

## Digital footprint for tourism research

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### **Abstract**

*Tourists leave some digital footprints spread across a wide variety of repositories that can be studied to observe and analyze their behavior. This paper exhaustively analyzes the use of Big Data sources for understanding and predicting the main variables affecting tourist behavior. Analyzed sources include those derived from the tourist activity in the Internet and also some other digital footprint data not related to the Internet activity. The classification of sources is grounded in a model of purchase consumption system applied to leisure travel behavior. This model defines potential predictors on travelers' choices and classifies them in three stages: pre-trip, during-trip and post-trip. Our work classifies the digital footprints left by tourists according to the stage in the model and the variable they help predict or understand. As a result, a complete map of Big Data sources for tourism research is presented. This map evidences not only complementarities among sources, but also potential applications of digital footprint analysis that have not been studied yet.*

**Keywords:** *Big Data; PCS; Tourism; Data Sources; Classification.*

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