

AEROSPIKE

# The Data Driven Edge - Where is your Edge?

5 Key Actions to Transform your Business Leveraging the Edge



# Today's speakers



**Danny Bedgood**  
Global VP, Vertical Industry  
Solutions, Aerospike



**Ben Gamble**  
Product Champion - Office of  
the CEO, Ably

# Agenda

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- How the Edge is defined is changing - where is your Edge?
- Using data as a primary driver for defining your Edge
- How the industry is evolving
- Business decisioning at the Edge
- Architecting for making decisions at the Edge
- Show me the money...monetization possibilities with good decisioning at the Edge
- Becoming smarter about what your customers care about leveraging all your Edge data

# How the Edge is Defining Smart Industries



## INDUSTRIAL MANUFACTURING

Grow global GDP by 0.8% (\$816B)  
in the next decade (Deloitte)



## TRANSPORT & LOGISTICS

Reduce damaged goods by  
30-50%, increase container  
utilization by 10-25% (McKinsey)



## SMART CITY & INFRASTRUCTURE

\$158B market by 2022 (Visual  
Capitalist), represents 23% of  
all IoT projects (Microsoft)



## SMART BUILDING

Reach 23% CAGR through  
2025, driven by energy, space,  
comfort (Mordor)



## OIL & GAS

\$43B market by 2024, driven  
by exploration, production,  
retail (Research & Markets)



## AVIATION

Reduce delays that cost \$28B  
per year (FAA-Nextor)



## HEALTHCARE

Market for remote patient  
monitoring is booming in the  
COVID era



## CONNECTED VEHICLE

\$540B market by 2025, driven by  
safety, maintenance, marketing  
(BusinessWire)

# Edge Decision Ecosystem

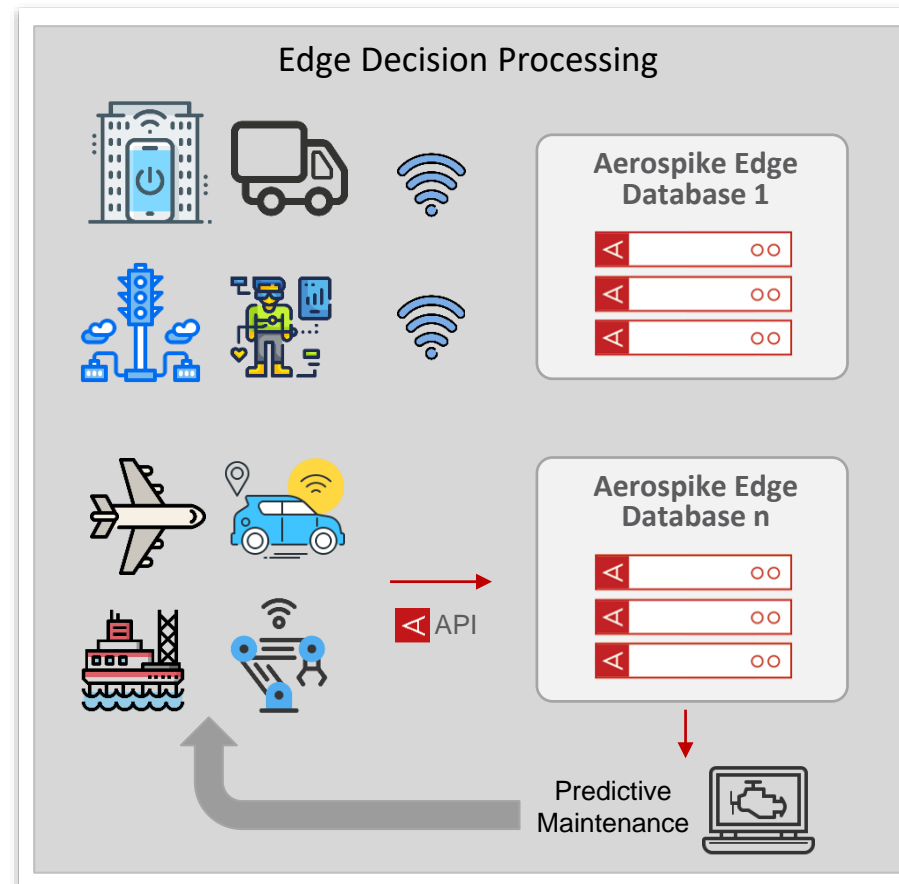
## Process Edge Data at Lightning Speed

Collect billions of daily processing events from widely dispersed devices and applications

