

## TOURISM WEBSITES CHARACTERISTICS IN A COUNTRY WITH SMALL INTERNET USE – CASE STUDY OF SERBIA

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### Abstract

*Web is the powerful tool for tourism industry in economically developed countries. That mostly implies high website quality, use of Internet promotion techniques and good management of website distribution elements. However, what kinds of tourism websites characteristics are present in a country with small development and small use of Internet, such as Serbia? Serbia connected to Internet in 1996, and two years later first websites related to tourism subjects appeared, but still has small Internet penetration rate. Many companies in travel industry from developing countries use websites, but not in the right way. The purpose of this paper is to examine and show present tourism websites characteristics in term of its credibility, presentation and type of website content, visibility and search engine rank. The main method used in this research is structural observation of domestic 260 travel websites in Serbia. The results have pointed to the negative websites characteristics and inadequate use of its possibilities in tourism sector in Serbia.*

**Key words:** *Internet use, Serbia, tourism, website*

**JEL classification:** *M15, M30, L86, N74*

### 1. INTRODUCTION

Tourism as a global phenomenon constantly follows technological trends and willingly uses new technologies (Stankov, et al, 2007). The changes that Internet has brought to tourism have been dramatic since Internet has the potential to revolutionize all kinds of business activities, including the creation, promotion, and delivery of services (Zinkhan, 2002). Effective use of technology is fundamental to the tourism industry (Buhalis, 1996). From the beginning of Web, Internet and tourism are strongly bounded, and there will not be possible to develop tourism promotion without strong influence of Internet. Many guest interactions is now handled over the Internet, and travel and tourism enterprises are dependent on each other to cooperate in networks for realising the maximum benefits of e-business (Sevrani, Elmazi, 2008) over the Internet. Already in 1996, 50% of all Internet transactions were travel and tourism related (Niininen et al, 2006). According to European Interactive Advertising Association, most popular websites in Europe were those related to tourism and travel. On-line travel sales reached EUR 49.4 billion in the European market in 2007 (Marcussen, 2008).

The official Internet birthday in Serbia is February 27, 1996, when Academic Network of University of Belgrade in collaboration with company “Telefonija“, connected to global network. The preparation for this happening was secretly done to avoid some political obstacles and influence of monopoly groups.

Number of Internet users in Serbia is not something to be proud of. The Statistical Office of the Republic of Serbia keeps records on Internet use from 2006. According to this institution, there were 1.4 million of Internet users in 2006, and 1.7 million in 2007.

There were 36.000 websites (12 million Web pages) in 2006. In the middle of 2008, the number of websites doubled to over 65.000 (20 millions Web pages) (Aničić, 2008). According to The Statistical Office of the Republic of Serbia in 2007, among households with Internet connections, modem connection had 73,4%, WAP and GPRS 16,1%, cable (15,6%) and DSL (ADSL) 12,1%.

The broadband Internet connection is important indicator of Internet development. This connection enables both quicker access to the Internet and changes the entire way of using the Internet knowing that quicker download of information from the Internet compared to the traditional (dial-up) modem connection is made possible. Thus, the percentage of households having this type of Internet connection is taken to be one of the main indicators of the development of ICT use in the European Union from 2005. In Serbia, 8,2% of households had a broadband Internet connection in 2007 (The Statistical Office of the Republic of Serbia, 2008a).

Unlike households, Internet is more accepted in enterprises, where 90,6% of companies had Internet connection in 2007. Most of the enterprises understand the significance and necessity of their Internet presentations (Ćurčić, 2006).

