

Decoding the Dollar: Real-Time FX Forecasting with LLMs

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News volume prevents timely response to market-relevant events

- Analysts are often inundated with news and financial metrics, leaving them unable to respond to the events that matter
- Analysts are unable to understand the impact of news
- The result is **increased portfolio losses** due to the inability to predict changes in FX rates

We identify critical market news and deliver role-specific signals

We convert unstructured news into event-indexed signals that drive faster FX decisions:

- Real-time FX risk scoring with event tagging and signal extraction so analysts can respond rapidly
- Interpretable, narrative-consistent features mapped to targeted BNY workflows for precise, role-based signal delivery

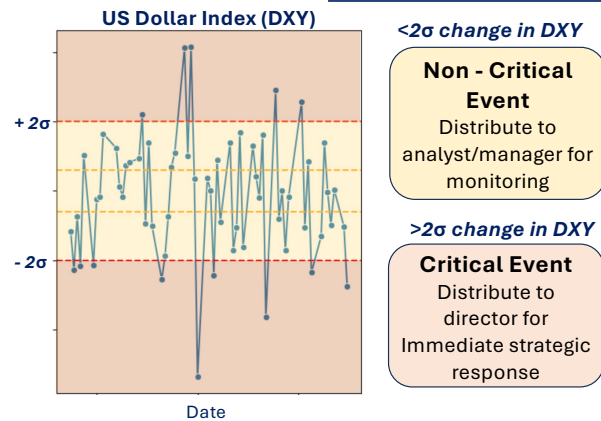
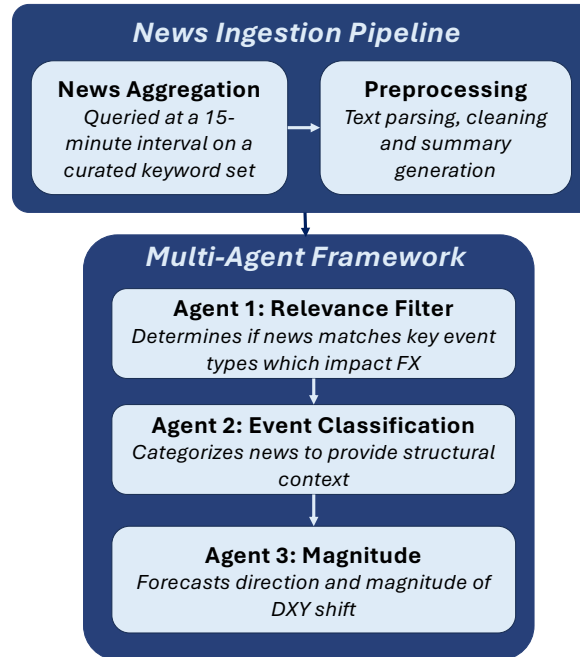
US DXY quantifies FX risk

What is US DXY?

The US Dollar Index measures the value of the USD against a basket of currencies (EUR, JPY, GBP, CAD, SEK, CHF).

Why use US DXY?

DXY trends closely link to U.S. monetary policy and key macroeconomic indicators. A move in DXY translates to FX risk.

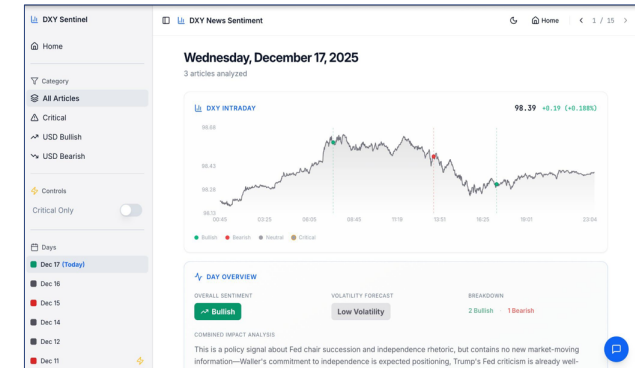


Evaluation compares post-publication windows of 15 min, 1h, 2h, 3h, 4h, and 24h. Models explored include Claude, Qwen, Gemini, and lightweight local baselines.

News offers strong FX prediction signals

- Preliminary testing on LLM-derived event signals has achieved a **78% directional accuracy** at the 4-hour horizon
- Certain event types (e.g., Fed policy, inflation, geopolitical) show strong predictive relationships
- Claude Sonnet 4.6 selected over Gemini Flash 2.5 and Qwen 3 based on accuracy, cost and speed

Platform offers evaluation tools for analysts



- News maps directly onto intraday DXY price chart to assess prediction accuracy
- Daily sentiment score, volatility forecast, and article breakdown provide expanded event review capabilities
- Side panel allows for analyst to filter and navigate news by category and date

Future work aims to predict more indices

- Modeling can be extended to support forecasting for other indices (equity, bonds, etc.) based on news ingestion
- LLM prediction tool will be enhanced using macroeconomic training data to improve index movement forecasts