SECURITIES INDUSTRY news

- TRADING ON THE NEWS: Turning Buzz Into

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Katherine Heires

Trading decisions based on news developments are nothing new. Whether the market-moving news arrives by boat, carrier pigeon or Blackberry, traders have always been eager to be the first to exploit and act on information that may impact a given market.

Yet now news is only new for a fraction of a second. Algorithms and rules-based engines filter text as it appears online, identify its underlying meaning, assess its importance and then - when warranted - execute trades based on it. All in a matter of milliseconds. Ideally, a thousandth or two of a second before competing traders' algorithms do so.

At the same time, the definition of news as it applies to trading markets is changing as well. In the age of Facebook, Twitter and social networks "we are seeing many new and different kinds of data sources that can be analyzed and mined for tradable insights," which in turn can be turned into machine-readable text or numbers and assessed for value by trading algorithms, notes Roger Ehrenberg, an independent investor in financial technology startups and former CEO of DB Advisors, a quantitative trading operation owned by Deutsche Bank that managed more than $6 billion.

At this point, there is not a set template for such efforts. Executing trades based on such automated forensics is an evolving science that is attracting more practitioners. Particularly interested in turning news into numbers are traders who employ quantitative strategies.

Early efforts have involved the use of high-speed news feeds that combine news as it traditionally has been defined: the stuff of newspapers, magazines, TV and radio newscasts and official-source-issued economic data.

According to Don Williams, managing director with Ravenpack, a news sentiment specialist firm that works closely with news provider Dow Jones, there are several steps to turning a traditional news article into machine-readable news or numerical info for use by a trading algorithm:

News content or text is usually analyzed simultaneously by five different natural language or sentiment analysis algorithms. The software studies the degree to which a particular article conveys positive or negative language about a given company, for example, or the degree to which the text may impact volatility in a given stock. A score ranging from 0 to 100 is produced for each one of the natural language analyses conducted. This numerical information can then be used in a customized way by quantitative traders as a factor for consideration in their trading models.

But this is just one way to speed up news filtering efforts. Increasingly, event-based information that can move markets and is being culled from blog postings, social network conversations, Facebook and Twitter text and being considered, weighted and in some instances, factored directly into trading algorithms.

"When the CEO of a major company says something at a conference, there is no official press release, the event is mentioned on Twitter and we see a massive move in the stock price in one day," says Don Simpson, chief technology officer of Psydex, a startup. That's information that can be factored into trading algorithms so machines can act on it far faster than a human trader would. His firm supplies text analysis and data mining software that can facilitate such activities. .

Others are wary of such practices.

"There is a lot of financial information quoted on Twitter that is simply not true," says Timothy Sykes, an independent trader and frequent Twitterer. "Just the other day, there were rumors posted about a company going bankrupt that were false. You have to take all this information with a grain of salt."

"Traders are using the most advanced technologies available today to solve an age-old problem: How to derive maximum benefit from either rumor or news," notes Roy Freedman, an adjunct professor at Polytechnic Institute at New York University.

The old financial adage - Buy on rumor, sell on news - remains valid today, he said.

"The only difference is that, machines are doing most of the trading today rather than humans," Freedman said, with the development of best practices an evolving process.

The growing interest in "trading on the news" via algorithms, observers and market participants say, is due in part to traders' never-ending quest for alpha - a return that exceeds the general market return.

But it also is a response to increasing investments in high-speed technology, such as complex event processing software that can speed up the process of building algorithms or provide real-time analysis of complex events such as a sudden uptick in market prices after the president gives a speech or whether or not the CEO of Apple is in good health.

Among providers in the category of machine-readable news services and related, real-time text analysis services are a host of traditional news providers such as Bloomberg, Dow Jones, Need to Know News (NTKN) and Thomson Reuters as well as startup or smaller firms such as Acquire Media, Kinetic Trading, Psydex, Selerity Corp., StockMood and Streambase, a provider of algorithm development software. The firm launched a service this spring that helps traders monitor "tweets" on Twitter for price sensitive data. The information can also easily be fed into algorithmic trading strategies, via Streambase's software.

Growing interest in trading on news is fueled by quant traders seeking unexpected factors in the marketplace they can capitalize on. Feeding into this: StockTwits, a service that aggregates conversations about stock trading on Twitter.

"A lot of quant traders have continued to trade off of the same market data day after day and as a result, their algorithms have been less effective and they have been losing their alpha.More recently, they are turning to alternative content like machine-readable news or news analytics to factor into their models and improve their strategies," noted Richard Brown, global business manager, machine-readable news at Thomson Reuters.

His firm, working with UK-based Infonic, a news sentiment specialist, has developed a NewsScope Sentiment Engine which assigns sentiment "scores" to news articles to indicate the positive or negative sentiment they represent so that the info can be swiftly fed into trading algorithms. In the firm's latest product update, announced in May, Thomson Reuters began to include scores for real-time commodity and energy market news, including six years of historical news sentiment data. This allows back-testing of strategies and modeling historic correlations between sentiment and prices.

Services such as Bloomberg, Dow Jones and Thomson Reuters tend to focus on the transformation of their own, branded news product into machine-readable news and tout their ability to provide archived and reliable news data for back-testing of strategies. Newer services are more experimental in the types of news and event information they may process.

Psydex, a three-year old startup firm based in Atlanta, Georgia, is a data mining and text analytics firm that operates on the premise that citizen journalists, posting on services such as Twitter, Facebook and the Web, will often observe and report on a market-moving event faster than any mainstream news outlet.

"Our focus is on unscheduled events - an emerging area of interest to traders - and using natural language and semantic-based algorithms, we analyze mounds of real-time news and information flow from TV, business wires, Dow Jones, Thomson Reuters, Twitter and blogs in a tiny fractions of a second," explained Rob Usey, a former IBM executive and CEO and co-founder of Psydex.

Psydex uses large grids of computers, trillions of bytes of memory and patent-pending technology to process traditional and non-traditional news. The firm using topic model analysis (e.g., a search for information about "Google" and "acquire"), analyzes the location and proximity of key words, the precise time that they appear and the frequency of such words, to determine if the frequency of references to a given subject or topic is increasing. The system is then able to turn this into numbers and produce a machine-readable news feed, suitable for algorithmic use - all within 20 thousandths of a second.

This allows the firm to assess the average number of mentions of a particular topic over a specific time period and look at standard deviations from the mean to produce a real-time, semantic tick feed. "Just as a tick data feed allows you to see if stock price levels are normal, unusual or highly unusual, we are able to do the same with content news flow and see if it's influencing a particular company," Simpson said.

"We are seeing that traders are now doing pure, black box trading off of our event-based news; Clearly, among traders, the world of news does not revolve around the established news providers, the Dow Jones and Thomson Reuters of the world," Usey said.

"Increasingly, people are looking at all forms of news and building their own indicators around it in a semi-structured way," as they constantly seek out new trading advantages said Rob Passarella, global director of strategy at Dow Jones Enterprise Media Group. His firm provides both a low latency news feed and news analytics for traders. Passarella also pointed to new academic research being conducted on the degree to which frequent Google searches on various stocks can serve as trading indicators, the potential impact of various phrases and words that may appear in Securities and Exchange Commission statements and the latest wave of online communities devoted to stock trading topics.

"Markets are by their very nature conversations, having grown out of coffee houses and taverns," he said. So the way conversations get created in a digital society will be used to convert news into trades, as well, Passarella said.