

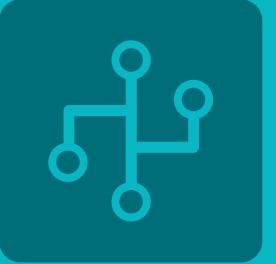
The Data Streaming Platform:

How to make your Broader Data Strategy Successful



Rully Moulany | AVP Asia, Confluent

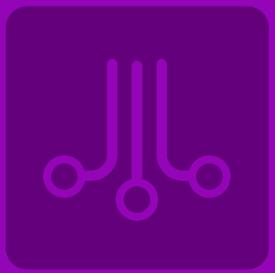




Challenges of a Modern Data Strategy

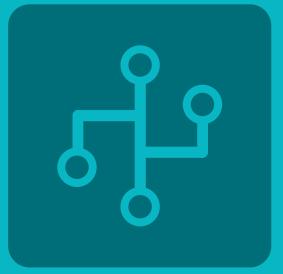


Centralization:
The core of your challenges



The role of the Data Streaming Platform





Challenges of a Modern Data Strategy



Centralization:
The core of your challenges



The role of the Data Streaming Platform



In the beginning, there was a use case...



LimitedSources

SmallCentralized
Data Eng

Bounded consumers and reports

But business needs always multiply

















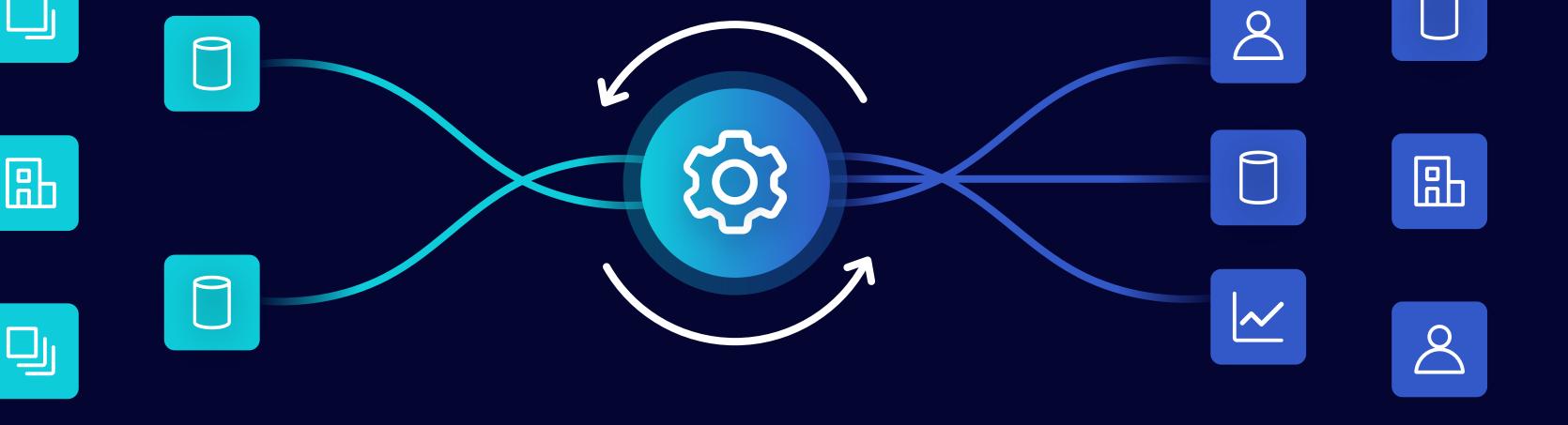




Unbounded

destinations

and needs



Overburdened

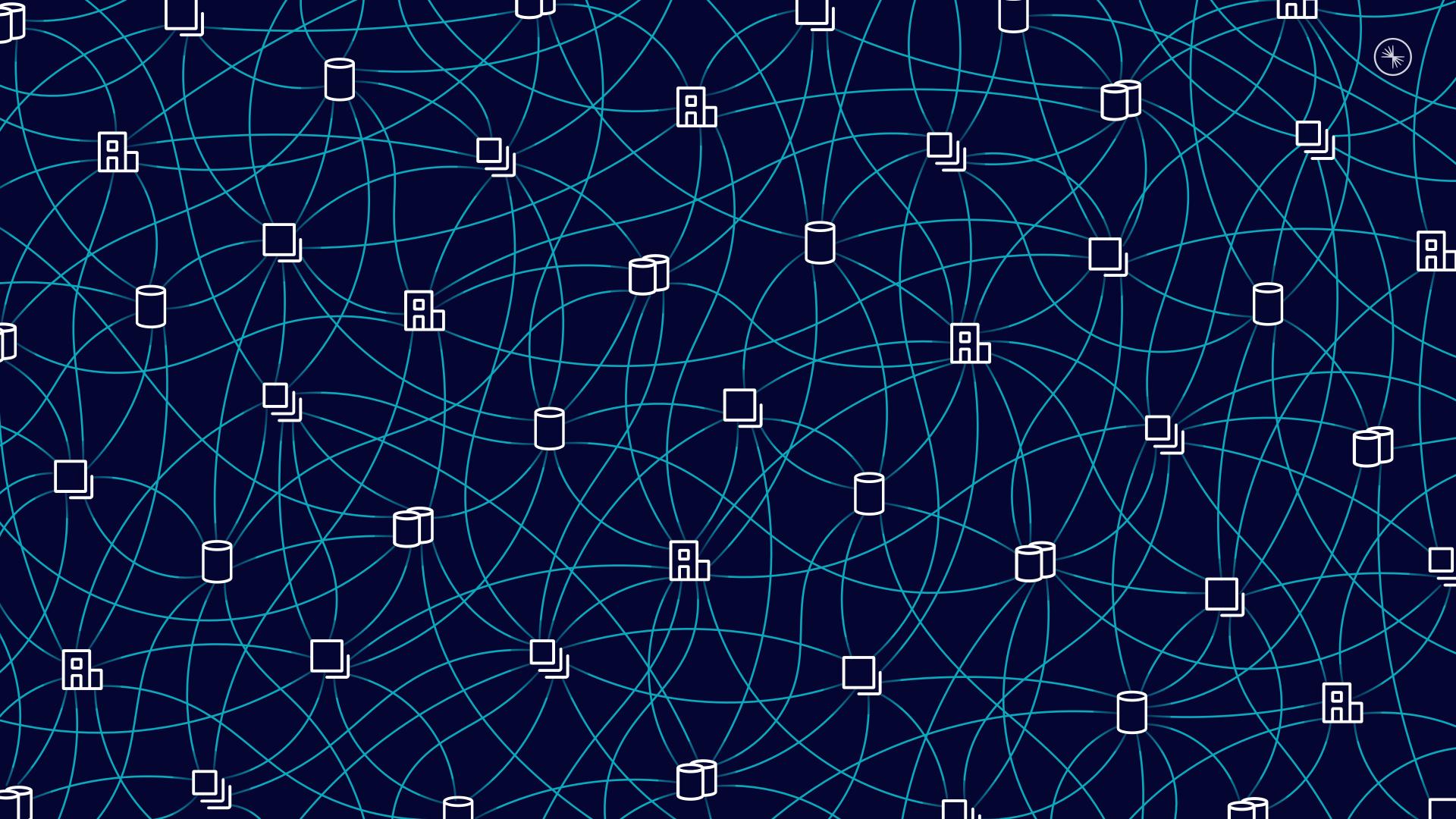
Centralized

Data Eng

Increasing

Data

Sources





Data strategy revolves around taming this core problem

Data

Strategy

Data Quality

