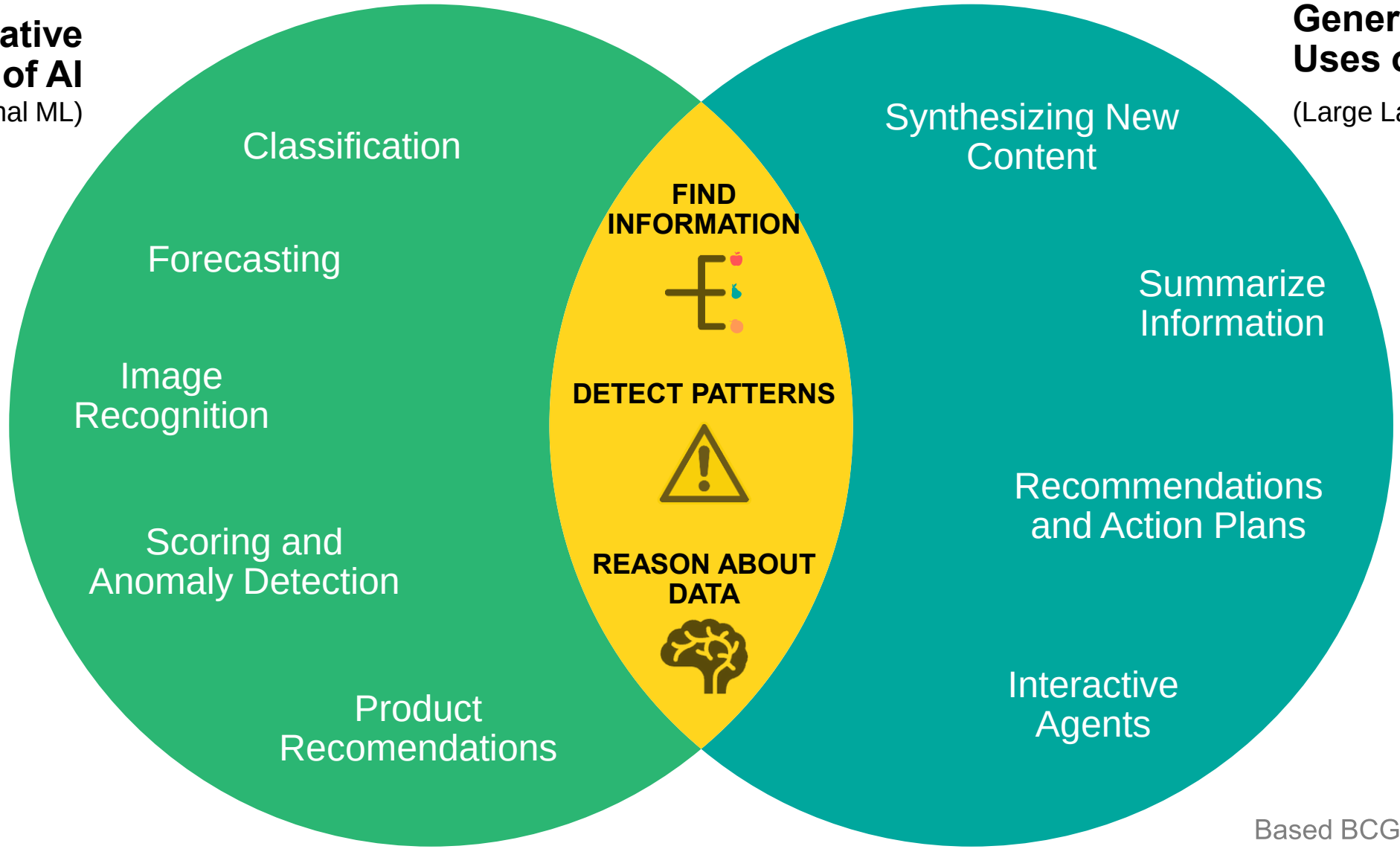
KDB.AI

Combining the power of AI and vector data to unlock organizational wisdom

Pete Kohler

Building Blocks For Modern AI

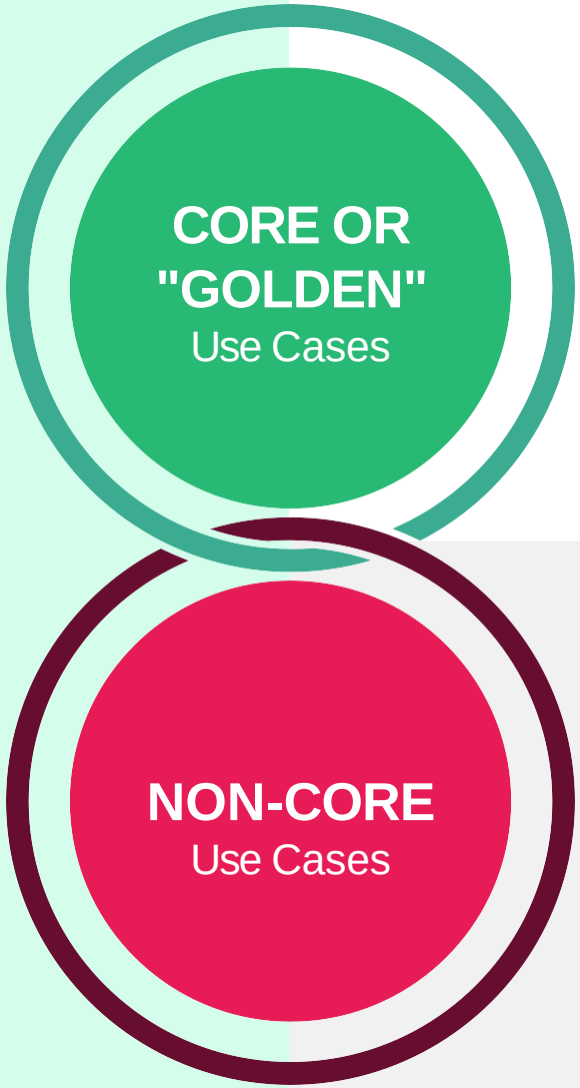


Based BCG's The CEO's Guide to the Generative AI Revolution
The CEO's Roadmap on Generative AI

