Retail Investments: Decision Support beyond traditional market information

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Motivation for the project

Why First?

Seamless integration of complementary information into state-of-the-art financial information systems

Innovative, comprehensive FIS that increase customer retention

Broadened support of decision processes
The Target Group: Online Retail Brokerage Customers

Retail clients/users
Discount brokerage/portal based business
Focus on single instruments and single, yet small to medium sized portfolios
Workflow(s): Pick & Choose, Buy/Sell decisions

Rare incorporation of unstructured information
If by chance actors encounter related news, threads etc.
The Challenge:
Picking the right instrument
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The Challenge:
Picking the right instrument
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The Vision: Incorporation of unstructured data

- Break barriers between heterogeneous data
- Visualize assessment of semi-/unstructured data
- Convey relevant information at a glance
Sentiments: Condensed unstructured information

Support and improve individual decision making by incorporating sentiments derived from semi-/unstructured sources

Automation of reviewing various sources
• unburdens the actor of performing this task by himself
• results in a sentiment that aggregates opinions extracted from various yet unused sources
Augmentation of available set of indicators will leverage the process of decision making.

Sentiment per financial instrument: condensed evaluation of the content of a multitude of related semi-structured and unstructured information documents.
Sentiments:
Levels of Aggregation

- Single Instruments
- Individually composed baskets
- Markets / Sectors / Regions
- Indices
The Input: Unstructured & Structured Data

Articles, news, analyst reports, comments published in
- News streams
- Blogs
- Social networks
- Bulletin boards
- Discussion forums

Structured data and metadata
- Price information
- Technical indicators
- Reference data (identifiers)
- Relation among instruments (e.g. index constituents)

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The Approach: Application Scenarios

Plain Usage

Topic Trends

Event detection

Portfolio Optimization

Display of Sentiments
History / Time series of sentiments
Event Detection for instruments
Sentiment Peaks
Changes in Correlation

Visualization of currently relevant Topics
Evolution of Topics
Portfolio Rebalancing
Part of Diversification Model
The Outlook:
More to come

Sentiment-related indicators with prognostic relevance regarding e.g. future performance or volatility

Value-added reports and recommendations based on these indicators

Visualization how topics evolved and what was their impact

Discrete (e.g. Negative, neutral, positive) or continuous values (e.g. [-1;1])
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THANK YOU!