## The impact of digital social media on tourism: a Case Study of experiences of Chinese visitors in Switzerland

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Decision making in the tourism domain often involves complex and dynamic situations. On one hand, the tourism related data sets often from various sources and difficult to compare. To overcome such situations, semantic web, and more recently linked data technologies have been developed to support the intelligent integration of tourism data. As a term to connect related data on the web, linked data is an important factor for improving the quality of natural language processing (NLP), such as user's interpretation from digital social network platforms. However, to date no significant amount of related studies have been published in the tourism domain.

On the other hand, and most importantly, decision makers must always broaden their investigations to include the nearest trends. Nowadays, Chinese tourists now increasingly want to travel by themselves or in small groups of friends to visit foreign countries. When deciding the place and direction, they often turn to online user-generated content available through social media to obtain information prior to their vacations, believing that other tourist's experiences to be trustworthy and useful. Sina Weibo – the largest and leading social media platform in China – gained over 600 million users. Weibo's great market penetration suggests tourism operators and markets need to understand how to build effective and sustainable communications on Chinese social media platform.

Switzerland, as one of the most desirable European destinations for Chinese tourists, is strongly positioned as a steep and consistent quantitative growth market throughout the past years. A better understanding of the Chinese tourist is therefore essential for successful business practices. However, there are far few studies have empirically examined over real outbound Chinese travelers' attitudes and experiences (e.g., on social media platforms). Research on linked data with behavior analysis to support tourism decision making system in this field is also notably lacking.

This study examined the tourist behaviors and experiences of Chinese travelers in Switzerland by adopting a linked data approach for a large-scale semantic analysis. A total of 103,778 Weibo messages shared with Swiss locations were collected between January 2013 and April 2015. We addressed questions about Chinese travelers' profiles, trends in keywords, and differences between first time and multiple visitors. Moreover, we implemented a semantic search engine by employing linked data technologies to provide useful information about Chinese tourists in Switzerland, both for the tourism industry and individual tourists.