Instagram sentiment analysis: Discovering tourists' perception about Sri Lanka as a tourist destination

Erandika Hansani Ranaweera[*] and Chathura Rajapakse

Department of Industrial Management, Faculty of Science,
University of Kelaniya, Sri Lanka
erandiranaweera@gmail.com

Today the web has changed from static containers of information to dynamic platforms where users can share digital contents such as blog posts, pictures and opinions in a very simple manner. Especially, the social media is largely getting popular due to the fact that most people prefer to share their feelings, thoughts and memories of their daily activities in social networks. One of the most common types of posts in social networks is opinion related posts. Moreover, social network users tend to seek opinions of others before purchasing a product or getting a service.

Social media plays a revolutionary role in travel and tourism industry. With the increasing use of social media, tourists not only consume tourism products and services but also prefer to share their experiences with others in the forms of text-based opinions, comments to other's posts, pictures with descriptions, ratings, etc. Current statistics available with Sri Lanka's tourism authorities do not reveal whether tourists are happy with the services received during their visit and they have no information regarding common issues that the tourists have to deal with when they are in Sri Lanka. However, reading and analyzing all these online posts is not practically feasible due to the enormous time and human resource that would be required. The objective of this research is to identify how social media contents could be used to extract valuable and meaningful information to develop and promote travel and tourism industry in Sri Lanka.

Our approach is to adopt Sentiment analysis techniques to analyze the text-based contents shared by tourists on Instagram, which is a popular social networking site among tourists worldwide, to determine the overall perception of tourists about Sri Lanka as a travel destination. Photo descriptions and user comments are collected, using special keywords related to tourism in Sri Lanka using an online tool and, in the first phase of the research, sentiment classifier with support vector machine algorithm will be develop to identify sentiment polarity of posts. Furthermore in the second phase feature analysis model will be developed through which positive posts with feature words will be used to identify tourists who recommend Sri Lanka to others or potential tourists who plan to visit/revisit Sri Lanka. Moreover, feature categorization method will be used to identify the key areas that require improvements to offer a better service to tourists through negative sentiments.

Keywords: Sentiment analysis, Instagram, Social media