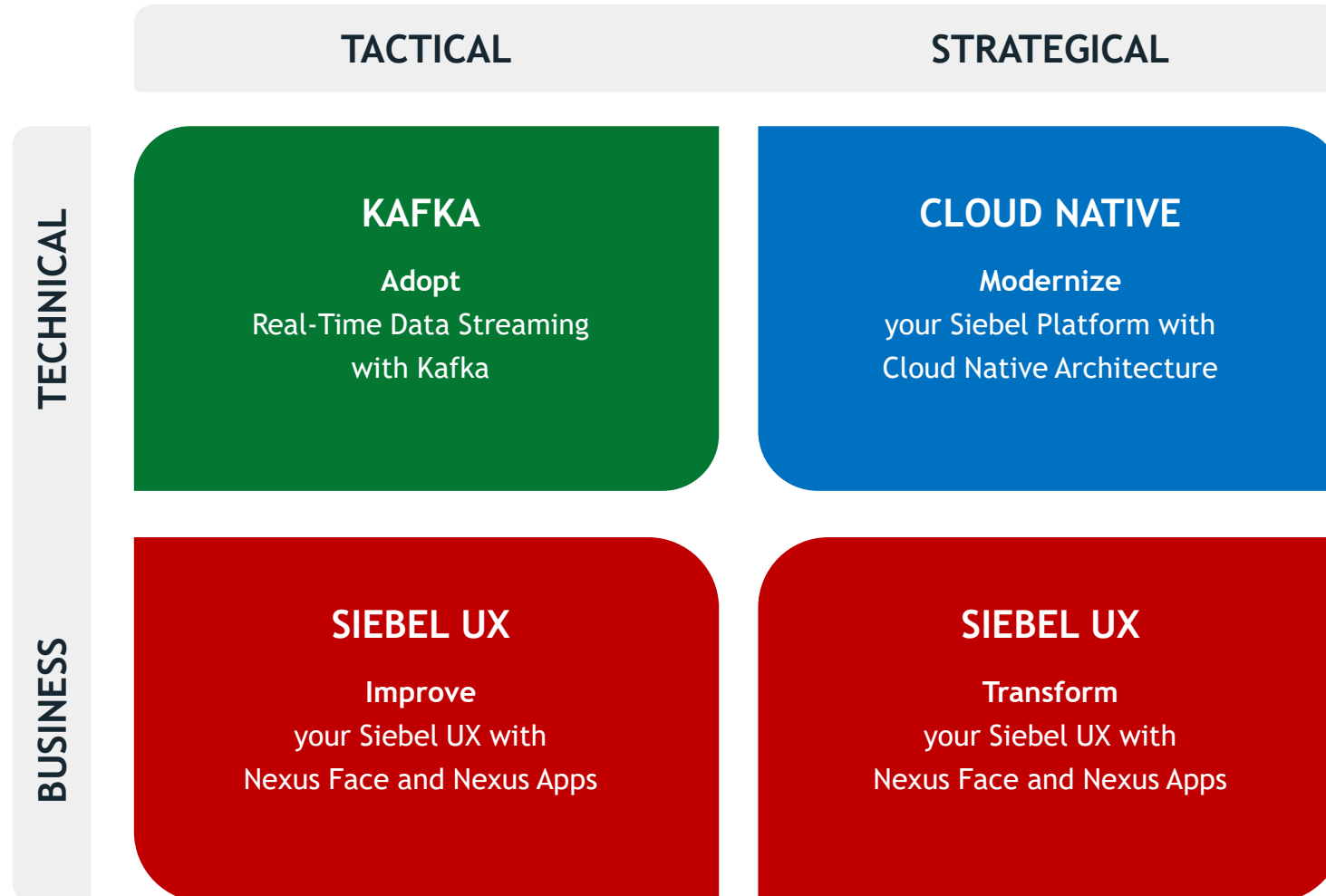


Data Streaming with Kafka

2021

Three initiatives to turn your Siebel into the best non-SaaS CRM





Adopt Real-Time
Data Streaming
with Kafka

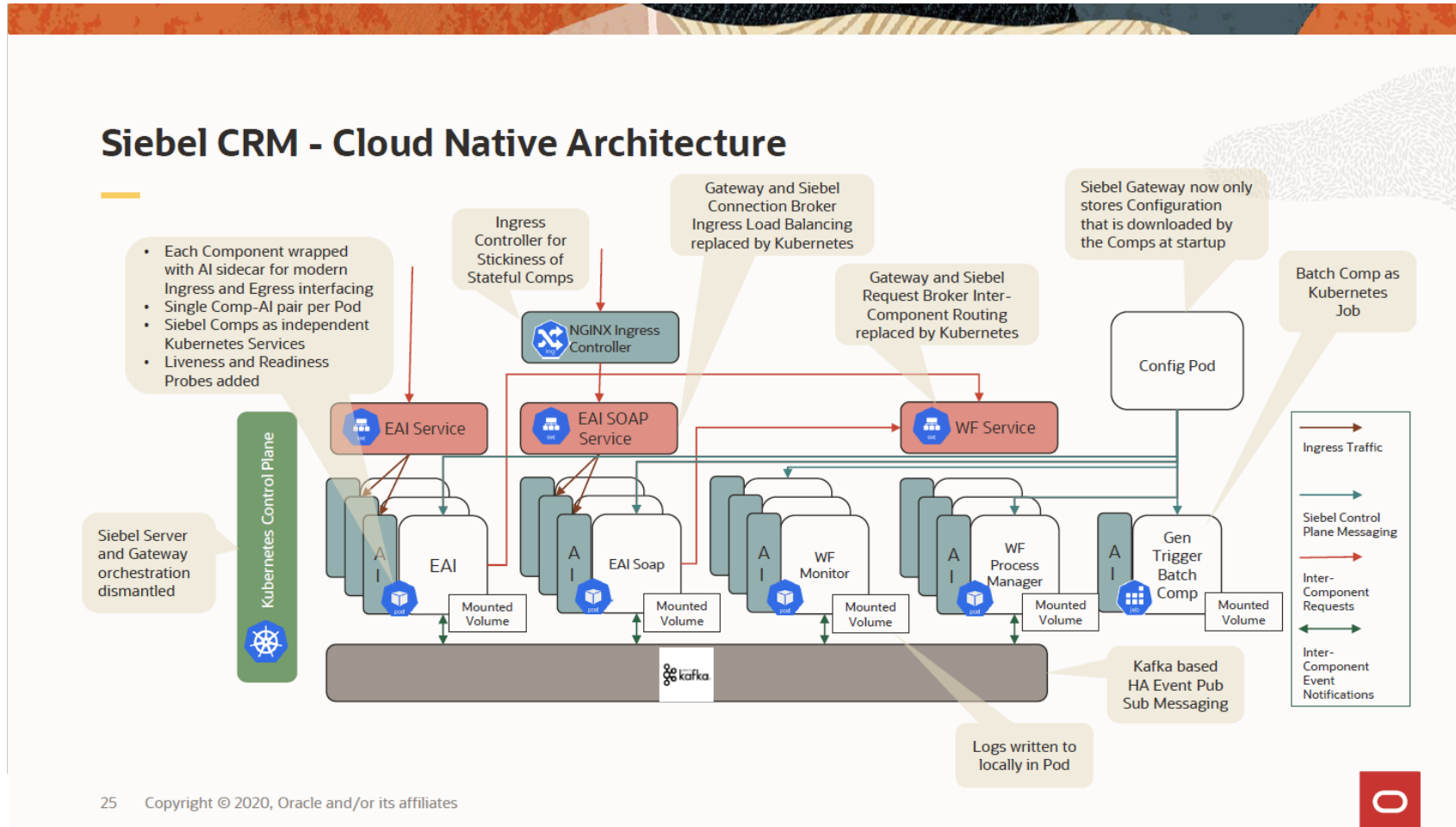
Siebel CRM Cloud Native Sessions: <https://bit.ly/SiebelCloudNative>