How do we ensure the data is consistent, correct and clean given so many sources / destinations?

Governance

How do I balance locking data down and opening it up? How do I do that across so many systems?

Data Integration

How do I reduce redundant and costly transforms across the business? How do I scale data delivery?

Self-Service

How can we enable data consumers to more operate independently from central teams?

User Choice

How do I give users the option, and our systems the ability, to choose the right platform for their needs?

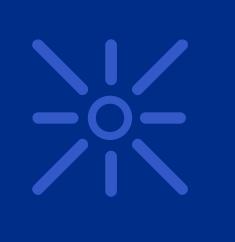
Architecture for Tomorrow

How do I evolve our data architecture to tackle new use cases while keeping the lights on?





Challenges of a Modern Data Strategy



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The role of the Data Streaming Platform

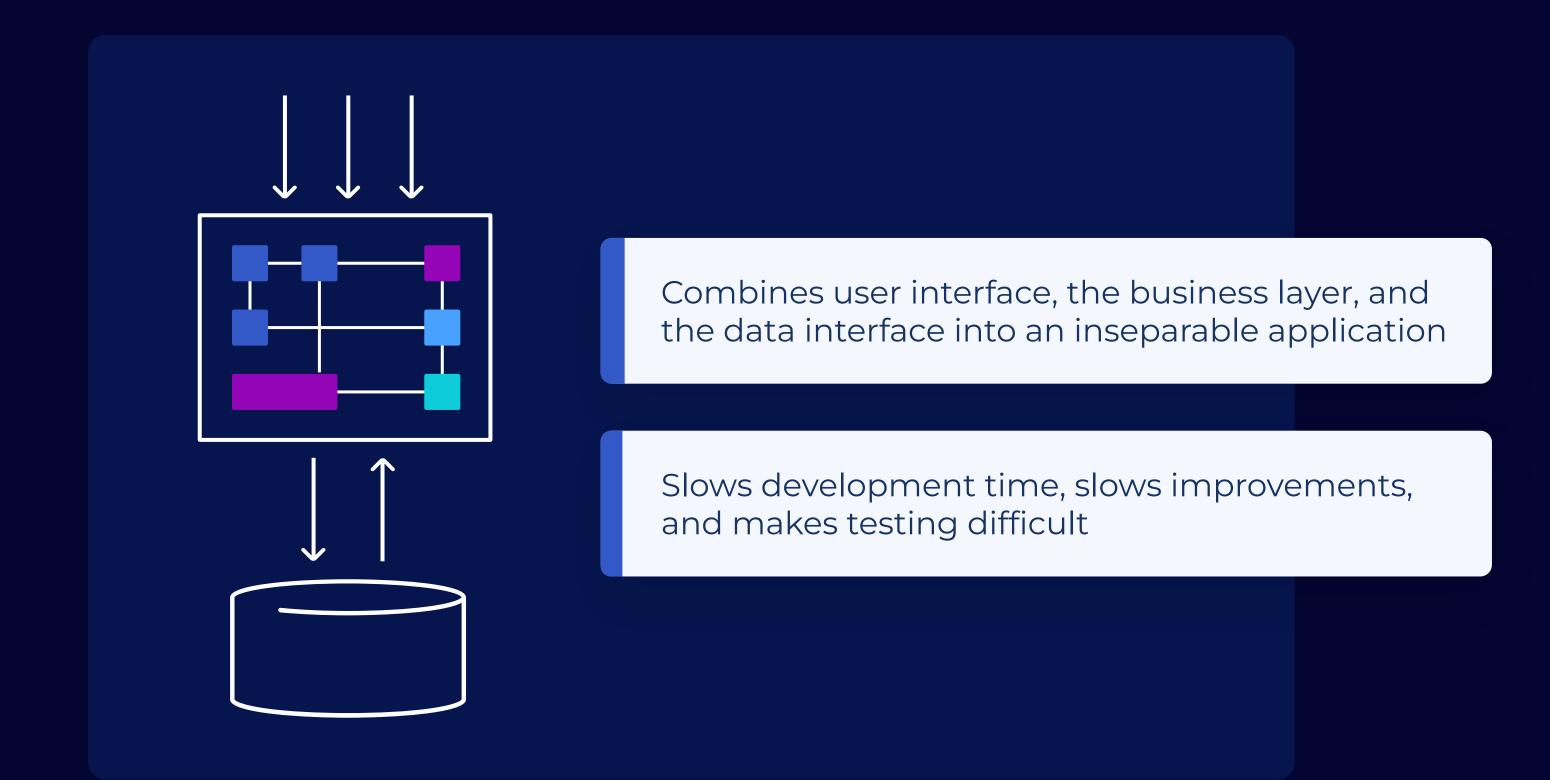


Centralization

A natural evolution... that's probably holding you back.