Discover your company's golden use case

For the CEO, the key is to identify the company's so-called golden use cases that drive competitive advantage

Non-core use cases are table stakes, everyone will adopt them



Focus on Building Long-Term Advantage

Strengthen competitive positioning with truly unique use cases that both drive value and are challenging to adopt (i.e., have a barrier to entry for competitors)

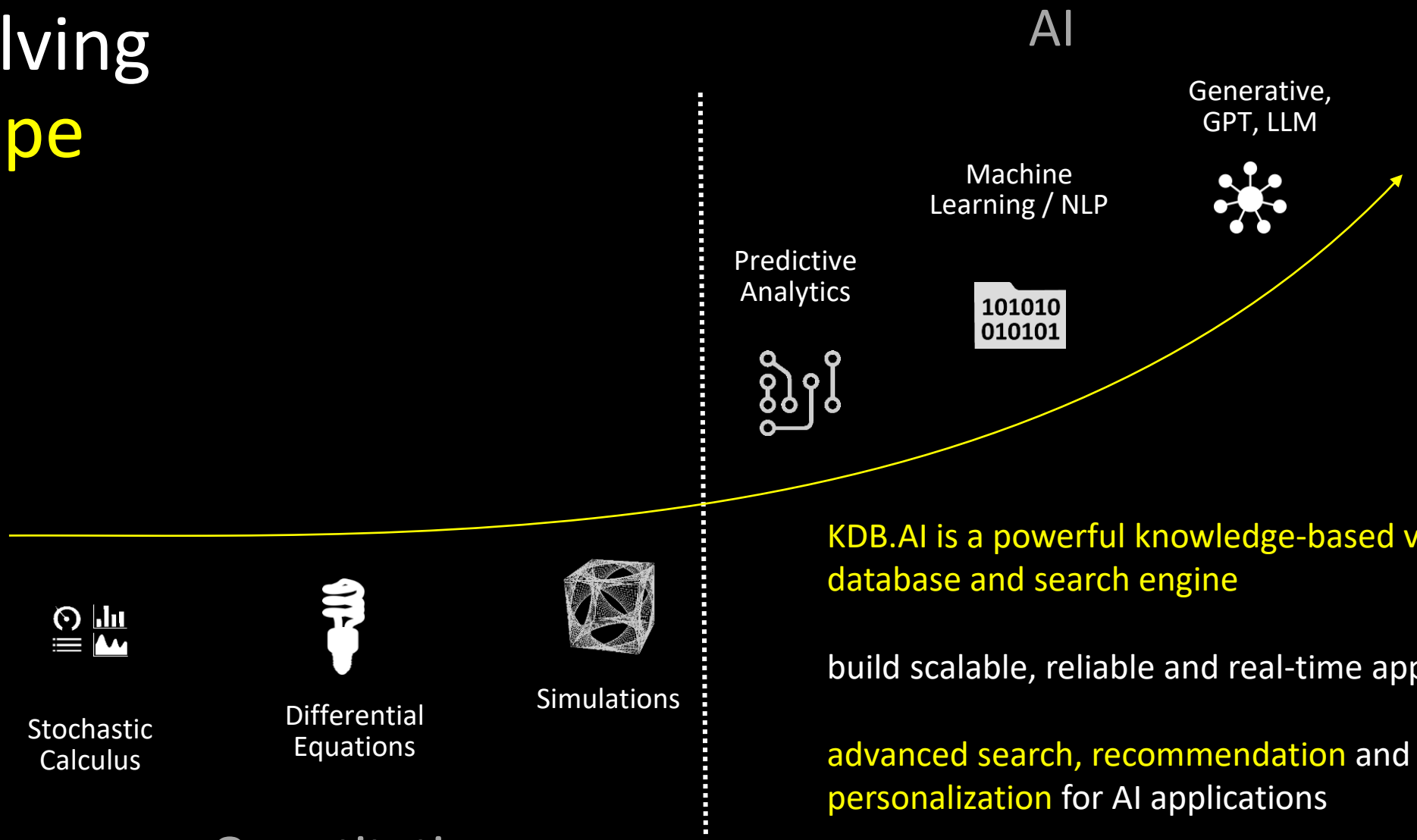
- For e.g., in pharmaceuticals companies, Generative AI can drive core R&D to produce new drugs/molecules at record pace

There is low barrier to adopting use cases that rely on existing LLM applications, but they will be important to keep pace with other organizations

- For e.g., purchasing Generative AI tools that creating automatic summaries of meeting notes

Table-Stakes to use cases will improve efficiency

The Evolving Landscape of AI



KDB.AI is a powerful knowledge-based vector database and search engine

build scalable, reliable and real-time applications

advanced search, recommendation and personalization for AI applications

KDB.AI

Generative

Training Data: Models are trained on vast datasets

Neural Networks: deep neural networks or transformers, which consist of layers of interconnected nodes (neurons).

Learning Patterns: the model learns to generate data by analyzing the patterns present in the training dataset.