Sep 15 – Sep 17 **Sep 22 – Sep 25** Sep 29 – Oct 02

The image shows a grid of 8 webinar sessions. The middle row, containing three sessions, is highlighted with a red border. Each session card includes a title, duration, a 'Read More' link, and a 'Watch Webinar' button.

Session Title	Duration	Read More	Watch Webinar
Learn how to Optimize Customer Advocacy with Siebel Loyalty	45 mins	Read More	Watch Webinar
Siebel CRM in 2020 - Key Benefits & ROI	45 mins	Read More	Watch Webinar
How Oracle can help you Transform your Siebel CRM Application	30 mins	Read More	Watch Webinar
American Airlines' Transformation to Oracle Cloud Infrastructure	45 mins	Read More	Watch Webinar
Introducing Oracle Digital Experience for Communications – the Modern Cloud Native Solution for Siebel CRM Customers	45 mins	Read More	Watch Webinar
Siebel CRM Cloud Native Architecture	45 mins	Read More	Watch Webinar
Siebel CRM Cloud Native Architecture - Technical Deep Dive	45 mins	Read More	Watch Webinar
Siebel CRM Customer Success for Telco	45 mins	Read More	Watch Webinar

Kafka comes with the Siebel Cloud Native Architecture

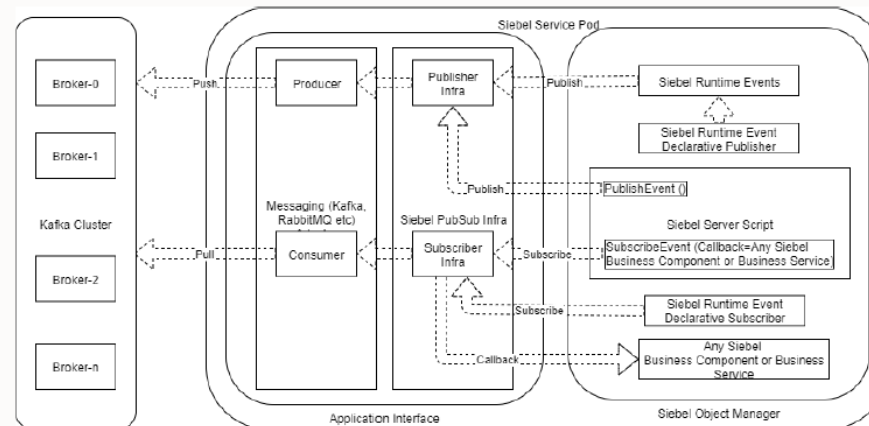


Siebel Kafka integration: background and demo

Siebel Event Driven Framework

Cloud Native Pub Sub Messaging

- Pub Sub Based Event Messaging Infrastructure – adapter based so can work with Kafka, AMQP etc.
- Kafka cluster fault tolerant, auto scalable and highly available.
- Scripting API to Publish and Subscribe to Events.
- Declarative Configuration to Publish External Events on Siebel Runtime Events
- Declarative Configuration to Subscribe to External Events with Callback to any valid Siebel Business Service Method
- Other internal touchpoints for PubSub of External Events can be added depending on requirements



KAFKA

01

TECHNICAL CHARACTERISTICS

- Delivers messages with very low latency
- Scales to a thousand brokers and trillions of messages per day
- Stores streams of data safely in fault-tolerant cluster
- Processes streams of events in real time