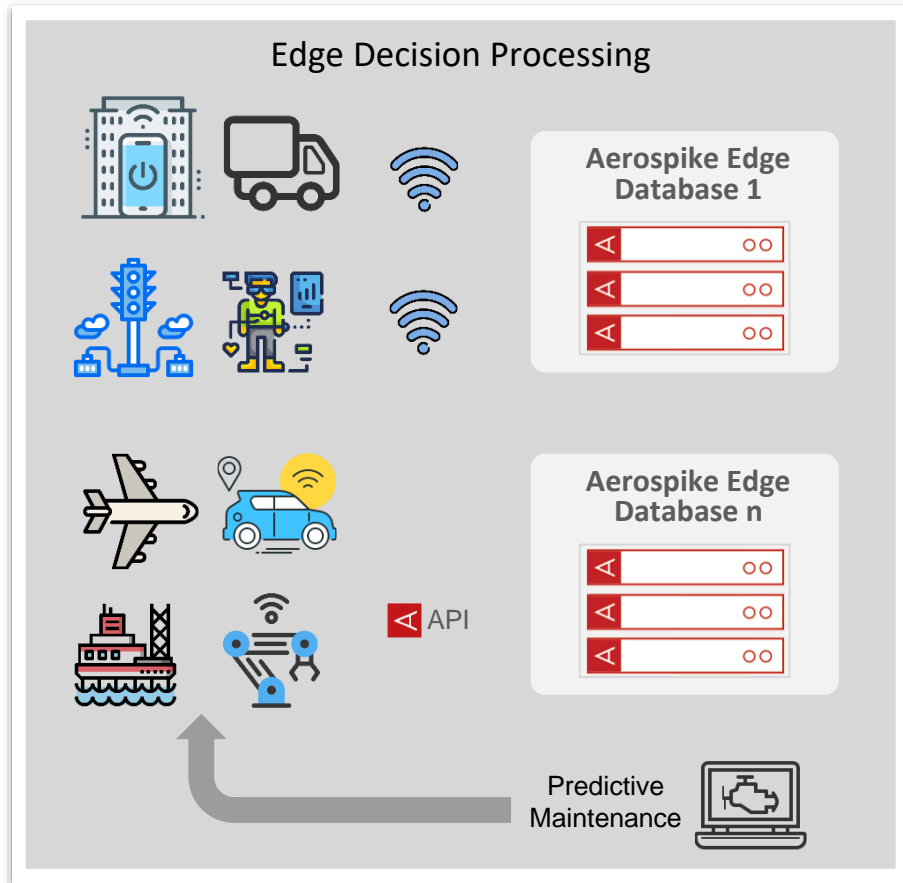


## Run AI & ML Analysis at the Edge

Streamline how you perform AI and ML-driven data analysis and reach resolutions in milliseconds



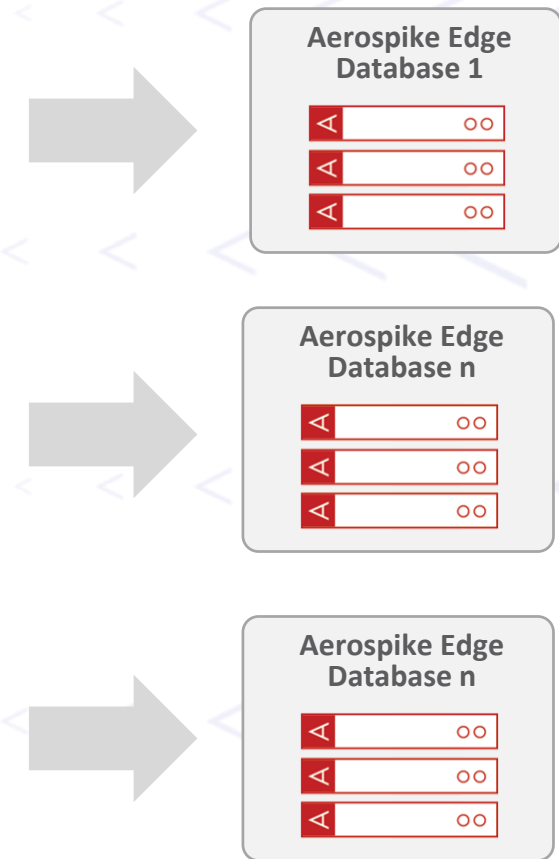
# Collect and Process Edge Data at Lightning Speed



