Redpanda

Why event-driven data is the missing link for agentic Al

Autonomous agents can't wait for batch jobs. They need every new event the moment it happens.



Al that doesn't just predict, it acts

Agentic AI systems continuously read signals from their environment, reason over each event, and trigger downstream actions without human input. Think fraud defenses that adapt mid-transaction, robots that reroute on the fly, or websites that personalize while a user is still browsing.



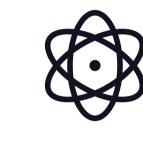
Live fraud detection



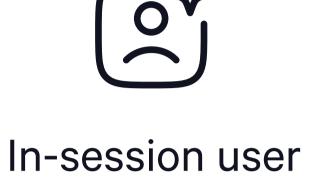
Autonomous supply chain routing



Real-time adaptation to evolving data



Robotics and smart machinery



personalization



for faster innovation

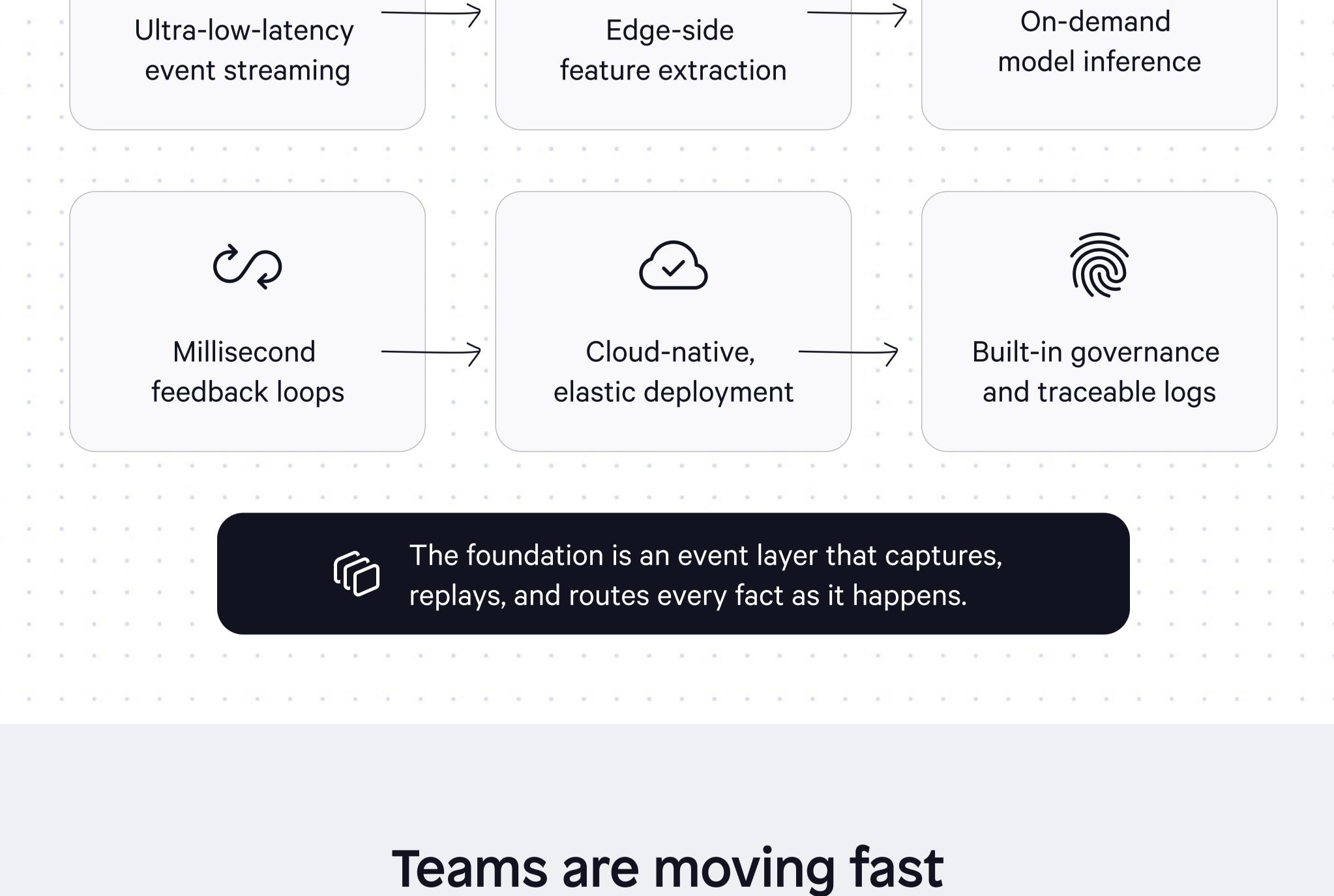
When data is delayed, decisions are too

Dimension	Batch AI	Event-Driven AI
Data arrival	Arrives in timed batches	Flows event by event
Model response	Minutes to hours later	Milliseconds to seconds
Feedback loops	Static and retrospective	Live tuning, adaptive
Best for	Historical reports	Autonomous decisions

