

**AGF INSIGHTS**

# Putting alternative data in its place



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## From CEO flight schedules and hashtag threads, to earnings manuscripts and satellite images of retail parking lots, there is little doubt that alternative data has become the next big thing in investing.

Gone are the days when asset managers got their thrills from being able to analyze stacks of financial statements in just nanoseconds. Now, they're turning their enthusiasm to the task of sorting and sifting through less traditional sources of information as a way to gain unique insights and a competitive advantage.

However, despite its promise as an alpha-generating difference maker, alternative data does have its shortcomings and those who make the most of it are the ones who can separate the wheat from the chaff, setting the appropriate parameters for using it within a broader, more comprehensive investment process.

While alternative data appears to be finally coming of age, its rise should be seen as part of the ongoing evolution of Big Data, a concept that originated as far back as the late 1800s when electronic punch cards were introduced to help process U.S. Census statistics in a timely manner.

Early on, and for most of the past century, data sets consisted of information that, like census stats, were clearly defined and recorded in a specific way. Over time, however, structured data sets have grown in complexity, keeping pace with vast improvements in technology.

More recently, the realm of data sets has expanded and includes more alternative sources of information that are far less structured. This explosion of data comes from the development of the Internet and the Internet of Things, but also from machine learning and Artificial Intelligence (AI)—innovations that can help connect disparate information in new and substantive ways.

Generally, these data sets are differentiated in two ways: Unstructured data, which is comprised of information that is not organized or clearly defined, and includes formats like audio, video and social media postings; and semi-structured data that has some organizational properties that makes it easier to

analyze, but lacks clear definitions or is not in any kind of order.

For their part, investors are at the forefront when it comes to putting alternative data to the test. At last count, capital markets spending was expected to reach US\$901 million by 2021 from US\$252 million in 2013, according to the Aite Group. As part of a recent survey, the research firm noted that alternative data was becoming more critical for those "seeking to gain a competitive edge when financial information is ubiquitous and investment analysis remains largely homogeneous."

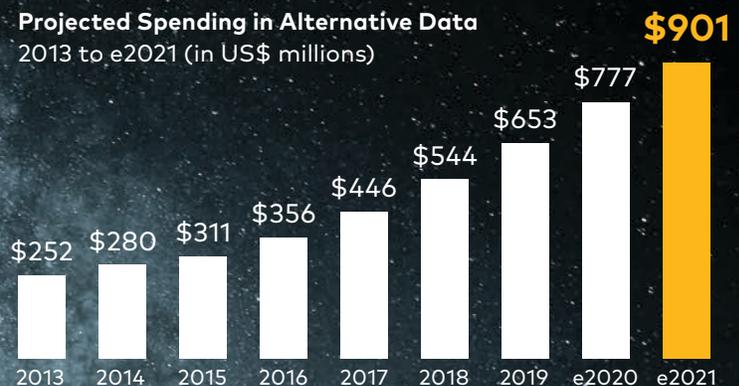
A good deal of the early attention around unstructured information has focused on satellite imagery of things like agricultural crops or shopping centre parking lots that can provide real-time supply and demand metrics which are then turned into trading signals.

There's also growing interest in data being derived from company earnings call transcripts to gauge

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Projected Spending in Alternative Data 2013 to e2021 (in US\$ millions)



Source: Aite Group



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executive sentiment. A study by Bank of America Merrill Lynch published earlier this year noted that one type of algorithm now being used to decode unclear language is being used as a consistent signal to sell a company's stock and may add as much as 6% to annualized returns.

Other versions currently in the market or now being designed, have similar aspirations, yet slightly different approaches. AGFiQ is developing its own model using natural language processing to sort through thousands of earnings call transcripts simultaneously to derive a sentiment score for each sector within a universe of stocks. The ultimate score is based on whether the aggregate tone of the words used are more positive or negative.

While satellite images and earnings transcripts have gained some level of credibility with investors, other sources of semi-structured or unstructured data found through Internet searches or via social media are generally considered less trustworthy due to the increased complexity in determining what is useable data and what is just "noise."

Access to millions of tweets by millions of different contributors, for example, has the potential to be a very attractive source of data for

assessing sentiment. But in the age of fake news, how can investors be sure of its veracity?

Google Flu Trends, moreover, illustrates the limitations of the search engine's attempt to predict the spread of influenza. The proposed public health tool was first outlined in a 2008 paper in the journal *Nature* and set out to track the amount and breadth of searches regarding the flu in certain geographic areas. But the results regularly proved inaccurate, in part, because the tool only measured what people searched for, not why they were searching for those words.

This helps highlight the inherent difficulties in working with alternative data, especially for investors who rely on third-party providers. While accessing it through them can be a valuable and often necessary option, investors sometimes have to take a leap of faith, given that they may not have full transparency and complete understanding of the parameters governing the data. Further, third party data that is sold broadly rather than exclusively may lead to crowding risks that can diminish its potential benefit over time.

Based on twenty years' experience in quantitative investing, we believe sourcing and building data sets internally is often the only way to

achieve legitimacy and trust in its accuracy. Granted, this may be a considerable task for some, but asset managers who are looking beyond their current capabilities in ways such as hiring data scientists and/or building in-house data teams will likely have an advantage.

In fact, humans – not machines – may be the key to handling the tidal wave of information now at our finger tips. By diversifying skill sets, investment management teams are in much better position to collect, analyze and use the data effectively. Like any tool, alternative data once vetted and verified is only as good as the investment process that is built up around it.

Finally, with greater domain knowledge, it becomes much more apparent what new data sets should be tested and where to spend time finding new opportunities. This may include how much decision-making weight alternative data will carry relative to other forms of data, or may be more about whether or not it should be used strategically or tactically in certain market environments. Whatever the case may be, those who are able to find the right balance are those who will be most thrilled by the outcome.

AGFiQ is the quantitative platform for AGF powered by an intellectually diverse, multi-disciplined team. Led by pioneers in factor-based investing, the team's approach is grounded in the belief that investment outcomes can be improved by assessing and targeting the factors that drive market returns. Our relentless passion for research and understanding drives our ability to advance the wealth accumulation and preservation goals of investors.



**For more information on quantitative investing,  
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\*Highstreet Asset Management Inc., an AGF company.

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