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Author: Louis Lovas, Director of Solutions OneMarketData, LLC



The chatter on Twitter, Facebook and other social media outlets has reached peak levels. This year marks just the seventh anniversary of Twitter and tweet volume is now over 400 million messages daily¹. Leveraging twitter or other social media sources for economic and company information for actionable insight has piqued beyond mere curiosity. The idea of trading based on non-traditional information is also not new by any means. What is changing is the concrete evidence of the correlation between the financial markets and the global psyche, a pulse on business as represented through social media. The market dip following a fake tweet from a malicious hack into the Associated Press (AP) Twitter account has shown the increasing influence of social media on financial markets.

The tools and techniques to judge human behaviors and determine sentiment have attained a high-degree of sophistication. Most are targeted to achieve a specific goal, such as retail buying patterns, or determining if a company's earnings report is good or bad news. To that end, news

agencies such as Reuters and Dow Jones provide sentiment-enhanced machine readable news. Likewise, interest in obtaining actionable sentiment from social media is gaining momentum.

At a recent tradeshow in Chicago, Quantitative Analyst Rochester Cahan from Deutsche Bank outlined his own research into the impact of news and social media on markets. Rochester draws a clear distinction between the influence of news, which is mostly factual reporting of quarterly earnings and social media information – which are opinions, commentary and customer feedback on a company's products and overall stature. Interestingly, his research indicates social media information has "twice the predictive power" over news for longer horizon strategies. Not all that surprising when you consider the shifting of public mood or psyche as depicted in twitter content. That insidious behavior is more analogous to steering an ocean liner, it moves and responses rather slowly.

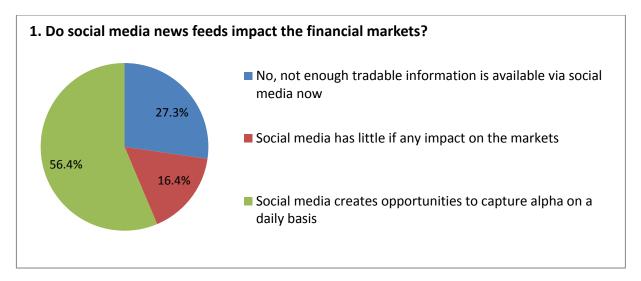
The AP Twitter hack, commonly known as the Hash Crash has caused market participants to sit-up and take notice. Besides the hack's deceitful content, the real treachery was the breach of a reputable news agency, the Associated Press. It certainly was not a casual choice. News and information is based on a trust model. Credibility of the information in rated on the reputation of the source. Regrettably, any confidence in social media as a news source was terribly shaken by the malicious act.

¹ Twitter turns 7, http://articles.washingtonpost.com/2013-03-21/business/37889387_1_tweets-jack-dorsey-twitter

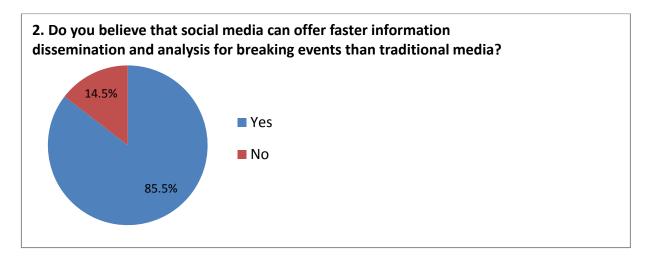
Yet it also called to question just how strongly is social media proving to impact financial markets? There is rampant speculation that part of the reason the market crashed so quickly was due to automated trading, algorithms which scan social media sites for major news and place trades accordingly. Just how prevalent are such strategies?

A New Normal, the long economic slog defined by higher regulatory scrutiny, increasing competition, falling equity volumes and volatility is a stranglehold on trading firms. As margins have thinned data analysis has broadened to reach beyond single asset class trading in the search for alpha. An increasing use of non -traditional information such as social media seems inevitable in the era of the new normal. Engaging a broader market analysis that strives to attain new insights and predict future outcomes through empirical cause-and-effect analytical techniques. Yet was the 145 point drop in the Dow that day caused by human emotional response or machine-based trend following strategies?

