# PageRank Grade Evaluation of Independent Slovenian Restaurant Websites

# Mitja Petelin

Slovenian Tourism Students and Young Professionals Association. mitjapetelin@gmail.com

# Miha Lesjak

The University of Primorska, Faculty of Tourism Studies - Turistica, Slovenia miha.lesjak@fts.upr.si

When considering Slovenian independent restaurants, whether they understand the importance of their websites must be determined. A neglected marketing strategy, a restaurant website, in this case, is a path towards disconnection with customers and means lost profits. The authors of this paper decided to perform a simple evaluation of how good their websites are in terms of the PageRank ali gorithm, which defines search engine page results. Using the PageRank checker, comparison among best gourmet restaurants 2013 of the city of Ljubljana in Sloveg nia (according to the 'In Your Pocket' city guide) was made. Low grades reveal a lack of investment in the field of search engine optimization.

Key words: Evaluation, Website, Independent Slovenian restaurant, PageRank

# Introduction

The rapid development of information technology and the Internet has dramatically changed the tourism industry (Ho & Lee, 2007). The Internet can serve as an effective marketing tool in tourism (Buhalis, 2003; Buhalis & Law, 2008).

Having an effective website has become vital for a business to strengthen its customer relationships and gain a larger market segment. HeBS digital research from 2013 (A Restaurateur's Guide to Successful Digital Marketing) states that restaurant sales are climbing and is crucial to maintaining an online presence. According to AIS Media (2012), 89 per cent of diners research restaurants online before visiting in person. Increasingly, people want to fully understand the restaurant's menu, services and pricing before the visit. They are disappointed when they realize that the restaurant website does not provide up-to-date menus, drink lists or cannot accept online reservations. Even if the restaurant provides that, there is a question of visibility. Missing out on website visibility in search engine page results means lost profit.

Website visibility could be defined as search engine optimization (SEO), as it is understood as a process of getting 'free' traffic from the organic search results on search engines. All widely used search engines (Google, Yahoo, Bing, etc.) have organic search results, according to which web pages are shown in an orderly manner based on what the search engine objectively considers more relevant. Organic search results are 'free' in contrast to paid search ads. This does not mean that organic search results are totally free, and it is at this point that SEO becomes relevant. The process of SEO requires constant website updating, appropriate tags, a logical website structure, appropriate coding of the website, backlinks, interaction, titles and description, as well as domains and URLs, and other factors.

Google uses the algorithm called PageRank that grades how well some web pages are optimized for their search engine. PageRank mechanically defines rank of websites in Google's search engine as it measures the importance of websites and their web pages. A high position in search results means that the PageRank recognizes a website as a valuable asset that represents the quality and trust of a reader (a consequence of a good SEO). The PageRank algorithm is extremely complex, but in simple terms it could be defined as the process of SEO. In other words, it measures the human interest and, therefore, defines the order of the web (Page et al., 1999). Usability and user experience vary in different cultures and countries but do not affect PageRank, meaning that it is a highly appropriate method for comparing websites.

The restaurant business requires constant progress, fresh local and seasonal menus, good visualization of food and beverages, promotional coupons, sweepstakes, events and promotion (offline and online). We decided to check the PageRank of the best Slovenian restaurant homepages in order to see how good they are. We chose the best independent gourmet restaurants in 2013 in Ljubljana (capital of Slovenia) published by the 'In Your Pocket' city guide

We discovered that some of the best independent restaurants in Slovenia had websites with low PageRank grades. Perhaps, we can connect this finding with the fact that the large majority of restaurants are small or medium enterprises. The common problem of SME's is a lack of resources for R&D and their ability to innovate (Križaj, Brodnik & Bukovec, 2014). Therefore independent restaurants (restaurants not owned by a hotel or a chain of hotels) cannot afford big marketing budgets, which is reflected in the quality of their websites.

When searching for similar research in Slovenia, we discovered that the research field has been neglected and needs more complex and thorough research.

#### **Literature Review**

There are different methodological approaches towards website analysis. Some use multi-criteria decision making, such as the Analytic Hierarchy Process (AHP) and the Preference-Ranking Organization Method for Enrichment Evaluations (PROMETH-EE) (Akincilar, Dagdeviren, 2014), others a multidimensional approach (Tanjunga, Dhewantob 2013), rubric comparison (Dion, Woodside, 2010), in-depth content analysis (Salavati, Hashim, 2015), a two-stage DEA model (Yanga, Shib, Wanga & Yan, 2014); the modified scorecard approach (traces the use of the approach from its beginning in 1999 to the present time), formative and summative evaluation (Morrison, Taylor & Douglas, 2008) and even more orthodox approached adopted an architectural criteria approach used in the evaluation of buildings (Hong & Kim, 2004). All of the mentioned approaches are complex in nature and provide in-depth overviews of which website is performing better or worse across different industries.