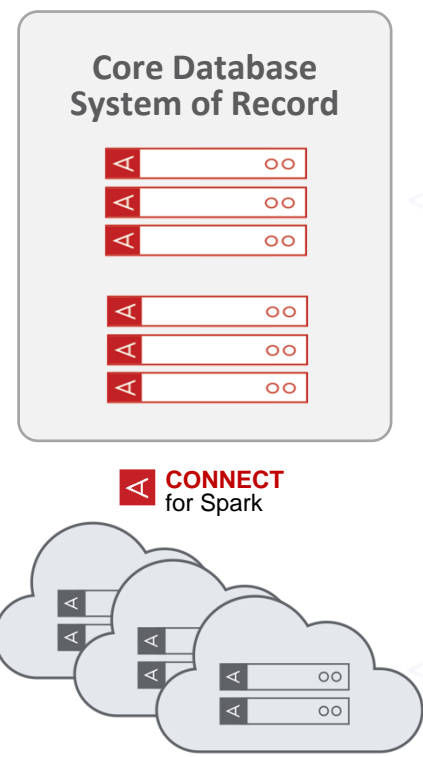
- Collect billions of daily processing events from dispersed devices and applications
- Scale seamlessly and easily add new devices and networks without losing performance
- Leverage 5G connectivity to sync critical IoT data in real time

# Run AI and Machine Learning Edge Data Analysis

- Simplify routing, processing and analysis of rapidly changing data points
- Process high volumes of requests simultaneously to reach resolution in milliseconds
- Collect data to monitor asset health and perform predictive maintenance
- Edge security: Data encryption in-motion (TLS 1.2), encryption at rest (AES-128, AES-256), authentication, authorization, auditing, access control, whitelisting, and Hashicorp integration



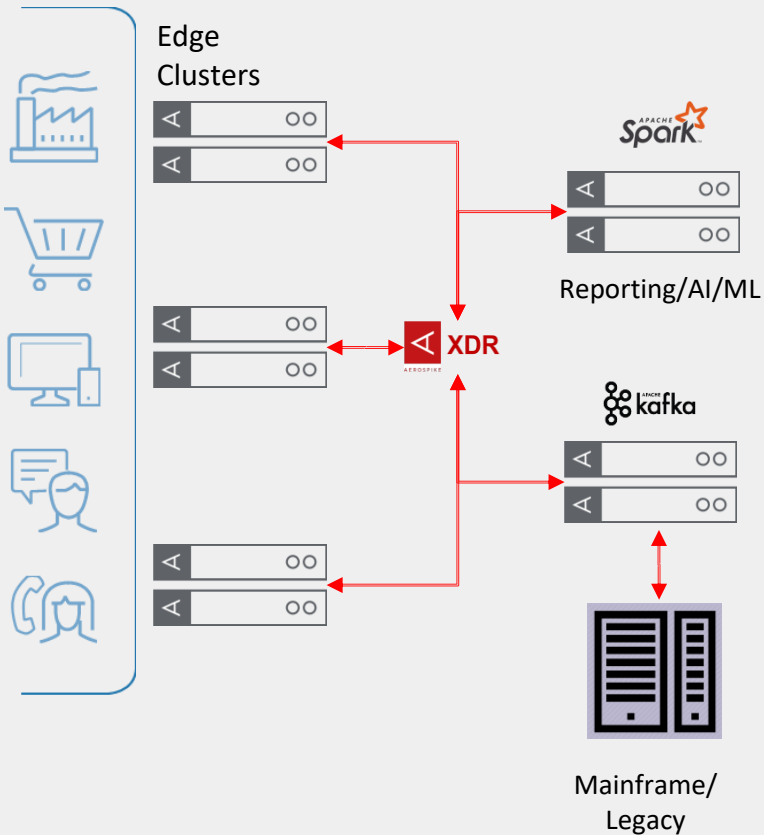
**Next-generation NoSQL Data Platform**  
Global data hub with five 9s uptime and multi-site clustering to support strong immediate data consistency