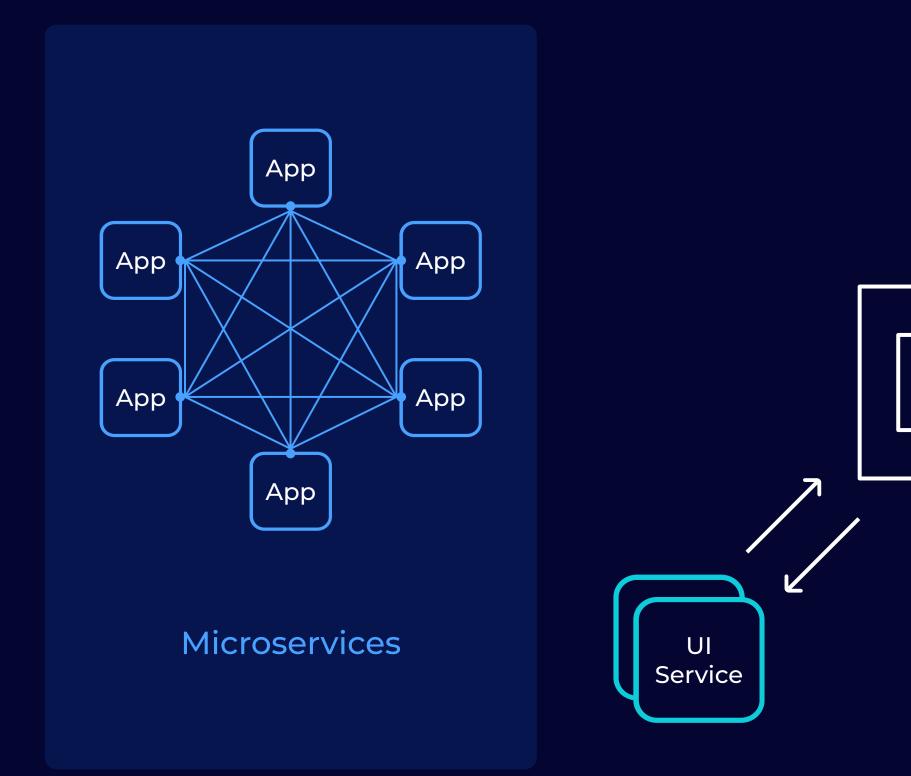


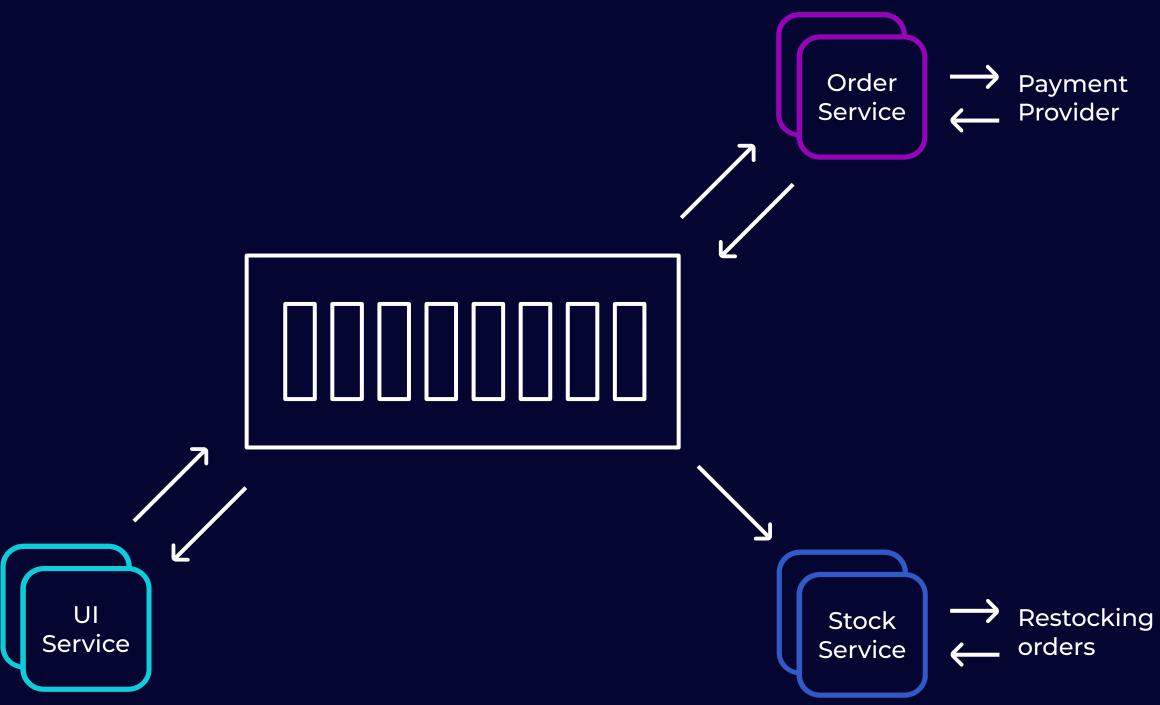
Centralized, monolithic apps weren't working...





