

Decoding Sustainability Through Tourist Reviews: A Multimodal Big Data Analysis of User-Generated Content

Abstract

The aim of this ongoing project is to identify how user-generated content (UGC) related to tourist destinations conveys dimensions of sustainability and how these, in turn, affect recipients' reactions. Adopting a triple bottom line approach to sustainability and leveraging big data analysis techniques, including machine learning and deep learning, to different content (i.e., textual and visual), this work sheds light on how tourists discuss sustainability-related issues online.

By analyzing more than 6,000 texts and over 11,000 image reviews, this research offers a methodological contribution by isolating sustainability-related associations in tourist reviews, providing a useful tool to monitor tourists' behaviors and perceptions concerning sustainability in tourist destinations. Theoretically, it contributes to the literature on sustainable tourism by revealing how tourists articulate sustainability and how this discourse relates to their behavior. From a managerial perspective, it offers destination management organizations and institutions a tool to monitor tourists' perceptions and associations related to sustainability, with the aim of aligning destinations' communication more closely with tourists' discourses.

Keywords: sustainability; reviews; user-generated content; image analysis, text analysis; triple bottom line