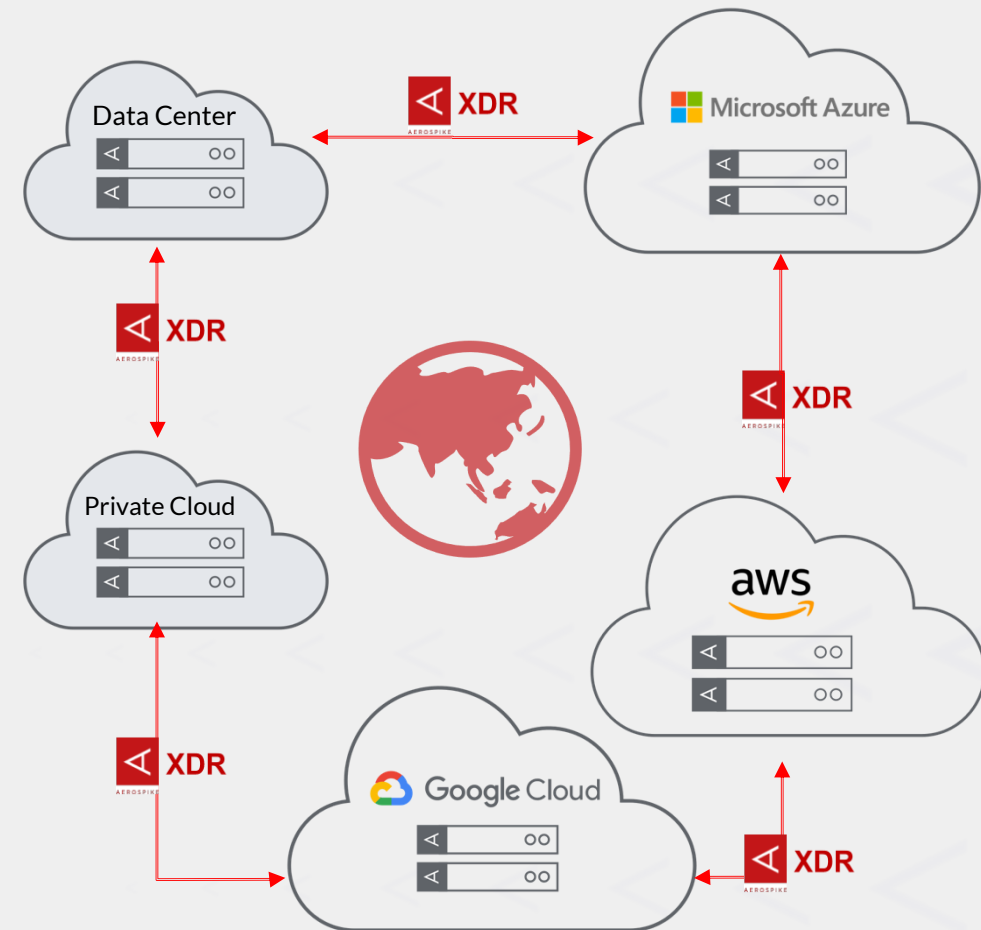
# Build Your Data Infrastructure on a Powerful Core Data Platform

## Intracloud Replication

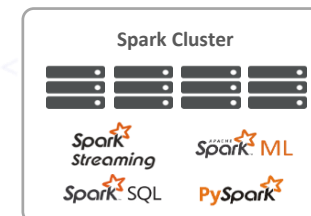
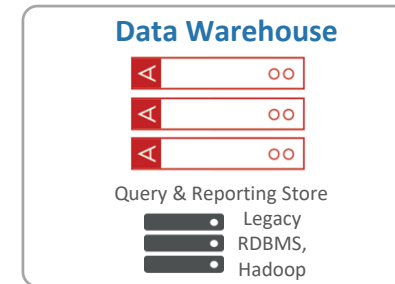
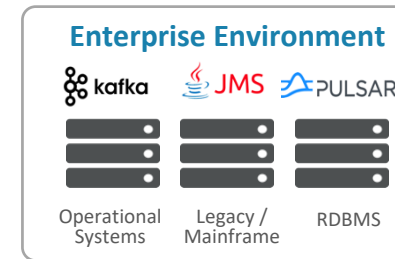


- ✓ Demonstrated uptime of five 9s
- ✓ Asynchronous replication
- ✓ Scale to meet petabyte-range data volume needs
- ✓ Multi-site clustering supports strong immediate data consistency, multiple locations and automated failovers without data loss
- ✓ Support for change notification
- ✓ Dynamic configuration
- ✓ Low latency reads / writes

