

Sentiment Analysis

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What Is Sentiment Analysis

- Sentiment analysis is the process of detecting positive or negative sentiment in text. It's often used by businesses to detect sentiment in social data, gauge brand reputation, and understand customers.
- Since customers express their thoughts and feelings more openly than ever before, sentiment analysis is becoming an essential tool to monitor and understand that sentiment. Automatically analyzing customer feedback, such as opinions in survey responses and social media conversations, allows brands to learn what makes customers happy or frustrated, so that they can tailor products and services to meet their customers' needs.

- For example, using sentiment analysis to automatically analyze 4,000+ reviews about your product could help you discover if customers are happy about your pricing plans and customer service.
- Maybe you want to gauge brand sentiment on social media, in real time and over time, so you can detect disgruntled customers immediately and respond as soon as possible.

Types of Sentiment Analysis

- Sentiment analysis models focus on polarity (*positive, negative, neutral*) but also on feelings and emotions (*angry, happy, sad, etc.*), urgency (*urgent, not urgent*) and even intentions (*interested v. not interested*).
- Depending on how you want to interpret customer feedback and queries, you can define and tailor your categories to meet your sentiment analysis needs.

Fine-grained Sentiment Analysis

- If polarity precision is important to your business, you might consider expanding your polarity categories to include:
- Very positive
- Positive
- Neutral
- Negative
- Very negative
- This is usually referred to as fine-grained sentiment analysis, and could be used to interpret 5-star ratings in a review, for example:
- Very Positive = 5 stars
- Very Negative = 1 star

Emotion detection

- This type of sentiment analysis aims to detect emotions, like happiness, frustration, anger, sadness, and so on. Many emotion detection systems use lexicons (i.e. lists of words and the emotions they convey) or complex machine learning algorithms.
- One of the downsides of using lexicons is that people express emotions in different ways. Some words that typically express anger, like *bad* or *kill* (e.g. *your product is so bad* or *your customer support is killing me*) might also express happiness (e.g. *this is bad ass* or *you are killing it*).

Aspect-based Sentiment Analysis

- Usually, when analyzing sentiments of texts, let's say product reviews, you'll want to know which particular aspects or features people are mentioning in a positive, neutral, or negative way. That's where **aspect-based sentiment analysis** can help, for example in this text: "*The battery life of this camera is too short*", an aspect-based classifier would be able to determine that the sentence expresses a negative opinion about the feature battery life.

Multilingual sentiment analysis

- Multilingual sentiment analysis can be difficult. It involves a lot of preprocessing and resources. Most of these resources are available online (e.g. sentiment lexicons), while others need to be created (e.g. translated corpora or noise detection algorithms), but you'll need to know how to code to use them.
- Alternatively, you could detect language in texts automatically with MonkeyLearn's language classifier, then train a custom sentiment analysis model to classify texts in the language of your choice.

Why Is Sentiment Analysis Important?

- Sentiment analysis is extremely important because it allows businesses to understand the sentiment of their customers towards their brand. By automatically sorting the sentiment behind social media conversations, reviews, and more, businesses can make better and more informed decisions.
- It's estimated that **90% of the world's data is unstructured**, in other words it's unorganized. Huge volumes of **unstructured business data** are created every day: emails, support tickets, chats, social media conversations, surveys, articles, documents, etc.). But it's hard to analyze for sentiment in a timely and efficient manner.

The overall benefits of sentiment analysis include:

- **Sorting Data at Scale**
- **Real-Time Analysis**
- **Consistent criteria**

APPLICATIONS OF SENTIMENT ANALYSIS

- The [applications of sentiment analysis](#) are endless and can be applied to any industry, from finance and retail to hospitality and technology. Below, we've listed some of the most popular ways that sentiment analysis is being used in business:

1. Social Media Monitoring
2. Brand Monitoring
3. Voice of customer (VoC)
4. Customer Service
5. Market Research