

The Future of Integration 2025

AI-Ready Integration with Data Streaming



Presented by Confluent



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Igniting business
**greatness in
every integration**

AI is Broadly Classified Into Two Approaches



Predictive Artificial Intelligence

Purpose-built models
Offline training
Real-Time model inference



Generative Artificial Intelligence

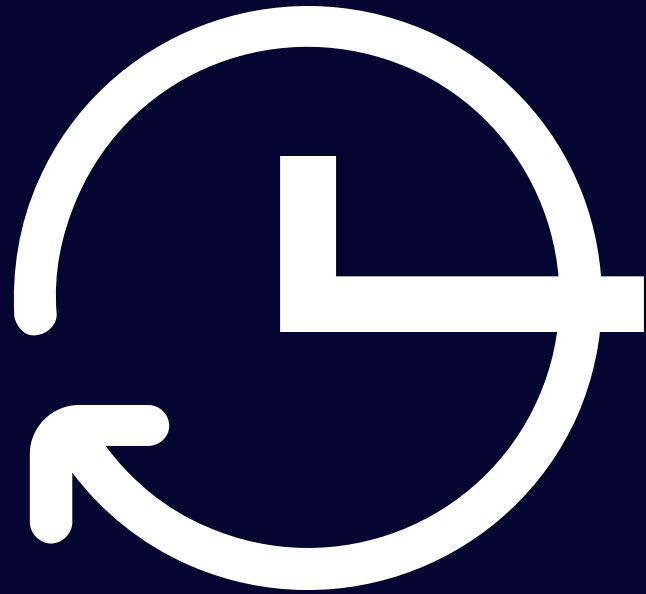
Reusable foundation models (LLMs)
Real-time contextualization
Agentic AI

