive the website is able to meet users' goals. An example is a website that provides online services in making bookings and reservations for hotels, airlines tickets, theatre, theme parks, and many others.

Satisfaction refers to the perceived quality by users, not feeling discomfort and have positive attitude towards the use of the website. In this study, the usability evaluations were based on the websites' features and functions.

Purpose of the Study

Important questions remained unanswered in deciding what a usable and/or effective website contributed. Designers and authors fail to understand whether there should be any difference between websites of different industries and target users (audiences), between commercial and information-based websites. How about tourism-based websites? Does official tourism websites have the same kind of information, design, features and functions like a commercial travel-provider websites, like airlines, hotels or even theme parks like Walt Disney World Resort?

This study attempts to understand the importance of elements that tourists seek to find in a tourism website. A selection of international-level official tourism websites was assessed from the perspective of web technological features and functions to demonstrate its usefulness.

Official tourism websites were selected because they are commonly owned and managed by a government agency and they exist to promote the country's tourism. They will continue to exist for a longer period of time compared to non-official ones. Most of the official tourism websites are well managed and reliable information are provided. They are hosted on paid web-hosting hosts and this ensures the seriousness of the website and its reliability. Drawn upon past research which was relevant to website evaluation, an integrated website evaluation framework from the features and functions perspective is formulated.

The authors wish to thank Kementerian Pengajian Tinggi Malaysia for the sponsorship.

Dimensions of Website Usability Evaluation

Overall website is evaluated on three main design/technological elements; ease of navigation, technological creativity and accessibility (Perdue, 2001). However, his study focuses on non-tourism websites. The unique feature of tourism websites lies on its global exposure and potential target users. Therefore, it is important to understand how users of tourism websites perceive these elements and whether it can attract them to visit the destination. In this study, the usability evaluations were based on the websites' features and functions of these dimensions: navigation elements, content elements, and accessibility elements.

Navigation Elements

Kaplanidou and Vogt (2004) defined navigation as a successful movement through a website. A good navigational design enables users to find information they need easily from the homepage and any other pages. Websites need to provide navigational tools (buttons, links, bar, or tabs) that are easy to learn and are designed to facilitate users to move around. If they are not lost in the pages and yet unable to find the desired information, they will stay longer and eventually make purchases. The following are the attributes of navigation elements: (1) easy to find attractive information; (2) navigation bar was present in every page; (3) user friendly; (4) easy to find event information; (5) easy to find accommodation information; (6) having good navigation homepage layout; (7) well-organized navigation bar; (8) able to move through the website; (9) having similar look and feel; (10) easy navigation of the overall website; (11) having search options to assist quick information access.

Content Elements

Contents are more important than navigation element in tourism websites because users visit a website to find information. Websites with bad navigation will not bring a pleasant experience for users but they will revisit if the information is very useful and important enough. An active Internet user will learn to use bad-navigated websites as long as the information is of great value. Indeed, information should incorporate text and images, video and audio creatively. However, sometimes designers failed to cater for users with slower Internet connection. A heavy website with loads of video and multimedia content, will take ages to download (Doolin, Burgess and Cooper, 2002). Internet users nowadays are very demanding and they are more experienced that will not wait for more than 30 seconds for a page to load. Besides, understanding who the target audiences are is very critical. A website should not be designed for a small group of users or local residences, but also those from other countries with no or minimal knowledge of the website author, the language, the culture and many other issues. Some attributes content elements are: (1) text easy to read; (2) clearly written overall information; (3) satisfying contents; (4) thorough listing of destination products and services;

(5) useful links; (6) very informative content of destination features; (7) up-to-date travel information such as local news, weather and many others; (8) motivating contents to visit; (9) effective combination of contents and pictures to market the destination; (10) motivating pictures to visit; (11) motivating graphics to keep browsing; (12) clear description of locations/attractions; (13) useful deals and packages information.