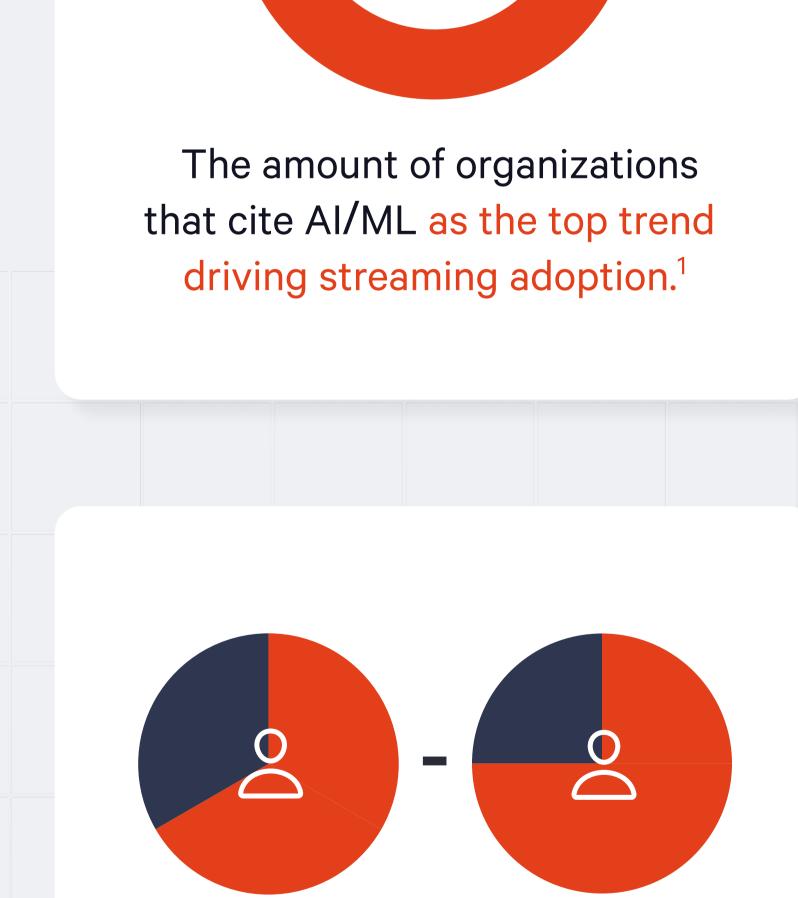
What it takes to power

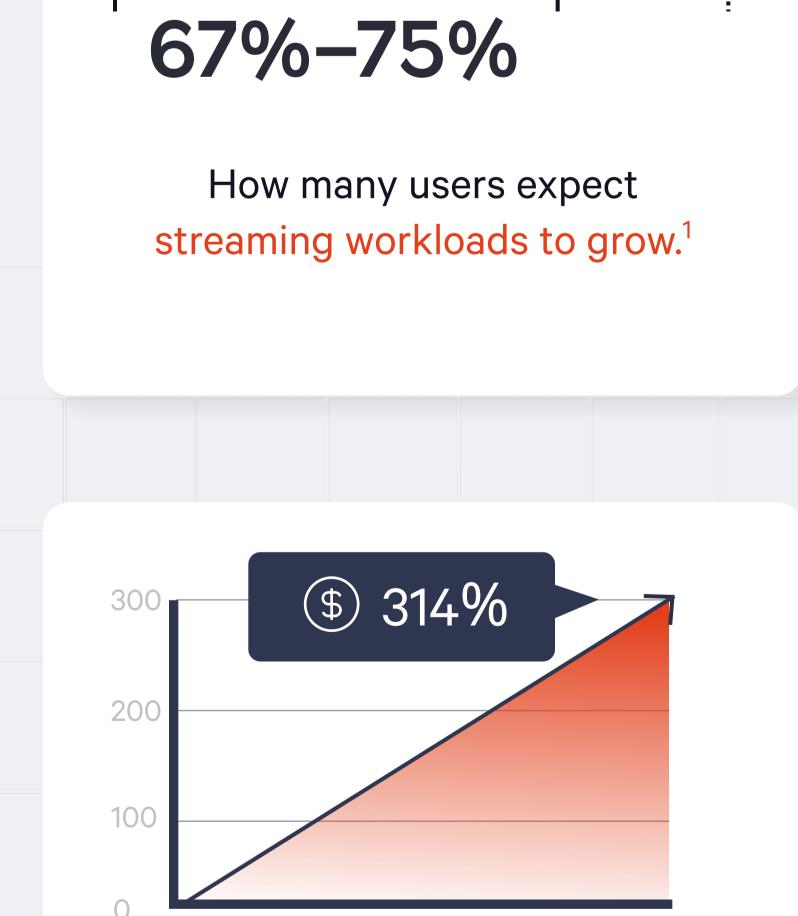
real-time autonomy

Agentic AI is event-driven by design. Batch breaks autonomy.