Generating New Data: Once trained, generative AI can generate new data that resembles the patterns it has learned

Sampling and Control: Users can interact with generative AI models by providing seed input or specific instructions to guide the generation process. This allows for the generation of customized and controlled outputs, ensuring the AI aligns with the user's intent or desired content.

Discriminative

Data Collection: The first step is to collect a labeled dataset, where each data point is associated with a specific category or class.

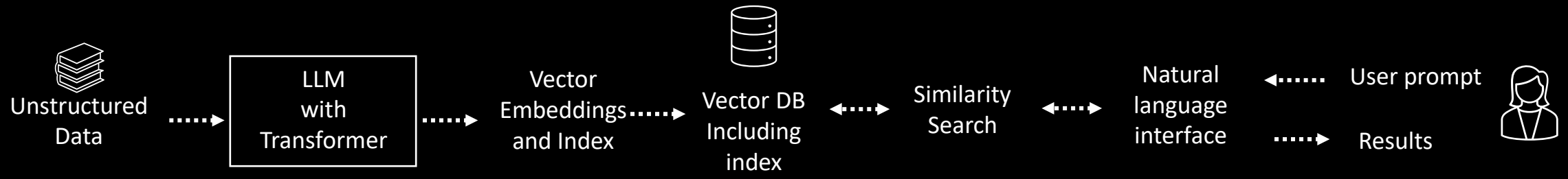
Feature Extraction: The AI model extracts relevant features from the input data. These features are characteristics or attributes that help the model differentiate between classes.

Model Training: A machine learning algorithm, often a neural network or a support vector machine, is trained using the labeled dataset.

Prediction: Once the model is trained, it can make predictions on new, unlabeled data

Evaluation and Iteration: The performance of the discriminative AI model is evaluated using various metrics like accuracy, precision, recall, or F1-score

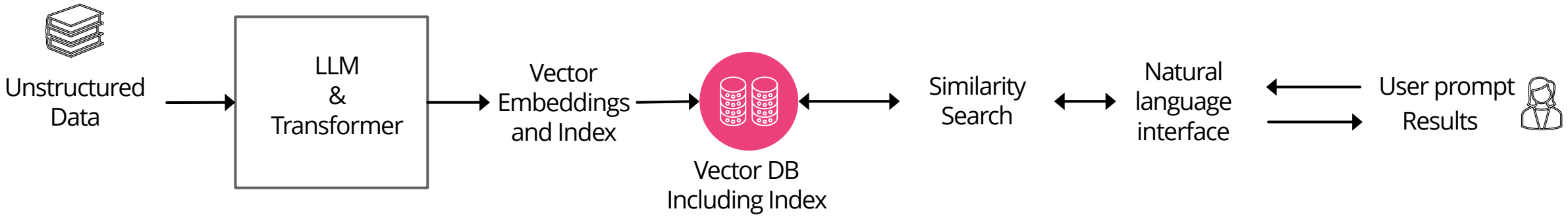
Generative uses of AI: **Unstructured: Semantic Search**



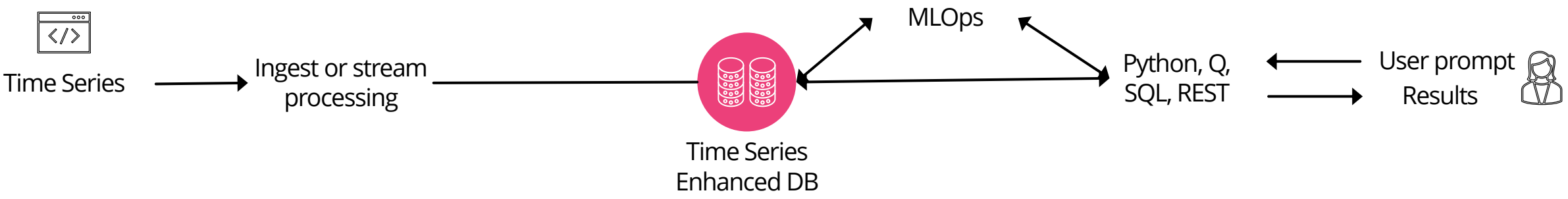
Use cases involving text analysis, summarization, forms or content generation are the sweet spot
Information discovery and knowledge mining E.g. Generative AI tools that create automatic summaries of meeting notes