The data is as important as the model

Large Language Models Require Real-Time Data and Context



Traditional data infrastructure is not real-time



**Missing
Up-to-date
Contextual Data**

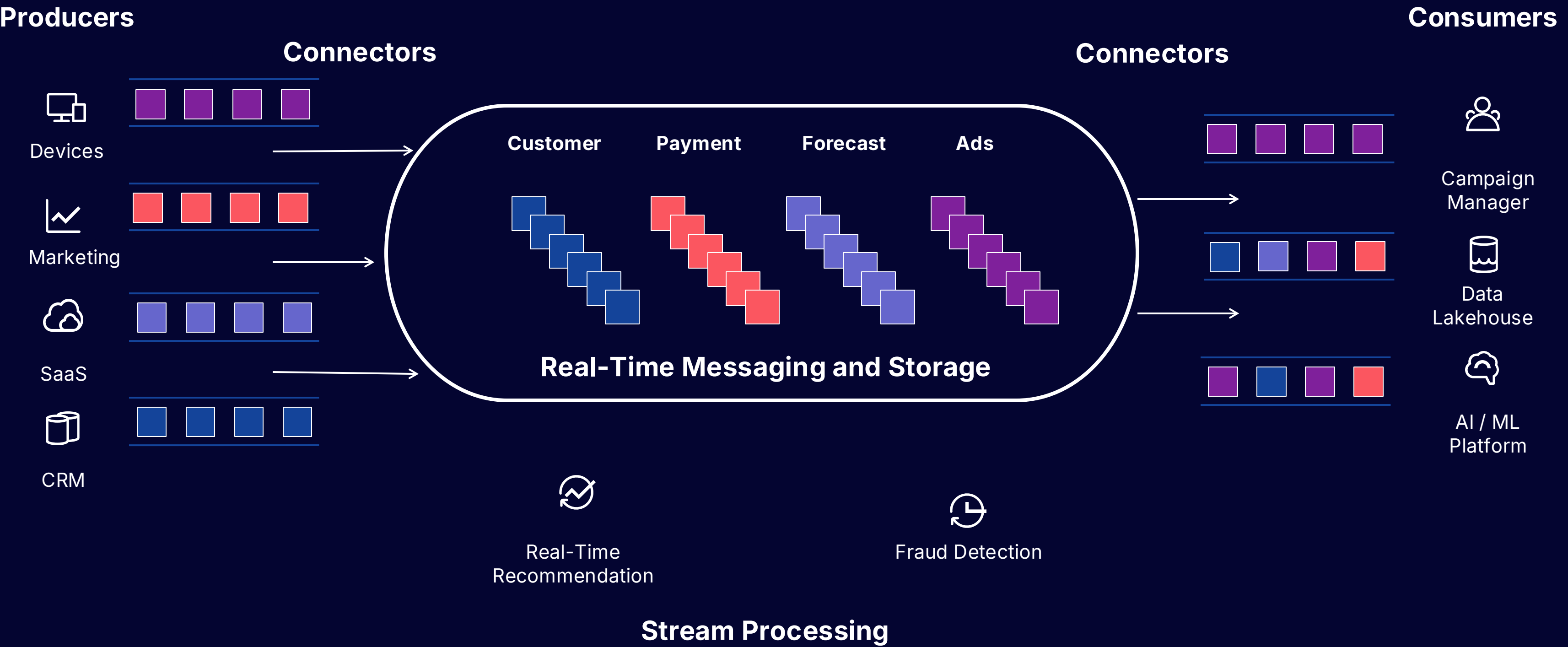


**Tightly Coupled
Architecture
and Lock-in**



**Complex Security
and Governance**

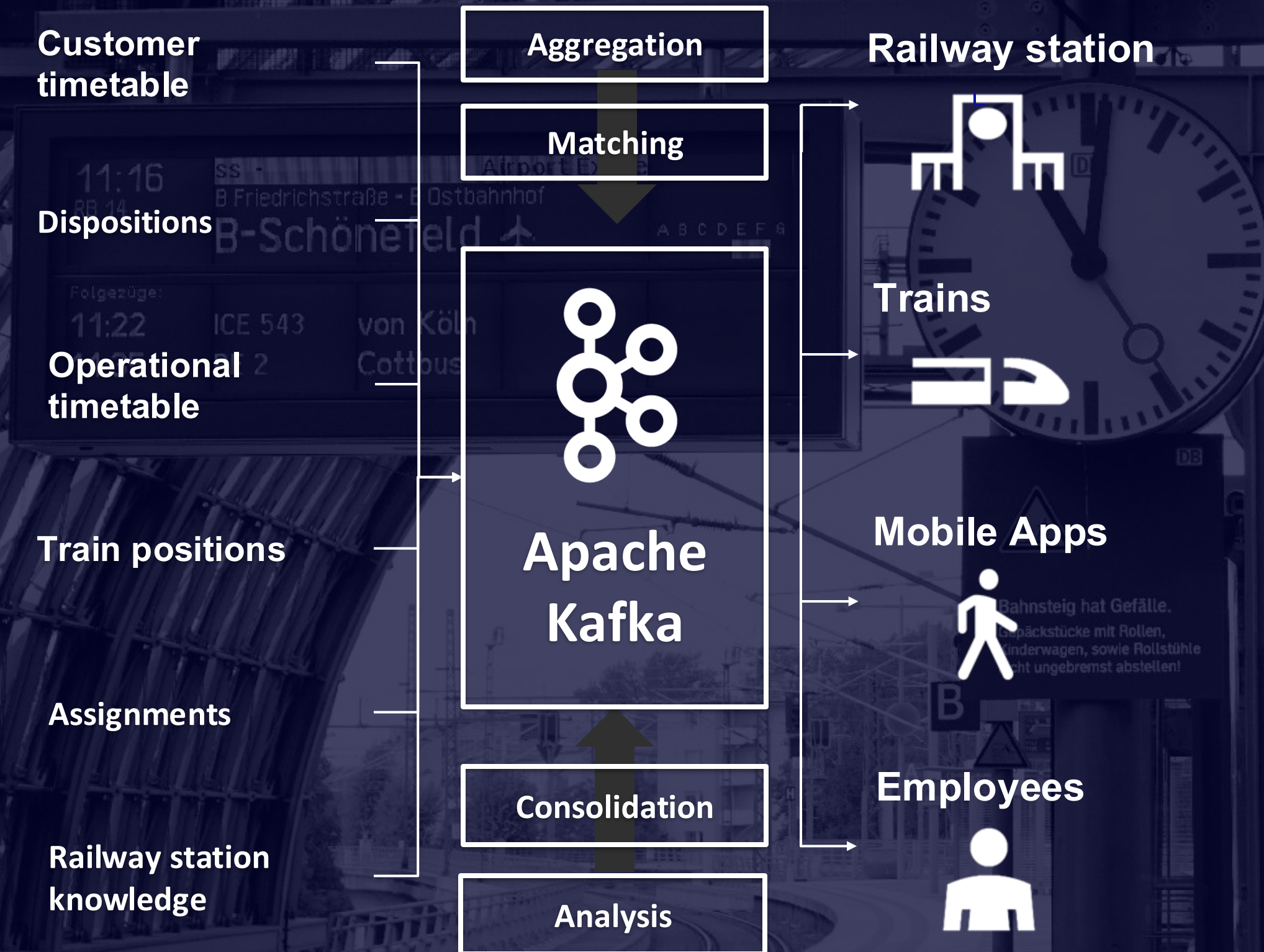
Event-Driven Architecture with Data Streaming