02

SIEBEL RELATED NOTES

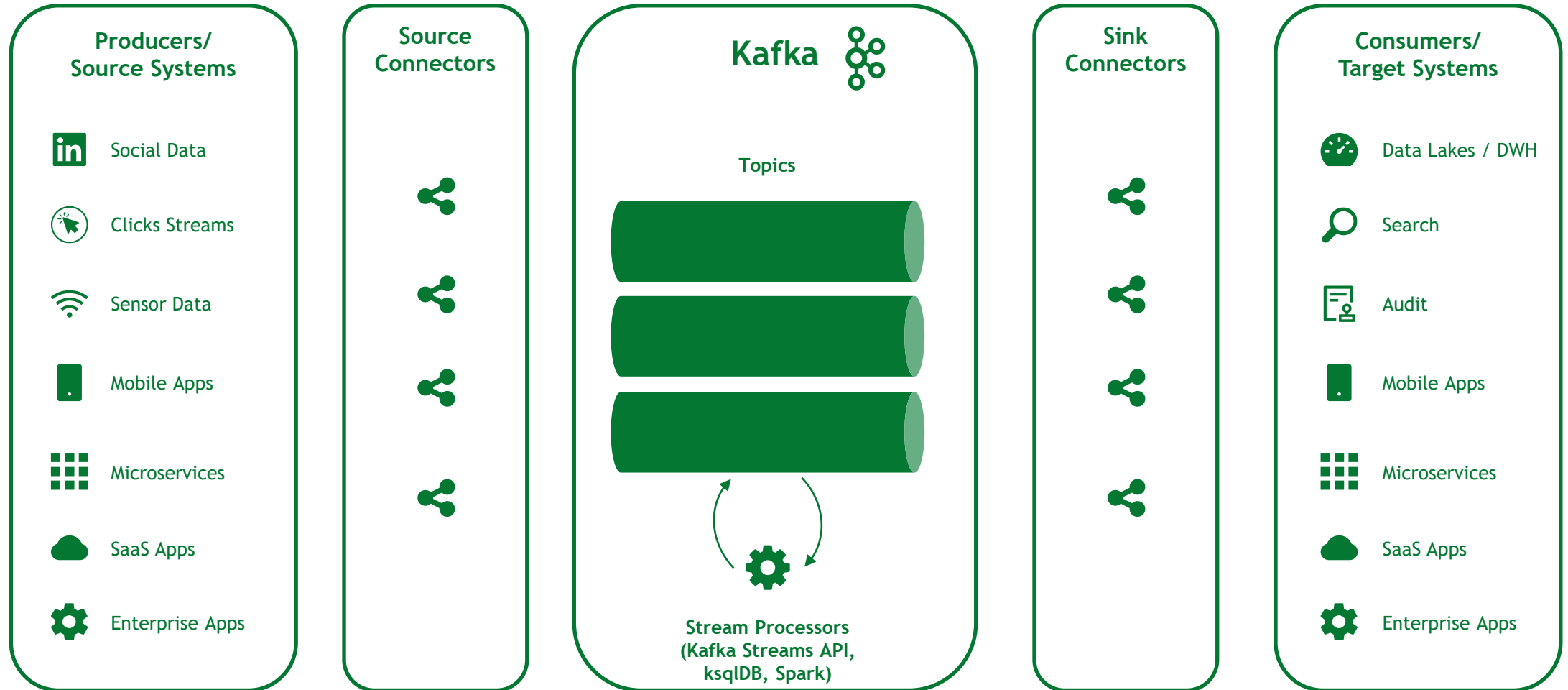
- Expected in 2021; update to the latest version is required
- Publish and subscribe to events declaratively and using scripting
- Siebel Cloud Native Architecture uses Kafka internally
- Now Siebel can work with Kafka using CDC or custom Connectors

03

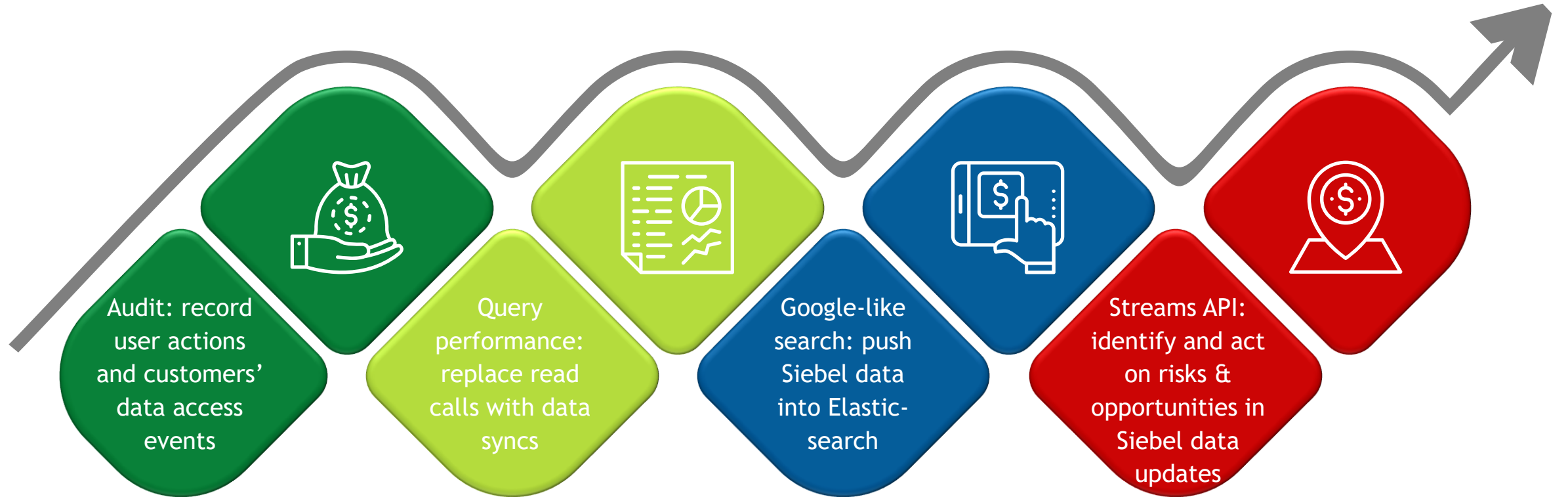
USE CASES

- Audit of the customers' data access events
- Speed up queries: replace read calls with data syncs
- Google-like search: push Siebel data into Elasticsearch
- Identify and act on risks and opportunities in Siebel data updates using Streams API

