



CRA Insights:

Risk, Investigations & Analytics

CRA Charles River
Associates

February 2021

Leveraging social media analytics to navigate market volatility

The “short squeeze” phenomenon of early 2021 has created market losses of more than \$20 billion, as masses of investors, galvanized by online public commentary, funneled extraordinary amounts of money into a few companies hit hard by the COVID-19 pandemic, impacting short positions and option strategies. While volatility comes with the territory in financial markets, these recent events appear to be the first time that a large number of investors’ trading activities were driven by social media. This article considers whether this type of activity can be detected before it markedly affects portfolios.

The extraordinary trading patterns seen across these stocks have left a paper trail of activity that can be used to develop predictive algorithms going forward. The fact that correspondence is occurring out in the open presents a unique opportunity to leverage technology to inform investors. Using sophisticated analytics tools to monitor discussion threads across multiple social media platforms and online forums, investors could:

1. Identify social media posts that indicate similar coordinated events before they occur;
2. React more quickly to anomalous investment activity and protect positions;
3. Establish routine tracking and monitoring algorithms covering large volumes of commentary potentially focused on specific individuals, ticker symbols, and key terms;
4. Compare and contrast stock price movements with contemporaneous conversations and social media posts;
5. Proactively monitor chatter around equities with similar profiles (e.g. 25%+ short interest); and
6. Create automated real-time alerts to notify investors if the aggregate mentions of a specific stock ticker symbol start spiking on social media and online forums.

Social Media Analytics

Social media analytics tools allow practitioners to analyze commentary from numerous sources at once, including Twitter, Facebook, Instagram, Reddit, Tumblr, and countless other online blogs, forums or social media platforms, including foreign platforms such as VK or Weibo. They also allow users to analyze commentary in aggregate, quickly analyzing tens of thousands—or even millions—of individual posts to map the conversation over time and identify macro trends, such as spikes in conversational volume or changes in algorithmically determined sentiment, as well as key demographics such as age,

gender, and geographic location. They allow users to create customized alerts and notifications on a given topic to be notified, nearly in real time, when anomalies begin to appear.

These tools can also be used to identify the top contributors (i.e. most prolific authors) and the top influencers (the participants in the conversation with the largest audience) on a given topic. Further background research on top contributors or influencers using traditional investigative techniques, such as public records research or source inquiries, often yields interesting results regarding the drivers behind those online conversations that may help inform a company's strategy for navigating the conversation.

With roughly four billion social media users globally, social media commentary can be a significant force in multiple realms. Many fund managers, analysts, and corporate business intelligence units already understand this and invest significant time in monitoring the social media conversations surrounding their companies or investment positions. However, this analysis is often done manually, on a micro-level to monitor specific forums or comments on specific Facebook pages, for instance. The pairing of proprietary social media analytics software tools allows for both macro level and detailed analyses and can provide a valuable "edge" to early adopters.

The relatively recent democratization of investing has led to substantial growth in the trading community. The predictive analytics aspect of social media can be a meaningful tool for investors seeking insight, allowing for an efficient and algorithmic gathering of vast amounts of data in a strategic way. Monitoring and analysis capabilities can empower investors with a more holistic and early understanding of events which may help protect portfolios and investments.

About the Risk, Investigations & Analytics Practice at CRA

Our consultants deliver complex multijurisdictional and multidisciplinary investigative, compliance, and disputes assignments for clients. These complex matters often require sophisticated data analytics tools combined with unique investigative capabilities and deep subject matter expertise integrated into a single team for efficient delivery of services. Our team is comprised of former federal and state prosecutors, former intelligence officers and analysts, data scientists, white collar criminal investigators, forensic accountants, risk and compliance specialists, economists, political risk analysts, and damages experts.

Contacts

Lisa Dane

Vice President

+1-202-662-3986

ldane@crai.com

Kenneth Feinstein

Principal

+1-212-294-8893

kfeinstein@crai.com

Victor Epstein

Senior Associate

+1-617-425-3671

vepstein@crai.com



The views expressed herein are the views and opinions of the authors and do not reflect or represent the views of Charles River Associates or any of the organizations with which the authors are affiliated. Any opinion expressed herein shall not amount to any form of guarantee that the authors or Charles River Associates has determined or predicted future events or circumstances, and no such reliance may be inferred or implied. The authors and Charles River Associates accept no duty of care or liability of any kind whatsoever to any party, and no responsibility for damages, if any, suffered by any party as a result of decisions made, or not made, or actions taken, or not taken, based on this paper. If you have questions or require further information regarding this issue of *CRA Insights: Risk, Investigations & Analytics*, please contact the contributor or editor at Charles River Associates. This material may be considered advertising. Detailed information about Charles River Associates, a registered trade name of CRA International, Inc., is available at www.crai.com.

Copyright 2021 Charles River Associates