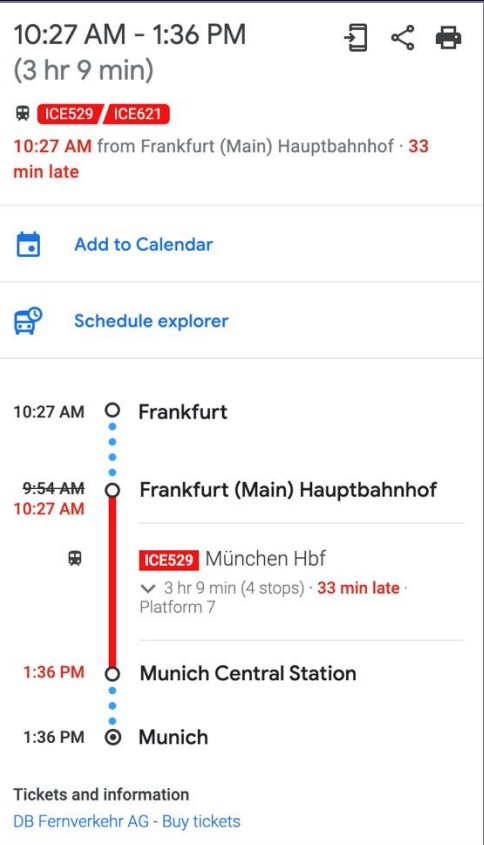
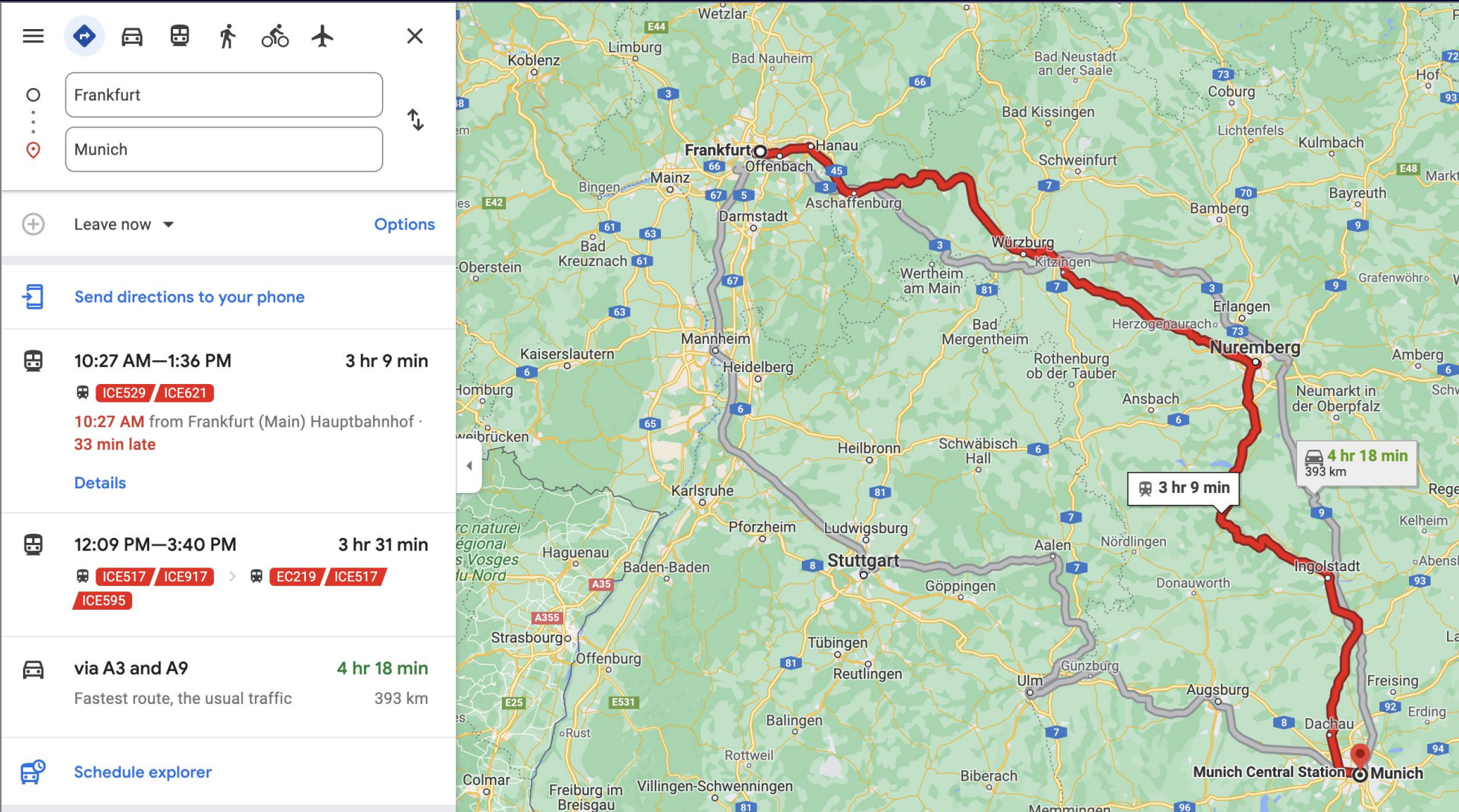
RI-Plattform

Single Point of Truth

Consistent real-time information for travelers across Germany



Data Sharing for New Business Models and Improved Customer Experience



Deutsche Bahn partners with Google Maps

© DEUTSCHE BAHN AG



“We look at events as running our business. Business people within our organization want to be able to react to events—and oftentimes it's a combination of events.”

VP of Streaming Data Engineering

A background image of two women sitting on a couch, smiling and looking at a tablet. One woman is wearing a grey turtleneck sweater, and the other is wearing a brown sweater.

 | 

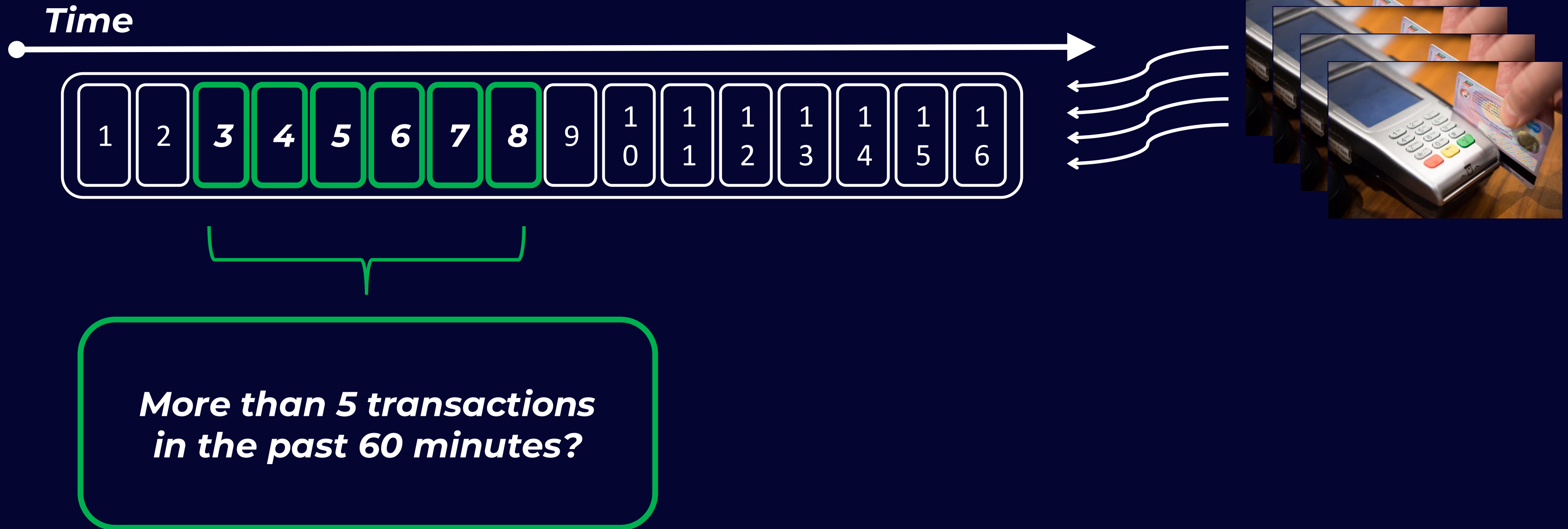
Did you make both purchases?

