

MARKET NEED

Publicly expressed opinions in online reviews, such as found on Amazon.com, are becoming an integral part of the modern consumer's decision making process. The 2014 version of an annual study by BrightLocal¹ revealed that 88% of consumers trust online reviews as much as they trust personal recommendations. This percentage has been steadily increasing since the study began in 2011 (with 67% in 2011, 72% in 2012 and 79% in 2013). Further, the study found that 85% of consumers read fewer than 11 reviews, with 67% only reading up to 6 reviews. Depending on the product, review sites can have thousands of individual reviews.

The continuously increasing magnitude of review data, coupled with the evolution in consumer behaviour discussed above has exposed a market need for online reviews to be collated and summarised in a concise and user-interpretable manner.

TECHNOLOGY SOLUTION

Our technology solution consists of two key components. The first component is an extraction engine. This engine employs a range of natural language processing tools and state-of-the-art machine-learning models to extract pro and con sentences from the review corpus.

The second component of our solution clusters similar pro sentences and similar con sentences together to learn the strongest and weakest aspects of the target product. The resulting clusters are displayed, with a wordcloud visualisation and the centroid sentence (sentence which best represents the cluster) so the user can quickly discover the best and worst aspects of the queried product.

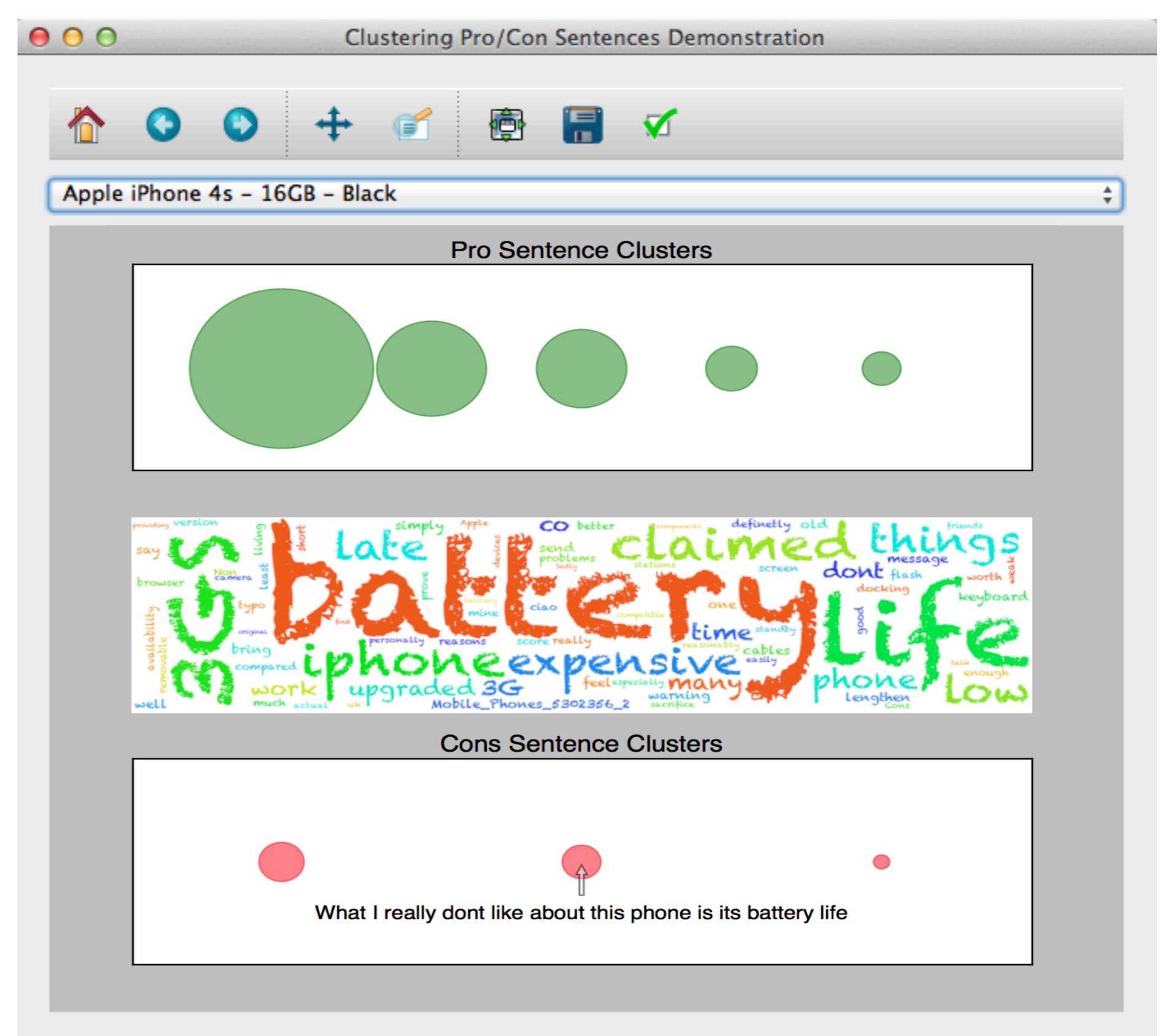


APPLICABILITY

The technology solution has the following two main use cases:

Improved Consumer Insight: Using this tool consumers can improve their purchasing decision. For example, if a consumer requires a phone with a good camera, they can quickly check the pro clusters of the queried product and investigate if the camera is discussed positively.

Provide Developer and Manufacturer product aspect feedback: Developers and Manufacturers can quickly see the aspects of their products that are in need of improvement. Our solution allows production team to see the aspects in greatest need of improvement, visually by inspecting the cluster sizes.



The PFF application in action. The visualisation shows the selected cluster is related to the battery and is a negative aspect of the product.

Research Team

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¹<http://www.brightlocal.com/2014/07/01/local-consumer-review-survey-2014/>

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