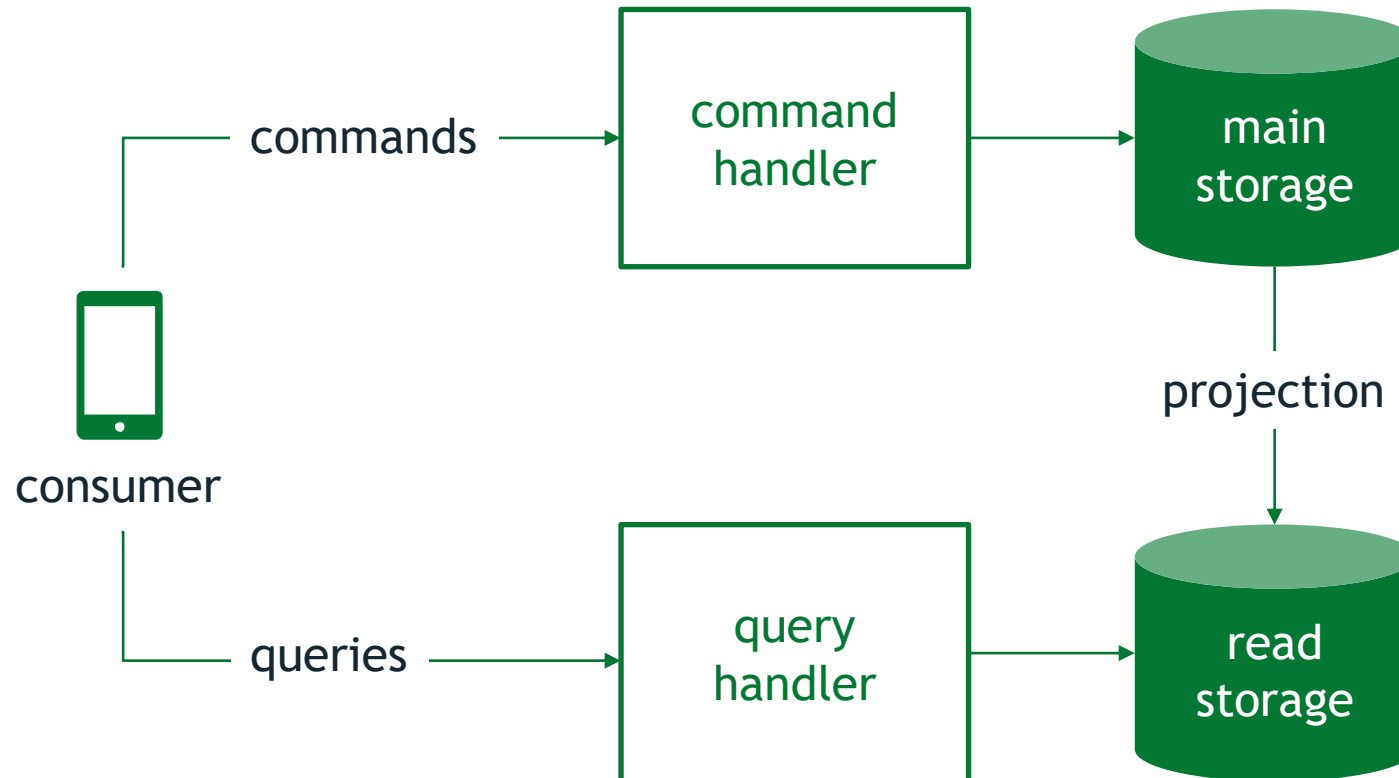
Data streaming with Kafka: Real-time performance and reliability



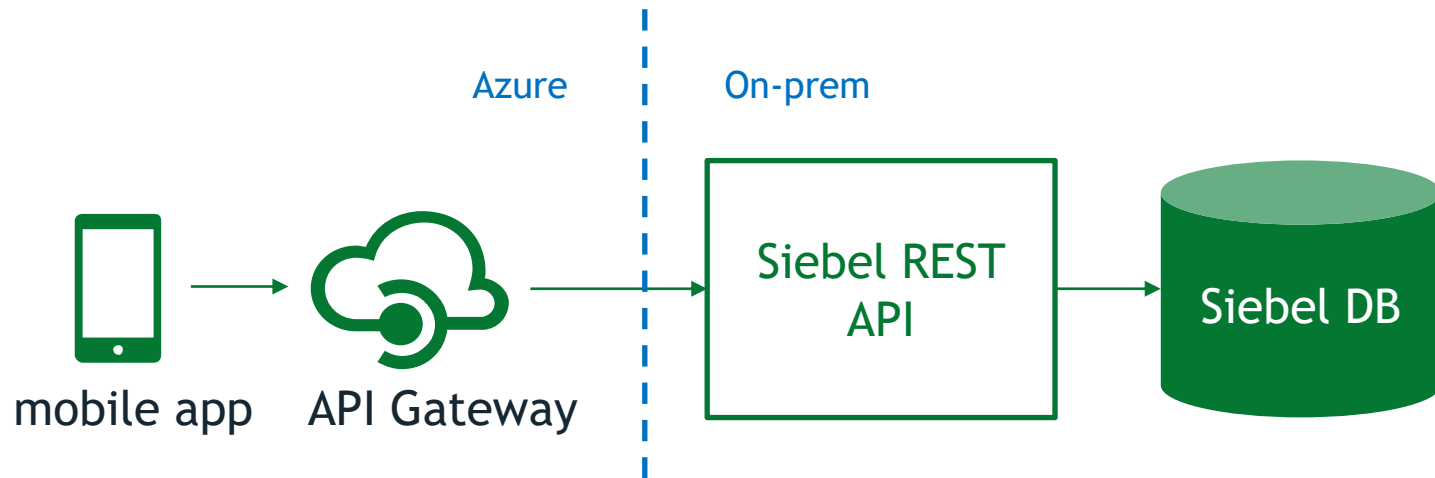
Common Kafka Usage Scenario for Siebel applications



