

AUTOMATING TEXT-BASED CUSTOMER FEEDBACK ANALYSIS TO DERIVE BUSINESS ANALYTICS

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Abstract

In today's business context most of the businesses have already identified that the customer feedback reviews play a major part in terms of the businesses next steps. Businesses are also aware that there are many important business analytics which could be found through analyzing the customer reviews. Currently even though most of the businesses encourage their customers to post their experiences regarding the business products / services, they still analyze and evaluate those reviews manually. This manual process is time consuming, error prone and the quality of the analytics would depend on the experience level of the person who evaluates the reviews.

This research focuses on design and development of "Customer Feedback Analyzer" which provides tool-based support to analyze the text-based customer reviews and then showcase important business analytics eliminating the need to manually evaluate and analyze the customer reviews. Tool is empowered with data scraping, preprocessing and finally classifying the reviews using sentiment analysis technologies in order derive important business analytics. Tool uses multiple data preprocessing techniques such as sentence tokenization, lemmatization and stop word removal combined together. Text-based customer reviews are classified in to three different groups as "positive", "negative" and "mixed" reviews. Finally, as the outcome, tool provides overall business analytics as well as analytics upon business products / services.

Keywords: Data Scraping, Data Preprocessing, Sentiment Analysis, Classification, Python, Text-based Customer Review Analysis