Accessibility Elements

Accessibility issues are seldom overlooked. It simply means the ability of the user to easily find a website through search engines. Download time is greatly influenced by various factors, like Internet connection, time of day when search is done, amount of graphics and the web browser. If it takes a long time to download a page, the user may likely to switch to other websites. This means a loss of potential business. Technically, missing and broken links may also cause frustration to web users. Therefore, the article's author described only these elements. The attributes of accessibility elements are fast-downloaded home page and fast-downloaded sub pages. These attributes were adapted from tourism-related searches.

Website Usage and Satisfaction

This attribute is adapted from prior research that observed actual user behavior during suited tests. In this study, a lab-controlled test was conducted. Several attributes of website usage and satisfaction are: (1) Satisfaction with website experience; (2) Satisfaction with website quality; (3) Website usefulness for trip planning; (4) User's intention to visit the destination based on website experience. A detailed description of the attributes will be discussed on the Method section.

Responsiveness

Any service-oriented providers are expected to provide excellent customer service support and should be made available any time. This is further augmented with the use of the Internet. Users may come from any part of the world at different time zones. Malfunction in responding enquiries from potential users timely may lead to a loss of business opportunity. This study utilizes common attributes of Responsiveness Elements that we deem important in our own search of information: (1) accessibility of service; (2) e-mail service; (3) reply to customers; (4) contact information; (5) online help.

Interactivity

This dimension may mean the same the previous attribute, Responsiveness. However, we have separated them because interactivity deals with non-enquiry typed attributes. This includes features for community-based interactions. Attributes of interactivity elements are: (1) interactive features; (2) FAQ; (3) guest book; (4) chat.

Cultural Elements

Considering the global audiences that the tourism websites are targeted at, this study attempts to evaluate several attributes that is most common in the cultural dimension studies. They are colors, default language, other languages on website, religion, and influence of political leaders (adapted from Singh et al., 2008).

From the seven dimensions, a total of 44 attributes will form the website usability framework of this study.

METHOD

Sampling

This sampling frame for this study includes 38 official tourism websites in the Asian region. The region was selected due to the expanding travel and tourism within the region (PATA, 2008). Travelers come from within and outside the region. Initial search through Google was conducted. From 45 nations in the region, only 39 have official tourism websites. On the day of the evaluation, the Israel website was inaccessible. Table 1 lists the 38 countries included in the study.

Table 1 *Official Tourism Websites of Various Countries*

No.	Countries	URL
1	Afghanistan	afghanistan.saartourism.org/
2	Armenia	www.armeniainfo.am/
3	Azerbaijan	azerbaijan.tourism.az/?/en/
4	Bahrain	www.bahraintourism.com/
5	Bhutan	www.tourism.gov.bt/
6	Brunei	www.bruneitourism.travel/
7	Cambodia	www.tourismcambodia.com/
8	China	www.cnto.org/
9	Hong Kong	www.discoverhongkong.com/
10	India	www.tourisminindia.com/
11	Indonesia	www.indonesia.travel/
12	Iran	www.itto.org/
13	Japan	www.jnto.go.jp/
14	Jordan	www.visitjordan.com/
15	Kazakhstan	www.kazakhstan-tourist.com/
16	Korea	english.visitkorea.or.kr/enu/index.kto
17	Kuwait	www.kuwaittourism.com/
18	Laos	www.tourismlaos.org/
19	Lebanon	www.lebanon-tourism.gov.lb/
20	Malaysia	www.tourism.gov.my/
21	Maldives	www.visitmaldives.com/
22	Myanmar	www.myanmar-tourism.com/
23	Nepal	www.tourism.gov.np/
24	Oman	www.omantourism.gov.om/
25	Pakistan	www.tourism.gov.pk/
26	Philippines	www.tourism.gov.ph/
27	Qatar	www.qatartourism.com/
28	Russia	www.russia-travel.com/
29	Singapore	www.yoursingapore.com/
30	Sri Lanka	www.srilankatourism.org/
31	Syria	www.syriatourism.org/
32	Taiwan	www.taiwantourism.org/
33	Thailand	www.tourismthailand.org/
34	Turkey	www.tourismturkey.org/
35	United Arab Emirates	www.dubaitourism.ae/
36	Uzbekistan	www.uzbektourism.uz/en/
37	Vietnam	www.vietnamtourism.com/
38	Yemen	www.yementourism.com/

