Improving tourism marketing strategies by predicting the behavior of travelers using social media networks

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Summary
1. Analysis of social networks to understand the behavior of tourists
2. Marketing message improvement based on semantic concepts extraction
3. Enhancement of customer adhesion to marketing texts created with automatic text generator

Introduction
Every minute:
- 2'430'000 posts on Instagram
- 400 hours of new videos on Youtube
- 7M videos watched on Snapchat

This project analyses comments from Instagram (over 200'000) to detect a correlation between posts, weather and holidays. It aims to improve the customer adhesion and provide a better marketing message based on semantic concepts extraction for automatic multilingual text generator.

Methods
Fig. 1 – Project process: data is extracted from social media and online sources. It is processed through the data mining platform "KNIME" to prepare it for "Babelfy" and extract concepts. In the end, the data is used to improve the marketing message for the customer adhesion improvement.

Fig. 2 – The methodology used to create the visualization in our use case is based on CRISP-DM, with the addition of a visualization branch. The iterative process stays present in this methodology mainly in the data mining process.

Conclusion
1. Adapted CRISP-DM methodology to match the client vision
2. The variety of API to connect to social media vary often over time
3. A novel way to handle the customer comments and sentiment through an automatic online tool
4. An automatic text generator for tourism/marketing messages to improve the customer adhesion was addressed multiple times by various clients (private and tourism companies)