Cut & Cloth
Sunday, June 10, 2018
\$40.00
Sunday, June 10, 2018
\$40.00

[Yes, I Made Both](#)

[No, Help Me Fix This](#)

Fraud Prevention with Continuous Streaming Analytics





Challenge: Build a conversational chatbot service that incorporates complex technologies such as fulfillment, natural-language understanding, and real-time analytics

Solution: Use Confluent to build a fast, super-scalable event-driven architecture that could handle immense traffic spikes and also provide other guarantees around delivery semantics

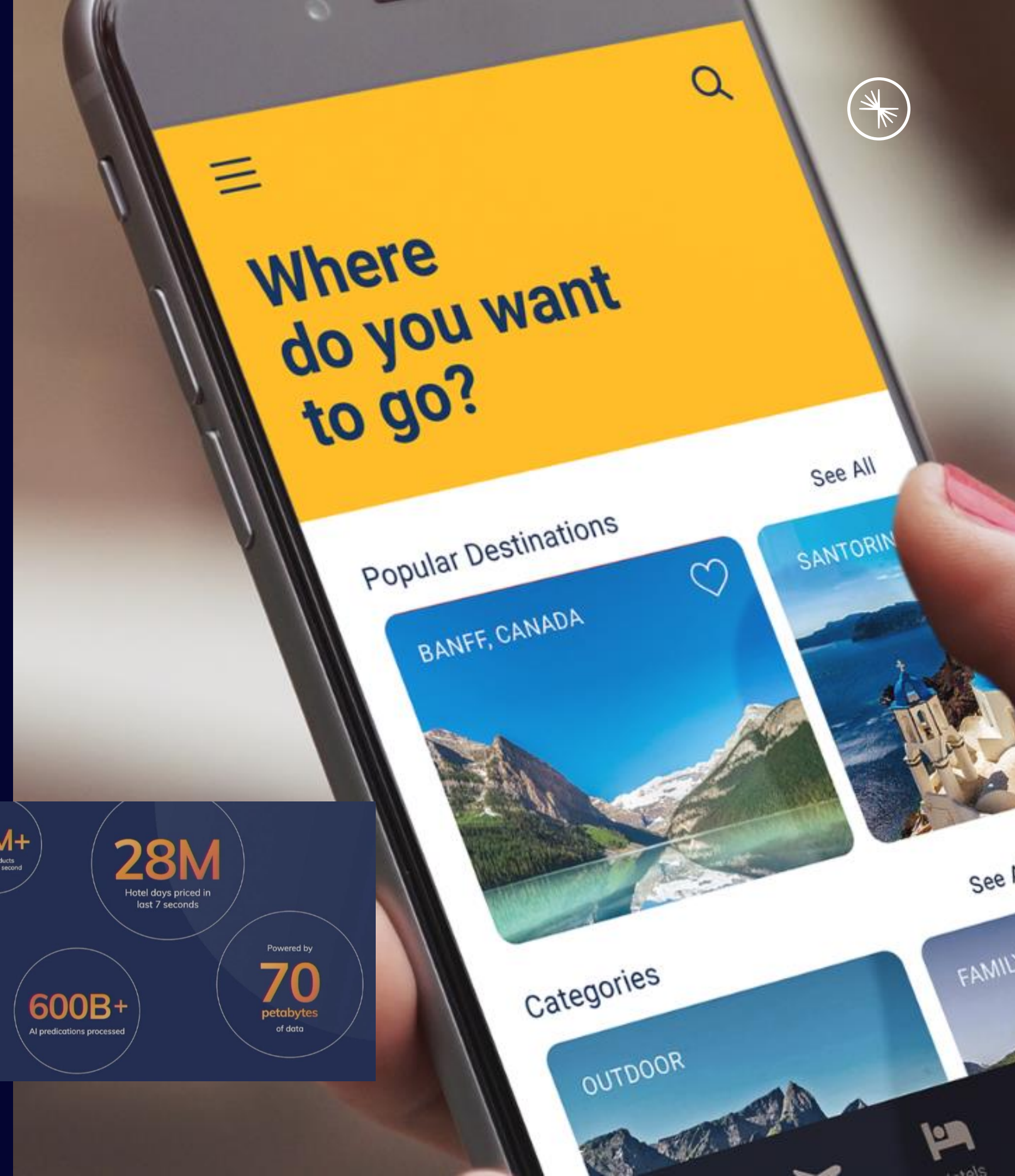
Results:

- Near-zero downtime even during huge traffic spikes
- Rapid acceleration of new-skill onboarding
- Doubling of NPS rating

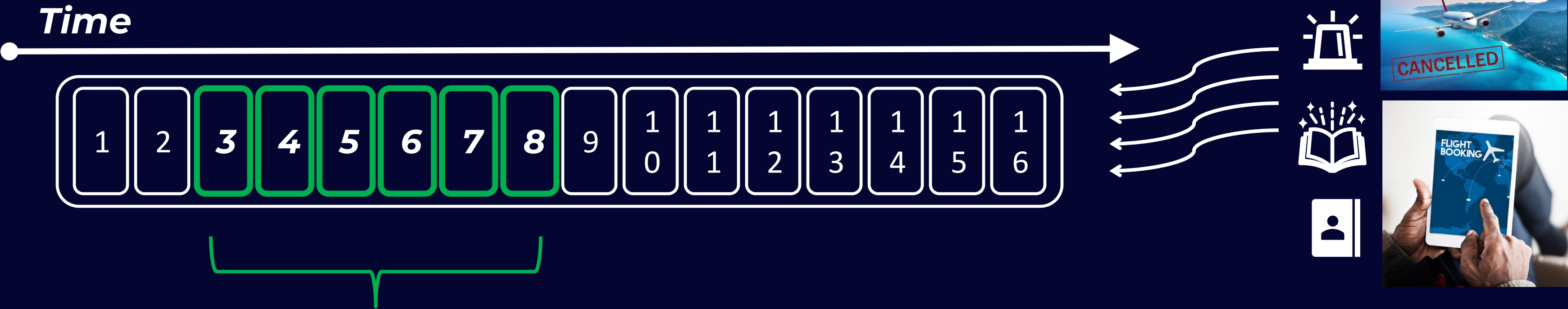
Virtual Agent Platform:



