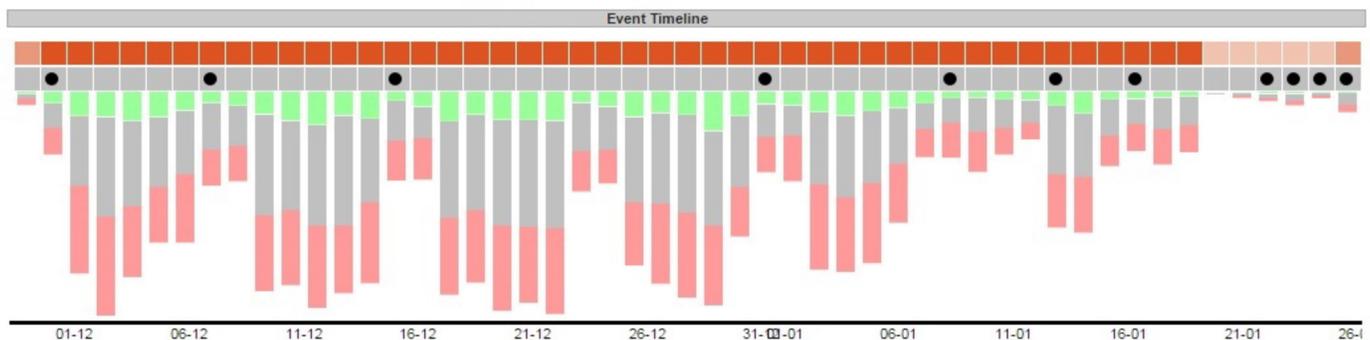


FAVA (Visual Analytics System for Exploring Financial Data)

PRODUCT

What FAVA Does

Financial Anomaly Visual Analytics (FAVA) is a visual analytics system that detects and explores financial anomalies and compares it to news media context. Financial analysts responsible for monitoring abnormal financial market behaviors can use FAVA to quickly find and extract relevant information, which would otherwise be a time-intensive task.



FAVA's Polarity Distribution Stacked Bar Graph with green being positive sentiment, gray being neutral and red being negative.

Why it is Useful

Anomalies in financial trends need current news context to be properly understood because not all of them are relevant or require action. Conversely, not all context is relevant either, which makes the information even more difficult to sift through. Additionally, line graphs that get cluttered and difficult to read are typically used to chart all data. Analysts need easy-to-read tools to probe these anomalies and to identify, explore, and understand their causes and behaviors.

Using input collected from focus groups of different types of analysts, FAVA was designed with an automated anomaly detector with different types of graphs that represent data and provide users with different approaches to analyze it. This eliminates the need for significant time spent researching and building hypotheses.

Case Studies

FAVA has been used to analyze:

- The airline sector (October 2015-March 2016)
- The oil sector (October 2015-March 2016)
- The technology sector (August-October 2011)

continued...

Main Components of FAVA

One of the major advantages of FAVA is its multiple representations of financial data, making it useful for different types of analysts and helping them put their information into context. The main components are:

Time Series View: Presents ticker prices and anomalies over time and provides users with display and configuration options.

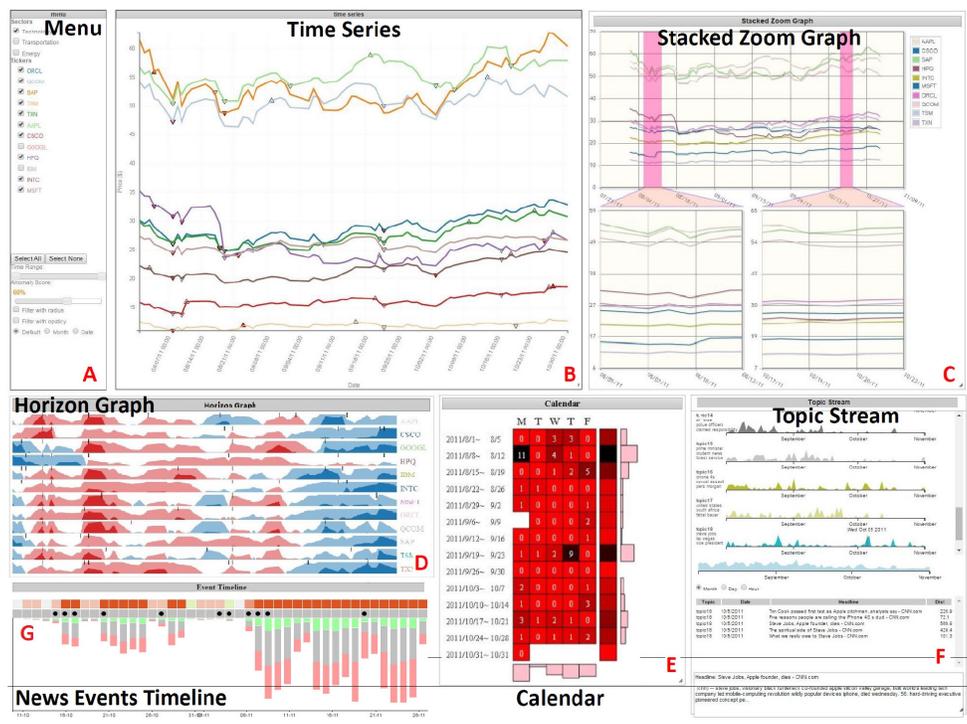
Horizon Graph View: Presents ticker prices, anomalies and trends for individual stocks, market/sector indices and the overview trends.

Calendar View: Presents count of anomalies in the format of a calendar in order to explore seasonal and cyclical trends.

Stacked Zoom View: Presents ticker prices over time in detail and its relation to the overview.

Topic Stream View: Presents related news stories for each topic/ticker over time.

News Events Timeline View: Presents potential contextual evidences of financial anomalies from news articles.



FAVA's various views — showing line graph, Stacked Zoom Graph, Horizon Graph, Calendar, Topic Stream and News Events Timeline.

Contact Us

Want to find out how VACCINE's research can help your organization? Email vaccine@purdue.edu or visit www.visualanalytics-CCI.org.

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