Finance and Sustainability need alternatives, also Alternative Data

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WHAT IS "ALTERNATIVE DATA"?

Alternative data is non-traditional data that can be extracted by means of AI technologies from several digital environments (for example: blogs, forums, social or e-commerce platforms, maps, etc.). It differs from traditional structured data, as it often originates as a text, image or even vocal track and, consequently, has to undergo a complex process - implying the use of machine learning and NLP tools - to be translated into numbers. Some types of Alternative Data are "structured", such as weather forecasts or e-commerce data which are easily integrated into traditional models, but in the vast majority of cases it is unstructured data, such as: social posts, blogs, news, reviews, etc..

WHY SHOULD WE USE ALTERNATIVE DATA?

Within the Fintech sector the use of alternative data is gathering an ever-increasing importance and it is becoming particularly attractive to investment funds, listed companies and companies which are about to be financed.

"Traditional" financial dataset is available to all operators, but today it is no longer sufficient for companies and investors to create added value

and gain a competitive advantage. This is the reason why the search for alternative datasets has recently intensified in the financial sector. However, anyone who wants to deal with this unstructured data needs to understand it, which implies approaching the logic of the digital environments where it has been created, of the underlying communication and of the digital distribution. Lack of digital and data science expertise is one of the main reasons why many players in the financial arena approaching the world of alternative data encounter tremendous difficulties.

HOW CAN WE USE ALTERNATIVE DATA?

Alternative Data can be used for informative and predictive purposes.

The first approach concerns the provision of new indicators and alerts drawn from Alternative Data which are filtered, classified and weighted based on popularity, sentiment and volatility. By using this tool, financial advisors can offer to their clients innovative investment themes (concerning, for example, blockchain or electric cars) and become more competitive in terms of costs and services, especially considered that only an evolving

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approach to customized services is a successful approach under MiFID II regime. At the meantime, Investor Relations Managers of public companies can monitor the sentiment related to their stock, performing not only an assessment related to the overall financial and commercial performance of the company, but also a detailed analysis of current and future product and services, business opportunities, management reputation and litigation issues, but also monitor the digital investors' sentiment in relation to their competitors. Moreover, they can quickly and efficiently manage possible misunderstandings and rumors, so preventing excessive market fluctuations and reducing risks.

The second approach to Alternative Data concerns the assessment, optimization and prediction based on the combination with traditional data (i.e. stock data, quarterly reports, open data). For

instance, by applying machine learning to traditional financial data related to SMEs, lending institutions can enhance their scoring models, performing an in-depth analysis of a large number of variables, which can be integrated with the most relevant extracted from digital Alternative Data.

WHAT DOES FINSCIENCE'S SOFTWARE DO?

FinScience developed a platform that gives a simple access to alternative data to people who work in the financial industry.
FinScience software, through AI algorithms, collects, classifies, analyzes and summarizes a huge amount of digital data from different sources to find signals potentially connected with financial assets price trends in the medium-long term. In particular, Finscience's software can:
• monitor the web and acquire structured and unstructured data from several predefined sources;
• filter and process those data, in order to rank them by relevance and quality;
• extract the social sentiment related to a company or a corporate issue or event in a given period;
• store processed data for automated statistical analysis that could lead to useful insights; and
• take advantage of insights, also by means of a cross-analysis with financial trends, to support investors and companies to identify the corporate events, products and services that interest, and cross that most probably may affect firm performance on the medium and long-term.

FinScience bases its data interpretation on specific proprietary indicators:

- Digital Popularity Value (DPV), that measures the diffusion of a digital signal on the web related to specific topics or physical and legal entities,

- DPV Volatility: the amount of DPV change an entity experiences over a given period of time,

- Sentiment: the data analysis is enriched with the specific sentiment related to the digital content, where the 'sentiment' refers to the way users perceive a specific issue, brand, event, product or service. The data analysis is currently carried out by using data in english.
For instance, if we analyse an article where the author judges negatively the electric car sector, but speaks positively about Tesla electric cars, the sentiment associated to Tesla will be positive.

- Market Potential Index (MPI): is a proprietary dynamic scoring system that assesses companies' readiness to invest, by mixing digital and financial indicator.

LET'S TALK ABOUT SUSTAINABLE DEVELOPMENT. WHY TRADITIONAL DATA IS NOT ENOUGH?

Building a sustainable economic system is today one of the most urgent global needs. Individuals, corporations but also investors and the society in general are called to actively engage in the economic transition. Financial institutions, as key providers of funding, play a key role, as change is possible only by reorienting private capital to more sustainable investments. However, the lack of reliable information makes it difficult for professional investors to identify in which companies they should invest in order to promote a sustainable economy.