(Marc Silbey, VP of Product at Expedia)



Contextual Customer Support

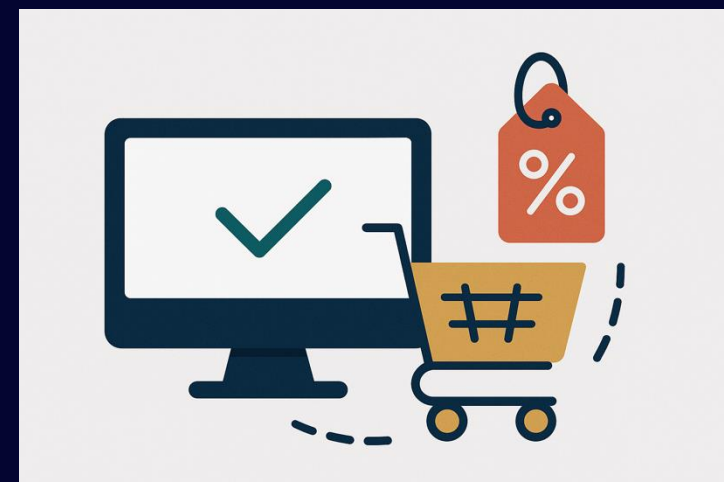


The Agentic AI Opportunity with Event-Driven Applications



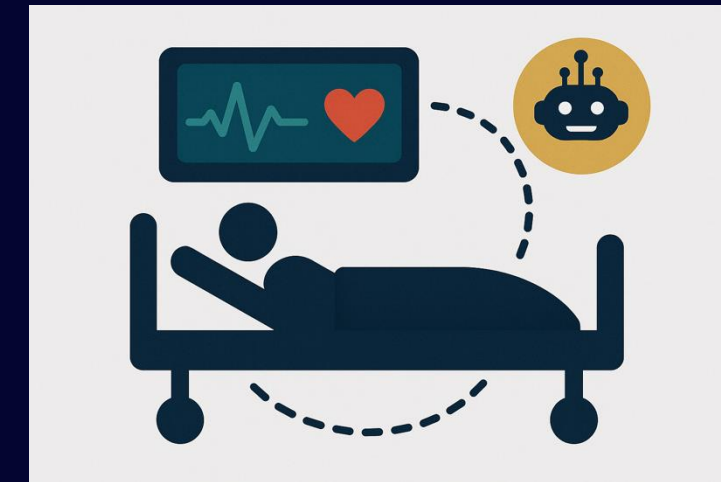
Financial Services

Real-time fraud detection
and autonomous
transaction blocking



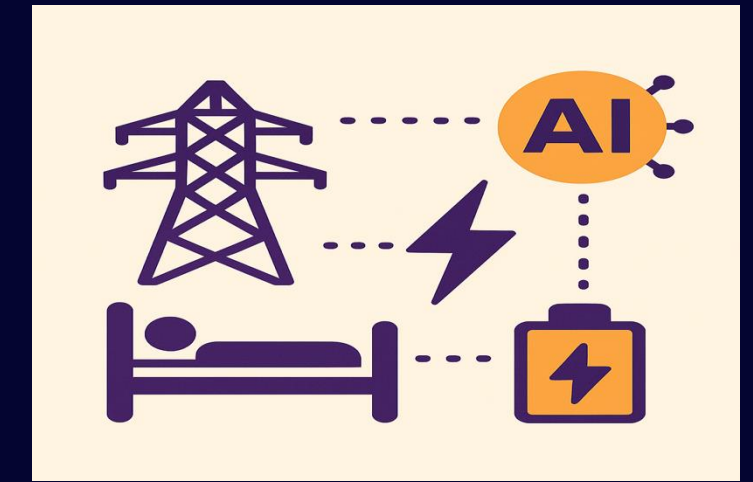
Retail & E-Commerce

Personalized, AI-driven
offers and promotions
at checkout



Healthcare & Life Sciences

Continuous patient
monitoring with automated
anomaly alerts



Energy & Utilities

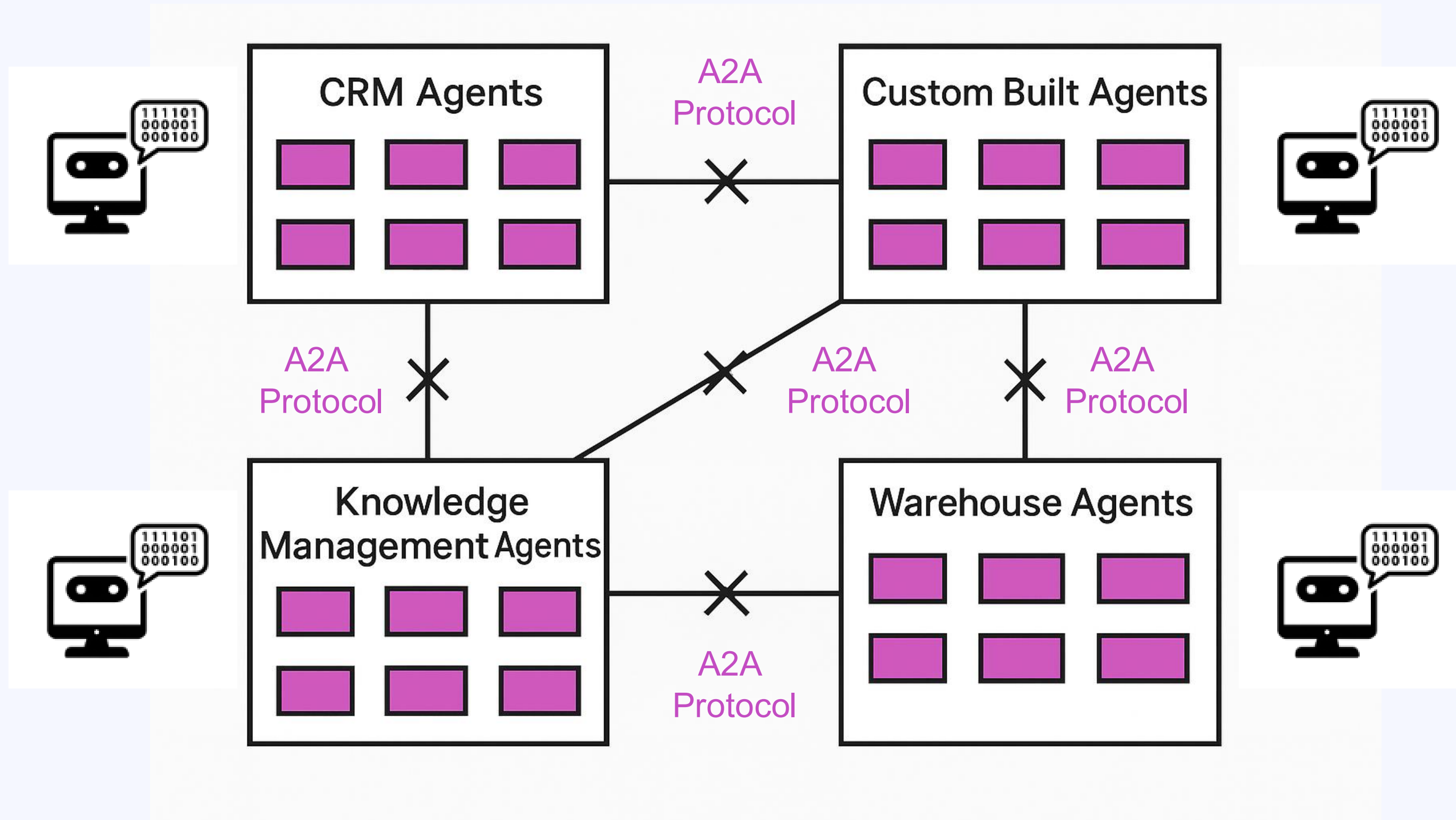
Smart grid balancing
with AI-driven
demand response

The difference?

GenAI (Prompt-driven Creation) vs. Agentic AI (Autonomous Action)