Data Collection Method

This study employs two methods of data collection. First is conducting website usability evaluation. An expert evaluator with more than 15 years of experience of website development and an

avid traveler was engaged in carrying out the evaluation. This is a common method in doing website evaluation. Prior research that utilized actual users as evaluators or multiple may not have the same opinions and understandings of the attributes in the study. Those evaluators may not have the same web experience with each other. Therefore, a solo expert evaluator will just do the job well.

The second part of the data collection method is a lab-controlled session with actual users. They are 50 final-year undergraduate students of a local university in southern Malaysia. The lab test was conducted to evaluate the users' satisfaction of random selected websites, mentioned in Table 1. Few of the samples were tested twice. To be fair, the study has to re-assign websites that are more prominent (countries that are likely to be visited) to those evaluators. In both evaluations, checklist was used. Evaluators scored each website according to 4 points scoring system (Table 2). The whole study was conducted in a month's period, from June 2010 to July 2010.

Table 2 Scoring System

Points	Scores
1	Not available
2	Available; only text links
3	Available; prominent feature, use of graphics and colors
4	Available; outstanding feature, multimedia content/element

RESULTS AND DISCUSSION

In this section, results of this analysis points out the nature and attributes of the websites attending different dimensions.

Navigation Elements

Figure 1 shows that the extent of navigation elements in the 38 websites varies. Out of the maximum 44 points from this element, the highest score is 33, which is 80%. This is better than the commercial websites studied by Huang et al. (2006). The websites nowadays are better designed and properly laid out. Twenty five websites scored 33 points.

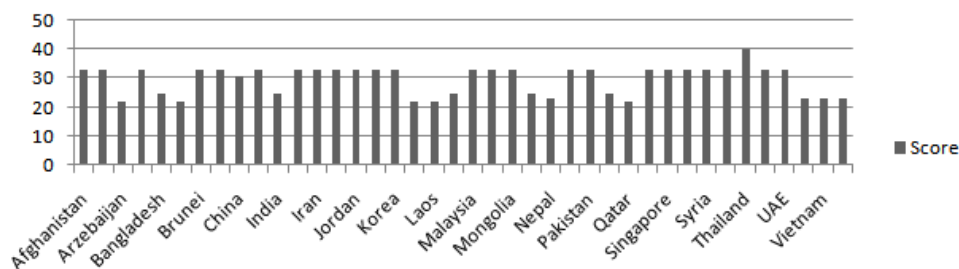


Figure 1. Navigation elements (by country)

The lowest scores came from 5 countries: Azerbaijan, Bhutan, Kuwait, Laos and Qatar. They each scored 22. China scored the full score, 4, for the attribute of having similar look and feel.

With an average score of 3, the websites studied placed much emphasis on the navigation element. They have navigation in their websites more than hyperlinks. As mentioned before, navigation is not the main concern in website usability evaluation.

Content Elements

Out of the maximum 52 points from this element, the highest score is 45, which is an encouraging 90%. This proved that these websites are almost perfect in accordance with attributes of content elements. Surprisingly, only Armenia scored the 45 points; followed by Russia, Singapore and Thailand with 44 points. Lowest scores came from 4 countries: Azerbaijan, Bhutan, Kuwait and Laos. They each scored 26, 50% weaker than the maximum score.

With an average score of 3.5, the websites studied did well in ensuring quality information are made available to potential tourists to their country. More than a dozen nations have links to social networking platform. This enhances their presence in the cyber world.