...so app devs moved towards microservices

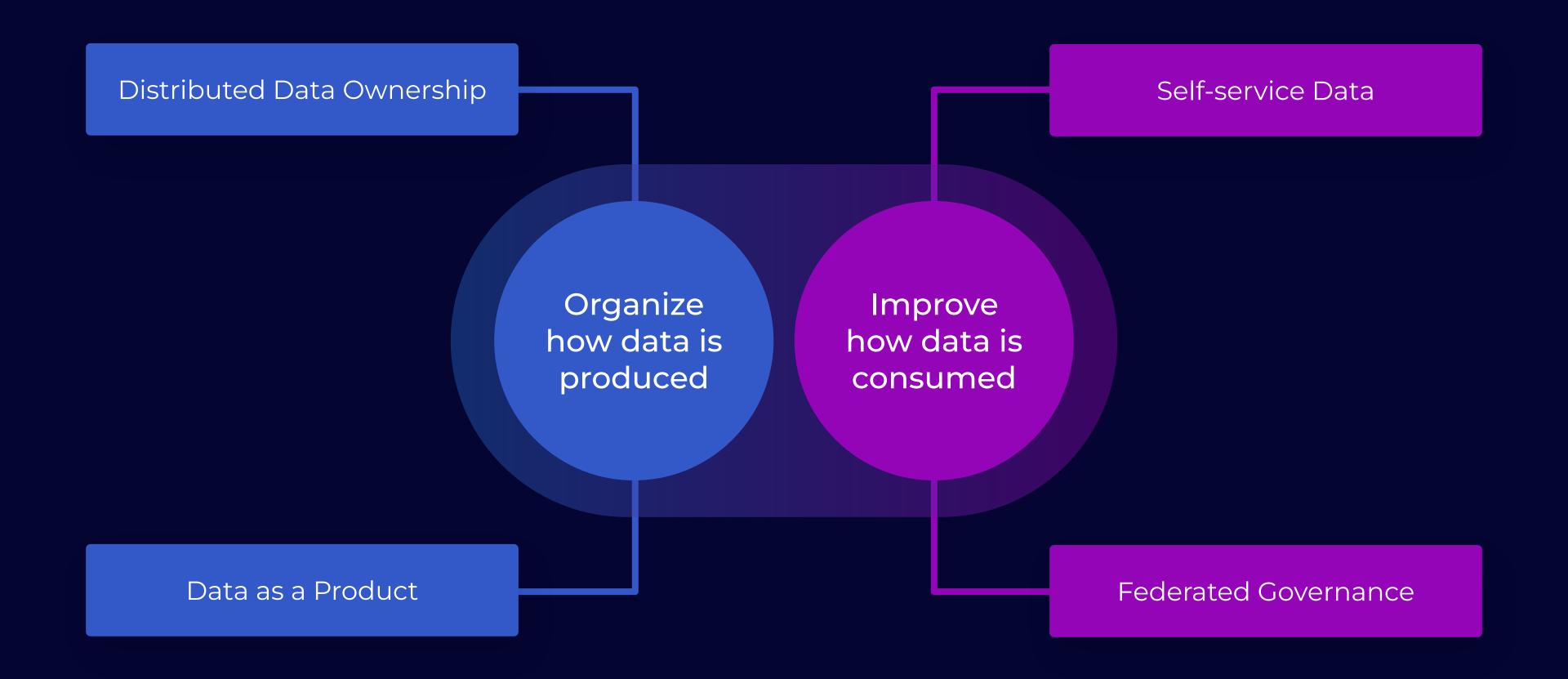






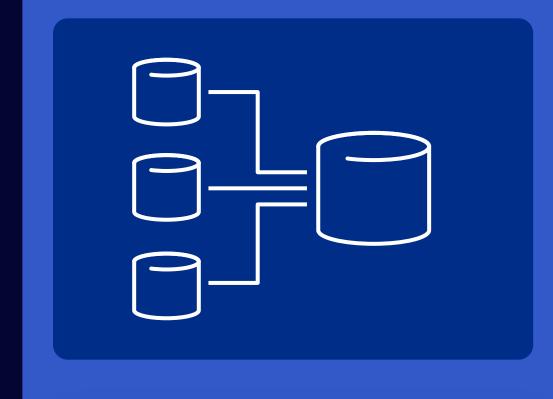


Decentralizing your data strategy





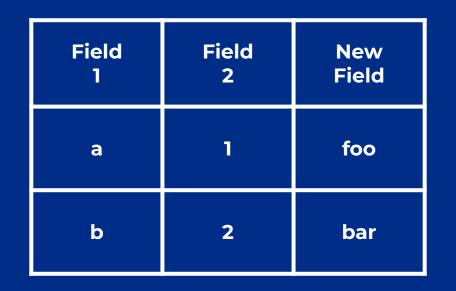
Why is this a better way to orchestrate data?



No centralized analytic

data monolith

Data needs evolve with the business



No long queue of frustrated data consumers





Cool story.

But how do I actually go about implementing this?

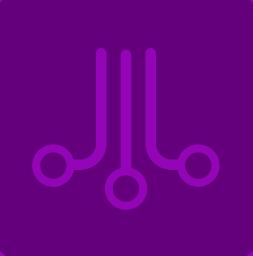




Challenges of a Modern Data Strategy



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Decentralization and the Data Streaming Platform

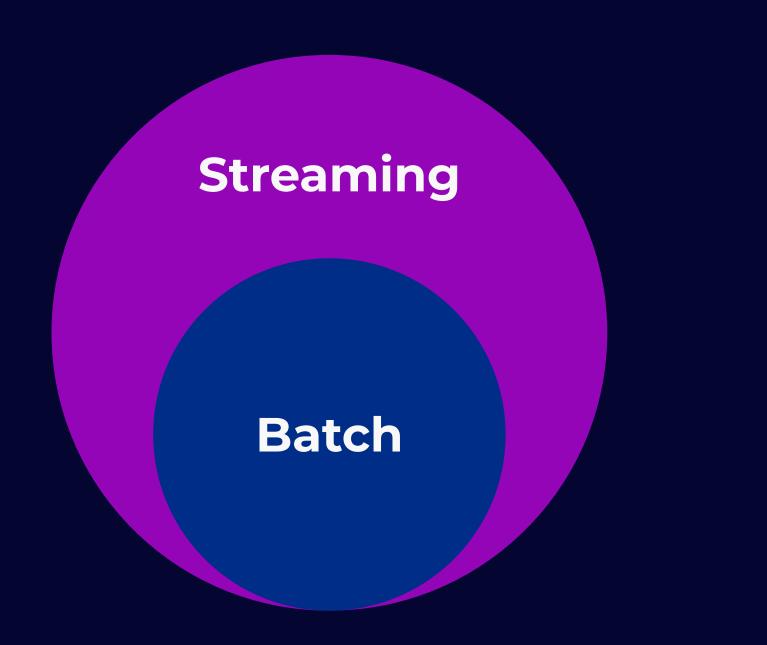
Why Streaming over Batch for decentralization?

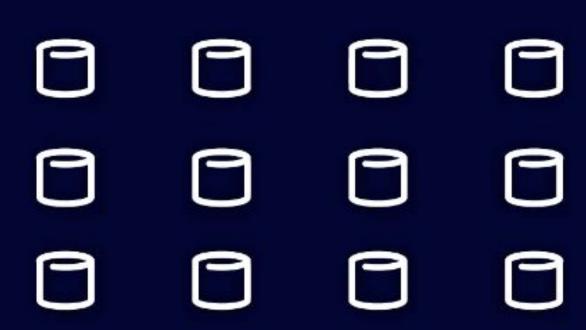
Data Streaming
Platform Capabilities
and Impact

How Confluent can help?

Why Streaming?







Streaming is a Generalization of Batch

Streaming solves for data consistency across your organization



Decentralization and the Data Streaming Platform

Why Streaming over Batch for decentralization?

Data Streaming
Platform Capabilities
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How Confluent can help?