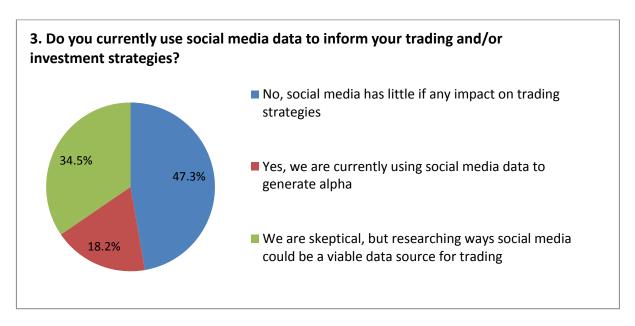
Who better to answer these absorbing questions than the market participants themselves, those actively engaged in ways to improve the bottom line. To that end, OneMarketData² decided to solicit input from the industry on their use of social media for trading and investment decision making. The following charts portray a general sense that the industry, while hesitant and cautious is taking social media seriously.

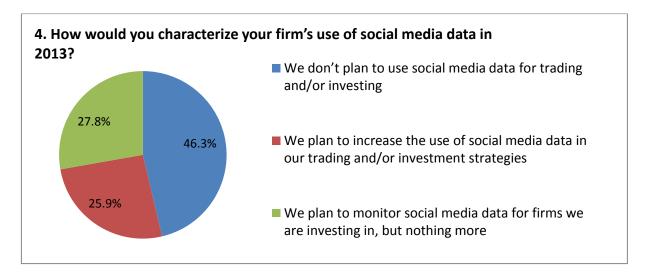


² OneMarketData and OneTick, technology for financial data management, http://www.onetick.com

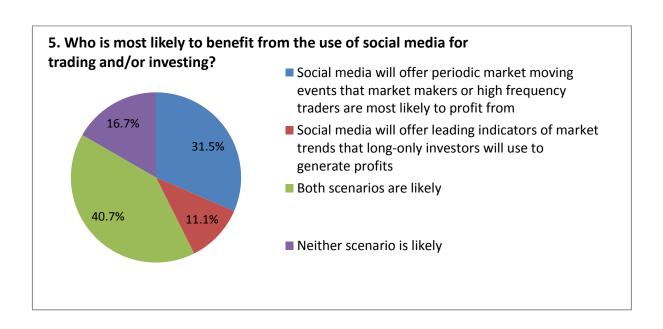


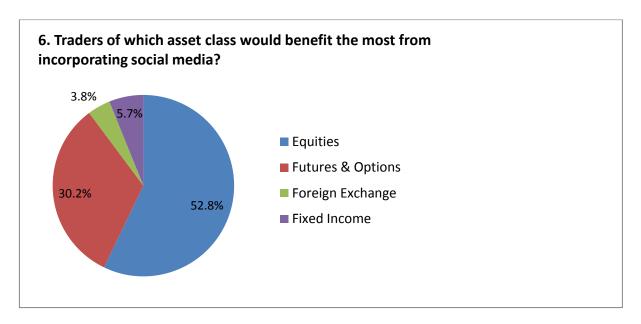
Question 2 demonstrates that traditional new agencies, regardless of the efforts to build and maintain a reputation as credible sources are taking a backseat to social media as the future of information dissemination.



