

DATA
STREAMING
WORLD TOUR

PARIS



CONFLUENT

Modernizing Enterprise Integration with Confluent: A VINCI Construction Story



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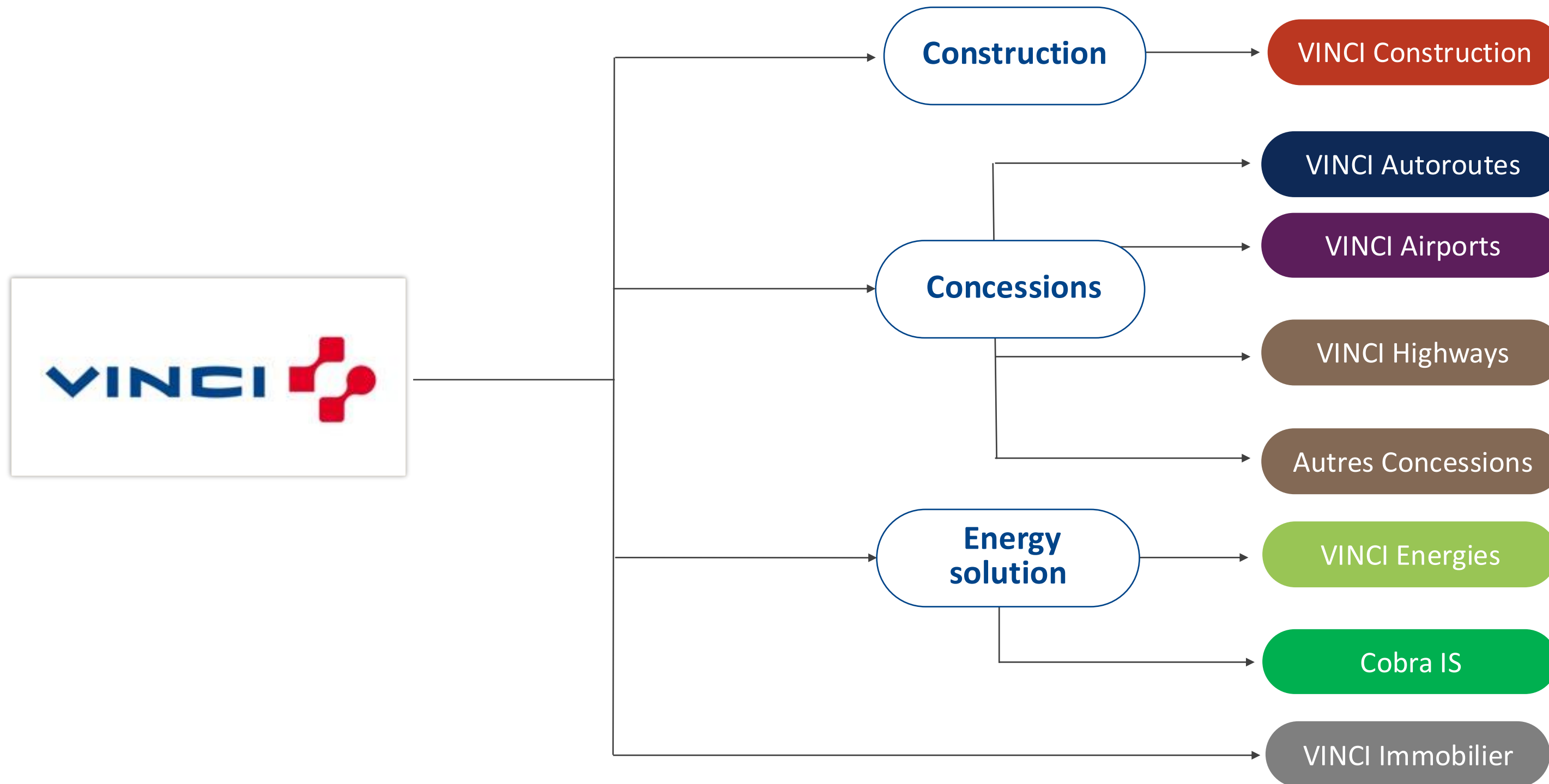
Modernizing Enterprise Integration with Confluent: A VINCI Construction Story