toward event-driven data





2023

2024

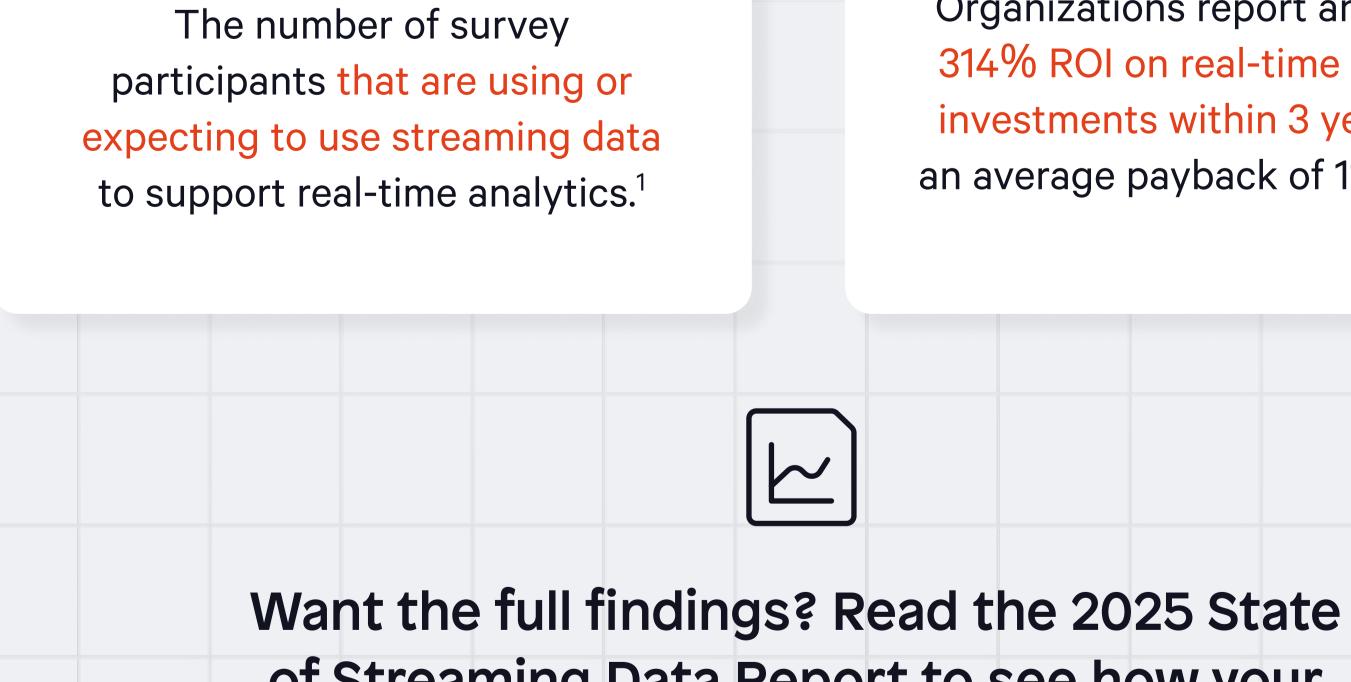
Organizations report an average

314% ROI on real-time analytics

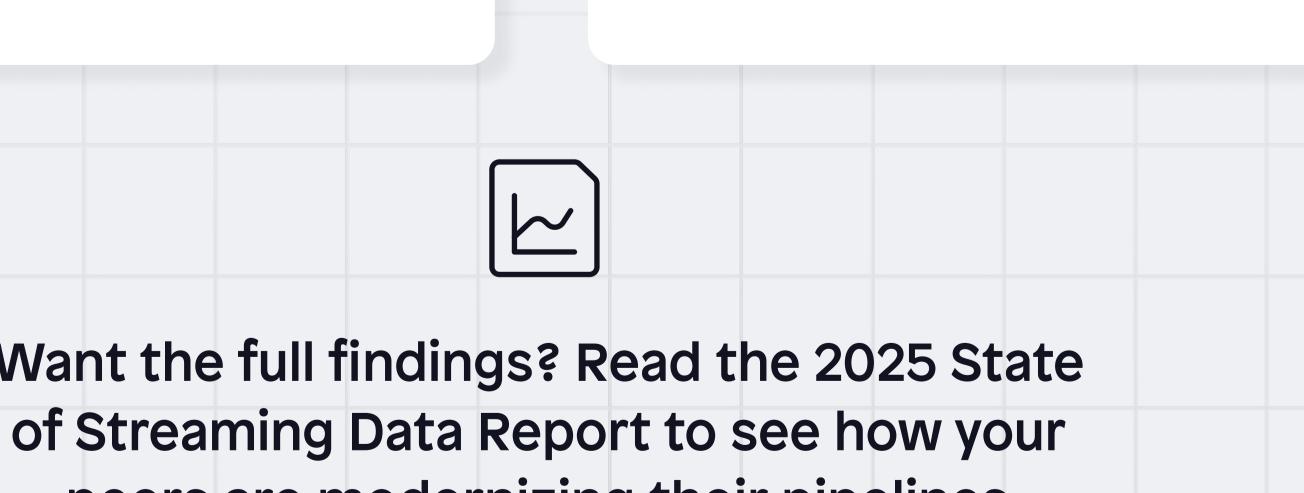
investments within 3 years, with