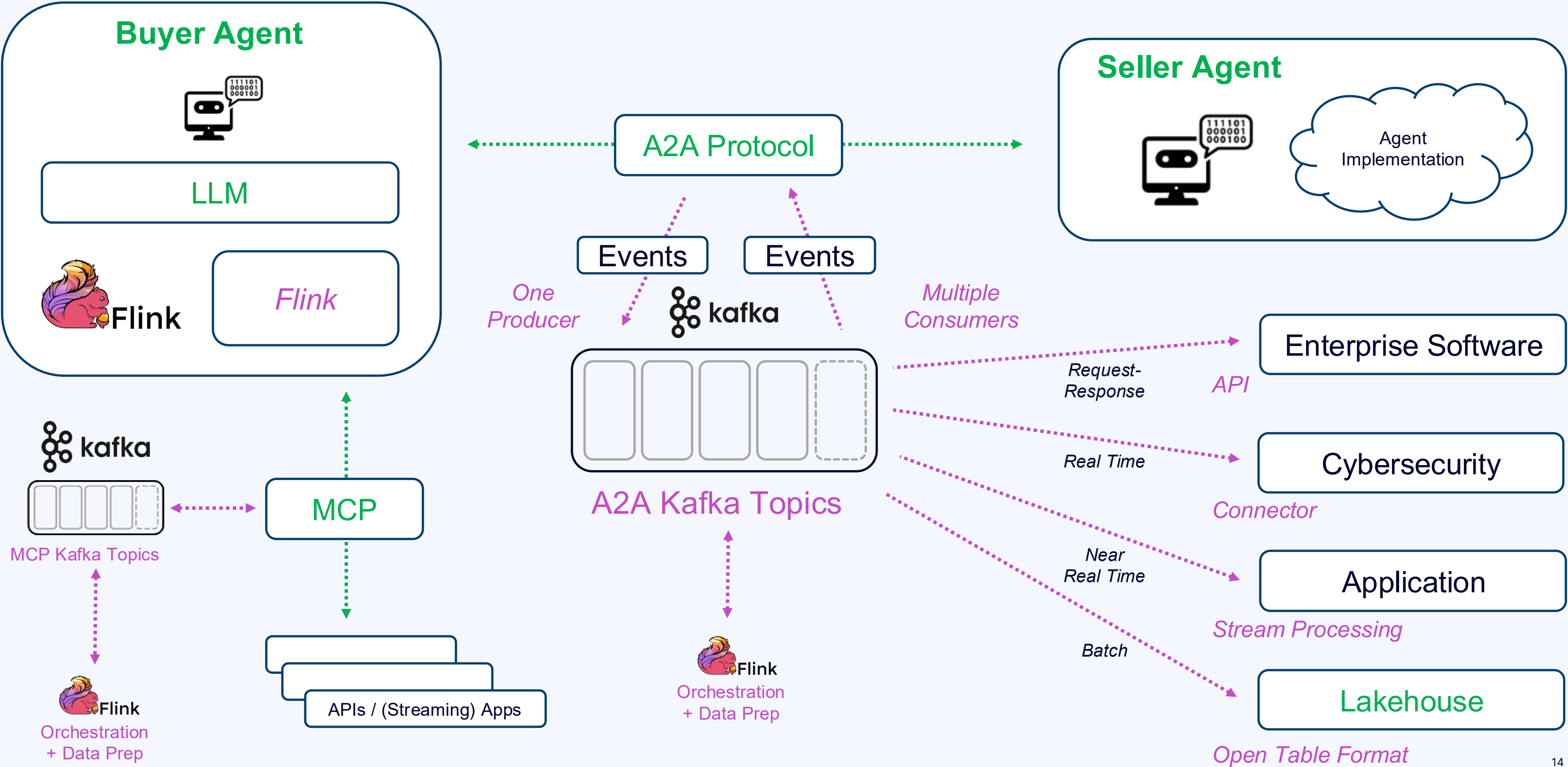
Agentic Spaghetti Architecture

(like with Microservices in the Early Days)