Accessibility Elements

Out of the maximum 8 points from this element, the highest score is 6, which is a satisfying 80%. The websites studied placed much emphasis on the accessibility element. Only three nations scored the lowest, they are: China, Kuwait and Laos.

According to the evaluator, accessibility element was the most challenging. The evaluator needed time give a standard download duration for each website in order to be fair. Also, the evaluator had to control the time of the evaluation day conducted. Since the evaluator used a networked Internet connection, the connection was slower during peak-office hours. So the evaluator limited the evaluation only on weekends, from 10 a.m. to 2 p.m., for one month period.

Website Usage and Satisfaction

The websites studied created the highest score of 16, which is 100% perfect. This is to proof that these websites are almost perfect according attributes of website usage and satisfaction (Figure 2). The lowest scores of 8 came from 5 countries: Bhutan, Kuwait, Laos, Qatar and Vietnam. They each scored 8, 50% weaker than the maximum score. One of the attributes, “user’s intention to visit the destination based on website experience” scored a high mean score of 3.1. The top scores websites did have enticing photos and videos of the countries’ most beautiful tourist attractions.

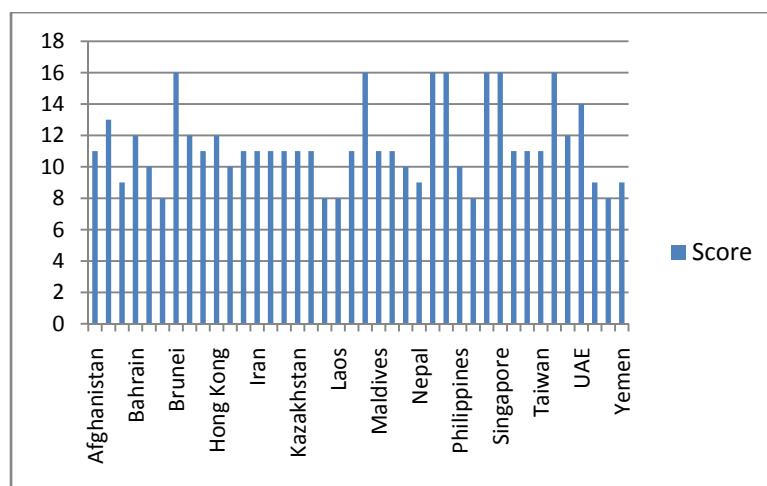


Figure 2. Website usage and satisfaction score

Responsiveness Elements

Out of the maximum 20 points from this element, the highest score is 13, which is 70%. This is to denote that few of these websites almost failed to respond to queries sent by the evaluator and was given as much as a month for the reply. This is rather shocking. All except China, Kuwait and Laos have at least an email or contact information mentioned in the websites. More than 50% of the 38 countries do not even reply to queries sent through the online feedback form, chat room or email. Few reply within hours of query made, they are tourism websites of: Malaysia, Indonesia, Thailand and India.

Interactivity Elements

As in Figure 3, the highest score is 12 out of the maximum 12 points from this element, which is an encouraging 100%. This is to proof that the websites placed high necessity on this attribute. A dozen have links with popular social networking platforms (Facebook and Twitter). They are tourism websites of: Thailand, Bhutan, Indonesia, Korea, Kuwait, Malaysia, Maldives, Mongolia, Oman, Singapore, Taiwan and Yemen. Surprisingly countries that scored lowest in the both responsiveness and interactivity elements are actually more connected than others. However, they failed to utilize the connectivity to enhance their navigation, content and website usage.