Besides given indicators, the most important is Internet penetration rate. The Internet penetration rate corresponds to the percentage of total population of a given country or region that uses the Internet (Surfing and Site Guide Internet World Stats, n.d.). In 2007, Serbia had 1.700.000 Internet users with estimated population number of 7.498.001 (The Statistical Office of the Republic of Serbia, 2008a; The Statistical Office of the Republic of Serbia, 2008b). This gives Internet penetration rate of 22,7%, which is almost identical with

World average (21.9%). However, if we compare this Internet penetration rate to European Union (59.9%) or Slovenia as ex-Yugoslav Republic (64.8%) this is the small Internet penetration rate. In the region, only Bosnia and Herzegovina (20.9%) and Albania (13.1%) have lower Internet penetration rate.

After the disintegration of former Yugoslavia, Serbia faced terrible economic and political situation that devastated country's tourism development. During the 90's international tourist arrivals stagnated, and there were no significant investments in tourism sector and promotion, as well. Serbia connected to Internet in 1996 and two years later first websites related to tourism subjects appeared. Despite many negative reasons, number of new tourism websites was constantly growing. Travel agencies were the first to realize promotional potential of using websites. Soon, most of travel agencies, hotels, rent-a-car companies and travel organizations had their own websites.

Within the context, there is a need to examine present tourism websites characteristics in Serbia. More precisely, this paper will examine and show present tourism websites characteristics in term of its credibility, presentation and type of website content, visibility and search engine rank. The results will show a present picture of tourism websites in Serbia in the light of good practice in developed countries.

## 2. METHODOLOGY

The main method used in this research is structural observation of 260 travel websites, based on the research of Baloglua & Pekcan (2006) and Hashim, Murphy & Law (2007). Observation of 260 travel websites was conducted from August 18 to October 18, 2008. To form a list of websites, authors used automatic search engines.

Authors defined main segments, elements and expected situations that will be subject of observations. Main segments that were being observed are website profile, general website quality, type of the content, visibility and search engine rank (*Table 1*).

Structural observation allowed authors to gain numerical data that shows quantitative information about criteria selected for observations.

Tourism websites are selected to represent tourism sector in Serbia. Observation included following groups of websites: travel agencies, accommodation facilities (mostly hotels and motels), travel and tourism organizations, transport companies and travel and tourism portals (*Table 2*).

Authors used service „way-back machine“ from website The Internet Archive®, a non-profit organization found out to preserve Web sites by taking regular “snapshots”.

**Table 1 - Categories, elements and expected situations of structural observation**

Category	Elements	Expected situations
1. Website profile		
	a. When was website created?	Year
	b. Website type	Static/ Dynamic
2. Website credibility		
	a. owner	Exists / Does not exist
	b. data sources	Exists / Does not exist
	c. update info	Exists / Does not exist
3. Presentation of website content		
	a. navigation	
	b. foreign language accessibility	Full / Partial
	c. basic	Colour
	d. contrast	Good / Not good
4. Type of content		
	a. pictures	Exists / Does not exist
	b. sound	Exists / Does not exist
	c. multimedia	Exists / Does not exist
5. Visibility and search engine rank		
	a. Google®	Exists / Does not exist / Rank
	b. Yahoo®	Exists / Does not exist / Rank
	c. <i>Pogodak</i>	Exists / Does not exist / Rank
	d. <i>Krstarica</i>	Exists / Does not exist / Rank

**Table 2 - Website groups, number and percentage of observed travel and tourism websites**

Website groups	Websites	Overall
Travel agencies	100	38,46
Accommodation facilities	60	23,08
Travel and tourism organizations	50	19,23
Transport companies	30	11,54
Travel and tourism portals	20	7,69
<b>Total</b>	260	100,00

Visibility and position in search engine results are collected using simple Google<sup>®</sup> and Yahoo<sup>®</sup> search, and domestic search engine "Pogodak" and "Krstarica". Average position in each observation group is calculated using following formula:

$$P = \frac{\sum P}{N_{ws}}$$

$P$  = rank of observation group,  $\sum P$  = sum of websites positions in observation group and  $N_{ws}$  = number of websites in group.

Results are shown with comments that explain positive indicators of websites characteristics in developed countries, in order to stress gained results of the research case of Serbia.

