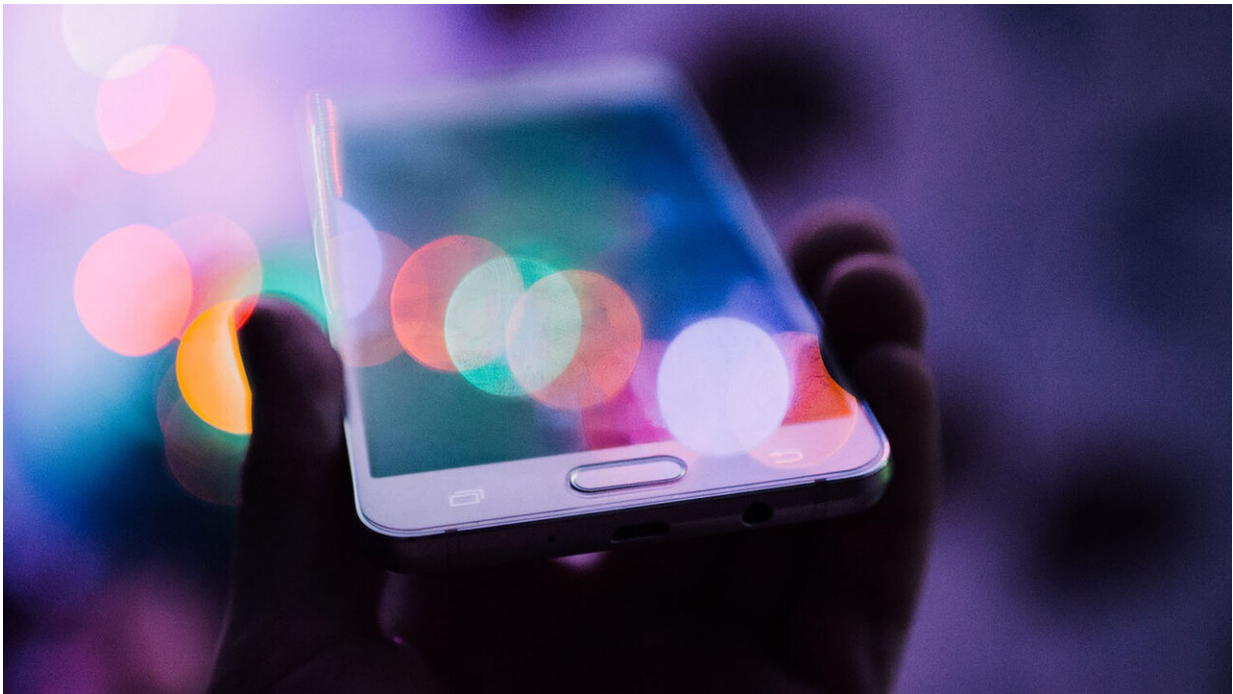# New tool assesses brand reputation in real time and in the long term

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Credit: Rodion Kutsaev

An international team of researchers has developed a framework for assessing brand reputation in real time and over time, and built a tool for implementing the framework. In a proof of concept demonstration looking at leading brands, the researchers found that changes in a given brand's stock shares reflected real-time changes in the brand's reputation.

"We've developed something we call the Brand Reputation Tracker that mines social media text on Twitter and uses 11 different measures to give us an in-depth understanding of how users feel about individual brands," says Bill Rand, co-lead author of the paper and an associate professor of marketing in North Carolina State University's Poole College of Management.

The Brand Reputation Tracker is a way of implementing a framework based on the Rust-Zeithaml-Lemon value-brand-relationship framework. Measures include things like "coolness," "goods quality," "social responsibility," and "trustworthiness," but are then aggregated into three scores: value driver, brand driver and relationship driver.

The value driver score effectively measures whether stakeholders think a brand is a good value. The relationship driver score assesses how closely stakeholders identify themselves with the brand. And the brand driver score accounts for pretty much everything else, such as style and popularity.

"The text mining allows us to give a numeric value to each of the measures and each of driver scores," says Rand, who is also executive director of NC State's Business Analytics Initiative. "And we are able to place those numeric values in context by comparing them to the measures and aggregate scores of other brands."

Because social media data are updated constantly, the researchers were able to identify changes in brand reputation in real time—as well as looking at trend data across days, weeks, months and years.

For this paper, the researchers looked at 100 popular brands as a proof of concept, demonstrating not just how the tool works but that it works. For example, the researchers found that—for those brands that were publicly traded on the stock market—changes in value, relationship and

brand driver score were reflected in each brand's stock valuation.

"One possible path forward is to significantly expand the dataset of brands that we're assessing to get a broader understanding of the brand landscape," Rand says. "And because we lay out the methodology we used, this paper allows users to create their own versions of the tool. For example, users could choose to look only at brands within a given industry category. Or users could modify the tool to focus on other aspects of brand, such as using a framework to assess the extent to which a brand is viewed as 'green' or 'sustainable.'"

Rand also notes that previous ways of assessing brand reputation in a meaningful way required either access to a tremendous amount of corporate data or the ability to survey thousands of people on a regular basis.

"But the approach we've developed here is more accessible to medium-sized businesses. It requires only the creation of the initial tool—which is very doable. Then you can plug in publicly available user data from Twitter and start getting usable brand assessment information in real time."

The paper, "Real-Time Brand Reputation Tracking Using Social Media," appears in the *Journal of Marketing*.

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