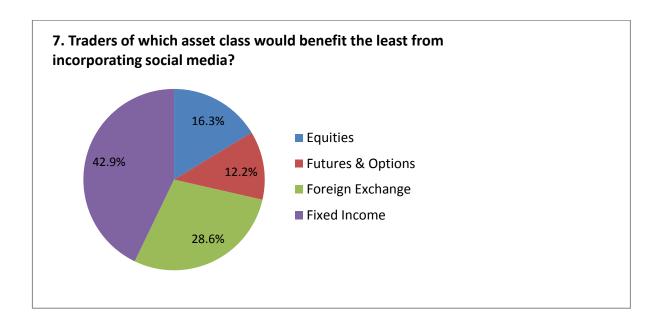


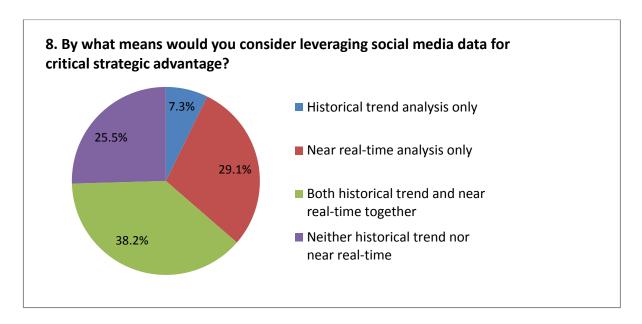
A cautionary but positive step forward in understanding the overall value and use of social media data in the investment and trading process can be easily seen in the responses to questions 3 and 4. Just over 50% of respondents indicate social media has value to the investment process by their willingness to infuse its content into their decision criteria. Although it's not a major leap of faith since just under 50% indicate they plan to ignore or void it.



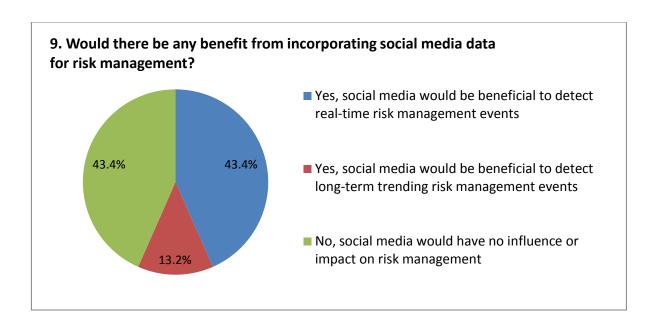


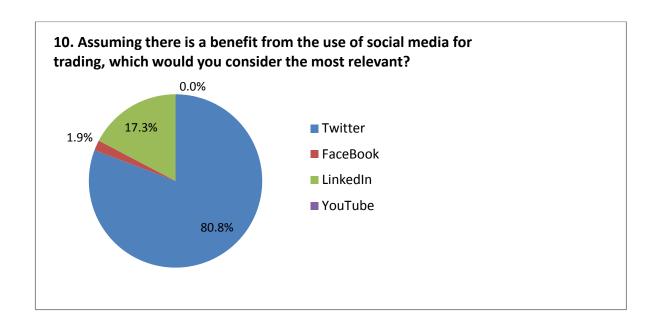
Social media content is the voice of millions expressing opinions, offering feedback on a company's products and commenting on corporate news and policy. It's no wonder that the consensus from questions 5 and 6 overwhelmingly indicate that any benefits of social media are felt most in the fast moving Equities and derivatives markets.