### 3. WEBSITE PROFILE

In Serbia, first websites related to tourism subjects appeared in 1998 (4 websites). Until 2001, constant growth of new tourism websites was noticed. From 2001 to 2003, growth was slowed down, but from 2004 situation has changed and growth continued. In 2007, the biggest number of new tourism websites appeared since 1998.

The basic characteristic, important for every website's user is its functionality. Two basic types are dynamic and static websites. Static websites are the simplest type of Web sites, with content statically stored in HTML files. Dynamic sites share the same basic architecture as static ones, but with adding programming logic (Irie, 2004), which gives them vast potential in terms of functionality and use of different forms of on-site promotion techniques. First condition for website success is dynamic content (Ćurčić, 2007).

Majority of tourism websites in Serbia (63.1%) are static. The most static websites are in the group of tourism agencies and accommodation sector. Reasons for such bad situations are lower costs for creating and running static websites, lack of educated staff, and low understanding and interest for promotional potential of dynamic websites.

### 4. WEBSITE CREDIBILITY

Website credibility is the second important category of research. Elements of website credibility included in observation are information about website owner, data sources and update information. Information about website owner is important for commercial websites credibility. Majority of websites (90.8%) has that information, but it is not enough. The only acceptable result would be 100% of websites having the owner information.

Research results show that only 9.2% of observed websites give source of presented data. The highest percentage (20%) is in the group of tourism portals and the lowest (3.3%) is in the group of accommodation sector. Small percentage within the group of

accommodation sector can be explained with the fact that content of their websites is mostly self-created, referring to the objects and organizations of accommodation sector companies.

One of the important elements of credibility of website content in tourism is last update. This is especially important in first and last minute offers, reservation deadlines, changes in travel arrangements' elements, weather conditions, money exchange rates, traffic reports and other.

Only 6.9% of observed tourism websites give information about last update. In case of group of travel agencies (2%) and accommodation sector (1.1%) percentage is low, almost negligible, while transport companies do not use information of the updates at all. The highest percentage (55%) is in the group of tourism portals, which is result of specific nature of this websites.

### 5. PRESENTATION AND TYPE OF WEBSITE CONTENT

Presentation of website content is important element of website quality. Among several levels of content presentation authors selected: website navigation, foreign language accessibility, basic colours and contrast.

Ease of navigation is important and it is determined with following elements: main navigation bar, site map and manual functionality check.

Main navigation bar must be provided in a consistent location on every page. Search engines can index any page from your site at any time, so home page may not necessarily be the first page visitors come to. A consistent-looking and well-positioned navigation bar with functioning links is the key to efficient site navigation (Sweeney, 2008). Research results show that 86.1% of observed tourism websites in Serbia has consistent main navigation bar on every page.

Site maps make it easy for users to access the information they are looking and they are great for submission to the search engines as they provide links to every page of website, ensuring, as much as possible, that every page of website gets included in the search engines' database (Sweeney, 2008). Unlike main navigation bar, only 9.2% of tourism websites has site map.

Authors also did manual check of link functionality on homepages and realized that only 71.1% links works. Dysfunctional links make bad impressions on users and cancel previous positive impressions.

Foreign language accessibility determinates type and size of target market. If websites are mostly on domestic language their target market is within state borders. Almost every second (47%) tourism website in Serbia provides content in some foreign languages. It is not surprising, knowing the fact that 70% of whole tourist arrivals in Serbia are domestic (The Statistical office of Republic of Serbia, 2008b). Websites on foreign languages are fully accessible in just 30%.

English, which used to be assumed as the lingua franca of the Internet, is declining in its dominance on the Web (Gong, et al, 2007), but in case of Serbia research

results show that among foreign languages on websites English is dominant (71%). English language is followed by German (13%), French (6%), Hungarian (4%), Italian (2%) and Russian (2%). Other languages are below 1%. It is very interesting that Spanish, as one of the most-common languages in the world is not used at all.