We searched for Slovenian literature that would research or evaluate Slovenian restaurant websites. We found some research on hotel websites using the Mann-Whitney U test (Roblek, Štok & Meško, 2013) directed towards the difference of information of three and four star hotels in Gorenjska region, websites of travel agencies in connection with safety and the keywords they use (Mekinc & Cvikl, 2011), and whether they are used as a primary marketing channel (Kribl & Bojnec, 2007). We found that the re2 search in the field of tourism-related websites was surprisingly weak, especially with restaurant webs sites. There are organizations that deal with the website quality and performance (those of tourism and other industries) such as E-laborat (www.e-laborat. si), which provide detailed insight into website performance and how to improve them. They are prom fessionals, and they provide information based on a fee and do not disclose details. They have a magazine that discusses best practices (Najboljše spletne prakse, 2014), but they are not connected strictly with tourism and do not provide tangible data for a more scientific approach.

# Methodology

Search engine optimization (SEO) is the basis of every website. Consequently, the websites we study had to be optimized in order to obtain a higher Pagi eRank grade, which means higher visibility. There are many ways to determine which website is better as discussed in the literature review. In order to check the quality of the restaurant website, we decided to use a very simple (we can say indicative) approach using PageRank checker. In this manner, we

will obtain a basic insight into the quality of selects ed websites.

Google defines PageRank algorithm as (Google guide 2015):

PageRank relies on the uniquely democratic nature of the web by using its vast link structure as an indicator of an individual page's value. In essence, Google interprets a link from page A to page B as a vote, by page A, for page B. But, Google looks at more than the sheer volume of votes, or links a page receives; it also analyses the page that casts the vote. Votes cast by pages that are themselves 'important' weigh more heavily and help to make other pages 'important.'

In other words, Google conducts 'elections' in which each web page casts votes for web pages with hyperlinks to those pages. However, unlike a delmocracy, a page can have more than one vote, and links from pages with high PageRank are given more weight (according to their ranking) and thus help to improve the targets PageRank.'

PageRank checker (http://www.prchecker.info) will provide us with a grade of Slovene and English home pages of selected restaurants (1 meaning very poor, 10 meaning excellent).

### Research

The 'In Your Pocket' city guide (www.inyourpocket. com) held a contest for the best restaurants in Ljubljana, the capital of Slovenia in 2013. People were able to vote for their favourite restaurant in nine different categories (Gourmet, Slovenian cuisine, Business lunches, Balkan cuisine, International cuisine, Best pizzeria, Student meals, Delivery services, and a special category for restaurants that are in the vicinity of Ljubljana). We decided to take a closer look at winners of the gourmet category (JB, Manna, As, Špajza, Cubo, Valvas'or, Pri Levu, Strelec, Vander, and Maxim). We excluded restaurants that were not independent (Pri Levu, Strelec, Vander, and Maxim). Listed below are the PageRank grade of Slovene and English homepages of independent restaurants.

PageRank grades of all the websites are quite low. The highest grade was only four out ten meaning that

Table 1 PageRank grades of the best independent gourmet restaurants in 2013 in Ljubljana according to 'In Your Pocket'

	Slovene home page		English home page	
Restaurant	URL address	PageRank	URL address	PageRank
JB	http://www.jb-slo.com/sl	3	http://www.jb-slo.com/en	4
Manna	http://www.restavracija-manna.si	2	http://www.restaurant-manna.com	N/A
As	http://www.gostilnaas.si	4	http://www.gostilnaas.si/home	N/A
Špajza	http://www.spajza-restaurant.si	3	http://www.spajza-restaurant.si/en	3
Cubo	http://www.cubo-ljubljana.com/sl	4	http://www.cubo-ljubljana.com/en	3
Valvas'or	http://valvasor.net	2	http://valvasor.net/?lang=en	1

SEO was poorly performed and needs improvement. PageRank checker could not grade some restaurant websites. According to www.prchecker.info follows ing reasons are the problem; 1) the web page is new, and it is not indexed by Google yet, 2) the web page is indexed by Google, but it is not ranked yet, 3) the web page was indexed by Google long ago, but it is recognized as a supplemental (supplemental results) page, 4) the web page or the whole website is banned by Google.

We cannot determine which of the reason or reasons are to blame. Further research and analysis would be needed in order to point out the exact reason.

# Conclusion

When attempting to determine whether Slovene independent restaurants are aware of the importance of the visibility of their websites, we can assert that they have a limited understanding of how a good website works. We would need to dig deeper and

with a larger sample to discover whether this is ape plicable throughout the independent restaurant business. Further research should comprise more complex graders such as alexa.com, compete.com, grader. com, and many others, which provide more information, such as keywords, time spent, bounce rate, pao geviews, audience demographics and other metrics. The problem with such approach could be that some checkers/graders would not be able to grade all the websites, similar to PageRank checker.