Today's Technology Stacks are Separate

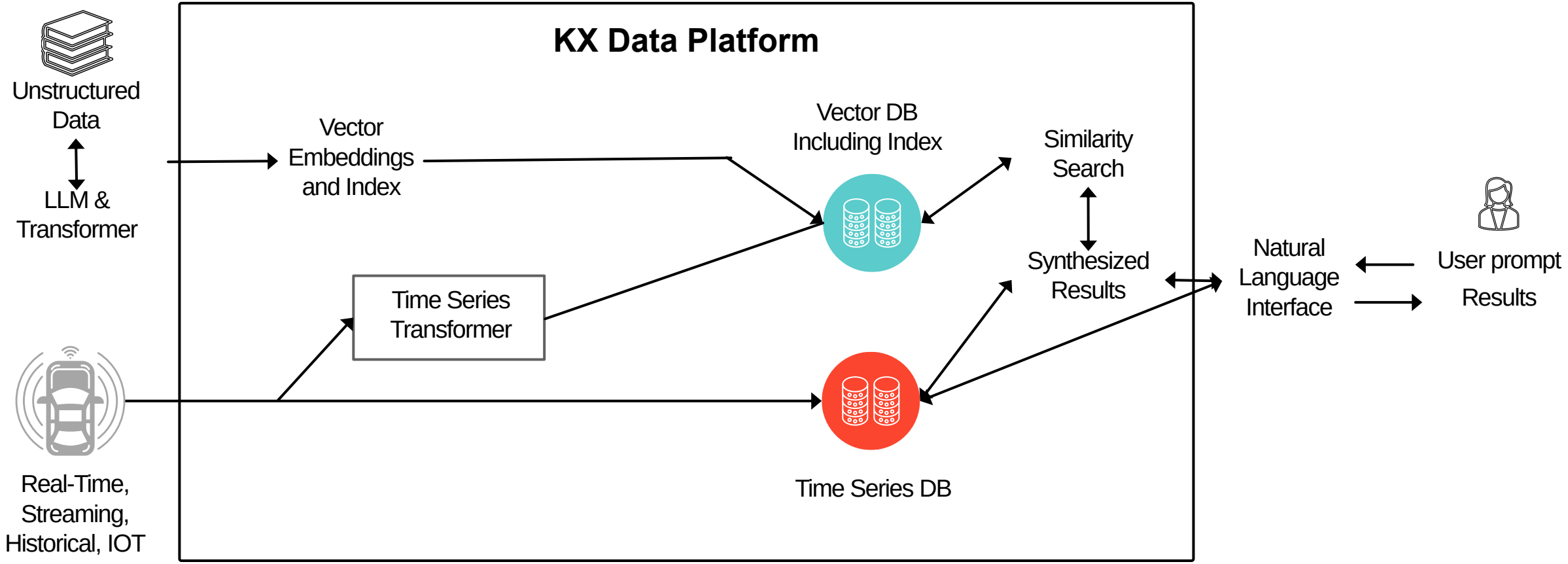
GENERATIVE USES OF AI: **SEMANTIC SEARCH**



DISCRIMINATIVE USES OF AI: **FORECASTING / PREDICTIVE ANALYTICS**



KX: One Data Platform for Traditional & Generative AI Applications



KX Data Platform Use Cases

Real Time Analytics

- Event detection & analysis
- Stream processing
- Real time monitoring
- Data science / exploration
- Predictive analytics
- Real-time aggregation
- Reporting

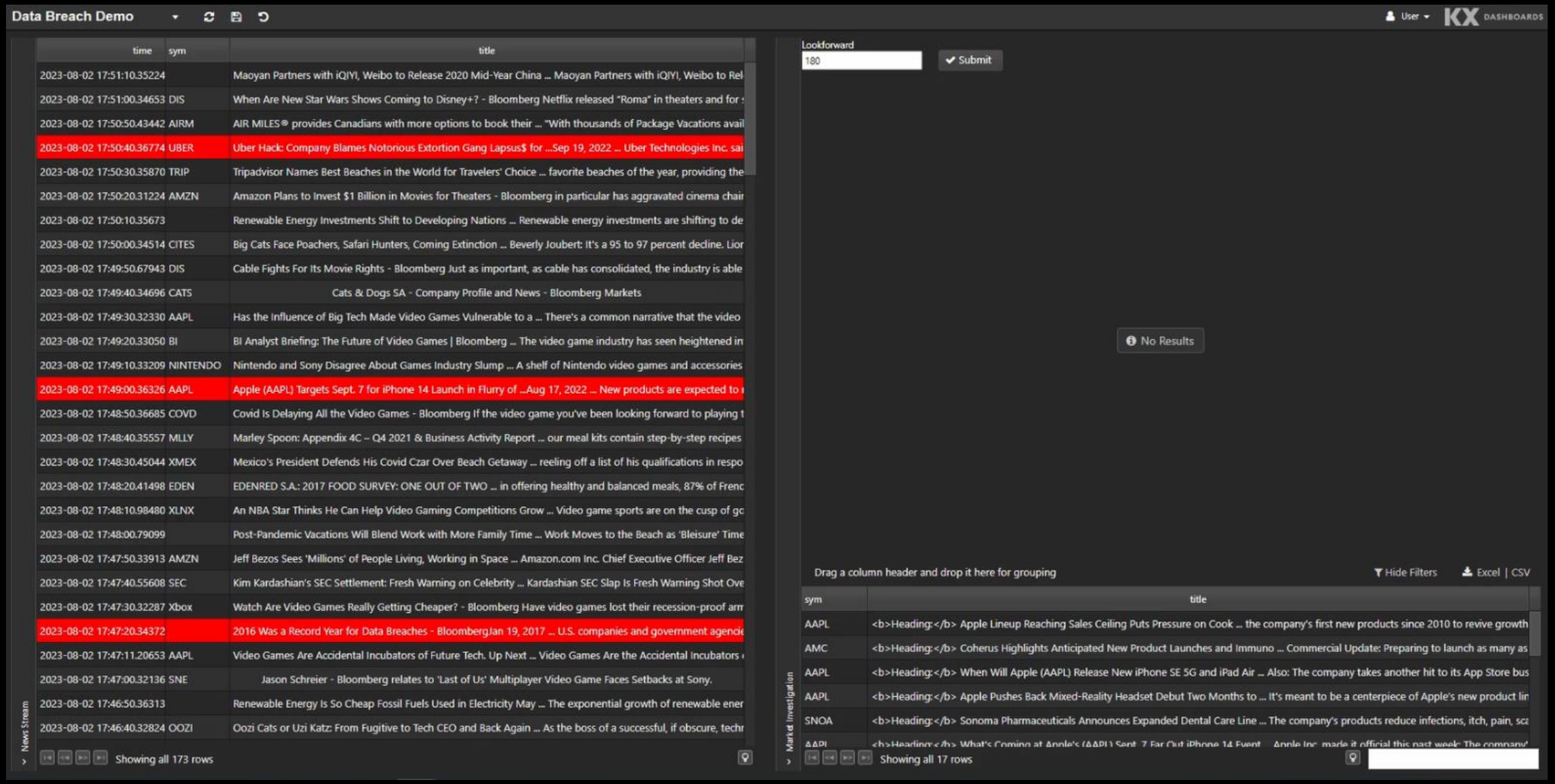
Vector Database

- Unstructured data search (image, text, video, audio)
- Object detection
- Classification
- Recommendation systems
- Pattern matching & outliers
- Sentiment analysis

