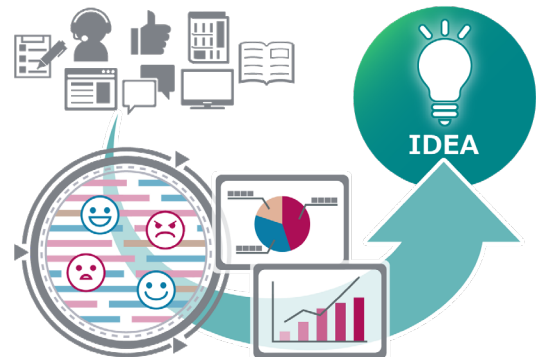


A Service for Predicting the Future Based on Voice of the Customer (VoC)

Sentiment Analysis Service

This service supports your future-oriented planning through the high-precision visualization of customers' opinions and sentiments (Voice of the Customer) as derived from social media and other sources.

Hitachi's Sentiment Analysis Service provides a highly accurate visual representation of customers' opinions and sentiments about a company or a product, based on analyses of text data. The service can analyze the data from a variety of media, such as social media, customer reviews, mass media including newspapers and television, and business data from questionnaires and call centers.



Contribute to your business from a variety of angles by combining this analysis with business data.

Forecasting trends based on customer opinions

Product planning to comprehensively meet market needs

For details, see "Examples of using the Sentiment Analysis Service" on the reverse side.

Advance detection of risks related to your products

Prompt measures against risks, such as the prevention of social media flaming and recalls

For details, see "Examples of using the Sentiment Analysis Service" on the reverse side.

Real-time analysis of feedback posted on social media

Effective promotional activities

Forecasting of demand by applying customer feedback to business data

More accurate production planning

Analyzing employees' sentiments based on questionnaire results

Promotion of work style reform

Features of the Service



Accurate Analysis

■ Sentiment Analysis

This function classifies the results into three major emotional categories (positive, negative, and neutral). The text data can then be further broken down into more detailed sentiments (joy, happiness, love, etc.). This function can also classify text into different categories.

■ Moral Analysis

This function uses the academically backed Moral Foundations Dictionary* to quantitatively analyze and visualize text data and to categorize keywords according to the following five moral foundations: care, fairness, ingroup, authority, and purity.

*Created based on the moral foundations theory advocated by social psychologist Jonathan Haidt.

■ Insight Analysis

This function uses Hitachi's original algorithm to identify unexpected, previously overlooked information that was buried in huge amounts of data.



Insightful Viewer

To use sentiment data for your business, you must be able to quickly and easily find the data you want. To achieve this, this service's dashboard has three features to help you notice important points. First, the dashboard displays analysis data in various graphs (pie chart, timeline, word ranking, etc.). Second, the dashboard can filter analysis data not only by keywords and dates, but also by emotions and topics categorized by AI. Finally, the dashboard can also filter analysis data by tags set by users.



Total Support

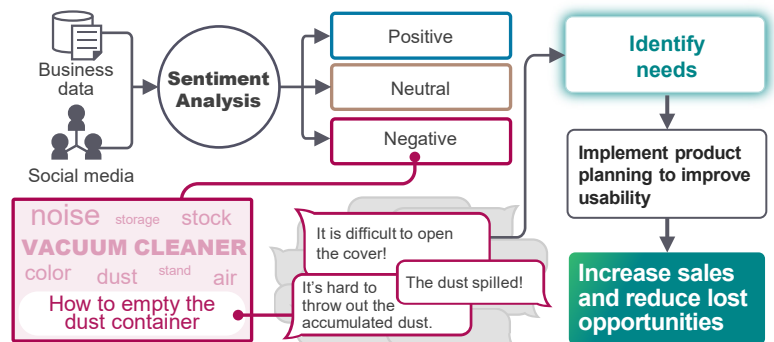
Hitachi provides comprehensive support throughout the process. For example, Hitachi provides consulting services that enable businesses to make effective use of media information, collects real-time data from social media, links with external data from mass media, analyzes and improves visualization of data, and performs operation and maintenance.

Examples of using the Sentiment Analysis Service

■ Product planning to comprehensively meet market needs

Perform sentiment analysis of data that includes both business data, such as product functions and performance, and information from social media. Based on customer complaints about the product, this analysis clarifies areas in need of improvement, which allows you to identify customer needs. This, in turn, enables you to perform product planning in a way that comprehensively meets market needs, thereby contributing to your efforts to increase sales and reduce lost opportunities.

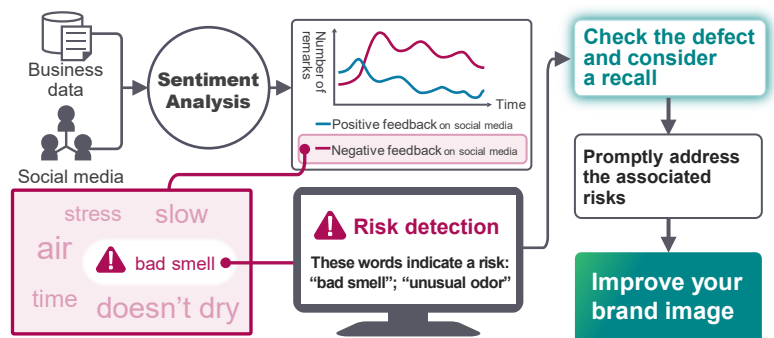
▼ Example : Analysis of data for vacuum cleaner planning



■ Implementation of prompt measures against risks, such as social media flaming and recall

Perform sentiment analysis of data that includes both business data (such as product specifications and information about the state of business when the product was released) and information from social media. This enables you to detect negative feelings about the product before they spread, and to identify words that indicate risks. This helps you to improve your brand image by promptly implementing measures against the risk, such as preventing accidents that may be caused by defects in the product or announcing a recall.

▼ Example : Implementing measures against risks related to a washer/dryer



● Hitachi reserves the right to improve or otherwise change the specifications of this service without prior notice.

For more information about this service

■ Official website of Hitachi, Ltd.'s Applications Services Division
<https://www.hitachi.com/products/it/appsdiv/>