Informatics Institute of Technology In Collaboration with University Of Westminster, UK

SentScore

"Autonomous Text Sentiment scoring and Summarizing System related to

Complaint Management"

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Abstract

In traditional markets, customer complaints are considered as an important source of information. Since complaint management is recognized as a central for customer satisfaction, any measure of complaint behaviour should consider the degree and quality of the underlying customer satisfaction. Therefore, analysing customer complaints is part of the process of a business. Therefore this project would be analysing customer complaints, in order to improve customer experience. However, a prompt, reasonable and efficient response to a complaint can win you a loyal customer, and develop your business's reputation for top quality service.

As the solution to solve this issue, the proposed solution would address issues with respect to consumer complaint data in a textual format (complaint by phones), which are identified with the IT field (Technical Support Complaints). Furthermore, literary data written in English dialect will be considered. Moreover, SentScore ought to be savvy enough to interpret data identified with complaints efficiently and effectively, classify and analyse sentiment score precisely, summarise them into aspects, and distinguish how the customer feels about those aspects.

With this proposed solution the CCOs are able to extract a summarised analysis of the complaint solution by assigning weights to the complaint and aspects including **Internet**, **Television and Facility**, which are the main aspect categories considered when analysing the customer complaint. The system makes utilise of Natural Language Processing, Machine Learning and Sentiment Analysis concepts to provide the highest accurate sentiments or opinions expressed by the customer in complaints to present the end users with accurate and effective summarised outcome of the customer complaints and aspect of it.

Key Words:

Natural Language Processing, Machine Learning, Aspect Based Sentiment Analysis, Text Processing, Complaint Data

Subject descriptors:

• Computing methodologies~Artificial intelligence • Computing methodologies~Natural language processing • Computing methodologies~Information extraction • Information systems~Sentiment analysis