



One of the major players in the cutthroat telecommunications industry had long been focused on optimizing its customers' and employees' experiences in order to remain competitive. Its Business Analytics team plays a key role by compiling and analyzing feedback from customers and employees and recommending steps to improve performance across the company.

### The Challenge

The Business Analytics team recently undertook a new initiative: to find connections between employee and customer satisfaction. To be specific, are there drivers of employee satisfaction that have an impact on customer satisfaction as well? The Business Analytics team realized that identifying such connections, if indeed they exist, would enable them to prioritize initiatives that would be the most beneficial to both employees and customers.

Until this point, the team had relied upon rigorous statistical methodologies to analyze predominantly quantitative data. However, the team would need to focus on unstructured data, such as open-ended survey responses, in order to fully understand the key drivers of customer and employee satisfaction. Traditional statistical methodologies, while valuable, are not as effective or rapid at analyzing unstructured feedback.

The team was also determined to eliminate as much bias as possible from the analytical process. However, traditional approaches to processing text-based data rely extensively on keyword lists and ontologies created by a human analyst.

# Situation

- Over 1.325 million anonymous comments from customers and employees
- 5 data sources
- Data collected over the course of one year

#### Goal

 Determine if a link exists between employee engagement and customer satisfaction, and if so, what factors influence both?

### Solution

 The company chose Luminoso because its AI-based approach automated the process and made it less susceptible to bias.

### Results

- Several links were found between employee and customer engagement.
- Employees desired more tools, resources, and training, and these comments were reflected in customer comments as well.

The Business Analytics team was concerned that an analyst might inadvertently skew the results by cherrypicking keywords or being subject to confirmation bias.

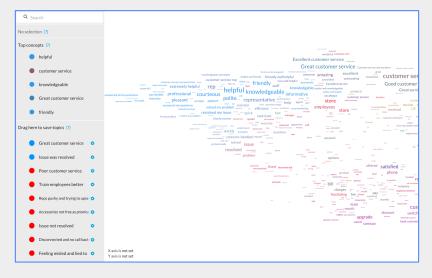
After vetting a number of different analytics companies, the telecommunications giant selected Luminoso to help them find connections between their employee and customer data.

The Business Analytics team asked Luminoso to help them answer the following questions:

- 1 Is there a link between employee engagement and customer satisfaction?
- Which factors influence employee engagement that also impact customer satisfaction?

Using Luminoso, the Business Analytics team analyzed over 1.325 million anonymized pieces of customer and employee feedback collected from five distinct data sources. By using cutting-edge methodologies in artificial intelligence and natural language processing, Luminoso was able to quickly map out relationships between customers and employees.

Within a few minutes, Luminoso's software identified the most relevant topics in the data – which were not necessarily the most prevalent or most-discussed. The software then visualized those topics in a concept cloud, which grouped the topics into clusters based on how the topics related to each other.



Individual topics could be clicked on and explored to get more information, such as which other topics were most related to the topic of interest; what emotions employees and customers associated with that topic; and to see verbatims that best represented what people were saying about that topic. The team could also easily filter their view of the data based on metadata like data source (employee vs. customer), NPS category (promoter, passive, detractor), geographic region, and others.

Having the data processed and displayed in this way made it much faster and easier for the Business Analytics team to uncover new insights and spot relationships between their employee and customer feedback.

## **Uncovering insights**

One topic that quickly bubbled to the surface in employees' feedback was the desire for more tools, resources, and training in order to feel more confident when answering customers' questions. Critically, some employees were commenting about the different training programs administered to employees in retail stores compared to those in call centers. Luminoso's software quickly uncovered a relationship between these employee comments and feedback from customers about feeling as though employees in retail stores did not always have the same information as those in the call centers.



**Employees** 

Training and learning the plans and ways to overcome issues takes a while to learn and they change constantly which leads to errors

Employees do **not seem well-trained or knowledgeable**. And prices of products are steep in that comparison

[Company] should do a better job at **managing the education and training** of their in-store and
phone customer service reps



Armed with this insight, the telecommunications company was able to prioritize providing more tools, resources, and training to its frontline employees. Over the course of the project, the number of employees and customers talking about this issue decreased by several percentage points.

Interested in learning more? Request a custom demo: www.luminoso.com/demo