Chapter 16

Social Media Applied to Tourism and Hospitality: The Case of Hotels in the Porto Metropolitan Area

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ABSTRACT

Online hotel reviews, ratings, or opinions have gained importance with the growth of social media tools. The objective of this chapter is to study the impact of specific satisfaction attributes on overall satisfaction. It is used a secondary data set obtained from three of the most influential online travel platforms, being analyzed the guests’ average ratings for around 130 hotel units, distributed by four quality segments, located in the Porto metropolitan area. The application of this methodology to a large sample of Portuguese hotels has not been done before, been that the main contribution of this study. It is evidenced that the different platforms, while all incorporating consumer reviews as primary social knowledge, are distinct from each other on some aspects. The three platforms present roughly the same supply of hotels, albeit presenting some differences in terms of volume of data. In terms of specific attributes, with the exception of “service,” the three platforms present significant differences that may reflect the different user bases on these platforms.
INTRODUCTION

Information has not stopped growing exponentially over time, with acceleration in the last decade. According to IBM’s calculations, the human being generated, from the beginning of its history until 2003, about five exabytes of information, five billion gigabytes. This value was generated in 2011, every two days (Dans, 2012). A recent IDC study expects that by 2025 163 Zettabytes of data will have been created in the world, a number that will be 10 times larger than the one recorded in 2016. Therefore, it could be the beginning of the Big Bang of data (Lancestremère, 2015). The question that can be asked is: What is the origin of all this data flow? Companies capture large amounts of transactional data about their consumers, suppliers and operations.

According to a recent IDC study for 2020, 65% of large organizations are information-based companies, with data being an important asset that will allow them to focus on relationships, people, and intangible capital, and use data to create value for the business through 4 actions: make better decisions, optimize operations, look for new sources of revenue and improve customer experience (IDC, 2018). Using the full potential of data has more to do with management than with technology (Redman, 2017). McAfee et al. (2012) have published an article entitled “Big Data: The Management Revolution” where they argue that such large flows of information can drastically improve a company’s performance if the decision is based on such information flows. In a study presented by Franks (2012), it is emphasized the importance of the action of organizations in the incessant search in the capture and analysis of these new sources of data to reach the knowledge and the opportunities that they offer, since it is a new source of advantages competitive for most companies. However, hardware, cloud architectures, and open source software are available to organizations with more limited capabilities. It is however important to note that according to the value of the Iron Mountain and PwC information index of 2015 (Cavanagh, 2015), only 4% of companies are able to extract the full value of their information, showing that most companies have a long way forward.

In the tourism sector, one of the first experiences in the adoption of techniques of mass data analysis to revenue management was in the 1980s, with American Airlines implementing a demand-driven pricing system based on the analysis of a large volume of information. After extensive adoption in the air transport sector, large American hotel chains implemented it between the late 1980s and the early 1990s. In the last decade, the platform economy (referred to as a collaborative economy, but a very controversial designation) developed, with disruptive business models based on big data solutions. According to Song and Liu (2017), Big Data is one of the most important new tools that have affected the global travel industry. Currently, the most well-known examples that are the greatest exponent in maximizing information with the aid of technology are Airbnb and Uber.

Big data tools play an important role in determining the ways in which tourism companies outline their strategies and policies. However, the great difficulty currently encountered in forecasting tourism through the use of the big data is due to the difficulties of capturing, collecting, manipulating and modeling this type of data (structured and unstructured from internal and external repositories), which is usually characterized by its privacy and potential commercial value.

Knowledge about customers, as well as what they think about the destination, facilities or equipments (hotels, hostels, museums, monuments, etc.) remains a key strategic point for those who manage them. However, the vast amount of information that is now available in organizations’ internal systems, as well as in social networks or user-generated contents websites (e.g., TripAdvisor) requires the use of new technologies and solutions for their collection, storage, processing and analysis, so that making