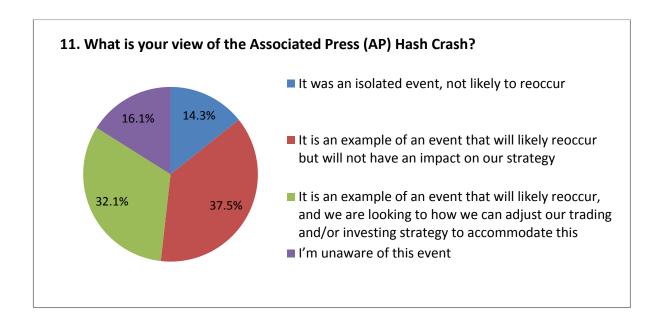


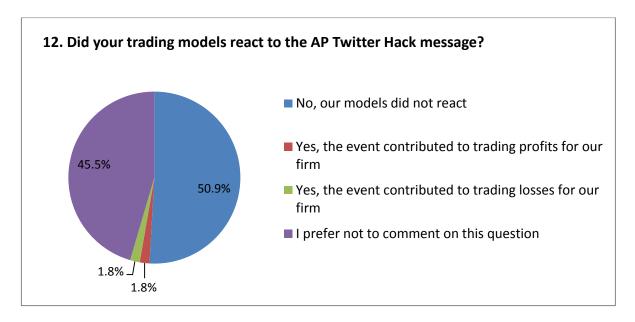


The conclusion to leverage social media content, both historical trend analysis and real-time parallels what today defines the state-of-the-art in quantitative analytics. Trading strategies use historical market data to back-test and define benchmarks, regression models and statistical trends. The efficacy of technology such as Complex Event Processing (CEP), while understood to be real-time analytics is wholly dependent on precedence established in historical data. This is based on the simple premise that the past can be a rational predictor of the future. It stands to reason social media content will be used in a similar manner.

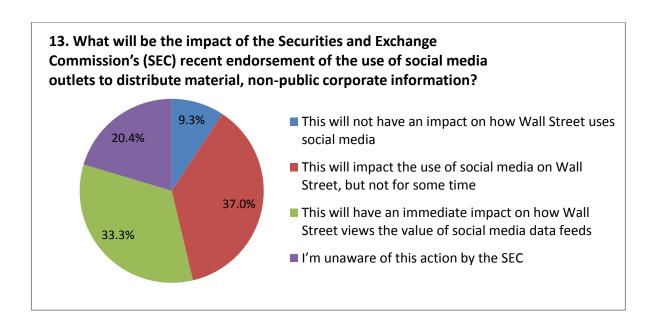


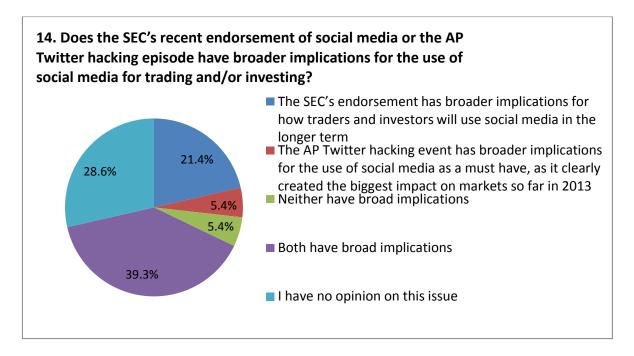




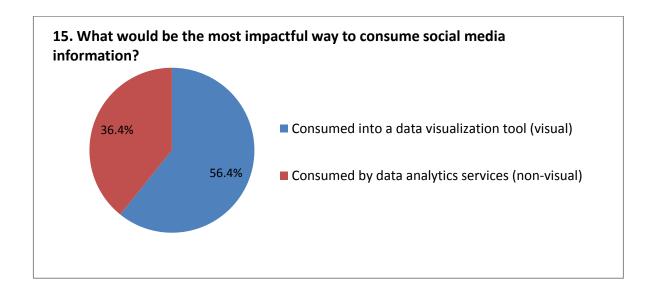


Questions 11 and 12 in the survey indicate a split decision on the impact and future expectations of social media and typify the heavy emotional reaction to digest and understand disruptive innovation. As with any overwhelming technological change the road ahead is chock full of potholes and forward progress occurs in fits and starts. Social media defines a revolution in both information dissemination and consumption. It was not created by committee or controlled by a few oligarchs. Twitter's voices are in the millions representing the democratization of information. Abusive behavior is a natural byproduct to its freewheeling design. Efforts to rein that it are an overreaction. Providing tighter security to deter hackers and content verification is the measured respond to the first of likely many scorching subversive efforts to undermine information credibility.