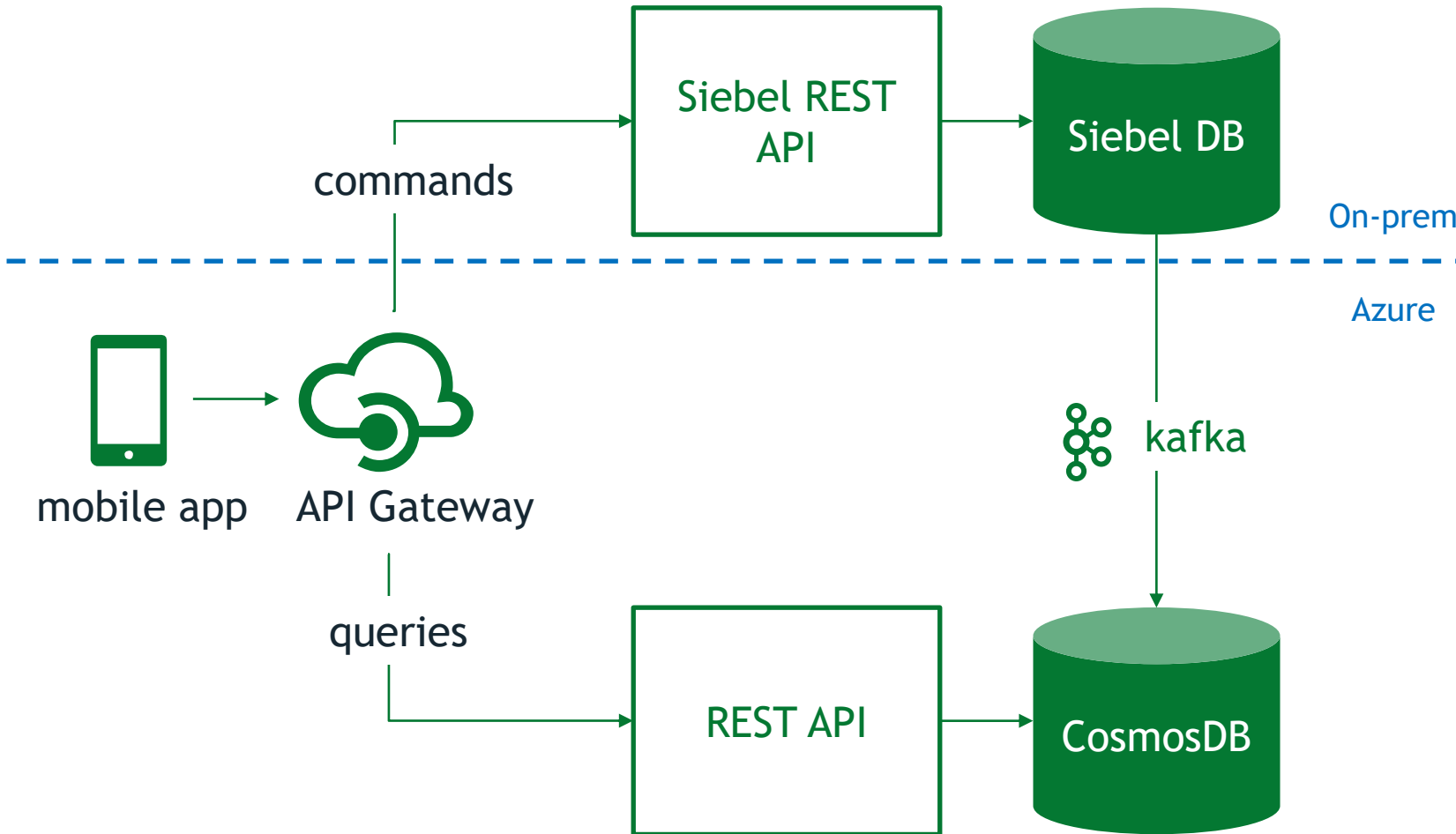
Speeding up queries with CQRS pattern



Speeding up queries in the Siebel CRM ecosystem



Speeding up queries in the Siebel CRM ecosystem



Read Performance Gain

- Record count in DB, BC, CosmosDB
 - Accounts 600k > 550k > 500k
 - Assets: 85m > 2.5m > 1m
- Flat by System ID - 1.2-1.7x
- Hierachy by System ID - 2.5-3.8x
- Large Response Size - 5.5-13.5x

