

## Chapter 78

# Airbnb or Hotel? A Comparative Study on the Sentiment of Airbnb Guests in Sydney – Text Analysis Based on Big Data

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### **ABSTRACT**

*Advances in information technology have hugely influenced the tourism industry. Many tourists can generate and share their travel tips through social media, and people consult online reviews before making travel arrangements because they could access these sources of information easily. Either positive or negative reviews could increase consumer awareness of Airbnb. Using the approach of text mining and sentiment analysis, examining whether guests' emotions are positive or negative, this study investigates the attributes that influence Airbnb consumers' experiences compared with their previous hotel experiences by analysing big data of guests' online reviews. Findings reveal that the factors of guests' positive sentiment are the atmosphere, flexibility, special amenities, and humanized service; the factors of guests' negative sentiment are not value for money, have to clean the room before leaving, sharing amenities and space with strangers, disturbed by hosts' noisy recreational activities, and troubled by hosts' requesting good reviews.*

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## **INTRODUCTION**

The sharing economy, also called the collaborative consumption, based on peer-to-peer activity to share goods and services through Internet, moved by growing shared values of the public and increasing technological advancement of Internet platforms, including services like Couchsurfing, Uber as well as Airbnb (Hamari et al., 2016). Airbnb, founded in 2008, is one of the largest peer-to-peer (P2P) accommodation platforms in the sharing economy, has enjoyed significant worldwide growth in more than 81,000 cities and 191 countries. It allows ordinary people to rent residences such as an entire apartment or a private room to tourists, exists to create a world where anyone can belong anywhere and provides healthy travel that is local, authentic, diverse, inclusive and sustainable (Airbnb, 2019). Given its popularity in the tourism industry, researchers have begun undertaking studies on the Airbnb phenomenon, mainly focusing on the issues about Airbnb's impacts on the traditional hospitality sector, attributes comparison between Airbnb and hotels and Airbnb guests' motivations for using the service (Birinci, Berezina, & Cobanoglu, 2018; Guttentag, 2015; Guttentag & Smith, 2017; Neeser, 2015; Tussyadiah, 2015; Yannopoulou, 2013), however, it seldom involves the comparative study of tourists' emotional characteristics between Airbnb and hotels based on the sentiment analysis.

With the rapid development of information technologies, online social media and we-media, a massive new source of data called user-generated content (UGC) have come into being and been shared (Kaplan & Haenlein, 2010). Most of the UGC data at present are the travel photos, travel vlogs and tourist reviews of scenic spots, accommodations, caterings and the overall destinations, through which tourists could know about the tourism information more veritably and objectively. Several recent studies explore the issue of online reviews, or electronic word-of-mouth, focusing mainly on matters such as motivations of, and social dynamics between, users and contributors of review sites (Hennig-Thurau, Gwinner, Walsh, & Gremler, 2004). Yet, previous studies primarily rely on surveys, personal interviews, and other communication-based methods, but not made full use of this UGC (Xiang, Schwartz, Gerdes, & Uysal, 2015). The present sentiment analysis based on travelers' online reviews has mainly restricted the processing of unstructured text especially Airbnb guests' comments needs to be further studied and developed.

As a result, based on the theory of sentiment analysis, this study uses online reviews of world tourists to Australia and selects LIWC dictionary and text analysis instrument to compare the sentiment characteristics of Airbnb users and their previous hotel experience, to investigate the influencing factors of their positive and negative reviews. This study is an attempt to explore the sentiment of tourists based on the tourism big data. For tourists, it is helpful for them to obtain useful information from the huge amount of information before making reservations. For the managers and hosts of the Airbnb platform, it would be useful to perceive tourists' sentiment demands so that they can promote the quality of the accommodation products and services provided during their stay.

## **REVIEW OF LITERATURE**

### **Comparisons Between Airbnb and Hotel**

Various studies have attempted to investigate Airbnb's impacts on traditional hotel accommodation industry. And some researchers have compared Airbnb's attributes with hotels (Belarmino, Whalen, Koh,

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