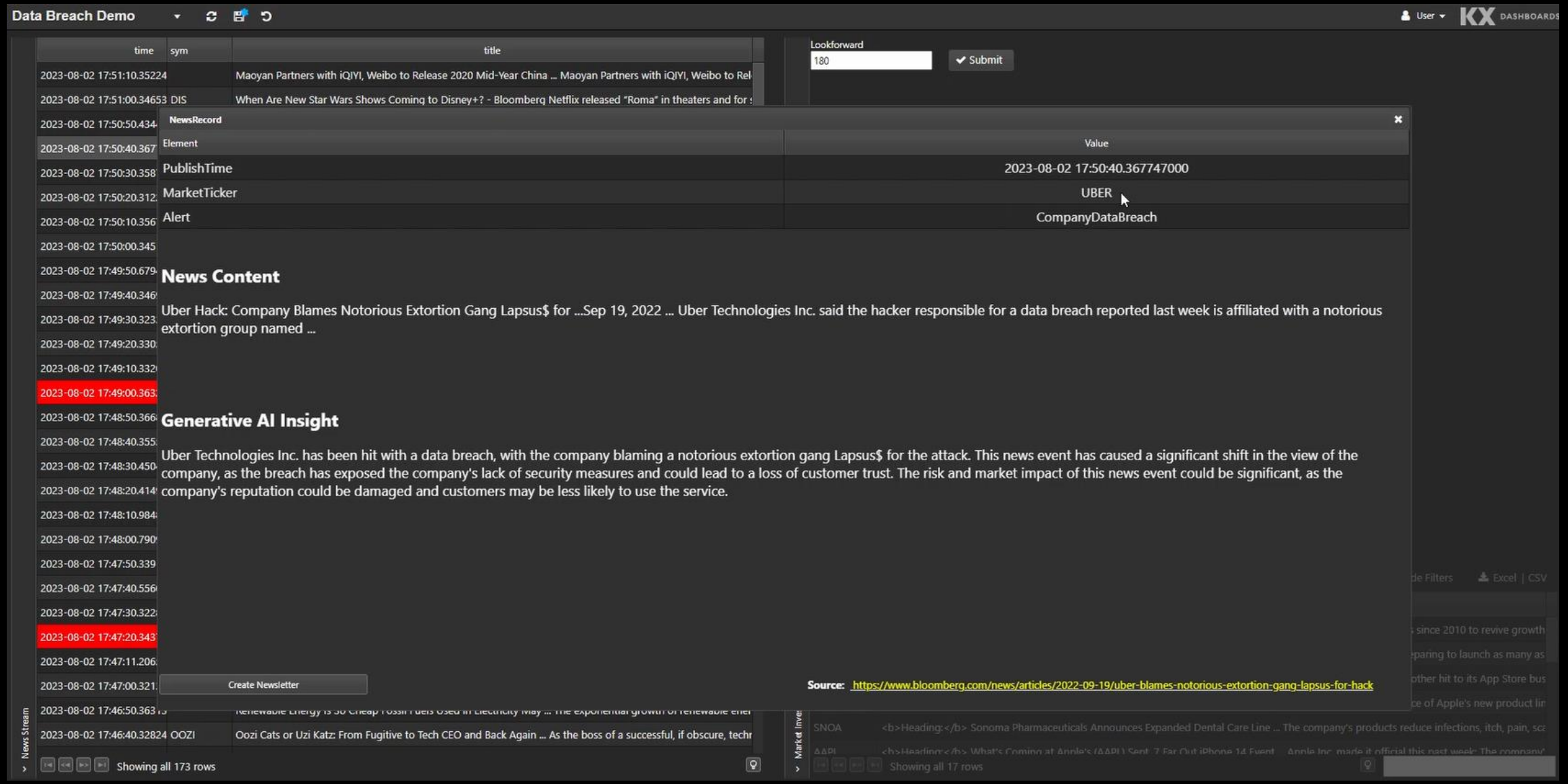
Embeddable Engine

- Time series
- Tick data
- Vectorized queries
- Large volume ingestion

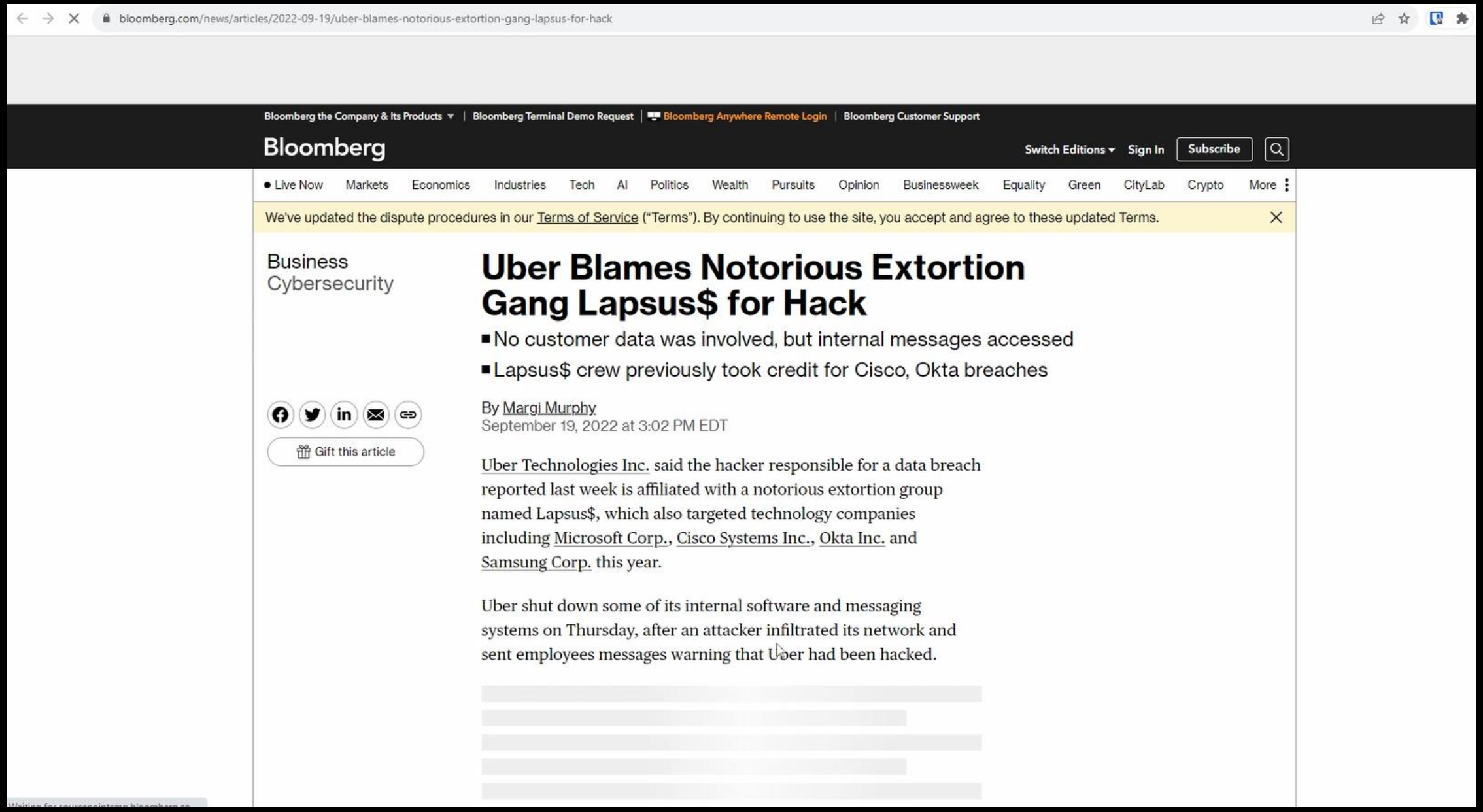
