# Chapter 21 <br> Social Media Analytics: Opportunities and Challenges for Cultural Tourism Destinations 

Časlav Kalinić<br>Faculty of Sciences, University of Novi Sad, Serbia<br>Miroslav D. Vujičić<br>Faculty of Sciences, University of Novi Sad, Serbia


#### Abstract

The rise of social media allowed greater people participation online. Platforms such as Facebook, Twitter, Instagram, or TikTok enable visitors to share their thoughts, opinions, photos, locations. All those interactions create a vast amount of data. Social media analytics, as a way of application of big data, can provide excellent insights and create new information for stakeholders involved in the management and development of cultural tourism destinations. This chapter advocates for the employment of the big data concept through social media analytics that can contribute to the management of visitors in cultural tourism destinations. In this chapter, the authors highlight the principles of big data and review the most influential social media platforms - Facebook, Twitter, Instagram, and TikTok. On that basis, they disclose opportunities for the management and marketing of cultural tourism destinations.


## INTRODUCTION

The emergence of social media in the first decade of the $21^{\text {st }}$ century created the opportunity for studying socio-economic processes in a new way, especially since it allowed more people to engage in online content co-creation. Opinions, attitudes, ideas, and emotions of a large portion of the world population became publicly available through tracking of their posts, conversations, shopping habits, online movement, etc. The number of social media users is growing together with the availability and growth in numbers of devices that allow internet access, such as personal computers, mobile phones, and tablets. Furthermore, the number of social media and user-generated content continues to grow and impact the travel industry (Browning et al., 2013; Xiang and Gretzel, 2010; Narangajavana Kaosiri et al., 2019). This
growth encouraged the development of new approaches to understanding this socio-economic phenomenon in various fields (Wood et al., 2013; George et al., 2014; Batrinca and Treleaven, 2014). The big data concept is one of them, and it allows tourism organizations and destinations to gain new insight into their past, present, and future visitors. Social media analytics, as a field of big data application, offers them new possibilities in formulating marketing strategies, as well as ways of communication with tourists.

With this chapter, we advocate for the employment of a big data concept through social media analytics that can contribute to the management of visitors in cultural tourism destinations. Basic principles of big data are highlighted followed by the review of indicators of analytic capabilities of most influential social media platforms - Facebook, Twitter, Instagram, and TikTok. On that basis, we disclose opportunities and challenges for stakeholders in the cultural tourism destination landscape. The chapter extends the ongoing discussion on the role of big data and social media analytics approach in the domain of tourism management and marketing.

## SOCIAL MEDIA

Although there is no single definition of social media, various terms are used to closer define social media, depending on research purpose and perspective. Among them are web 2.0 (Constantinides, Fountain, 2008; Constantinides, 2008), social websites (Akehurst, 2009; Kim et al., 2010), platforms for social communication (Jansen et al., 2009), etc. The additional term that helps define social media is user-generated content (Dhar and Chang, 2009; Dotan and Zaphiris, 2010; O’Connor, 2010). However, most of the authors use the term social media (Kaplan and Haenlein, 2010; Thevenot, 2007; Smith, 2009; Xiang and Gretzel, 2010; Para-Lopez et al., 2011; Mangold and Faulds, 2009; Leung et al., 2013; Jin et al., 2010; Hanna et al., 2011; Cha et al., 2010). Kaplan and Haenlein (2010, 61) are focusing on platform and content and consider social media 'a group of online applications that are based on ideological and technological foundations of web 2.0 , and which facilitate creation and exchange of user-generated content'. However, it is a broad term that includes platforms such as social networks, blogs, microblogs, social news, platforms for multimedia sharing, review websites, and others (Gundecha and Liu, 2012; Kaplan and Haenlein, 2010). Social networks are the most widespread subgroup of social media, with Facebook as a typical representative. Boyd and Ellison (2007, p.211) define social network sites as "web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system". With the emergence of social media and web 2.0 technologies, communication is not one-way anymore, meaning that users are active participants, generating large amounts of data every day.

There are approximately 4.2 billion users of social media worldwide as of the beginning of 2021, with a significant $13 \%$ user base growth during 2020. The social media platform with by far the most active users is Facebook, counting for almost 2.7 billion active users. Other social media that are the focus of this paper, Instagram, Twitter, and TikTok have 1.1 billion, 380 million, and 800 million respectively (Haenlein et al., 2020). People use these platforms to keep up with friends, news, or just as a pastime. Despite the ubiquity of social media platforms, the market potential is still increasing, as not only user figures but also user engagement continues to grow. Users spend one in every three minutes online networking, while the average daily time spent online is also on the rise. The average number of social media accounts per person has also risen from three to more than eight. The major driver of this trend

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