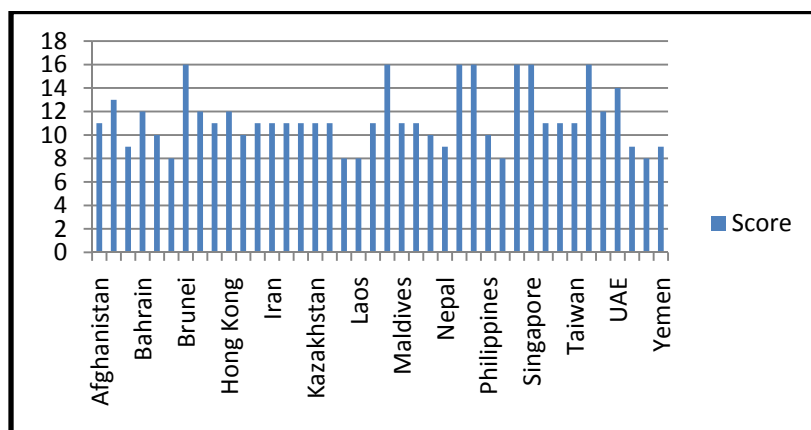


Figure 3. Interactivity elements score

Cultural Elements

This is the additional element that was added to explore the amount of cultural cues available on the 38 websites.

Color – Almost all websites studied uses white background. They are very easy on the eyes and able to make the colorful text more readable. Interestingly, Hong Kong uses a black background but it is compromised with white colored text.

Languages – By default, all except Armenia's, Kuwait's and Vietnam's websites use English. However selections of other languages are also made available. From many popular languages of the world, Mandarin was offered in 12 websites (Figure 4) since it is the most spoken language in the world after English.

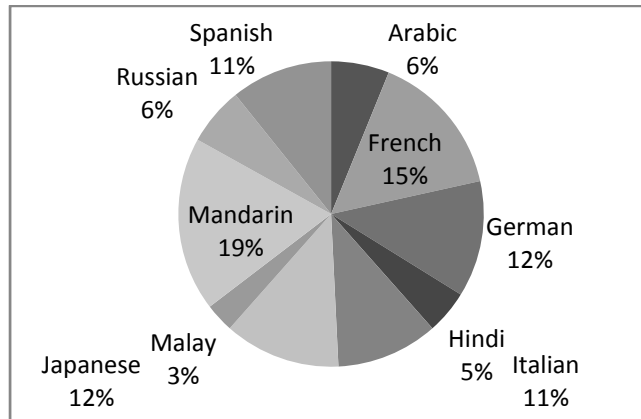


Figure 4. Other languages available on the websites

This also proves that most of the countries target to grab Mandarin-speaking tourists to their countries. The country with the most language offered on their website is Thailand, with 21 choices; Korea and Pakistan with 9 choices of languages. Jordan has 8 choices, Japan has 7 and both Indonesia and Hong Kong each offered 6 different languages. Interesting to note that the Hong Kong’s website even has a Malay translation offered.

Religion – Most of the websites except Bangladesh, Bhutan, Myanmar, Philippines, Qatar, Taiwan, Turkey, Uzbekistan and Yemen do not mention or have links to any religion-related matters.

Overall by countries – Thailand (Figure 5) scored the highest with 128 points, 82% of the perfect score. Then, Russia and Singapore with 117 points each (75%). The lowest is Kuwait (Figure 6) with 72 points or 46%, a failure. Other websites that failed to score at least 50% are Azerbaijan and Bhutan.