kdb.ai: Data Breach Alert Demo



kdb.ai: Data Breach Alert Demo



kdb.ai: Data Breach Alert Demo



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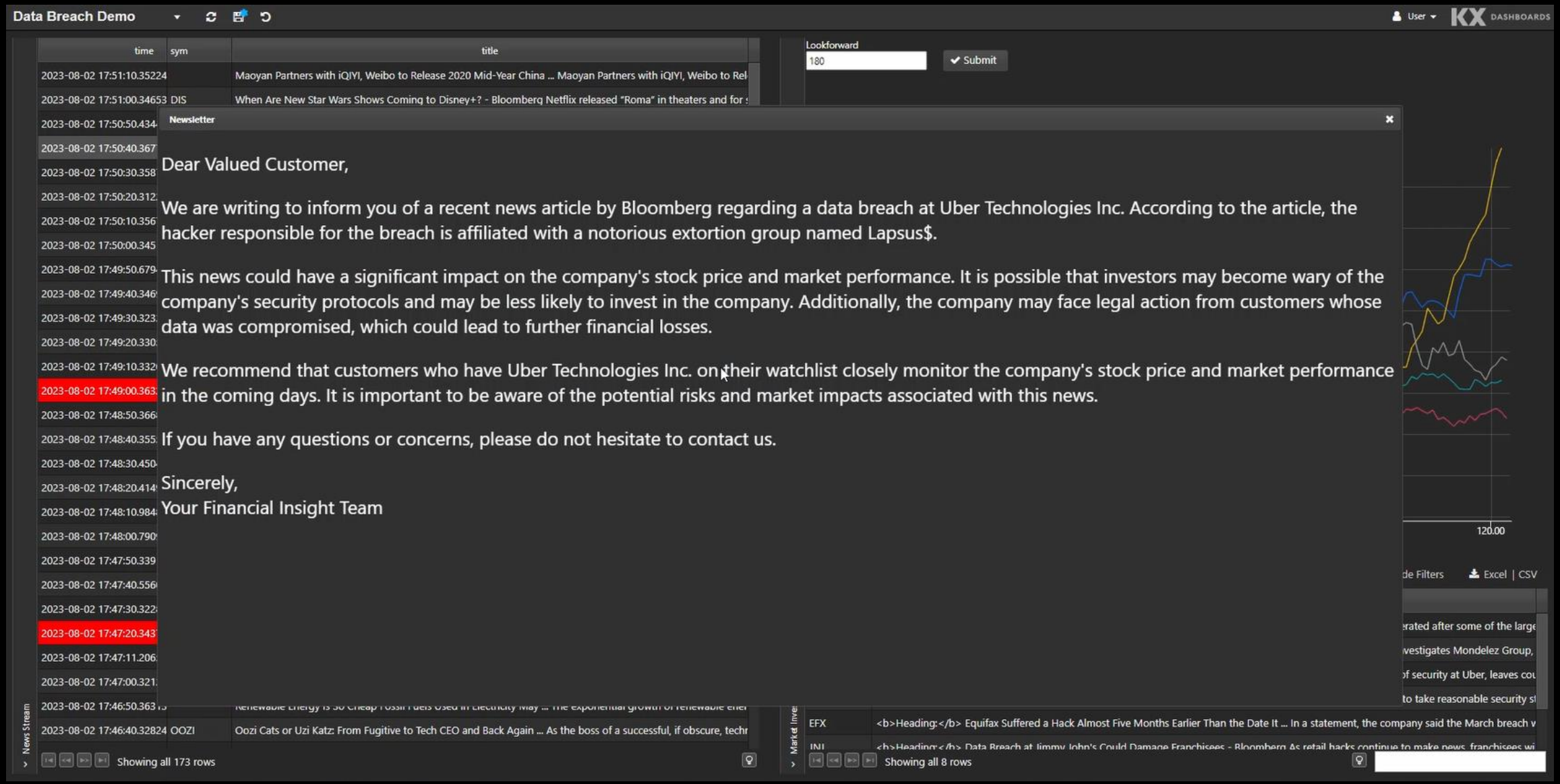