A comparison between Slovene independent and dependent (restaurants that are part of hotels or chains) using PageRank checker could also be a prospect for further research. It would be interesting to run a similar study with a sample of independent restaurants from other countries to see if there is a difference.

We can say (even with such basic and simple research) that independent restaurants lack understanding of the importance of their website. The late ter could be connected with a lack of resources and investments which is a common issue for site managers. There is also a large gap with regards to existing research material on Slovenian restaurants upon which we could build and learn. This simple research identifies that there is a need for more complex research that could provide further insights.

## **Citations and References**

- Akincilar, A. & Dagdeviren, M. (2014). A hybrid multi-criteria decision-making model to evaluate hom tel websites. International Journal of Hospitality Management volume, 36, 263-271.
- Morrison, A. M., Taylor, J. S., & Douglas, A. (2008). Website evaluation in tourism and hospitality: the art is not yet stated. Journal of Travel & Tourism Marketing Volume 17(2-3), 233-251.
- A Restaurateur's Guide to Successful Digital Marketing. (2013). HeBS digital. Retrieved December 24, 2015 from http://blog.hebsdigital.com/a-restauraa teurs-guide-to-successful-digital-marketing
- Best Restaurants in Ljubljana 2013. Retrieved December 28, 2014, from: http://www.inyourpocket.com/slovenia/ljubljana/Articles-and-Features/ Best-of-Slovenia-2013/Best-Restaurants-in-Ljubljana-2013\_114453v

- Buhalis, D. (2003). eTourism: Information technology for strategic tourism management. London: Pearson (Financial Times/Prentice Hall).
- Buhalis, D., & Law, R. (2008). Progress in information technology and tourism management: 20 year on and 10 years after the internet: the state of eTourism research. Tourism Management, 29(4), 609-623.
- Dion, C. P., & Woodside, A. G. (2010). Usefulness of government and private destination websites. Tourism-marketing performance metrics and use - fullness auditing of destination websites. Advances in Culture, Tourism and Hospitality Research, 4, 69-137.
- Križaj, D. Brodnik, A., & Bukovec B. (2014). A Tool for Measurement of Innovation Newness and Adoption in Tourism Firms. International Journal of Tourism Research, 16(2), 113-125.
- E-laborat. Retrieved February 24, 2015, from htttp:// www.e-laborat.si.
- Tanjunga, F. A., & Dhewantob, W. (2013). Formulation of E-Commerce Website Development Plan Using Multidimensional Approach for Web Evaluation and Small Business. The 5th Indonesia International Conference on Innovation, Entrepreneurship (IICIES 2013). Procedia - Social and Behavioural Sciences, 115, 361-372.
- Google guide: What's PageRank? Retrieved February 28, 2015, from http://www.googleguide.com/pagerank.html
- Ho, C.-I., & Lee, Y.-L. (2007). The development of an e-travel service quality scale. Tourism Management, 28(6), 1434-1449.
- Mekinc, J., & Cvikl, H. (2011). Safety and security on websites of Slovenian, Austrian and Croatian tourist agencies. In Tourism management: perspectives and opportunities (pp. 21-23). Portorož: University of Primorska, Faculty of Tourism Studies - Turistica.
- Page, L., Brin, S., Motwani, R., & Winograd, T. (1999). The PageRank Citation Ranking: Bringing Order to the Web. Technical Report. Stanford InfoLab.
- Law, R., Qi, S., & Buhalis, D. (2010). Progress in tourism management: A review of website evaluation in tourism research. International Journal of Hospitality Management volume, 31(3), 297-313.
- PageRank Checker. Retrieved December 24, 2014, from: http://www.prchecker.info

- Salavati, S., & Hashim N. (2015). Website adoption and performance by Iranian hotels. Tourism Management, 46, 367-374.
- Hong, S., & Kim, J. (2004). Architectural criteria for website evaluation - conceptual framework and empirical validation. Behaviour & Information Technology, 23(5), 337-357.
- Roblek, V., Štok, Z. M., & Meško, M. (2013). Attributes and Dimensions of Internet Sites Among Highly Categorized Hotels in Gorenjska. In International Conference: Tourism Education and Management; Turizem, Izobraževanje in Management - Soustvarjanje uspešne poslovne prihodnosti, October 2013 (pp. 827-841). Koper: University of Primorska press.
- Kribl, Z., & Bojnec, Š. (2007). Marketing-communication Channels and Internet Services in Slovenian Travel Agencies. Organizacija - Journal of Management, Informatics and Human reseurces, 40(5), 153-159.
- Yanga, Z., Shib, Y., Wanga, B., & Yan, H. (2014). Website Quality and Profitability Evaluation in Ecommerce Firms Using Two-stage DEA Model. Procedia Computer Science, 30, 4-13.