Traditionally, there have been three primary data estates

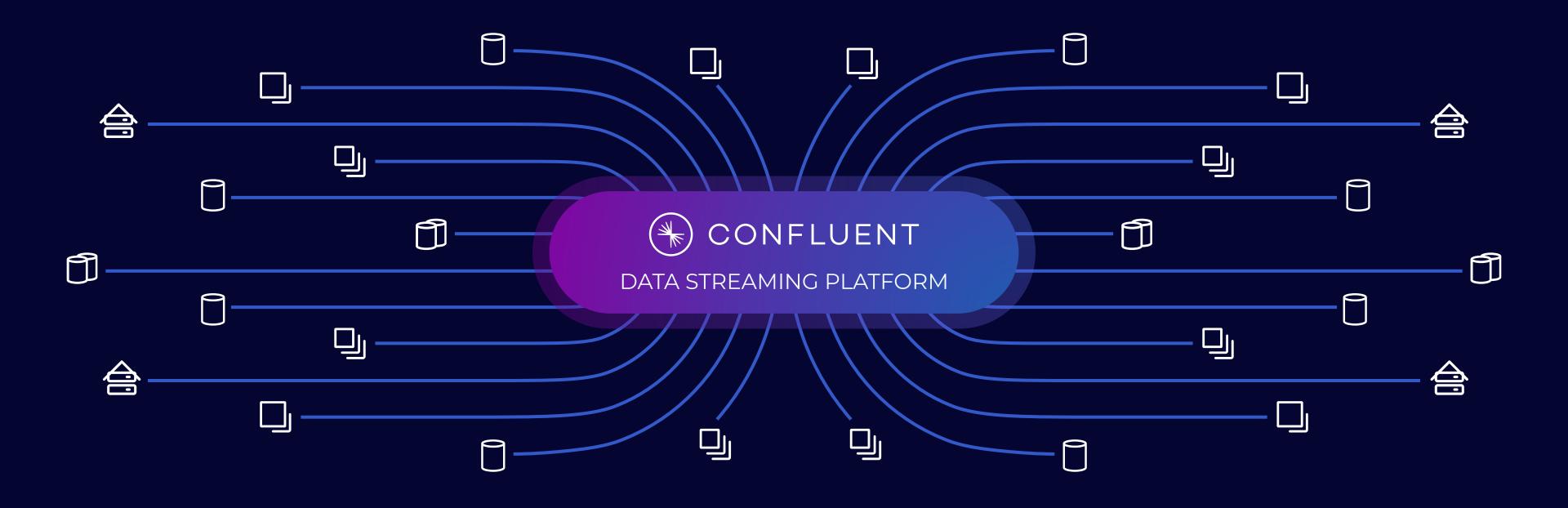






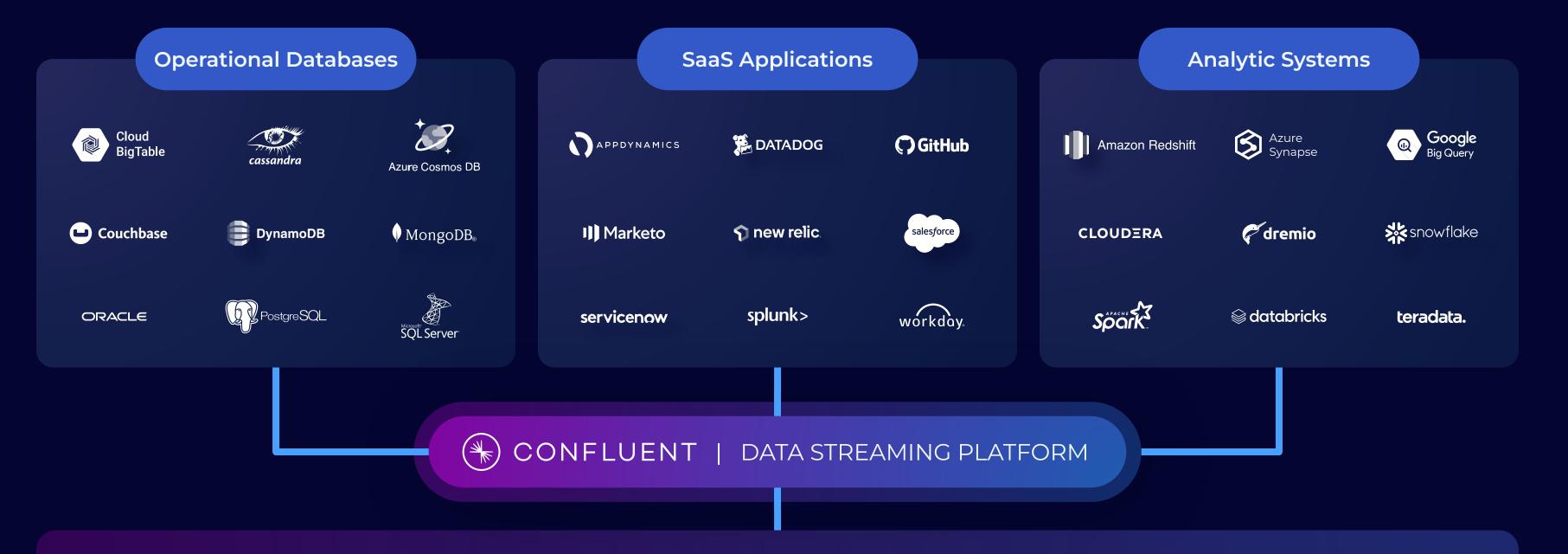
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Data Streaming Platform Coordinates across silos





Today, a fourth estate is emerging that provides a new foundation for your data strategy