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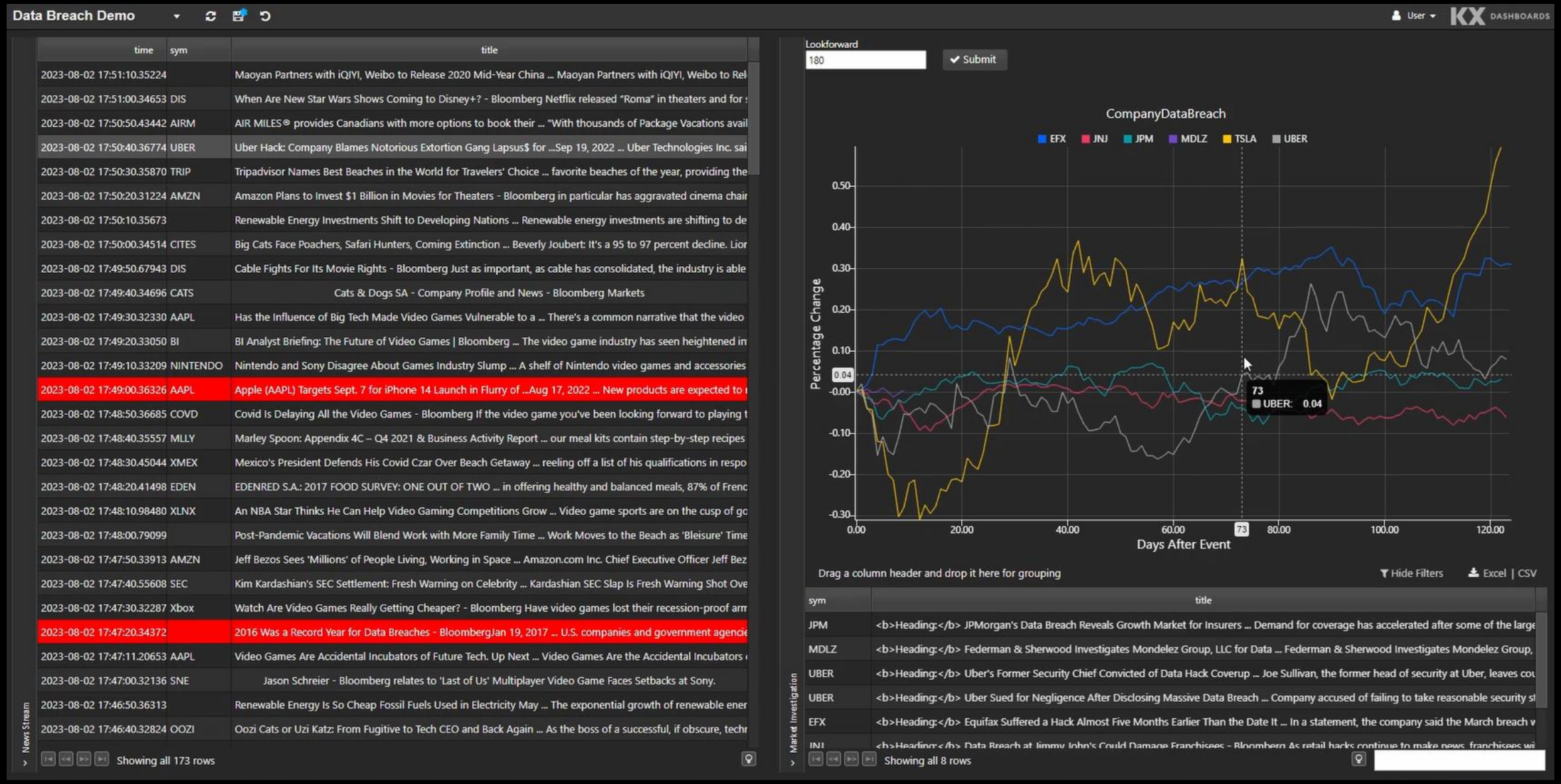