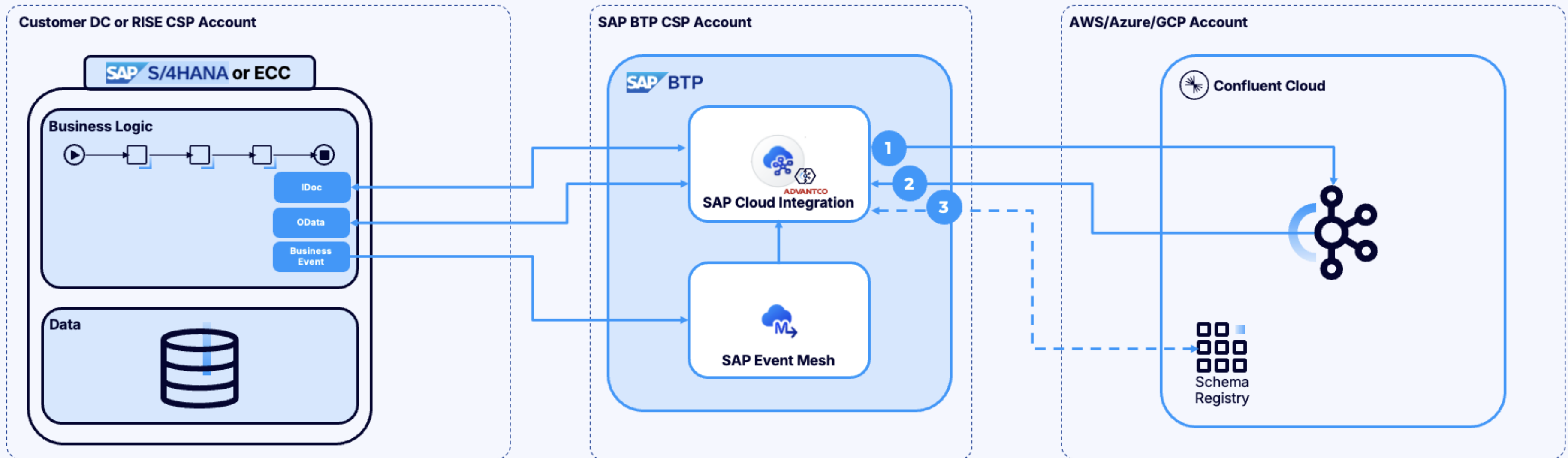


Data Streaming for Truly Decoupled, Scalable, and Contextual Agentic AI

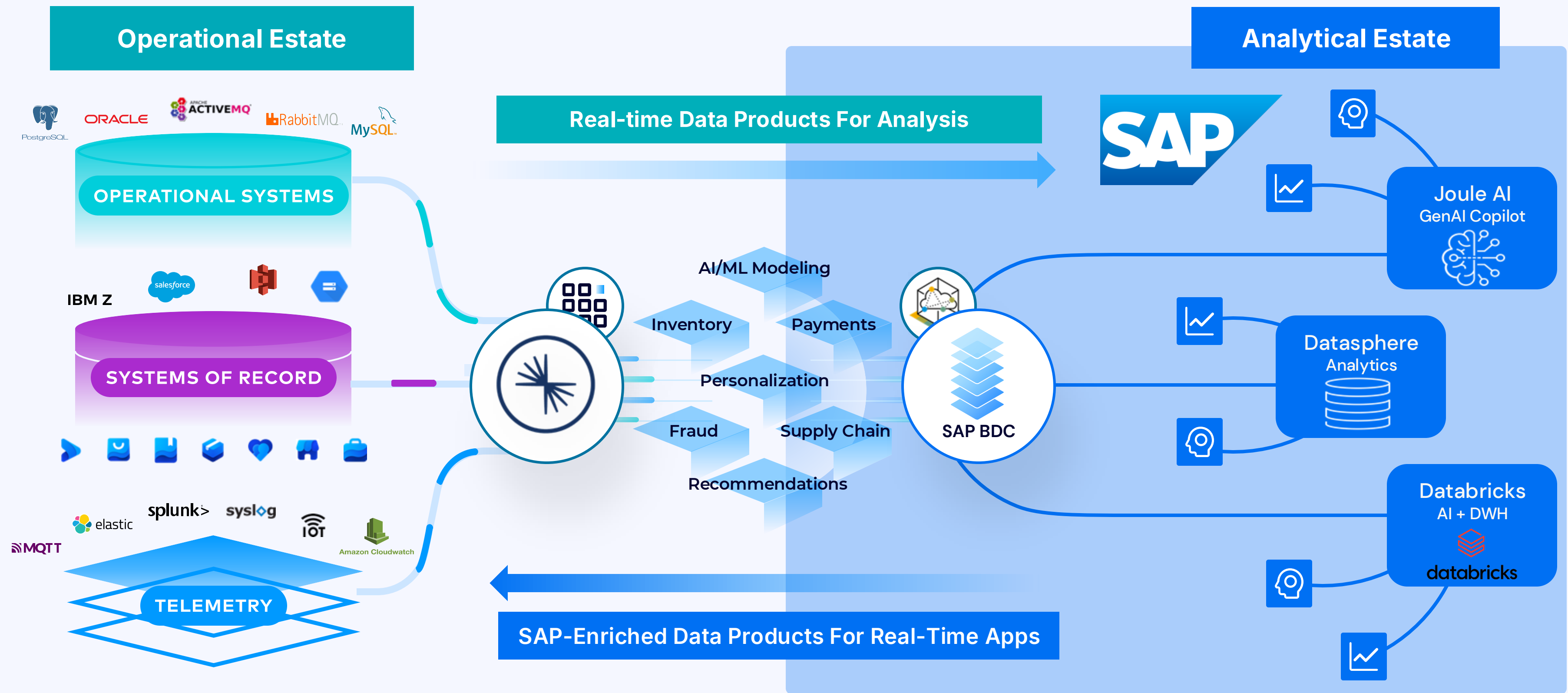
Legend:
Agentic AI Agent
Data Streaming



Operational Use Case: SAP S/4Hana ERP + BTP Cloud Integration + Confluent



Analytical Use Case: Confluent + SAP Datasphere/Joule + Databricks



THE ULTIMATE DATA STREAMING GUIDE

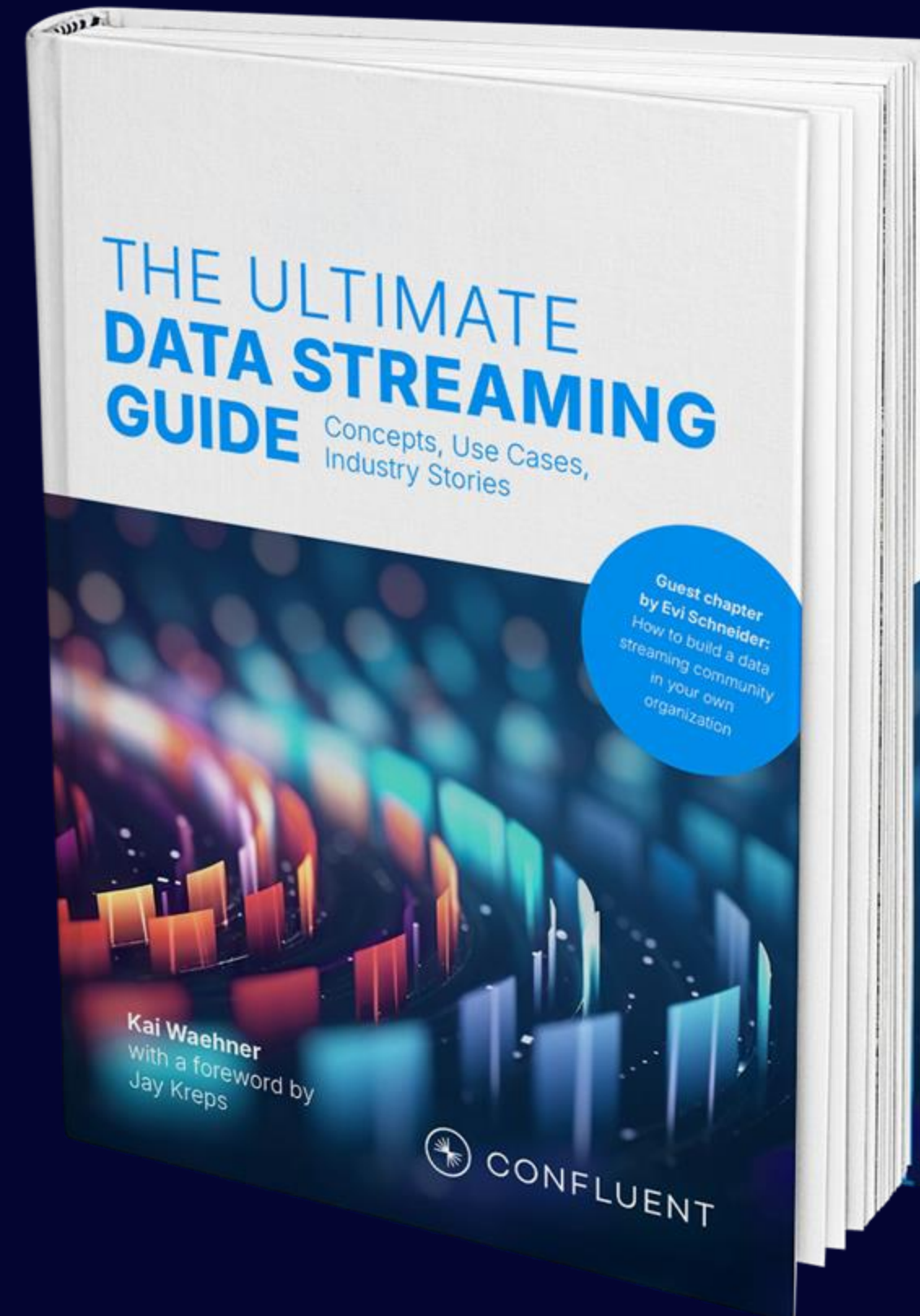


Discover how enterprises are leveraging real-time data for agility, scalability, and business value.

Get your free eBook today to learn from real-world success stories and unlock your data's potential.



kai-waehner.de/ebook



What does the Future of Integration mean for Confluent?



Delivering fresh, reliable data for AI (and every other use case);
across both operational and analytical systems.

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