## Real-time Data Monitoring in Oil and Gas

# Is your business insulated from volatility in commodity prices?



Crude Oil WTI (NYM \$/bbl), MarketWatch

# Reduce costs by moving to a real-time, data-driven production process.

### **Increase Efficiency**

Optimize the utilization of your workforce at drilling sites by moving from manual, labor-intensive batch data collection to automated, real-time data monitoring.

### Reduce Downtime

Move from scheduled maintenance to predictive maintenance based on real-time data analytics.

### Integrate Data Silos

Eliminate ETL (extract, transform, and load) process by integrating data across different divisions (upstream, midstream, and downstream).

How? Use **event streaming** and **Apache Kafka®** to connect systems and applications, providing **real-time data visibility** across your operations.

For example: In the U.S., **effective prediction of leakage** incidents could **save** nearly **\$30B/year**, which can be used to fund **50 percent** of midstream capex until 2030\*.

\*IoT Use Case for Gas Pipeline Monitoring by Kevin Gold

### Confluent Enables your Event Streaming Success

- Confluent founders are the original creators of Apache Kafka
- Confluent helps enterprises successfully deploy event streaming at scale and accelerate time to market
- Confluent Platform extends Apache Kafka to be a secure, enterprise-ready platform
- Confluent features, support, and customer success are led by Kafka experts





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### What else can you do with Event Streaming?

### **UPSTREAM**

- Real-time sensor data analytics
- Real-time monitoring and alarm system
- Real-time data sharing from IoT devices with third parties
- On-demand mobile application for operator assignment Hybrid environment data capture in real-time
- Ingestion of data in real-time from SCADA (supervisory control and data acquisition) systems
- Real-time monitoring of safety metrics

### MIDSTREAM

- Real-time health monitoring of pipelines
- Real-time tracking of trucks, vessels, and railroads

### DOWNSTREAM

- Continuous health monitoring of refinery equipment
- Update prices in micro-batches at gas stations
- Enable resource trading with real-time price updates
- Real-time demand monitoring within the distribution network