

# Customer Sentiment Measurement

Customer Experience Management (CEM) leaders rely on the Net Promoter Score (NPS) and customer satisfaction ratings to evaluate customer sentiment. This helps them make better decisions when allocating resources to solve specific issues like reducing pain points. Given some of this data is text-based (such as social media posts), analyzing and drawing insights is a bit more complicated.



The data science team begins by gathering and preparing the text-based data - which could come from a variety of sources such as social media posts, customer call logs, online reviews, and more. The team creates a KNIME workflow in KNIME Analytics Platform and deploys it on KNIME Server as a Guided Analytics Application. The CEM Leader is then able to interact with an Analytical Application, where they are exposed to just the right amount of complexity and predetermined touchpoints. For example, they can upload datasets, tweak the parameters, and more, in order to draw the insights they are looking for.

In this case, they can analyze the NPS, as well as number of promoters and detractors, and cross check these metrics against competitors. Secondly, the application guides them towards defining the correlation between customer satisfaction on individual touchpoints and overall customer satisfaction with the company. Thirdly, a customer sentiment analysis is generated, using a word cloud (see Fig. 1) of positive and negative comments, and prediction of sentiment for arbitrary reviews. Based on their findings, they are able to adjust existing processes and strategies to reduce customer pain points.



Fig. 1: Word cloud depicting positive customer sentiment.

**Results:**

With this Analytical Application, the CEM Leader can unify quantitative and qualitative metrics to understand customer satisfaction based on:

- A Net Promoter Score (NPS)
- A word cloud of positive and negative comments
- The correlation of NPS score with touch points on customer satisfaction
- A sentiment prediction based on arbitrary customer feedback

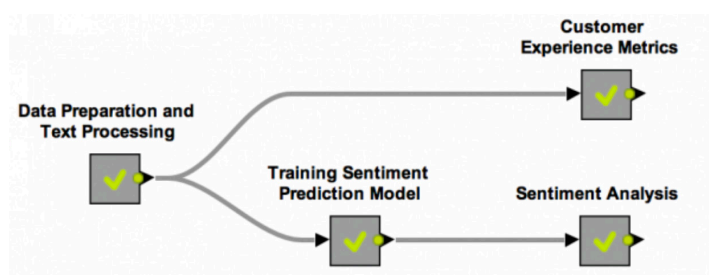


Fig 2. High-level KNIME workflow

Data wranglers and analytics experts build a KNIME workflow in KNIME Analytics Platform and deploy it on KNIME Server as a Guided Analytics Application. The CEM Leader interacts with only the relevant touchpoints to better understand customer satisfaction in order to plan which service areas can be improved.

## Try it out for yourself!

This workflow is available on the KNIME Hub:  
[tinyurl.com/knime-customer-sentiment](https://tinyurl.com/knime-customer-sentiment)