Lucas MUNDINGER & Yara AYOUB



About VINCI Construction

A global construction leader operating at scale, every day



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**CARTIER
FOUNDATION FOR
CONTEMPORARY
ART**

Paris - France



**THE EURALPIN
LYON-TURIN TUNNEL
TO DECARBONISE
MOBILITY**

France - Italy



**BUTIMBA
DRINKING
WATER STATION**

Mwanza - Tanzania

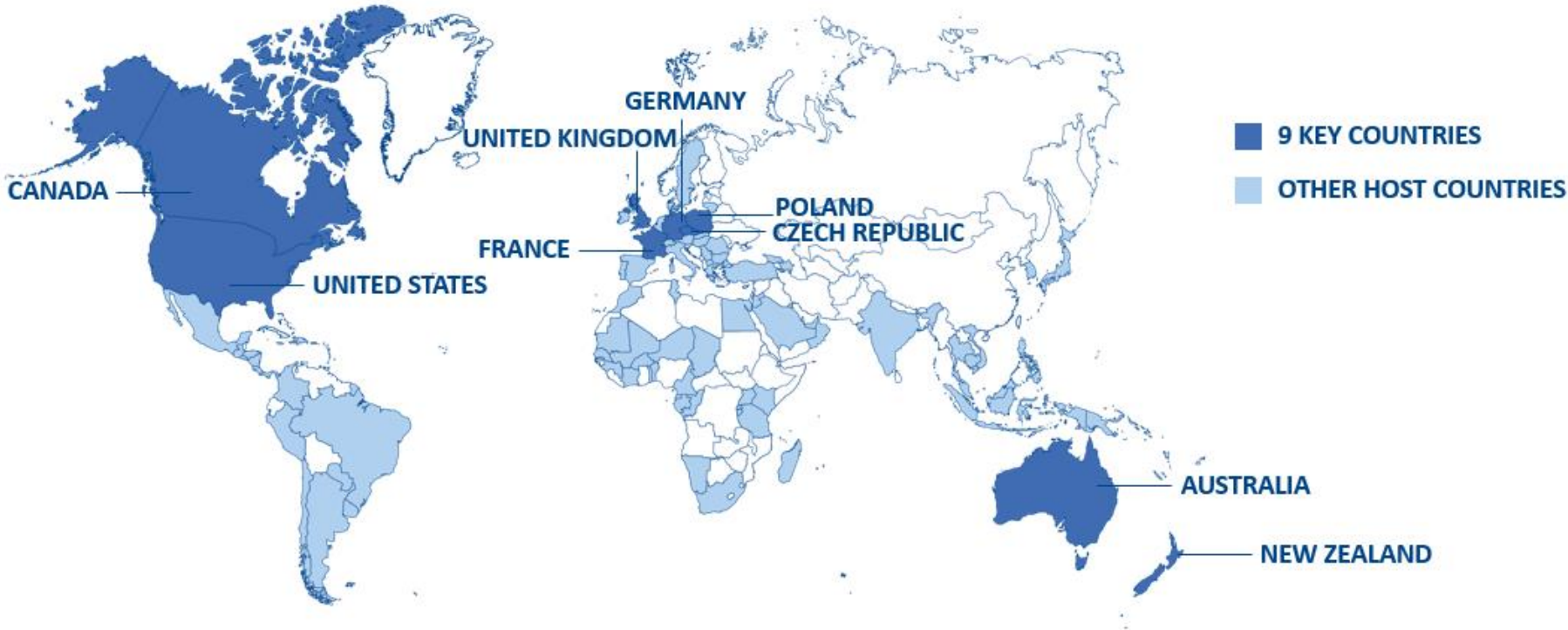


**TE AHU A TURANGA-
MANAWATŪ TARARUA
HIGHWAY**

New Zealand

About VINCI Construction

A global construction leader operating at scale, every day



117,000

employees

1,300

business units

100+

countries

75,000

projects per year

Decentralized organization built around local business units

One source of truth for people data

CPD manages the peoples across VINCI Construction



Common People Directory

VINCI Construction's central repository for managing employees and external-workers