an average payback of 11 months.²

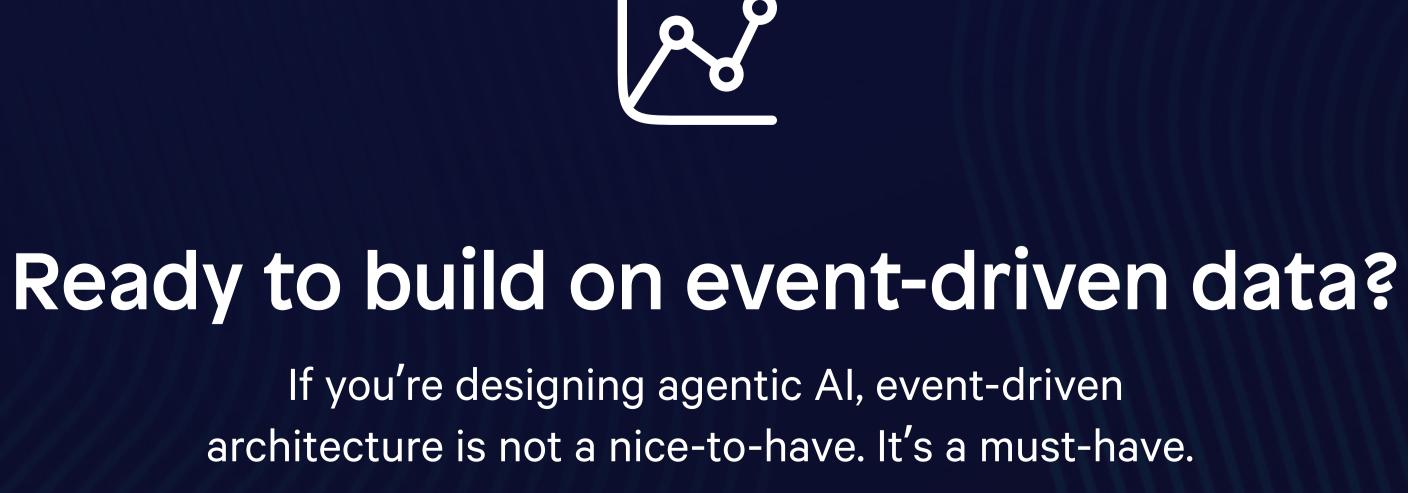
2025



2/3 to 3/4



peers are modernizing their pipelines. GET THE REPORT



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