

# USING REAL-TIME ONLINE DATA TO UNDERSTAND THE CUSTOMER

how sentiment analysis improved customer  
experience and informed business  
decisions at a regional grocery store  
chain

CASE STUDY: DATA ANALYTICS



## OVERVIEW

A regional grocery store chain saw the value in leveraging advanced analytics to drive their business forward; they just weren't sure where to start. With a mission statement vowing to keep the customer at the center of their business, they set initiatives to improve the customer experience. They knew in order to succeed, they needed to know what their customers were saying about their brand — and about their competition. Read on to see Zirous' role in the creation of a cutting edge sentiment analysis solution to provide new, relevant, decision-driving insights.

## THE CHALLENGE

With Amazon's recent entry into the grocery market through their acquisition of Whole Foods, a regional grocery store chain sensed a narrowing margin for error in staying competitive. With a fairly new analytics team, there were many potential problems to solve and questions to answer. But where should they start? There was one type of data they did not have at all, but knew it could provide a wealth of information — social media data.

The grocery store chain knew that their customers were freely providing crucial pieces of feedback online, and that the opinions being shared were influencing other customers and potential customers. With 245+ locations, manually reviewing social media posts was not a feasible option. Delivering a top-notch customer experience would require knowing what their customers want, and no one would provide a clearer answer to that than the customers themselves. But with each social channel's different post formats and unique API's, wrangling all of that data wasn't going to be easy. They needed a way to automate the retrieval, storage, and analysis of relevant social media posts — and that could turn into a substantial amount of data very quickly.

## THE SOLUTION

Zirous helped the regional grocery store chain create a solution to effectively analyze the unstructured data collected from social media and other online sources. The solution allows for real-time ingestion and analysis of social media posts across Twitter, Facebook, Pinterest, SurveyMonkey, and YouTube. Because of the flexible nature of this solution, it is able to grow and expand with this organization to continually add additional sources of social or other third-party data.

## QUICK FACTS

### Company

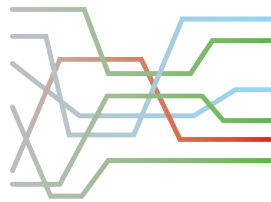
- Regional grocery store chain
- 245 retail locations and growing
- Online ordering and delivery services
- Annual revenue of \$10B+

### Technologies Involved

- Python
- NiFi
- HDFS
- PowerBI

## HIGHLIGHTS

- A regional grocery store chain needed to gain more customer insights, but they weren't sure where to begin.
- Zirous architected a sentiment analysis tool allowing them, in near real time, to analyze social media data that they had not had before.
- The company's customer care teams can respond more quickly and accurately to negative online feedback, giving them the ability to improve customer experience, loyalty, and lifetime value.



As posts come in, they are fed through a custom Python scoring model in real-time that determines if it has positive, negative, or neutral sentiment. Then, all posts are stored together to allow for additional holistic analysis. The social media data can also be joined with more traditional data that is already stored within the enterprise's data warehouse, creating a full, 360-degree view of this client's interactions with its customers.

## THE IMPACT

With the number of locations and number of customers this regional grocery store chain serves, this sentiment analysis solution revealed new insights that would not have been possible to identify without an automated solution.

All social posts are now queryable, so teams that are interested in how a particular product or store is perceived can quickly see every post that mentions these keywords. The most commonly mentioned words are automatically displayed in a word cloud for quick identification of trending topics. Customer care teams can now use this resource to identify and address customer concerns in a more proactive and timely manner. Highly negative posts are automatically routed in real time to a monitored Slack channel to take immediate and personalized action.

The organization has made production-level adjustments due to the insights gleaned from this tool, such as adding features and capabilities to their mobile application and online ordering platform. This regional grocery store is striving to keep the customer at the center of everything they do, and now the customer voices are heard directly, improving customer experience, loyalty, and lifetime value.