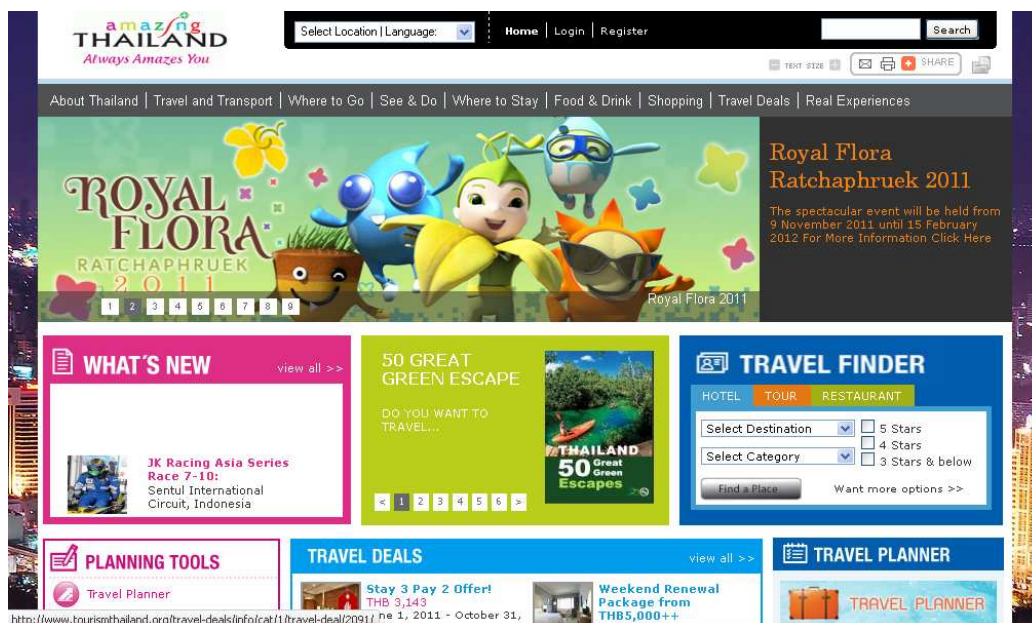


Figure 5. Screen shot of Thailand’s official tourism website



Figure 6. Screen shot of Kuwait's official tourism website

CONCLUSIONS

Tourism websites are supposed to be designed with many unique elements such as culture, language, color and images used. The 38 studied websites are designed and created with global potential tourist orientation. As much as they want to portray their uniqueness and flavor on those websites, they must also consider the websites' usability. Tourism providers need to afford effective and efficient marketing investments. There are many sources and methods of persuading consumers towards making decisions on their potential tourism destinations. According to this study, tourism websites vary significantly by their persuasiveness. Tourism providers and designers who wish to make an impact in propensity to visit their destinations may want to pay particular attention to basic website elements. Basic elements impact on website credibility which may result in a decision to visit, or a need to continue the information search. It should be noted that there are many travel purposes which include weekend getaways, honeymoon, family excursion, nature and adventure, medical tourism, religion pilgrimage and many others. Further studies may be considered to continue this study by evaluating whether these tourism websites emphasize on the different types of travel purposes and travelers such as young, pensioners, family and many others. It is also important to constantly revisit the websites to see whether changes are made to adapt to users' preferences.

REFERENCES

- Doolin, B., Burgess, L. and Cooper, J. (2002). Evaluating the Use of the Web for Tourism Marketing: A Case Study from New Zealand. *Tourism Management*, 23, 557 – 561.
- Huang, W., Le, T., Li, X. and Gandha, S. (2007). Categorizing Web Features and Functions to Evaluate Commercial Web Sites. *Industrial Management and Data Systems*, 106 (4), 523 – 539.
- Kaplanidou, K. and Vogt, C. (2004). Destination Marketing Organization Websites (DMOs) Evaluation and Design: What You Need to Know. Accessed from <http://www.travelmichigannews.org/Research.htm>.

PATA (2008). *Pacific Asia Travel Association Annual Tourism Monitor*.

Perdue, R. (2001). Internet Site Evaluations: The Influence of Behavioral Experience, Existing Images and Selected Website Characteristics. *Journal of Travel and Tourism Marketing*, 11(2/3), 21-27.

Singh, N., Baack, D. W; Kundu, S. K; Hurtado, C. (2008). U.S. Hispanic Consumer E-Commerce Preferences: Expectations and Attitudes Toward Web Content. *Journal of Electronic Commerce Research*, 162-175.

Travel Industry Association of America (TIA). (2007). *Travelers Use of the Internet*.

Wang, X. and Liu, J. (2007). Usability Evaluation of B2C Website, *Wireless Communications, Networking and Mobile Computing (WiCom) 2007*, 3837-3840.