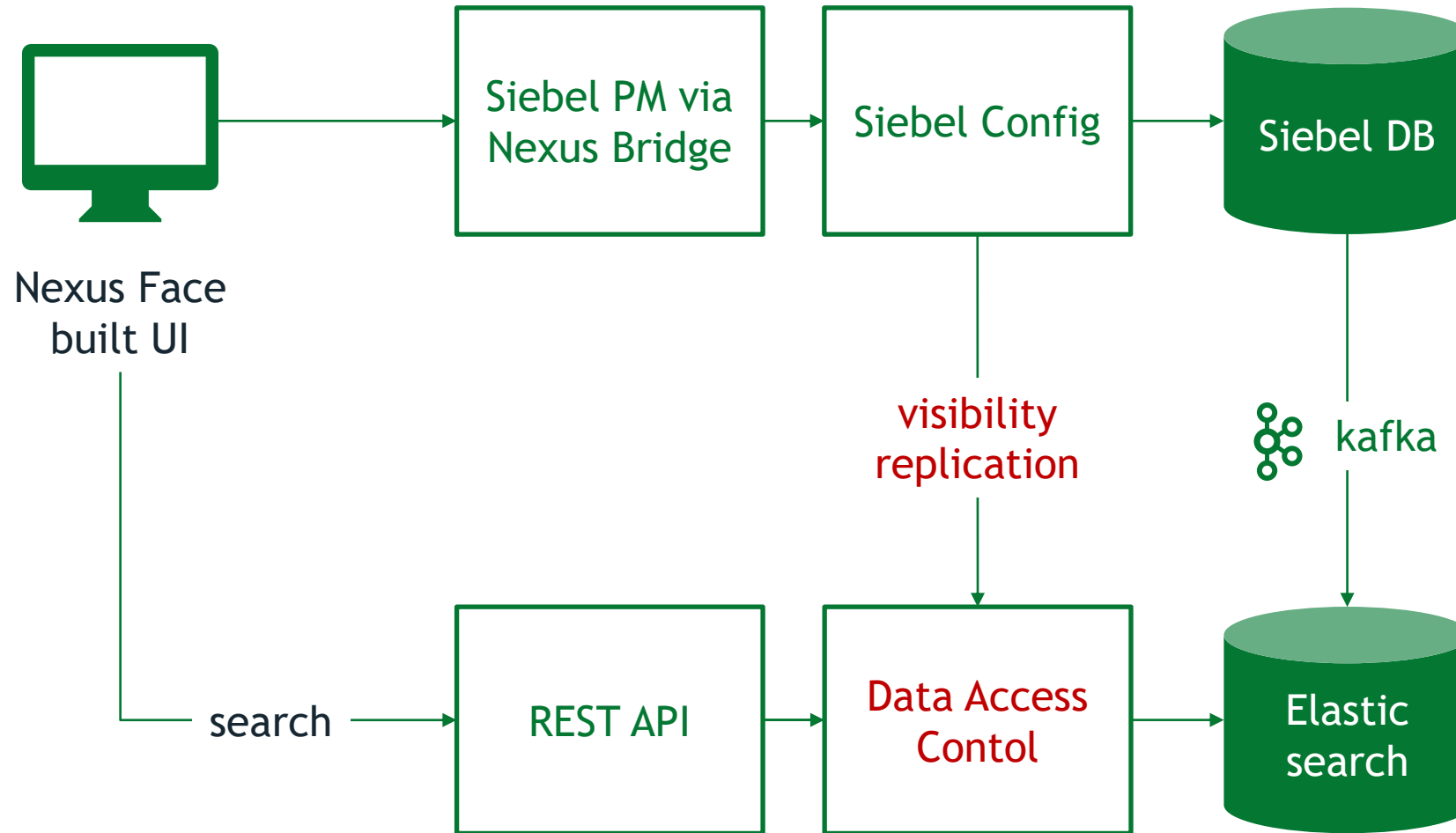
When to apply

- Pushing Siebel data into «Digital» applications
- Replacing Siebel VBC by data streaming from source systems

Current Kafka integration options for Siebel

- Source connector - CDC (Debezium, GoldenGate, Striim, etc)
- Sync connector - REST API based

Implementing Google-like search in the Siebel UI



Kafka is emerging as a middleware platform

1

SUPPORT OF VARIOS PATTERNS

While Kafka's core integration pattern is event-based, it also supports Fire-and-Forget, Publish / Subscribe, Request-Response / RPC, Batch and other patterns.

2

SINGLE SET OF TOOLS

Kafka provides all required middleware components, e.g., messaging, storage, connectors, processing. How many products do you currently run in your middleware stack?

