

Stratifyd SignalsTM for Retail



A large retailer used Stratifyd technology for text analysis of customer emails, processing thousands of documents in minutes.

Executive Summary

A Fortune® 500 retail company headquartered in the U.S. utilized Stratifyd technology for data analytics. In 2015, the retailer had over \$59 billion in sales. The retailer operates or services more than 2,000 home improvement and hardware stores in the United States, Canada and Mexico.

Challenges at the retailer

A large home retailer gets thousands of customer emails. Customer service would naturally expect a fair number of them to be complaints about their store layout, certain product lines, and a campaign that didn't go over well. Understanding customer feedback is important to this large organization. Going through thousands of emails manually is a herculean task, and prone for missed correlation and classification of the data, and missed opportunities to make improvements in customer satisfaction. This challenge facing the retailer was a perfect fit for machine-based learning, and the Natural Language Processing (NLP) power of the Signals platform. The need to turn thousands of unstructured text emails into something valuable is why our technology was used.



The Stratifyd Signals™ platform can automatically process the textual data within email to help identify key patterns, trends, and issues hampering the retail buying experience. The speed of our NLP engine allows the analyst to process the data and begin analyzing data in a matter of minutes. Other text analytics platforms can be slow to process and present information.

The visualization interface in Signals provides the ability to drill down and focus on a specific day, or evaluating email over days, weeks or even months, allows the retailer's sales and customer support teams to quickly identify trends and issues and address them head on, while ensuring store representatives are following protocol and delivering top-notch service.

How Signals Helped

Signals enabled the retailer's customer service teams take a deep dive into the unstructured text of their customer emails. Analyzing data in real time allows the customer service and customer experience teams to uncover potential issues and without complex IT integrations or by taxing data science teams. Signals has been able to quickly process all the emails and present it in a way that allows the retailer to better manage the overall customer experience

processes large volumes of unstructured and structured textual data from almost any source. Email was the source in this case study, but the platform can also analyze chat sessions, text files, e.g. Word and Evernote, blog posts, app reviews, social media and more. Signals produces quick and actionable insights in seconds by incorporating predictive modeling,

machine learning, and robust statistical NLP algorithms to create visualizations of behavior communities, trends, patterns and outlying themes.

- Key aspects of the solution include no complex integration, and an intuitive dashboard. The Signals dashboard offers drag-and-drop data importing and drill-down options such as temporal trends, category overview, or buzzword and geospatial analysis.
- **Additional data sets:** The retailer is able to add additional data sets to the email data so they can better understand ongoing customer demands:
 - Comment Cards and exit surveys
 - Purchase experience surveys, online chat, product ownership surveys
 - Tech support data

Results, Return on Investment, and Future Plans

The retailer correctly assumed they would see complaints about their store layout, certain product lines, and a campaign that didn't go over well. What they didn't expect the data to tell them was that there were ongoing problems with stores not properly recognizing their military discount policy. Retail locations in certain geographic regions were denying the discount to qualified members of the armed services causing much frustration with their clientele. Once this issue was identified, the company was able to quickly reeducate their employees on proper military discount policies.



The Signals platform can be used as a standard operational process, analyzing data on a daily basis, to strengthen relationships with customers.

The speed of the platform to **turn data into revenue** is a key selection criterion for using Signals. Large data sets, including those with the unstructured text, can be analyzed in minutes.

