Abstract

In the recent years, a vast amount of research has been conducted on the topic of sentiment analysis and opinion mining. Businesses and organizations understand the potential benefits of developing sentiment analysis and opinion mining systems. In this study, Rapidminer as a solution is proposed for analyzing online product reviews. A corpus of 200 reviews for the 25hours hotel in Vienna, Austria was collected from the Tripadvisor website. Overall sentiment analysis as well as aspect-based sentiment analysis was performed on the reviews. The results were then compared with the star rating provided by the reviewer using SPSS software to check the accuracy of the results. Finally, using the results from aspect-based sentiment analysis, linear regression was used to predict the sentiment using the most frequently appearing aspects. The purpose of this study is to show that open source software like Rapidminer can be used effectively to calculate the sentiment from online reviews as well as for aspect-based sentiment analysis. The results show that Rapidminer is an effective tool. Aspect-based sentiment analysis can be used to predict sentiment and thereby business can use it to improve overall customer satisfaction by focusing on enhancing certain aspects of their products and services.