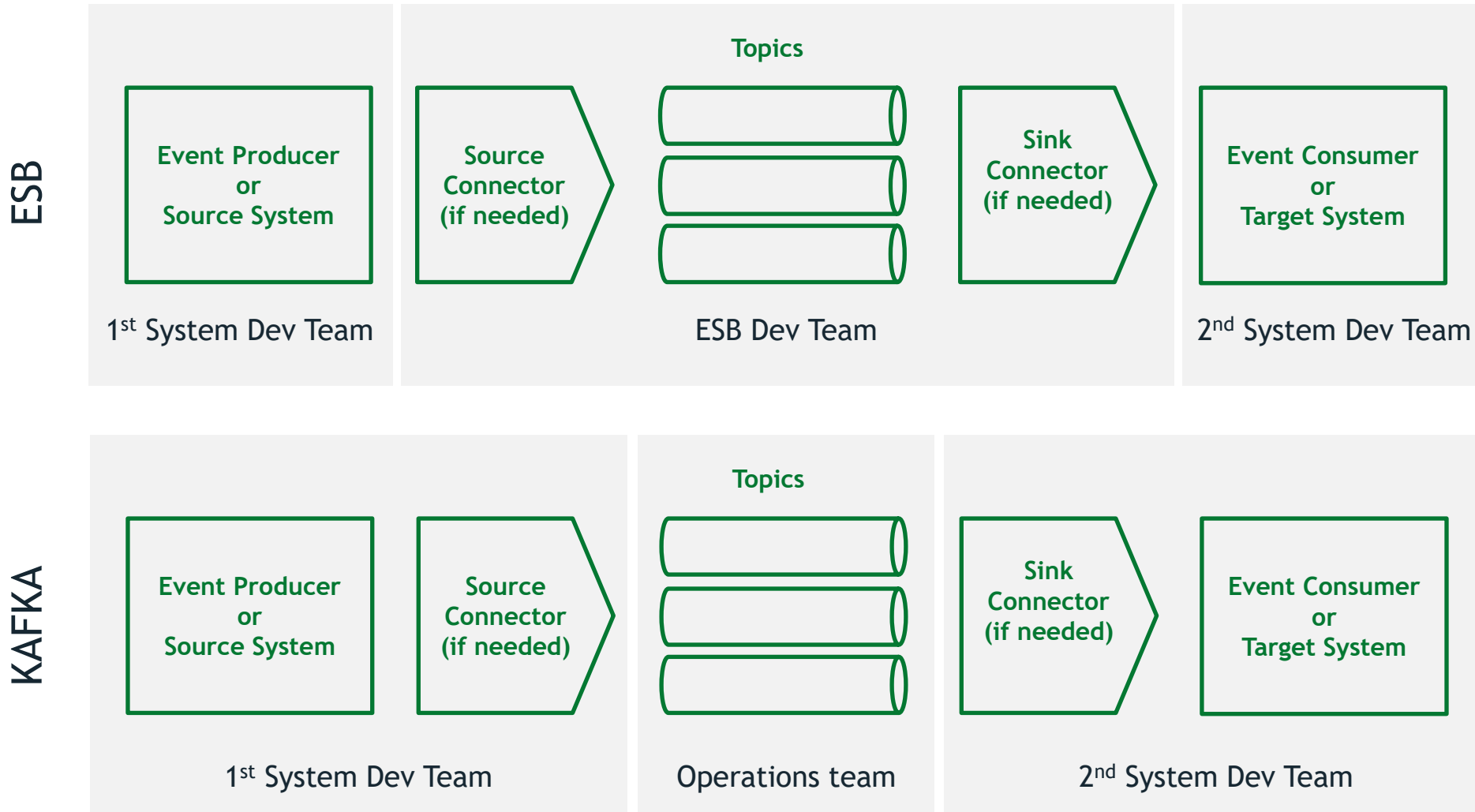
3

RELIABLE & SCALABLE INFRASTRUCTURE

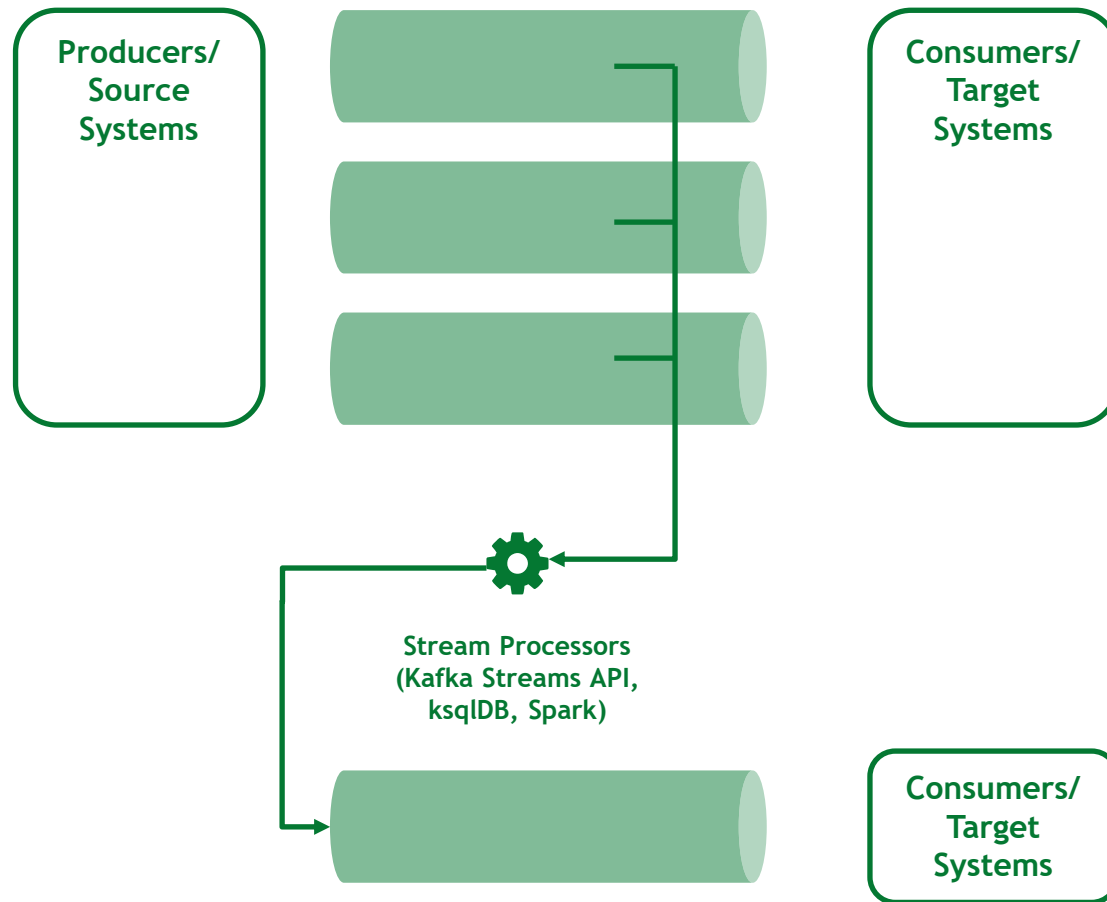
Kafka offers extreme scale and throughput while being highly available. With the decoupling of clients, it solved the problems of backpressure or unavailable consumers.

<https://www.kai-waehner.de/blog/2019/03/07/apache-kafka-middleware-mq-etl-esb-comparison/>

Organizational implications of Kafka's "Dumb pipes smart endpoints" approach



Stream processing



<https://kafka-tutorials.confluent.io/>

Present Kafka topics as

- Streams
- Tables

Two Kafka's technologies

- ksqldb (SQL like)
- Streaming API (Java, Scala)

Capabilities

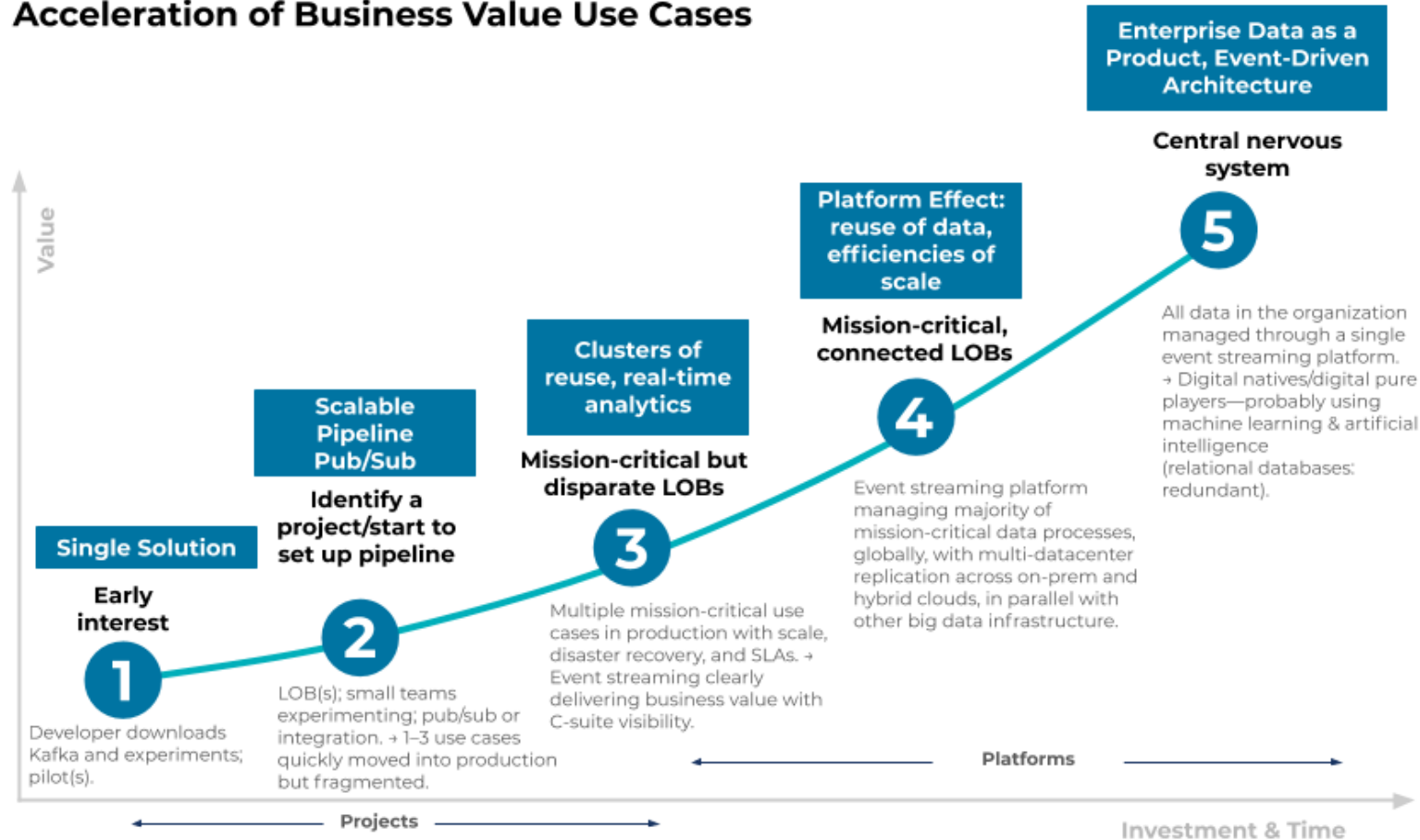
- Transformation of messages
- Filtering
- Aggregation
- Joining topics
- Time windowing