137,000

employee and external-worker records

85

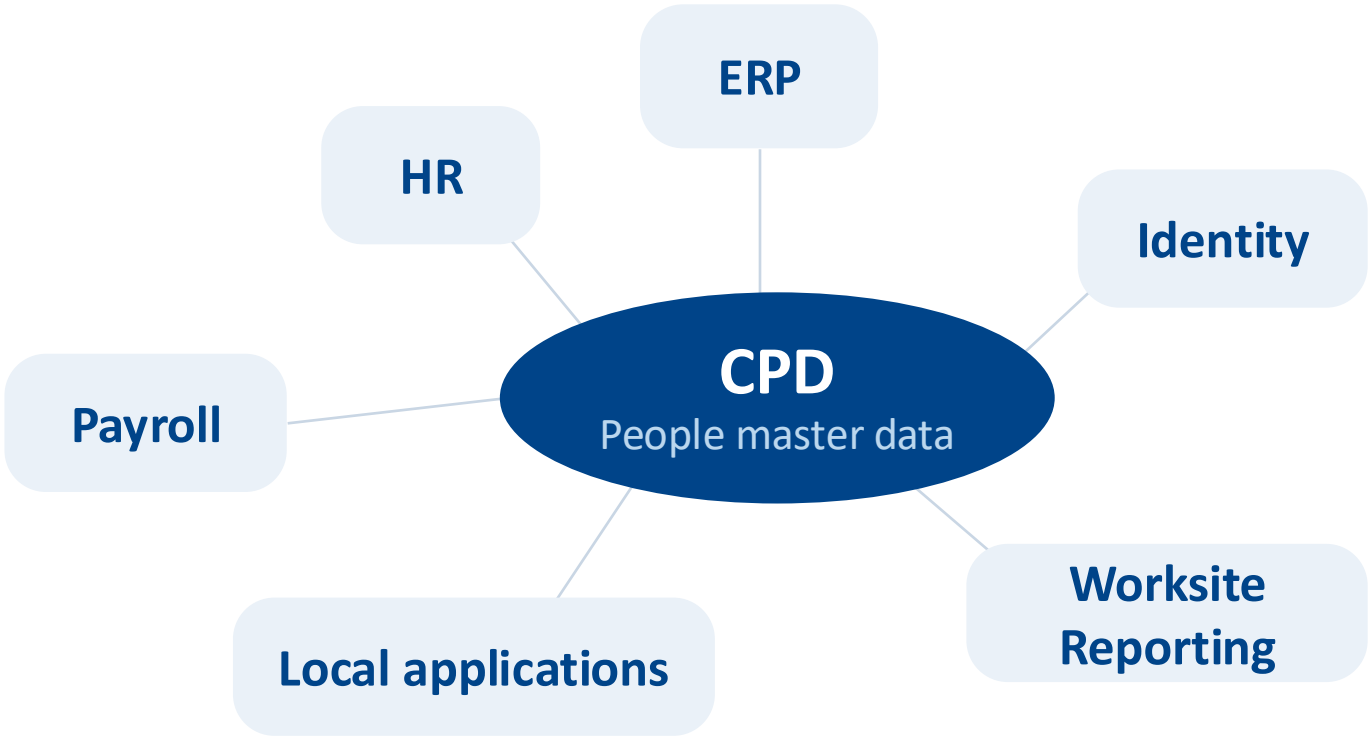
consuming applications

One centralized repository supporting a large and diverse application ecosystem

The integration challenges

The same people data supports systems with different purposes and consumption patterns