The basic colours and contrast are also very important characteristics of presentation that can strongly affect general website quality of travel websites.

Website is visual medium, trying to get visitor's attention using visual elements (and images). Colours are used on websites not only to make websites more interesting to look at, but also to inform, entertain, or even evoke subliminal feelings in the user (Powell, 2002). In general, colours should reflect websites goals. Colour theory is a complex topic, and experts from diverse fields have addressed it in great detail — from the physiology of the human eye and perception of colour to the mechanics of colour monitors (Navarro, 2001). Therefore, authors observed just main colours. Observed colours were red, blue, yellow - primary, orange, red, purple - secondary (Beaird, 2007), and brown and grey. Search results show that blue is dominant (40%), and other colours are ranged between 8% and 12% - red, yellow, orange, brown, green and grey. It is interesting that the group of accommodation sector uses more of warm colours, red and brown, while travel organizations use more of green than other observed groups.

Finally, contrast is important in web design, and the most important element when designing text. Whatever the case, contrast — the level of colour difference between the words and their environment — must be set relatively high in web design because a thousand different monitors will produce a thousand different images (Potts, 2007). Unreadable text has very negative effect on reader. In general, tourism websites in Serbia (82.3%) have good contrast.

Quality content presentation is basic for use on-site promotion techniques. At the same time, good content presentation can be used for visual marketing, at the first place for corporative visual communication (Wedel, Peters, 2008), colour psychology, first impression effect and other.

Type of content (picture, audio and video and multimedia) was also included in research. Almost all observed websites use picture content (97.7%). Audio content use just 9.6% and video and multimedia content 27.3% of observed websites. The use of video and multimedia can be a significant part of website quality in tourism industry (Stankov, 2009), but that is not the case in Serbia. The main reason for that is low use of bandwidth Internet access.

## 6. VISIBILITY AND SEARCH ENGINE RANK

The best visibility reviewed websites have on domestic search engine *Pogodak* (74.6%) and on Google® (70.8%). On the third place is also domestic search engine *Krstarica* (61.9%), and on the fourth is Yahoo® (46.9%).

If we compare presented results with the facts that only in 2004 were 233 million registered domains in the world (Kasi, Jain, 2006), and that search engines are the way in which 90% of people find Internet resources they need and Google® has a 75% market share in Europe and North America (Viney, 2008), we realize that websites in Serbia has small visibility.

Besides visibility, rank in search results is also important, because 84% of searchers never make it past the bottom of page two of Google® (Viney, 2008). The best rank tourism websites in Serbia have on search engine *Pogodak* (1.7), then Google® (1.9), *Krstarica* (2.7) and Yahoo® (2.4).

## 7. CONCLUSION

Tourism industry in developed countries uses Internet as a great new tool. The basic of that use makes quality websites. Undeveloped and developing countries do not have high-level of quality websites. Serbia connected to Internet in 1996, and current number of Internet users is about 1.700.000, with constant growth. In 2007, the biggest number of new tourism websites appeared since 1998. Still, in case of travel and tourism websites in Serbia, mostly negative indicators of website's characteristics are still present.

Most of tourism websites in Serbia are static and most of main indicators show low website quality. Also, an inadequate use of its possibilities in tourism sector in Serbia is present. In terms of the identified content of the research (website credibility, presentation and type of website content, visibility and search engine rank), there is larger number of differences between website groups of travel agencies, accommodation facilities, travel and tourism organizations, transport companies and travel and tourism portals. Proportionally, the best website characteristics are present in group of travel and tourism portals.

For future discussion, authors suggest two basic steps for improving of the characteristics of travel and tourism websites in countries with small Internet use, such as Serbia. First, Serbian authorities should create global awareness of the importance of quality website characteristics for travel and tourism business sector. Second, there is a strong need for planning, as a necessary step of website creation process, in every travel and tourism company or organisation, in order to avoid the negative results showed in this study.

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