Current ESG indices, scores and rating systems show deficiencies and limitations with reference to both the quality of information on which they are based, but also on the timing of issuance of the data. ESG reports are mainly built on CSR and sustainability reports, annual reports, publicly available company policies and information on corporate websites, and industry-specific questionnaires addressed to companies. Therefore, the nature of most of the information is voluntarily-based and hardly verified. Moreover, with a few exceptions, reports and data are updated yearly.

HOW CAN ALTERNATIVE DATA CONTRIBUTE TO A BETTER MONITORING OF CORPORATE SUSTAINABILITY?

The aim of FinScience's products and services for sustainability is to enable investors and other market participants to monitor companies ESG performance with an "alternative" approach. Self-disclosed information should be balanced with a wider set of data, especially outbound information which can provide investors with a more complete picture of companies' ESG performance.

Data-driven ESG investing is now a need for all kinds of institutional investors who want to approach sustainable investing in the least time-consuming and the most reliable way, especially in consideration of the increasing empirical studies showing how ESG-based investment strategies perform equal to - and sometimes better than - traditional investment strategies on the long term.

By using Alternative Data, FinScience can currently monitor not only those signals already having a strong financial impact (the so-called 'main signals'), but - by using a bottom-up approach - also the emerging or 'weak signals' that, if properly weighted, may provide useful insights on a still weak trend that may potentially affect the market in the future. These signals are hidden by more visible and popular data, and therefore are difficult to identify without a dedicated software.

FinScience plans to provide alternative ESG services to institutional investors in general, including pension funds, mutual funds, asset managers and insurance companies, but also to large and small-medium companies (public and private) - in particular to CSR and sustainability teams, Marketing and Communication professionals.

In relation to investors, FinScience believes that these, if equipped with a broad set of material information, are in a unique position to select and reward companies aligned with sustainability principles. The integration of alternative data allows them to promptly detect information on corporate events that may translate into risks and costs for the company (e.g. in terms of reputational damages, litigation etc.) on the middle and long-term.

Corporations themselves would largely benefit from an ESG score and related services, as the same data and tools may allow them to upgrade their operations in a way that creates value for their stakeholders and for the society at large. From many analyses, FinScience noticed that even though some large companies devoted large attention - and resources - to ESG issues and enacted many initiatives aimed at producing a positive social and environmental impact, these efforts were almost unknown by some stakeholders, especially consumers, maybe because of an inadequate communication of the same.

HOW CAN WE MONITOR CORPORATE SUSTAINABILITY IN AN "ALTERNATIVE WAY"?

FinScience currently offers three main products for corporate sustainability analysis:

• Alternative Data Intelligence Software
This is a proprietary dashboard where it is possible to monitor different kinds of digital signals (listed companies, general topics and such), which can be measured by FinScience indicators (i.e.: DPV, Sentiment, etc.).

Shanshan Zhu

• Alternative ESG Score

FinScience's Alternative ESG Score aims to evaluate companies and provide them a grade based on how they are perceived on the web about ESG criteria.

• Alternative ESG Analysis

This deep dive analysis about single or a group of companies helps enterprises and investors to identify new ESG trends, reputational and litigation-related risks, as much as to integrate corporate traditional internal data. Environmental, social and governance issues are constantly monitored through the analysis of FinScience's proprietary indicators- Digital Popularity Value (DPV), Investor DPV, DPV Volatility and Sentiment - in order to detect variations in public perception and sensitivity in a three-month period.

The Alternative Data market is experiencing a fast growth. Other concepts are taking the stage as well, such as Smart Data or Fast Data. However, the majority of the companies operating in this field currently only offers solutions that make it possible to acquire and process data, but this process often ends without producing any understandable and valuable outputs. Data collection without a proper analysis and interpretation cannot create added value. We should always keep in mind that, as Carly Fiorina (former CEO Hewlett Packard) once said, "the goal is to turn data into information and information into insight."

ABOUT FINSCIENCE

FinScience is a data-driven fintech company founded in 2017 by Google's former senior managers and Alternative Data experts, who have combined their digital and financial expertise. FinScience, thus, originates from this merger of the world of Finance and the world of Data Science. FinScience leverages 3rdPLACE's experiences concerning Data Governance &, Data Modeling and Paltforms solutions. These are further enriched through the tech role in the european consortium SSIX (Horizon 2020 program) focused on the building of a Social Sentiment for financial purposes.
FinScience is the only Italian one selected by siliconrepublic.com among the 25 European deep-tech start-ups to watch in 2019.
FinScience is part of Datrix group.

More information available at **finscience.com**