

## Chapter 11

# Composite Indicators for Measuring the Popularity of Portugal and Its Tourism Regions Using Google Trends

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### ABSTRACT

*The aim of this chapter is to present composite indicators that contribute to the understanding of online interest of Portuguese people for domestic tourism at national and regional level and by characteristic tourism product in each region of the country. For the construction of the composite indicators, data was collected for one year using the Google Trends tool, for a set of a priori defined search terms representative of the Portugal destination and its regions. The composite indicators result from the average weighting of seven primary indicators, composed of fifteen sub-indicators, which were proposed based on the conceptual framework of the Tourism Satellite Account. The results indicate that the interest of the Portuguese people by Portugal and its regions shows a seasonal behavior whose accent varies according to the tourism region, as well as the characteristics tourism products.*

### INTRODUCTION

Tourism is a sector with unique characteristics that make it strongly dependent on the information made available to the stakeholders. Furthermore, a global understanding of the tourism phenomenon requires a systemic and composite approach, as defended by Leiper (2004). One of the fundamental components

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of that approach is the tourist destination, whose conceptualization is not universal, leading to different and specific management and organizational approaches of the tourism destinations.

Authors such as Ritchie and Crouch (2003) and Morella (2006) agree that the management of tourist destinations should be led by an organization that, regardless of its nature, performs several functions, highlighting the tasks related with the development of marketing and promotional strategies and the production and dissemination of information. Thus, Destination Management Organizations [DMO] need up-to-date, relevant and timely information, among which the information on the visitor behavior patterns.

Regarding consumer behavior and the way he travels, he currently uses the internet every day to research information and purchase tourism products and services, although there are several marketing channels used throughout the decision-making process. Thus, the digital footprint of the potential consumer in tourism has become a powerful source of information, providing data that can help us understand consumer interests and intentions and anticipate trends and potential demand for tourism destinations.

In Portugal, in 2016, about 44.1% of the resident population made at least one tourist trip. The tourist trips occurred almost entirely in the national territory (90.4%), mainly in the Central and North regions (55.4%). However, it should be noted that when tourist trips last four or more nights, the most visited region is the Algarve. Most of the Portuguese travels (46.3%) are concentrated in the summer season (June to September), being August the peak month with 17.5%, moreover, it is also worth mentioning the December month where 10.4% of the tourist trips occurred. With regard to the residents in Portugal overnight travel, it was found that around 30% occur in hotels and similar establishments and other private accommodation (INE, 2017).

According to the results of the survey “The Connect Consumer Survey 2017” made by Google, 85% of respondents in Portugal claimed to use the Internet daily for personal purposes, and 75% of the users said that it is the Internet they turn to when they seek information (Google, 2017). According to the European Commission (2014), 42% of residents in Portugal used the Internet to organize their holidays, taking into account the results of the survey “Preferences of Europeans Towards Tourism”. The search engine is rated by 60% of the respondents to the “The Connect Consumer Survey 2017” survey as an activity they do on the Internet, at least weekly (Google, 2017), being the Google’s search engine the world leader, with a market share of 96.2% in Portugal, between January 2009 and February 2018 (StatCounter, 2018).

Data on the behavior and search interests of Google search engine users is freely available to the public through the Google Trends [GT] tool. This tool has already been used by marketers and academics from various areas. In the area of tourism we highlight Chamberlin (2010), Choi and Varian (2009), Shimshoni et al (2009), Suhoy (2009), Smith and White (2011), Artola and Galán (2012), Gawlik et al (2011), Saidi et al (2010), De La Oz Pineda (2014), Dinis, Costa and Pacheco (2015), Gawlik, Kabaria and Kaur (2011), Pan, Scacciavillani and Ali (2010), Shimshoni, Efron and Matias (2009), Jackman and Naitram (2015), e Li, Pan, Law and Huang (2017).

The statistical information published in Portugal by the National Statistics Institute [INE], as the national statistical authority, is insufficient, limited and made available late to tourism stakeholders, in view of the changes and trends that have occurred in the tourism consumer behavior. The Portuguese tourism public policies, materialized in the strategy defined for the sector in recent years, refer to the need to produce information, among others, on tourists and markets, as “a key element in improving the quality of decision-making and in the qualification of the destinations”(TP, 2015, p.67). The satisfaction of the information and knowledge needs evidenced by the tourism stakeholders surely involves the

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