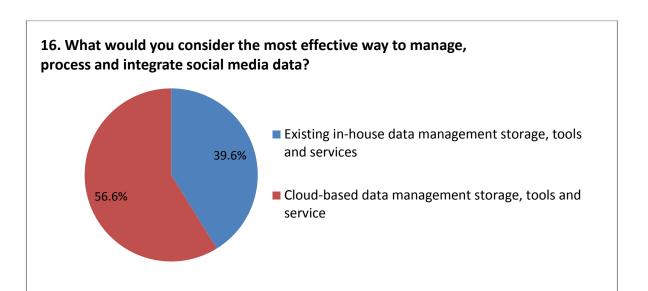


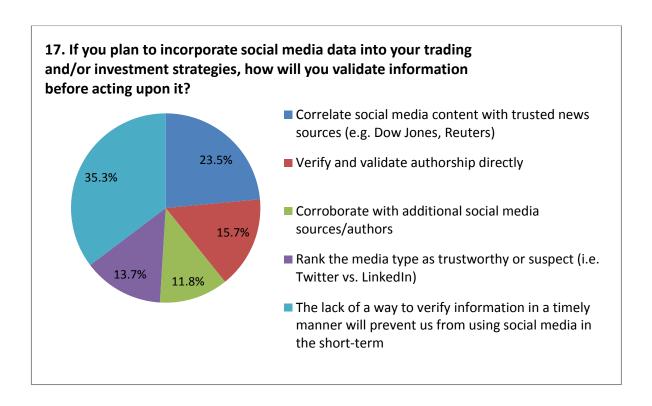
Coincidently and somewhat embarrassingly for the Securities Exchange Commission, the Hash Crash occurred just three weeks³ after its ruling that companies can use social media for corporate information dissemination⁴. A notoriously bold statement on the (lack of) security safeguards currently employed within social media.

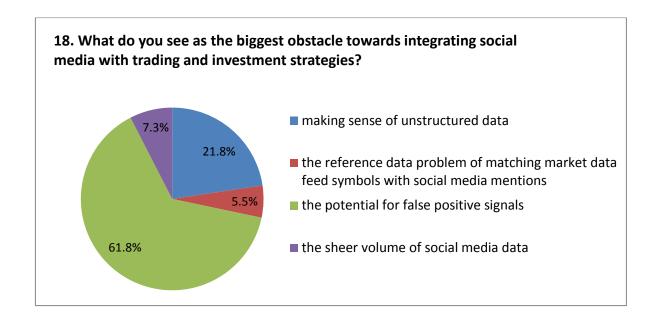


 $^{^3}$ Hackers send fake market-moving AP tweet: http://www.reuters.com/article/2013/04/23/net-us-usa-whitehouse-ap-idUSBRE93M12Y20130423

⁴ SEC Ruling on use of social media for Company Announcements: http://www.sec.gov/news/press/2013/2013-51.htm







The Information Transformation

We are in the midst of a revolutionary change in global news dissemination and consumption through social media. One so insidious we can hardly see the change happening before our very eyes. Traditional news agencies are up against the voices of millions with little more than their reputations to hold them afloat. Social media's information flow is not directly targeted at reporting a news story in the classic sense but to portray an emotion, the global psyche from the voices of millions. Yet there are two-sides to this coin. The widespread use of social media as a vehicle for conveying information has not translated into its acceptance as a credible source of actionable information for business. There is a skeptical eye glancing askance at social media arguing there is more noise than signal. Fear, uncertainty and doubt are the typical reactions to the untamed Wild West of any disruptive technology where widespread use outpaces the ability proactively apply safeguards against abusive behavior.

The tide is rising steadily, however slowly and imperceptible to understand and leverage this information source in the business decision process. In a recent survey by Talend⁵, respondents indicated the number one driver behind social media (big) data was increasing the depth and accuracy of predictive analytics. The challenge of the new normal in financial markets is the motivation to think outside-the-box in the hunt for alpha. Why not social media data?

Technology is an ever evolving proposition, what we know today will be replaced with something new in the future, history tells us that. Social media, especially Twitter transcends the old news agency reporting model. It represents untold numbers of opinions, perspectives and commentary. Eventually technology to elevate the credibility of its content and to accurately measure and detect causality will be devised and deployed. So if not yet today, social media will be a disruptive force for business in financial markets.

⁵ How big is Big Data Adoption: http://www.talend.com/resources/whitepapers/how-big-is-big-data-adoption