Master data shared across many systems



The integration challenges

Need for consistency

Every consumer needs reliable and coherent people-data updates

Faster availability

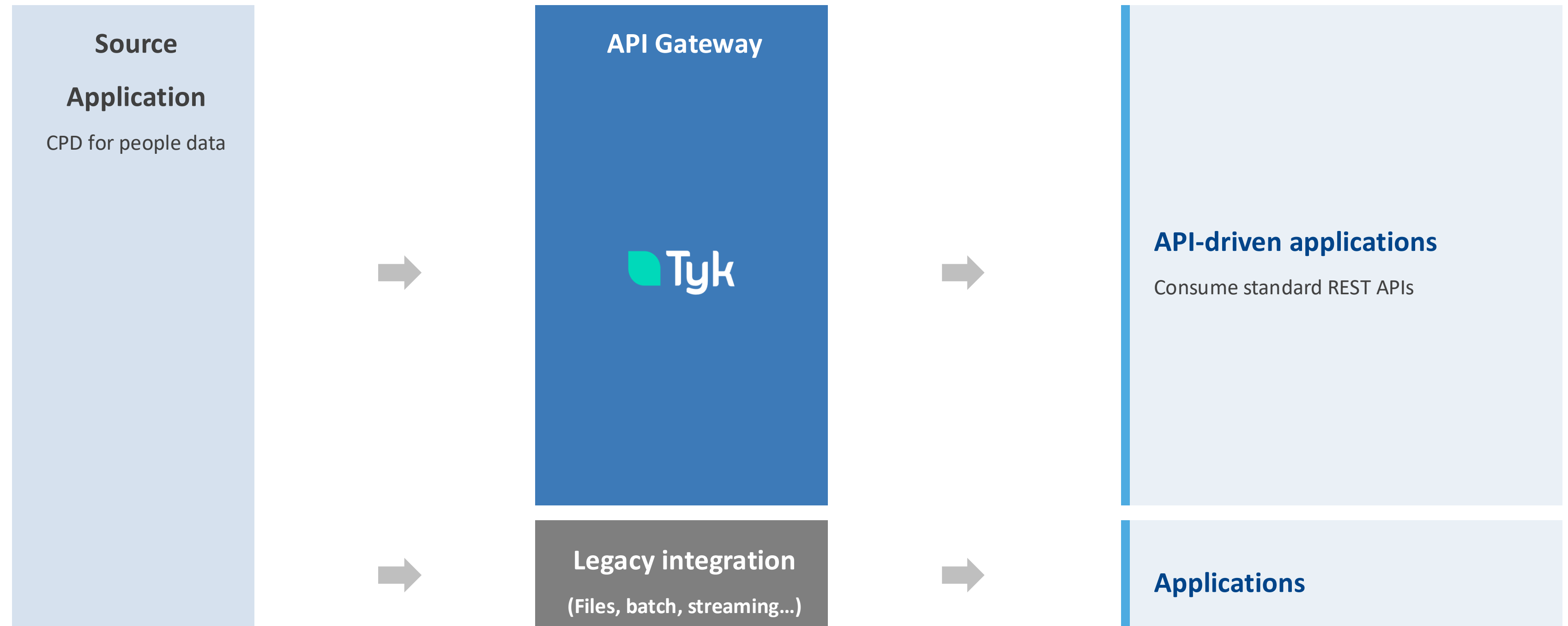
More applications expect changes to be available sooner

Independent consumption

Each application needs to consume data according to its own use case and pace

Our previous situation

API as the main integration pattern



Limits of the previous streaming solution

The existing model could no longer provide the independence, reliability and operability we needed

Limits of our previous streaming tool

Unreliable event sequencing

Changes could be consumed in an unexpected order.

Limited operational visibility

Monitoring and troubleshooting were difficult.

Disruptive replay

Reprocessing historical events required complex operations and could interrupt service.

Shared offset system

All topics within the organization share the same offset counter.

Architecture and platform choices

Kafka provided the event architecture. Confluent made it operational.

