

# Brain News Topics Analysis with LLM

## Product Summary

The Brain News Topics Analysis dataset exploits a proprietary **Large Language Model** approach to monitor specific topics and their sentiment within the financial news flow for stocks.

For example, an investor may want, for a set of companies, collect all news related to the topic of "Innovation", and track their sentiment specifically with respect to "Innovation". Similarly, another investor might be interested in tracking all news related to the topic "Company Risks", and measure their sentiment related to "Company Risks". So, in principle a news item could have a different sentiment depending on which topic is under scrutiny. For this dataset, **the sentiment is specific to the topic in question and not a general sentiment**, which is available in our other dataset Brain Sentiment Indicator.

For each stock and each topic three metrics are provided using the news published within a given time interval:

1. The **volume** of news relevant to the topic.
2. The **buzz**, which measures the variation in the amount of news that are published for each topic.
3. A **sentiment score for the specific topic**, ranging from -1 to +1.

All metrics are calculated based on the news published within a given time interval, e.g. the past 7 days that the model identifies as relevant for each topic.

## Technical Information

- Financial news are collected every few minutes from thousands of financial media sources.
- **Brain Large Language Model** evaluates the relevance with respect to each monitored topic. If a news item is considered relevant, the model assigns a sentiment score for that specific topic.
- Daily, for each stock, relevant news items for each topic are aggregated over various time periods to calculate both a "buzz" score and a sentiment score for the topic.
- The dataset files can be shared via FTP or an AWS S3 bucket. **Daily historical data starting from 2017 is available** for testing.

## Contacts

BRAIN is a research focused company that develops proprietary signals based on alternative data and algorithms for investment strategies on financial markets.

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## List of Monitored Topics

The topics monitored by the Brain Large Language Model in the news flow are the following:

1. Contracts, Licenses, and Partnerships
2. Financial Results;
3. Investor Asset Transactions and Positions
4. Governance and Management related Events
5. Innovation
6. Price variations
7. Rating and valuation estimates
8. Risks for the company
9. Legal

## Some Examples

Here, we provide few examples of news identified by the model as relevant for some topics and their associated sentiments. The stock referenced in the news is marked as "ASSET" in the news headline.

### Rating and valuation estimates

ASSET gets technical rating upgrade.	POS
ASSET rating lowered to market perform at Oppenheimer.	NEG
ASSET stock analysis : buy, sell, or hold in 2024?	NEU

### Innovation

The race to dominate AI : Google and ASSET leading as computing costs surge.	POS
ASSET delays its EV plans, will keep making combustion engines.	NEG
ASSET is hoping its [...] computer headset, [...] but will we all wake around wearing augmented reality googles?	NEU

### Aggregate sentiment and buzz for topic "innovation" for AAPL over the past 90 days period.

