## National parks are going social? An exploratory study of former Yugoslav countries on Facebook

Uqlješa Stankov, Univeristy of Novi Sad, Faculty of Sciences, Serbia; ugljesa.stankov@dgt.uns.ac.rs

Michal Klaučo, Matej Bel University, Faculty of Natural Sciences, Department of Geography, Geology and Landscape Ecology, Slovakia

Miroslav D. Vujičić, Univeristy of Novi Sad, Faculty of Sciences, Department of Geography, Tourism and Hotel Management, Serbia

Đorđije Vasiljević, Univeristy of Novi Sad, Faculty of Sciences, Department of Geography, Tourism and Hotel Management, Serbia

Vanja Dragićević, Univeristy of Novi Sad, Faculty of Sciences, Department of Geography, Tourism and Hotel Management, Serbia

## Introduction

Millions of people are using social network sites (SNSs) as they serve a number of functions in online and offline life, such as information search, providing emotional and social support and creating and maintaining ties to other people (Pempek et al., 2009). Furthermore, characteristics of SNSs dramatically changed how travellers plan and consume travel related products as SNSs are becoming increasingly important in travel planning, during the travel, but also in post-travel activities (Chung, Buhalis, 2008). At the same time, an increasing number of visitors and public are discovering protected nature directly or through their friends and family on SNSs. Likes, posts or comments are new language that should be adopted by national parks (NP) managers in other to communicate their mission and messages in digital era.

Nowadays having presence on Facebook, as a most used and most influential SNS, is a prerequisite for social media promotion activities. Unlike individuals who use Profiles (webpages containing user's information) to present themselves on Facebook, companies mostly use Facebook Pages. This option allows businesses, brands and all types of organizations to create a free presence on Facebook. Users can interact and affiliate as a fan of an organization's Page in the same way they interact with other Profiles (Cooper, 2010). Once a fan of a company on Facebook, users can "like", "share", "comment" posts actively expressing an engagement with the posting.

Many national parks (NP) and other organizational structures for environmental protection recognized growing popularity of Facebook and this topic is gaining importance since it is attracting more and more academic and practitioner attention. Still, this process is uneven in different parts of the world. This paper examines level of adopting and current practices of Facebook usage by the NPs in former Yugoslav countries (Bosnia and Herzegovina, Croatia, FYR Macedonia, Montenegro, Serbia and Slovenia) to seek for common practices, good examples or pitfalls.

In most cases, NPs can be seen as tourist destinations and consequently, parts of parks' managing structures can act as destination management organizations (DMOs). Therefore, this research proposes and adopts the use of common methodology for assessing destination management organizations' Facebook Pages in order to explore the level and form of acceptance among NPs.

## Methodology

The proposed approach used for data gathering is based on a systematic process of meaningful and open selection of variables, with technically low-demanding procedures usually used in research of DMOs. Based on the review of the contemporary studies of Facebook and advances in Facebook usability variables were chosen. These characteristics are not conclusive, but are offered to spark consideration and to add to the constantly open debate which is necessary concerning the dynamic nature of this social medium.

In general, Facebook Pages were analyzed in terms of general usage and Page popularity. In addition, within a selected timeframe, all published Facebook Page posts were analyzed in terms of post characteristics and engagement of users.

The data collections were gathered in two ways. The data for Pages were collected manually and using the customized requests, based on the Graph API Explorer, a low-level HTTP-based API for reading and writing the Facebook's Social Graph (Facebook Developers, 2015). Facebook's Social Graph is a graph data structure that represents social interaction and consists of nodes and connections between the nodes (Russell, 2013). The authors used Graph API Explorer v2.4 to query information, such as the number of users who like the Page, Page fans' countries, whether the page is verified, etc. For those information when automated approach was restricted by Facebook privacy policy (such as number of tabs and applications, review values, etc.), authors used manual data gathering. The data for Page posts was gathered automatically using page data module of Netvizz v1.25 tool. This Facebook tool extracts data from different sections of the Facebook groups and pages (Rieder, 2013). Extracted data include information such as: Facebook's post classification text of the post, picture URL (if a picture is attached to the post), publishing date and time, number of likes, comments, shares, etc.

## Results and discussion

Presently, most of NPs in the region have Facebook Pages (see Table 1). Most Facebook Pages are created in 2012 and 2013. First NP Facebook Page in the region dates from 2008, and two new ones are created in 2016.

Table 1 Number	of NP Faceboo	k nages in former	Yugoslav countries	up to May 1st. 2016.

Country	Number of NPs	Number of FB Pages
Bosnia and Herzegovina	3	3
Croatia	8	8
FYR Macedonia	3	3
Montenegro	5	1
Serbia	5	5
Slovenia	1	0

Preliminary results show that NPs in this region recognized Facebook as a communication channel but still have problems in realizing how to use it, that is, how to find effective strategies for managing existing Pages.

This paper demonstrates applicability of common methodology used for assessing DMO Facebook Pages in case of NPs. Furthermore, the results provide valuable insights into the regional practice of using Facebook Pages in former Yugoslav countries. The approach employed stresses the importance of determination of NP Facebook practice in regional settings by pointing out structural problems. In that sense, knowledge of the common Facebook usage standards can help NPs to evaluate their position in the region and adjust their practice. The findings of this paper could contribute to the existing research of the use of SNSs by NPs, specifically Facebook, by giving them guidelines for establishing good practice.



- Chung, J. Y., & Buhalis, D. (2008). Information needs in online social networks. Information Technology & Tourism, 10(4), pp. 267-281.
- Cooper, A. (2010), "Facebook", [online]. Available at: http://drcoop.pbworks.com/w/ page/18221293/Facebook [Accessed 10 February. 2015].
- Facebook Developers (2015). Graph API Overview. Facebook Developers, [online]. Available at: https://developers.facebook.com/docs/graph-api/overview [Accessed 10 October. 2015].
- Pempek, T. A., Yermolayeva, Y. A., & Calvert, S. L. (2009). College students' social networking experiences on Facebook. Journal of applied developmental psychology, 30(3), pp.227-238.
- Rieder, B. (2013). Studying Facebook via data extraction: the Netvizz application". In WebSci '13 Proceedings of the 5th Annual ACM Web Science Conference. New York: ACM, pp. 346-355.
- Russell, M.A. (2013). Mining the Social Web: Data Mining Facebook, Twitter, Linked-*In, Google+, GitHub, and More.* Sevastopol, O'Reilly Media.