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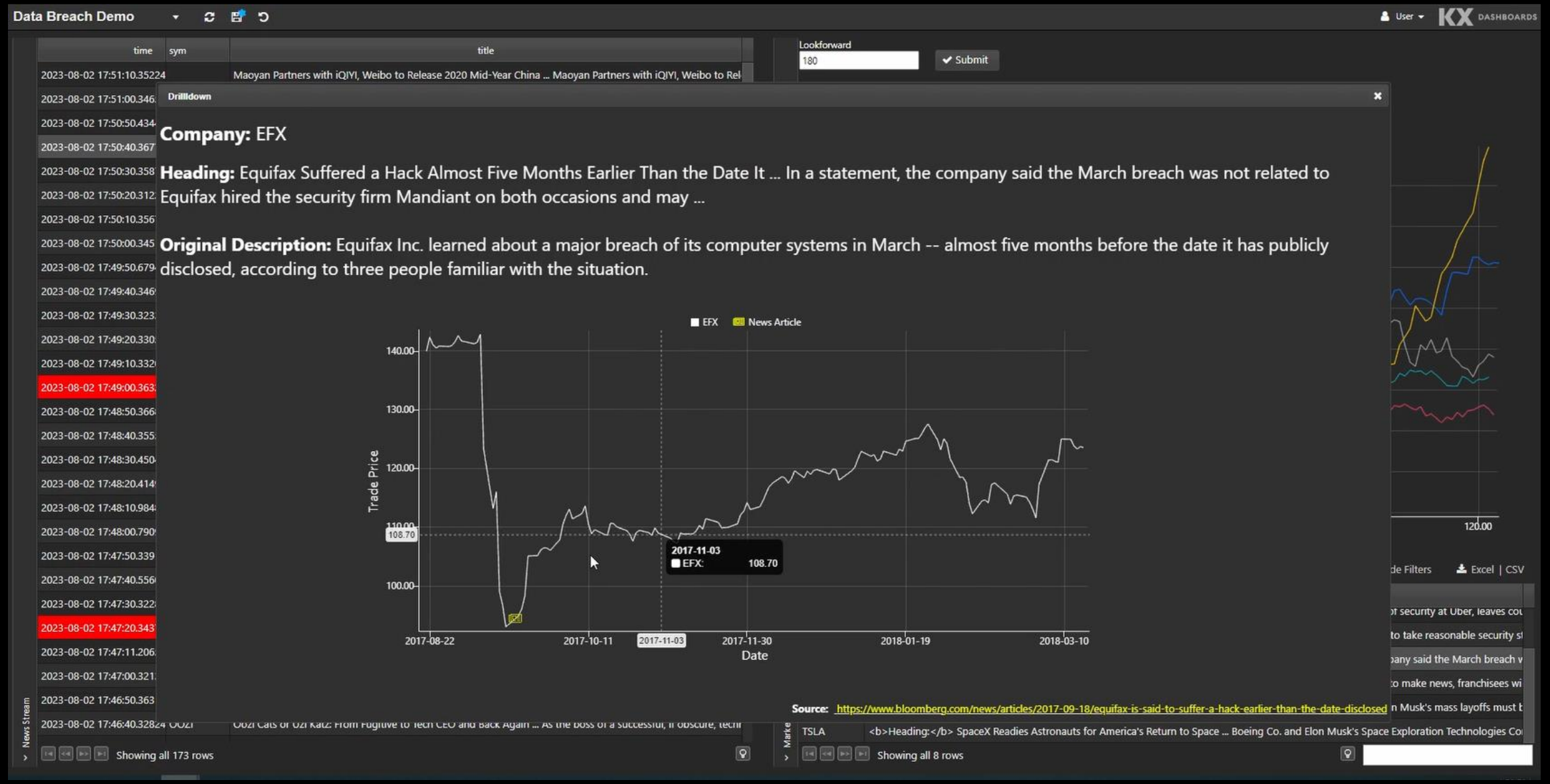
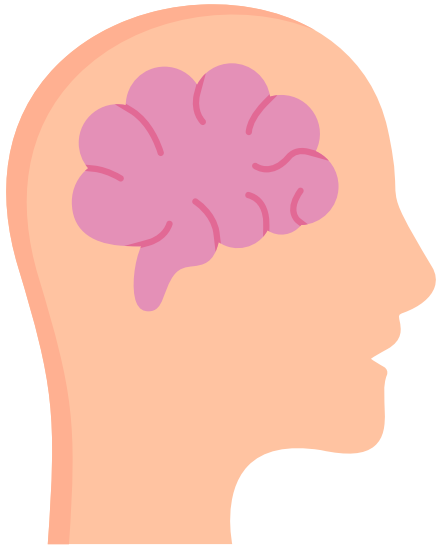


KX is the Contextual Data Platform for AI so Enterprises Can Work Smarter, Not Harder

A Neuroscience Approach to AI



1. Discover

- Enterprise connectors
- Real-time data synch
- Stream processing

2. Encode

- Vector embeddings
- Vector indices

3. Search

- Distance metrics
- Metadata & partitioning
- Query & filter

4. Contextualize

- Classification
- Relevancy
- Seasonality
- Versioning
- Interpolation
- Real time & historical

5. Reason

- Computation
- Aggregations

6. Anticipate

- Anomaly detection
- Forecasting

7. Act

(integrations)

- LLMs
- Generators
- Chat
- Automation

8. Share

- Metadata filtering
- Role-based access

KX uniquely positioned to deliver

About KX: Trusted by Wall Street, surging on main street. A growing ecosystem & strategic partners.

Customers

ALPINE F1 TEAM

BANK OF AMERICA

Syneos Health

Morgan Stanley

CITADEL

Woodside Energy

Partners

Azure

BISTel

KEYSIGHT TECHNOLOGIES

aws

CGI

databricks

snowflake

Telit

The time series, vector and matrix data management pioneer.

Trillions trusted and under management in top-tier banks and hedge funds.

Cloud native, Python Native AI Contextual Intelligence

KX