Main use-cases: real time action on

- Detected anomalies
- Prediction / Recommendation
- Analytics

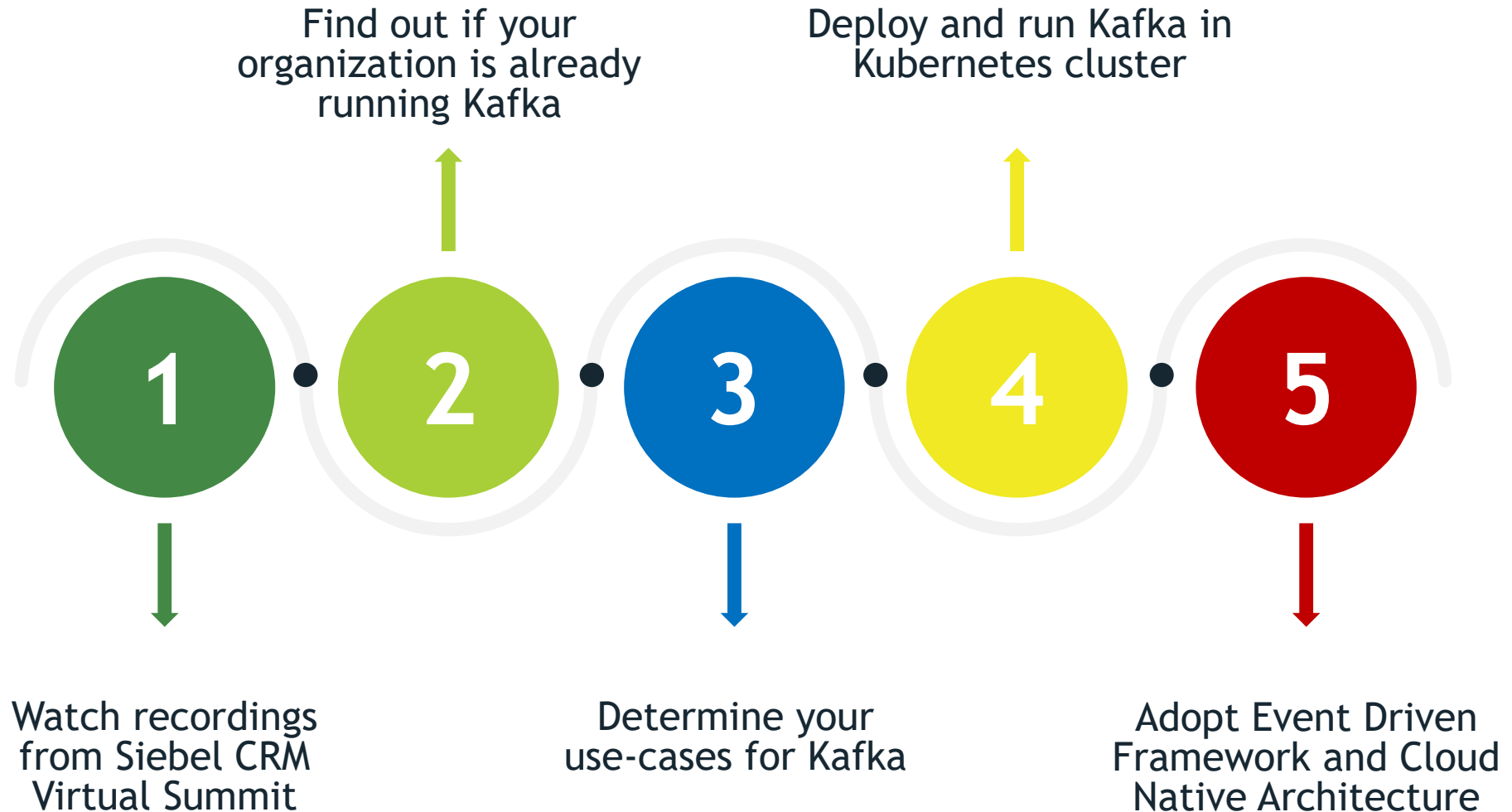
Adoption of Kafka in the enterprise

Acceleration of Business Value Use Cases



<https://www.confluent.io/blog/event-streaming-benefits-increase-with-greater-maturity/>

Your next steps





Series of webinars | Dec 2020

Three initiatives to transform your Siebel CRM in 2021

