

# INNOVATIVE FACTORS PROVIDE LEADING EDGE – ON THE POTENTIAL OF ALTERNATIVE DATA

**An active, factor-based strategy focuses on tapping into new sources of data, on identifying relevant information and how to intelligently combine such information. Within this context alternative data – texts, images, or audio files – is becoming more important for the investment process, and regarding additional analytical value. At the same time, comprehensive and swift analysis requires state-of-the-art technology and plenty of experience.**

As the amount of data continues to proliferate progressively, understanding all information relevant to investments (and the associated cross-linking) has outpaced human capability. Increasingly, investment success is becoming a question of the ability to process these huge amounts of data. Many traditional asset managers thus use the keyword “artificial intelligence” as bait. However, asset management is still a long way from deploying a strong artificial intelligence capable of making its own superior investment decisions within the scope of an investment process.

## Machine learning is key

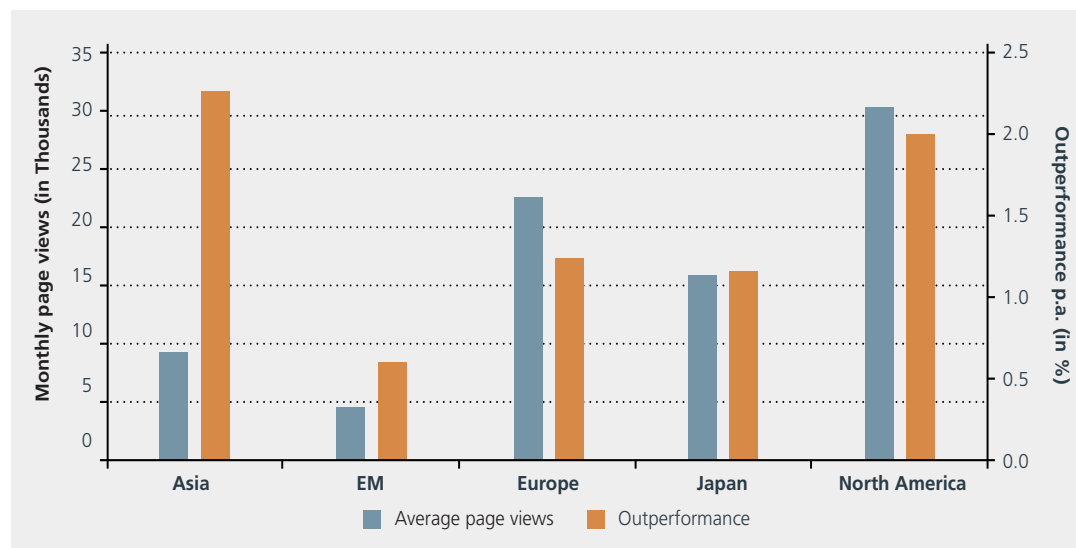
The head start that quantitative asset managers possess lies in the fact that they have always had a resilient technical infrastructure at their disposal – combined with the necessary experience and expertise in data science. Based on this, machine learning offers significant potential, and is particularly helpful when it comes to extracting relevant information from large amounts of structured and unstructured alternative data.

The big question is, how to generate superior return characteristics with a diversified mix of traditional and innovative factors. Generating persistent added value by processing simple factors, such as price/book or price/earnings ratios, has become somewhat difficult: the greater the number of investors considering this data, the more that such information is becoming automatically priced in. That is why, today, market players compete for data which has not yet been neutralised through arbitrage, or for the most innovative factors. Within this context, alternative data – such as texts, images, or audio files – is increasingly gaining in importance.

## Outperformance with alternative data

Quoniam Asset Management continuously examines new approaches within the scope of research projects, in order to make use of alternative data to the clients’ benefit – through systematic processing and analysis. One of these projects explored whether the mere fact that a company attracts interest can lead to outperformance. This so-called “attention effect” can be tested by looking at the access frequency of a company’s Wikipedia entry. Extracting the entries of approximately 20,000 corporations from around 45 million Wikipedia pages results in a coverage of more than 80 per cent of

A comparison of page views per company and outperformance



In this portfolio, shares of companies with high Wikipedia access frequency are bought, and shares of companies with low access frequency figures are sold short. The universe is restricted to companies in the MSCI World ACWI Index, excluding financials. The diagram does not show results for New Zealand and Australia. Sources: MSCI, Datastream, Wikimedia and own calculations

emerging markets companies (measured in market capitalisation) – based on a comparison of different information – and of more than 90 per cent in developed markets.

Subsequently, the excess returns – adjusted for the effects of common factors – were analysed. The result: securities which gain, on average, one standard deviation more attention, generate excess returns of more than 2 per cent per annum in Asia, whilst such securities achieve an outperformance of between 0.60 and 2 per cent per annum in Europe, Japan and North America (cf. diagram). As Quoniam’s model considers additional innovative risk factors, further analyses will show whether an integration of the Wikipedia factor also offers added value on a risk-adjusted level.

## 9 million pages in 100 seconds

Textual analysis is another area of research: analysing, for example, whether individual sections of an annual report are couched positively or negatively, and how much they deviate from the previous year’s report. The result can also be compared to that of competitors. Beyond this, there are numerous, significantly advanced text analysis techniques. Successful implementation requires expertise in the evaluation of unstructured data, and a highly developed infrastructure: with the help of modern technology (using 256 processing cores), 44,000 reports –

comprising an aggregate of around 9 million pages – can be analysed within just 100 seconds. A human would need 115 years.

“Research in the area of unstructured data is indispensable.”

Nowadays, research in the area of unstructured data is indispensable if one wants to continue uncovering market inefficiencies and generating above-average results. At the same time, no quantitative investment approach will be based solely on such a method. However, the sources of data may become a useful addition to traditional models that work with traditional data.

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