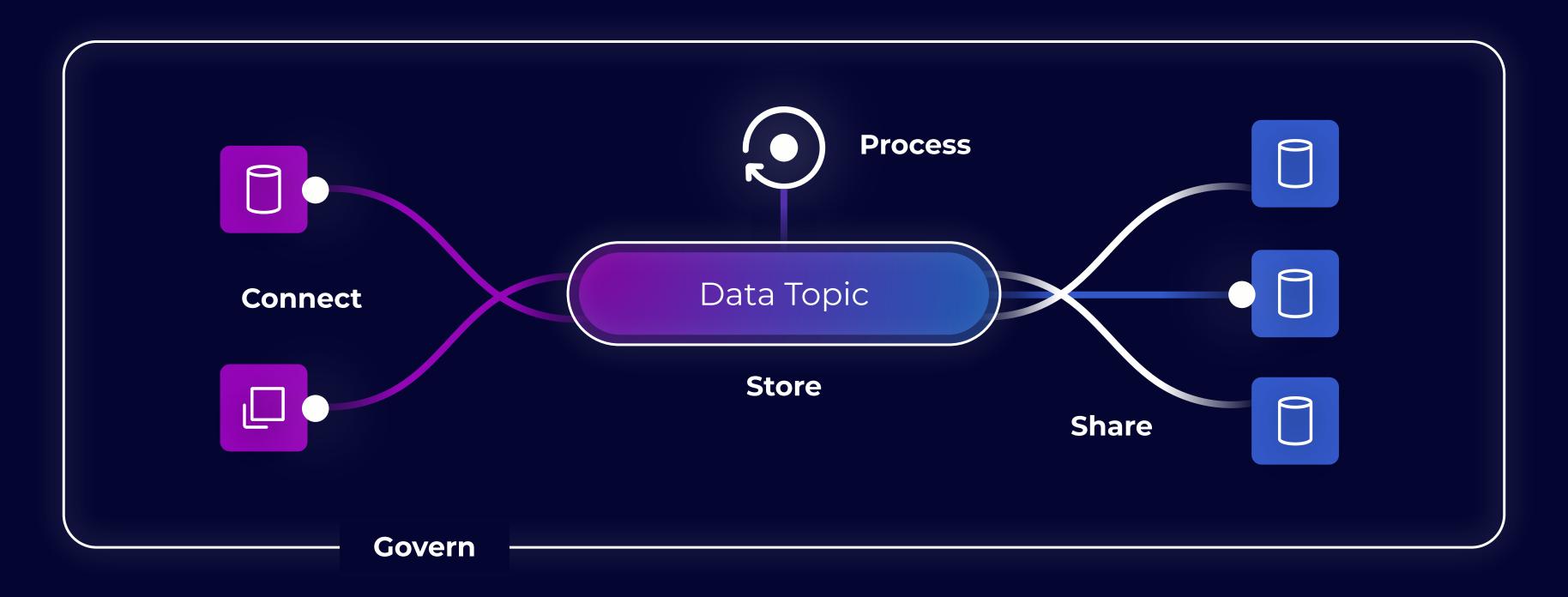




star+tree

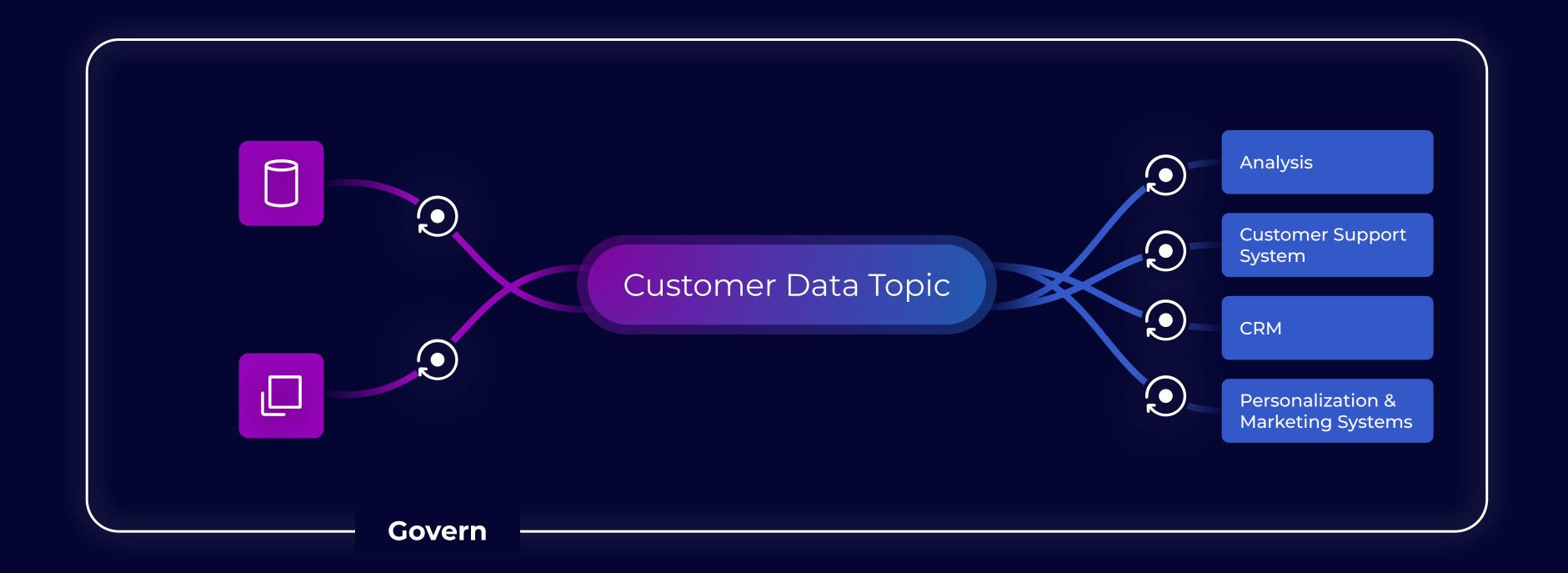


Breaking down the key capabilities of a data streaming platform



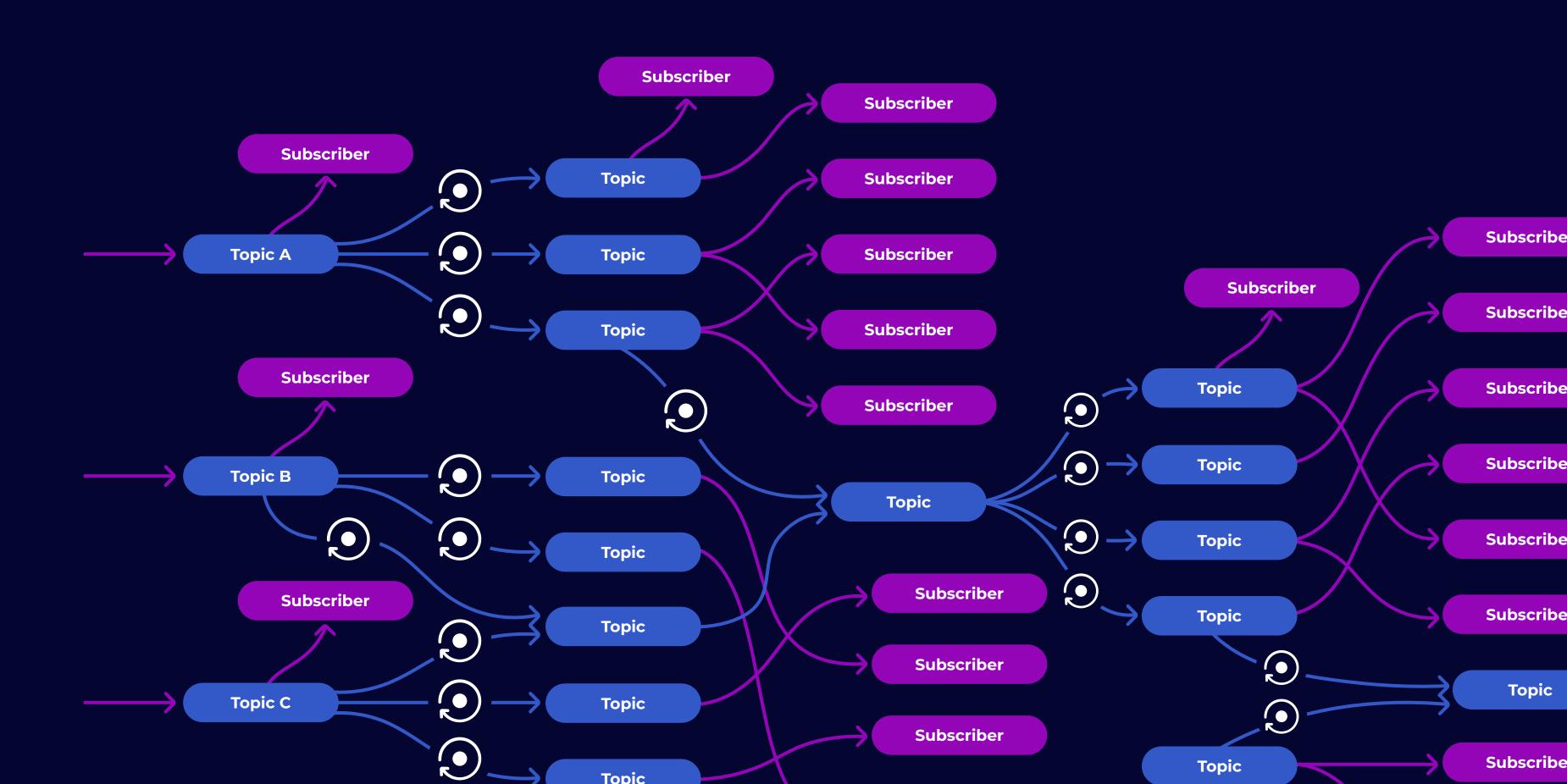


How this works in practice — customer data





This model scales throughout the business







Generative Al



DALL·E 2

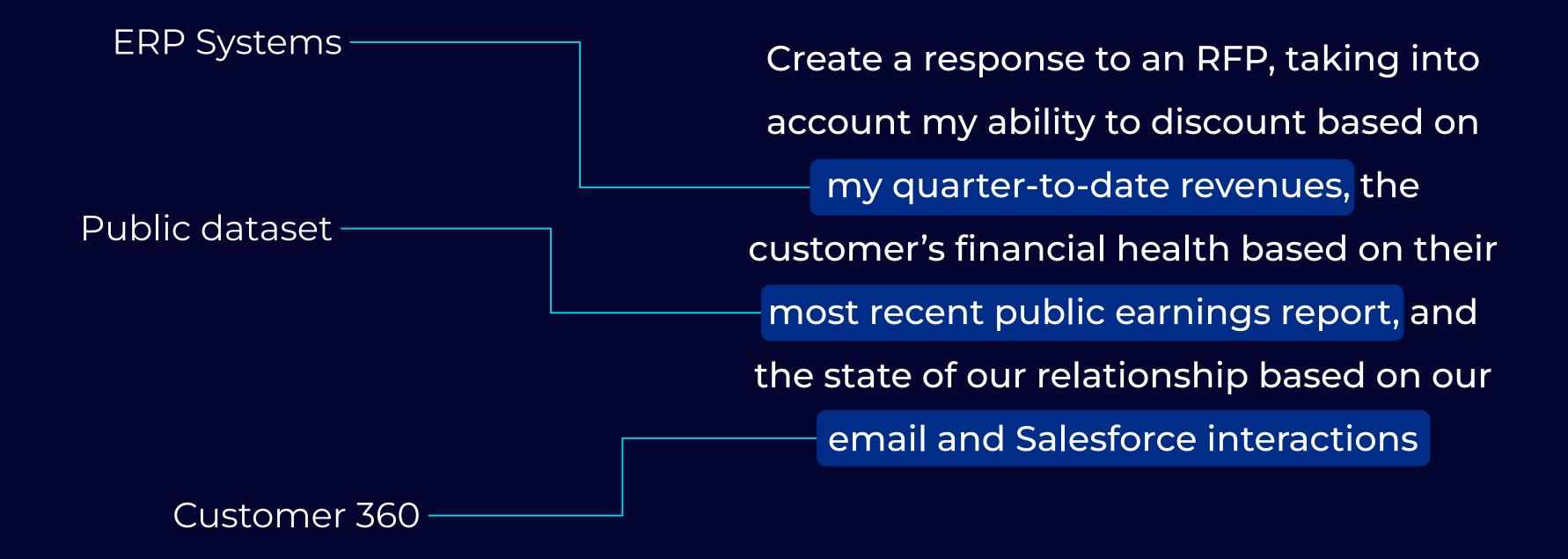
Large Language Models

ChatGPT

Google LaMDA

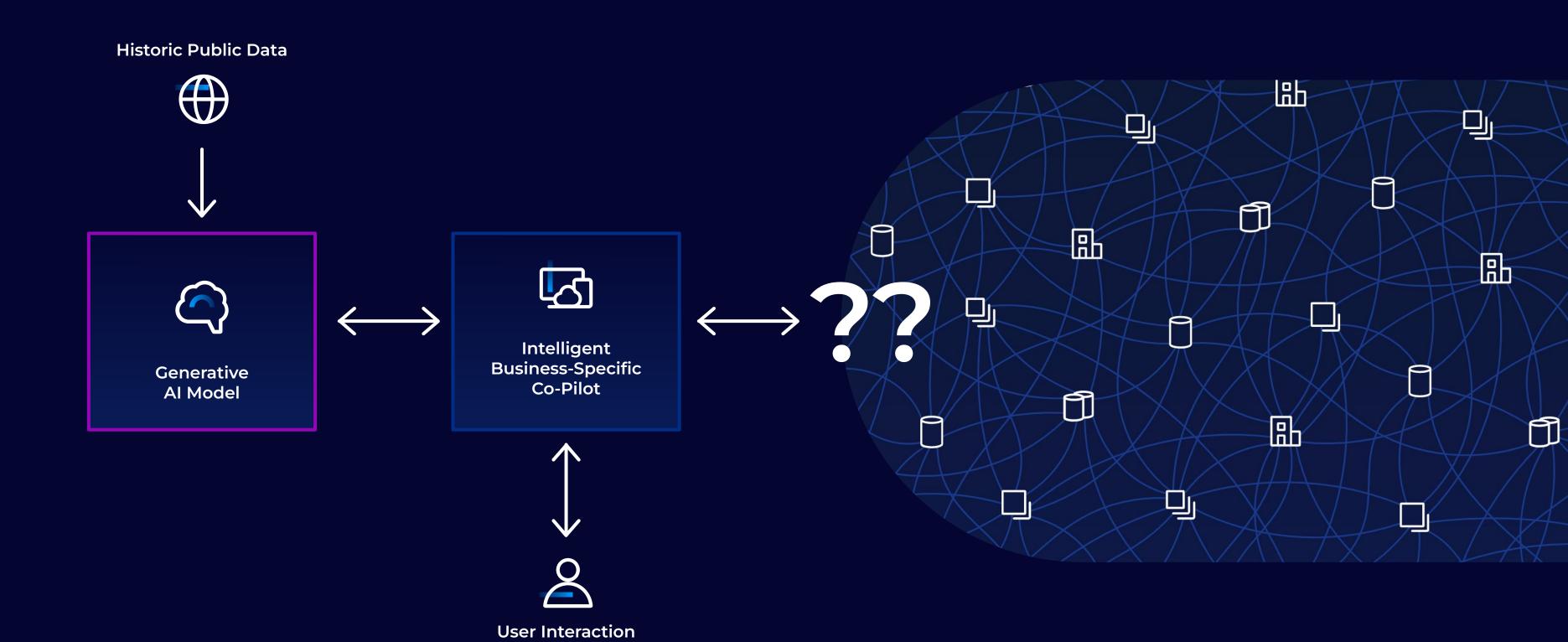


Generative Al: High-value use cases require high-value real-time data streams



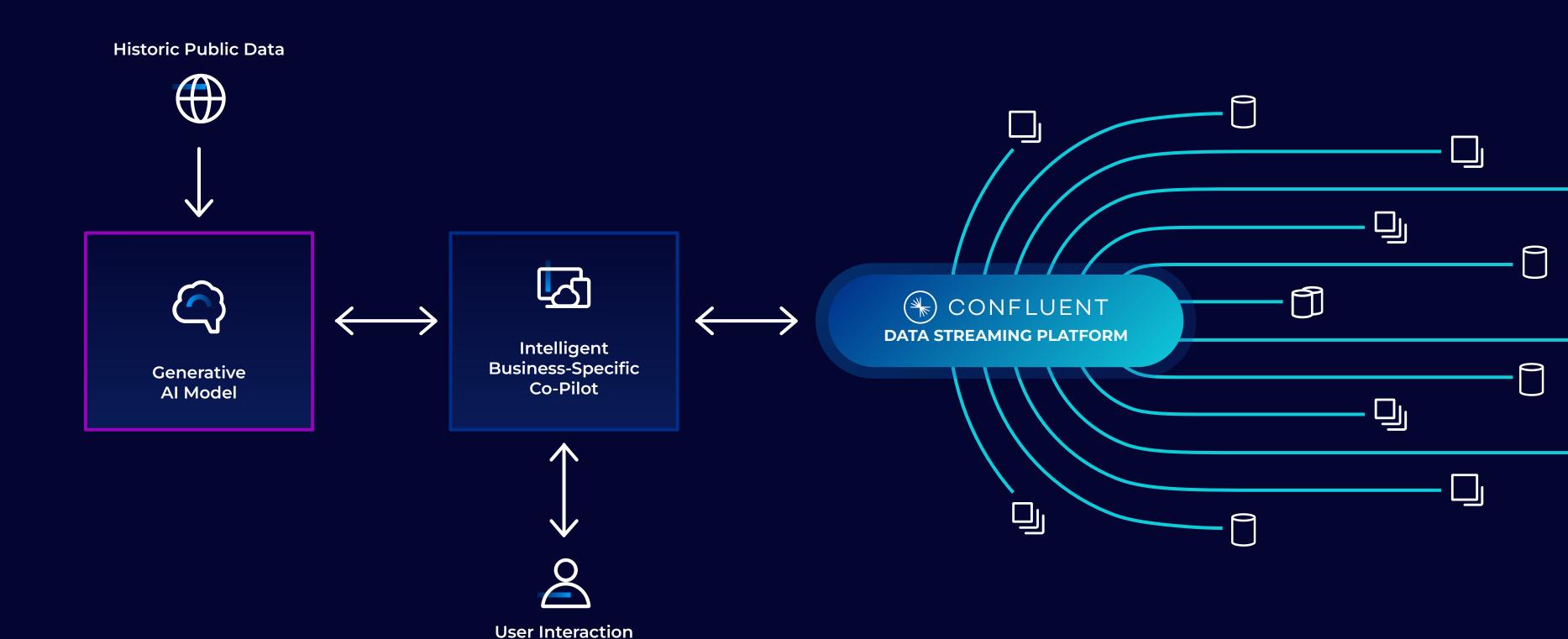
Generative Al: What does this look like in practice?





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Data Streaming is essential to Generative Al





The data streaming platform transforms data strategy challenges

Data Quality

A consistent source of truth with highly compatible data across the entire business in any environment

Governance

