

Predicting Earnings Performance with Location Data

Case Study: Cracker Barrel (NYSE: CRBL)

Every day, billions of consumers are using mapping tools to search, plan, and route to the different destinations that make up their individual worlds. Every route is a way to learn more about how consumers are engaging with different aspects of their lives and the companies around them— and the demand for this information has never been higher.

To better understand how behavioral location data can be used, we took a deep-dive into a top publicly traded company - Cracker Barrel (NYSE: CRBL) - to examine correlation between consumer routing behavior and quarterly company earnings with the MapQuest Route Insights product. The resulting anonymized dataset provided incredible visibility into how location can be used to predict company earnings for the top U.S. restaurant and retail chains.

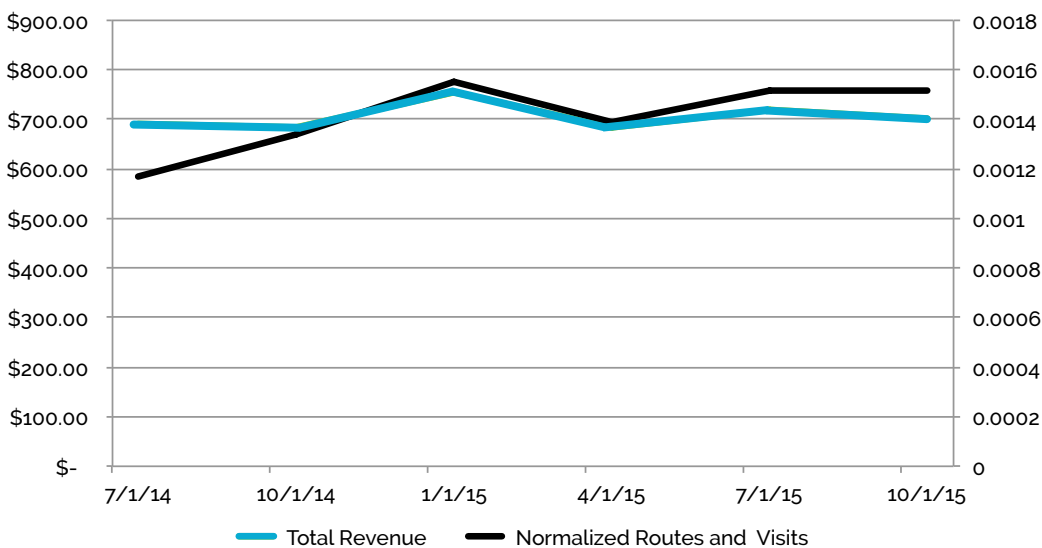
Methodology

In this study, we measured consumer routing behavior for Cracker Barrel restaurant locations against quarterly earnings for the company to determine if passively observed consumer location behavior was a positive indicator of earnings.

POI (point-of-interest) visit counts are used to define consumer routing intent and are made up of the total volume of routes generated to a CRBL location on the MapQuest web property (mapquest.com) and MapQuest mobile applications (iOS and Android) during the time period of May 2014 to October 2015. Mobile app users who visited (non-route) a specific store location are also counted and combined with POI visit counts and then normalized against all known MapQuest routes and compared against quarterly earnings for CRBL.

What is Search Ahead?

For large restaurant chains such as Cracker Barrel, consumer routing behavior can play a critical role in predicting earnings for event-driven hedge funds. After analyzing six quarters worth of data retrospectively, we found a .82857 correlation coefficient (Spearman's rank), indicating a positive linear relationship between foot traffic counts and quarterly returns. Obtaining this information from the MapQuest Route Insights product on a quarterly basis and analyzing it alongside other variables provides additional visibility into consumer behavior demonstrating the value of location data in determining predictive earnings.



CRBL: Route behavior is an indicator of quarterly earnings