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Northfield Partners with Alexandria for Sentiment-Based Risk Models

The offering aims to help users quantify risk based on the latest news.

Risk analytics provider Northfield Information Services has rolled out a service that augments the vendor's current risk models by incorporating sentiment analysis.

Anthony Malakian

The offering, dubbed Risk Systems That Read, took nine years to develop and was made in conjunction with big-data and machine-learning specialist Alexandria Technology. Alexandria uses algorithms to classify and process text and then summarizes those sentiments on a scale of positive, negative or neutral. Northfield then decides on certain parameters, such as where this is something that investors will care about, if it will increase or decrease volatility, if this news pertaining to a security that is very liquid—and, thus, is more apt to go back to normal very quickly—or if it's illiquid, according to Northfield's CEO Dan diBartolomeo.

Risk Systems That Read quantifies risk based on analysis of actual news, to help portfolio managers make judgments on a security as to how volatile it will be a week or two into the future.

"If you think about how financial firms assess risk today, it's very backward looking: If we had this portfolio that we hold today, back through history, how volatile would it have been? What we're trying to do here is to say that investors don't worry that much about the past, what investors worry about is the present and what they think the future will hold," says diBartolomeo. "So in some way we have to take the process of assessing risks and make it forward-looking."

Kevin Shea, chief executive of registered investment advisor Discipline Alpha, tells WatersTechnology that most of the sentiment tools in the industry today are built using bag-of-words models—for example, the word "exceeded" in a press release or news story is positive while "disappointed" is negative. The problem with those solutions, says Shea, is that those results are gameable, as the head of investor relations can get a psychology dictionary and figure out which words to incorporate and which ones to leave out of an earnings report.

What makes the Alexandria solution unique, he contends, is that it is much more suited to backtesting. This is because it's been developed using deep learning techniques to come up with those positive, negative and neutral judgments in order to better make a determination of the true context of the information the algorithms are analyzing—and it can do that in less than 30 milliseconds. "It's a lot harder to fake out a neural network than it is to take out a list of 100 words to avoid or use," Shea says.

Forward Sentiment

Every day, Alexandria analyzes more than 5,000 news articles. Those datasets are then sent to Northfield, where the risk specialist updates its existing models, and from there, those models are sent to clients.

The Risk Models That Read offering are available from Northfield directly or through its partners, such as FactSet, Charles River Development, Thomson Reuters and State Street, among others. DiBartolomeo says that there are two levels for clients to sign up to: clients who receive information on a daily basis are already signed up and this is just an extra service for what they're already paying for; clients who only receive short-term data on a monthly basis (they also have clients who receive long-term information on a monthly basis) will also receive Risk Systems That Read, but he notes that "they're only getting the data once a month, so it's not updated every day like the clients who are paying to receive it daily."

He says that going forward, they will look to add more complex forms of sentiment.

"Right now the analysis is done on news stories that relate to companies, to industries, to countries. What we don't try and do—yet—is analyze news with respect to arbitrary topics like inflation or war," diBartolomeo says, adding that Alexandria already does sentiment analysis on macro topics, but Northfield needs to figure out how to incorporate those into its data feed.