Why Kafka

Reliable event ordering

Consumers process events in the expected sequence

Built-in replay

Consumers can replay historical events from a selected offset

Independent consumers

Each application consumes events at its own pace

Reusable business events

Replacing repeated polling of the source applications APIs

Why Confluent

Fully managed cloud

SaaS delivery with elastic scaling, no cluster to operate

Kafka expertise

Access to technical expertise and support

Operational visibility

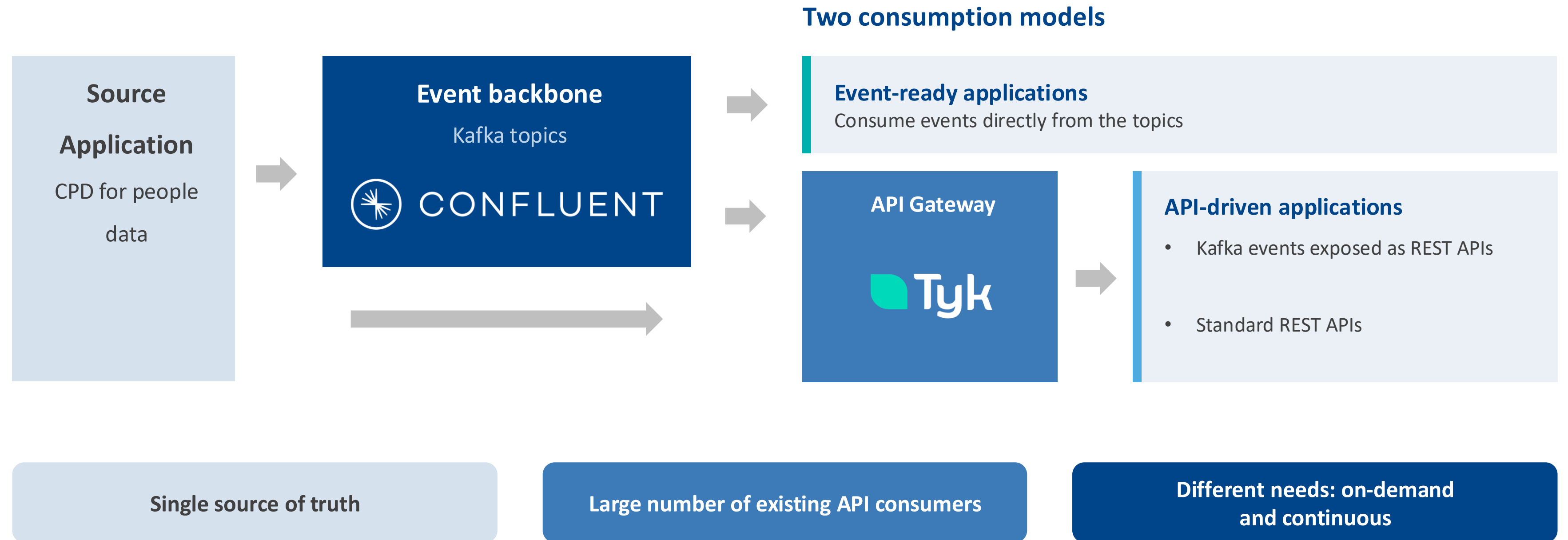
End-to-end visibility across topics, consumers and data flows

Accelerated adoption

Faster onboarding for producers and consumers

A pragmatic approach to event streaming

Events and APIs side by side: each application consumes the way that fits its use case

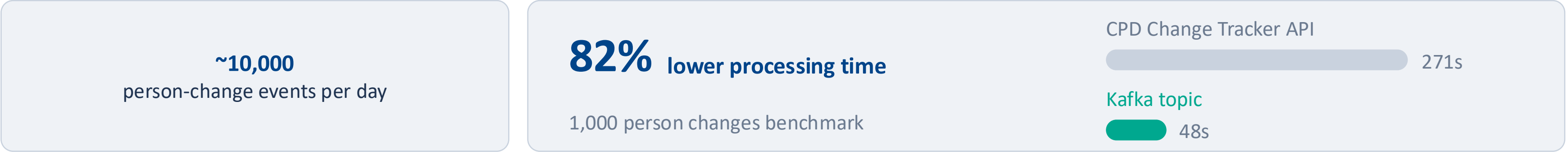


Right pattern per use case | No disruption for existing consumers | Reusable events

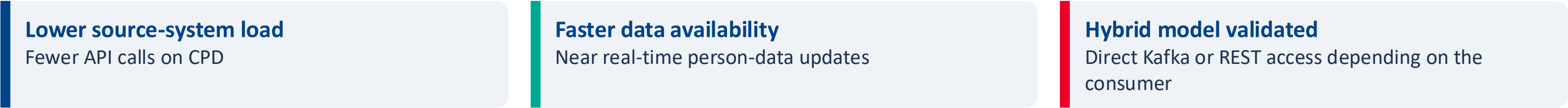
Our first use case

The CPD person-change event stream

Scale and performance validation



Outcomes



The starting point of our event-driven journey

Key takeaways and what's next

Looking back at what we've built, and charting the roadmap beyond people data

What we learned

We needed solid infrastructure, documentation, and monitoring before our first clients trusted the platform.

Connecting directly to Kafka is easier than we expected for some applications.

New-consumer onboarding requires a clear process.

What comes next

Add new use cases beyond people data.

Onboard new consumers to our existing topics progressively.

Train our teams and show partners what the platform can do.

From a single use case to an enterprise known event platform

Thank you!



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Merci!

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