



brandwatch

Sentiment Analysis

Introduction

Businesses and brands tune in to social media chatter surrounding a brand, product or topic through social media monitoring in order to gain insights into what consumers are discussing online. The motivation for social media monitoring might be to gauge the volume of mentions, understand what's driving conversation about the brand, review customer complaints, run market research or engage with customers; the possibilities are endless.

Plus, as reputation is everything, you will probably want to assess the sentiment surrounding your brand too.

When choosing the right monitoring tool, you will need to consider key factors such as accuracy of sentiment classification. Different tools are equipped with varying degrees of potency. This is often dependent upon the cost of the tool and the speed at which it can assess and classify mentions.

It is these main factors that Brandwatch holds central to its sentiment analysis system – one that is based on years of research and refinement to ensure the most accurate, cost effective and real time results are delivered.

What is sentiment analysis?

For those new to sentiment analysis, it is the process used to determine the attitude, opinion and emotion expressed by a person about a particular topic in an online mention. An online mention is any text-based content found online on social media platforms such as Twitter, blogs, news articles and the many forums people use for discussion.

Most sentiment analysis tools aim to categorise these mentions in to positive, negative or neutral mentions to help a brand measure the overall customer sentiment behind their brand.

Brandwatch sentiment analysis: How it works

We are very proud to have all of our sentiment analysis work done in-house, by a team of specialised people who dedicate a great deal of time and resource into researching and refining our methods of classification. Many of our competitors use simple dictionaries of words for their sentiment analysis, and often rely on third parties for the analysis. Doing our analysis in-house means we have more control over it and can continue to update and improve the system as language evolves.

Our sentiment analysis is based on a library of hundreds of rules, which are used to define whether a mention of your search term(s) is positive or negative in tone.

This is not as simple as merely a list of 'good' and 'bad' words. Our rules are created based on Natural Language Processing and are regularly audited and updated. Analysts manually mark up thousands of mentions for sentiment in each of the 22 languages we support. These mentions are then analysed by our in-house NLP experts to find patterns in how opinions are expressed online, which in turn are used to shape and update our sentiment rules.

For example, say this tweet is posted: "I can't wait for [brand name]"

We can identify that when the phrase 'can't wait' is used in close proximity to a brand/product/event etc, this is almost always positive. Therefore mentions that follow this pattern will be classed, by the relevant rule, as positive.

If a mention is part of a longer post, such as a blog or news article, we analyse each paragraph in which the search term features (175 words either side of the search term) and give it a score. The score is based on the proximity of the word expressing sentiment (hate, love etc) to the search term, among other things. The scores for each paragraph are then put through a formula to work out the overall sentiment of the post. The score is also adjusted to take into account words that could reverse the sentiment, such as 'but', 'however' and 'not'.

The system only classifies mentions that it is reasonably sure are definitely positive or negative. Mentions for which the sentiment cannot be classified with enough accuracy are left as 'neutral' (which could also be thought of as 'unclassified').

What about accuracy?

It is impossible for sentiment analysis to ever be 100% accurate, but we work hard to keep up with the constantly evolving language used online, taking into account new phrases and identifying, for example, sarcasm and irony as much as possible. Our NLP experts audit the sentiment rules monthly, looking at thousands of mentions, refining and adding to the rules where necessary.

In mid-2012, we changed from using our machine learning system to a rules based system for sentiment classification. This was because we found that, although our old system was better at classifying a larger number of mentions as positive or negative, the rules-based classifiers were more accurate (22% more) with the mentions it did classify. We felt that precision was more important than larger numbers of classified mentions.

Sentiment accuracy can also be increased through customisable Rules...

Customisable Rules

In order for our users to get the most accurate sentiment possible, Brandwatch also offers users the ability to create their own Rules, to be used in conjunction with, or to overrule where necessary, our built-in classifiers.

This is particularly useful for queries that are searching for mentions of an industry that has its own language and phrases that are not widely used in general conversation. It is impossible for us to create rules for every possible industry or brand, so allowing our users to customise their own means that they can control and increase the accuracy of the automated sentiment analysis.

An example of this could be Harry Potter. Conversation about Harry Potter contains a vast set of specialist words and phrases that are only relevant to that topic, so automated systems would struggle to identify the sentiment of the chat using this language. Creating custom Rules allows those phrases to be correctly classified for sentiment.

Another example is charities. Charities may experience a high percentage of negative conversation, according to the automated sentiment, due to the nature of the industry – conversation is likely to include words that are inherently negative, such as suffering, poverty, hunger, drought etc. Thus, mentions will likely be marked as negative, even if it is not negative towards the charity itself. Creating rules would allow a user to avoid these being classified as negative.

If you have any questions regarding sentiment analysis or any of our other Brandwatch features, please contact your account manager or email us at contact@brandwatch.com