Highly secure sharing and discovery of quality data streams via metadata fueled catalogs & stream lineage

Data Integration

Simple integrations via fully managed source & sink connectors with in-flight transformations to delight every downstream team



intel

AHAM CAPITAL

Data

Strategy

Self-Service

Scaleable, fan-out topics with an easy-to-browse catalog empowers teams to find their own data, and a visual tool for less technical users

User Choice

End users across domains get to continue using their preferred systems and platforms, with better data

Architecture for Tomorrow

Maximum flexibility for all future data needs, with a real-time underpinning to power any use case







Driving cloud innovation with leading businesses





































Lufthansa

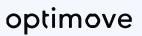






























Decentralization and the Data Streaming Platform

Why Streaming over Batch for decentralization?

Data Streaming
Platform Capabilities
and Impact

How Confluent can help?



SOLAPACHE ACHE KOLER

80% of the Fortune 100

70% of the Fortune 500

Data Streaming Platform Coordinates across silos





Confluent becomes the Central Nervous System to easily connect all of your apps & data systems





Getting started with Confluent Cloud is easy!

Have your team access a <u>free</u> <u>trial</u> account!



Request a personalized <u>TCO</u>
assessment for your current
Kafka needs or future Data
Streaming Platform



confluent.io/get-started/



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

"We chose event-driven architecture as the core of our platform, for which we needed a messaging service that gave us all the guarantees...not to mention that it had to be extremely scalable, highly available, and simple to use. Kafka hit all of these markers, and by using Confluent Cloud, our team was able to reduce the bottom line and operational burden."

— Ravi Vankamamidi, Senior Director, Technology, at Expedia Group

