

## THE VALUE OF CROWD-SOURCED INVESTOR SENTIMENT

Organized crowds have always played an important role in human society. It's how we come together in a marketplace – a diverse group of individuals going about our business, yet all subject to a degree of predictable behavior and certain rules of group dynamics.

Naturally, crowd behavior has been widely studied in fields such as psychology, statistics, and economics. Much of this research shows that the collective wisdom of a diverse group of people can be more accurate than a single opinion (even from an expert).

For stock market investors, sentiment can be an important factor in determining stock prices. Channels like Twitter have become viable sources of breaking news and even move markets. They're a moment-by-moment measure of public sentiment, which can affect stock prices. And they can help make the market more efficient by uncovering other information relevant to the value of a stock.

The deeper the level of conversation about a stock and the more types of people talking about it, the greater the chance that it reflects their intentions and, by correlation, the stock price.

The BUZZ Social Media Insights Index ("the BUZZ Index") crowd-sources insights from massive volumes of social media chatter – more than 50 million unique stock-specific comments, news articles and blog posts. Sophisticated natural language processing, Artificial Intelligence, and Big Data analytics are used to aggregate bullish sentiment on the top 75 US stocks.

The algorithm analyzes the tone of conversations to determine if it's bullish, bearish, or neutral. It considers who initiates the conversation and how much influence they have, as well as how accurate they've been in their forecasting.

The BUZZ Index is reconstituted each month to ensure the latest insights are incorporated. Social media provides the first three criteria for a wise crowd. The BUZZ Index, is designed to provide the fourth.

### Collective Wisdom and Stock Picks

You need the "right" crowd for collective wisdom to exist. Author James Surowiecki writes in his book, *Wisdom of Crowds*, that a crowd must meet four key criteria in order to act wisely:

- **Diversity of Opinion** – each person in the crowd should have their own ideas based on personal thinking
- **Independence** – individual opinions are not influenced by others
- **Decentralized** – people are widely distributed and can access distinctive local knowledge that informs their opinions
- **Aggregation** – an ability to turn individual opinions into a collective decision

Social media provides the first three criteria for a wise crowd. The BUZZ Index, is designed to provide the fourth.

## IMPORTANT DISCLOSURES & DEFINITIONS

**An investor should consider the investment objectives, risks, charges and expenses carefully before investing. To obtain a prospectus, which contain this and other information please contact your financial professional or call 1.855.215.1425. Read the prospectus carefully before investing.**

Buzz US Sentiment Leaders ETF shares are not individually redeemable. Investors buy and sell shares of the Buzz US Sentiment Leaders ETF on a secondary market. Only market makers or "authorized participants" may trade directly with the Fund, typically in blocks of 50,000 shares.

The Fund is new with a limited operating History.

The ability to invest based on social media analytics is relatively new and untested. The Fund may invest a significant portion of its assets in securities issued by companies in the information technology sector in order to track the Underlying index's allocation to that sector.

These types of funds typically have a high portfolio turnover that could increase transaction costs and cause short-term capital gains to be realized.

The Fund is not suitable for all investors. There are risks involved with investing in ETFs including the loss of money. The Fund is considered non-diversified and can invest a greater portion of assets in securities of individual issuers than a diversified fund. As a result, changes in the market value of a single investment could cause greater fluctuations in share price than would occur in a diversified fund. Funds that emphasize investment in small/mid cap companies will generally experience greater price volatility. Diversification does not eliminate the risk of experiencing investment losses. ETFs are considered to have continuous liquidity because they allow for an individual to trade throughout the day.

Defined investment universe of US stocks – in order to be eligible for inclusion in the Underlying Index, a company's stock must be traded on one or more major U.S. exchanges, have a minimum market capitalization of at least \$5 billion, and have a 3 month minimum average daily trading volume of \$1 million.

Investing in companies based on social media analytics involves the potential for market manipulation because social media posts may be made with an intent to inflate, or otherwise manipulate, the public perception of a stock or other investment.

Text and sentiment analysis of social media postings may prove inaccurate; that is, high positive sentiment may not correlate with negative change in the value of a company's stock.

Natural language processing (NLP) deals with the application of computational models to text or speech data. NLP algorithms can be used in Sentiment analysis to identify and extract subjective information in source materials. Sentiment analysis is widely applied to reviews and social media for a variety of applications, ranging from marketing to customer service.

Artificial intelligence (AI) is the intelligence exhibited by machines or software. One of the central problems (or goals) of AI research include natural language processing (communication).

'Big Data' is a term for data sets that are so large or complex that traditional data processing applications are inadequate.

Social media, as it relates to the ETF, refers to social media sites.

Some examples of social media sites may include, but are not limited to, the following: Facebook, Twitter, LinkedIn, Digg, Reddit, RSS, blogs, Investopedia, stock forums, etc.

Social community refers to the users of the social media sites.

Social network - is the use of internet-based social media programs to make connections with friends, family, classmates, customers and clients. Social networking can occur for social purposes, business purposes or both.

Hedge Funds are alternative investments using pooled funds that may use a number of different strategies in order to earn active return, or alpha, for their investors.

Fundamental Analysis is a method of evaluating a security that entails attempting to measure its intrinsic value by examining related economic, financial and other qualitative and quantitative factors

Relative Value is a method of determining an asset's value that takes into account the value of similar assets.

Technical Indicator is any class of metrics whose value is derived from generic price activity in a stock or asset.

Capital Asset Theory is a model that describes the relationship between risk and expected return and that is used in the pricing of risky securities.

ALPS Portfolio Solutions Distributor, Inc. is the Distributor for the BUZZ US Sentiment Leaders ETF.