## Intercloud Replication



**Run AI & ML Analysis at the Core**  
Ingest, prepare and process in real time the massive amounts of data needed to optimize AI and ML apps



# Edge Decision Ecosystem

## Process Edge Data at Lightning Speed

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Streamline how you perform AI and ML-driven data analysis and reach resolutions in milliseconds

## Next-generation NoSQL Data Platform

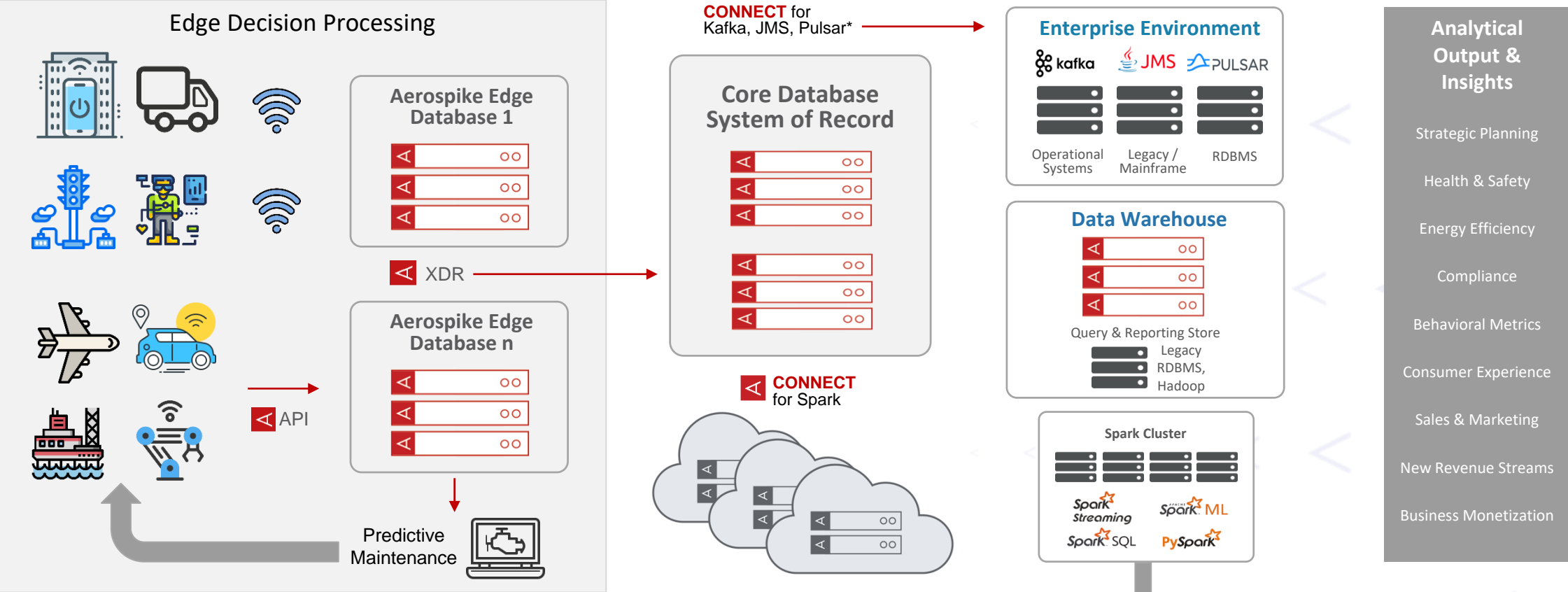
Global data hub with five 9s uptime and multi-site clustering to support strong immediate data consistency

## Run AI & ML Analysis at the Core

Ingest, prepare and process in real time the massive amounts of data needed to optimize AI and ML apps

## Add Intelligence to Your Data Stream

Push intelligence wherever you need it to deliver insights and empower more incisive decision making



### Optimize Data Flow from Edge to Core to Analytical Output

Deliver data across the ecosystem at extremely low latency to minimize data loss or corruption

# 5 Key Actions to Transform your Business Leveraging the Edge

1

## Process Edge Data at Lightning Speed

Collect billions of daily processing events from widely dispersed IoT devices and applications

2

## Run AI & ML Analysis at the Edge

Streamline how you perform AI and ML-driven data analysis and reach resolutions in milliseconds

3

## Next-generation NoSQL Data Platform

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4

## Run AI & ML Analysis at the Core

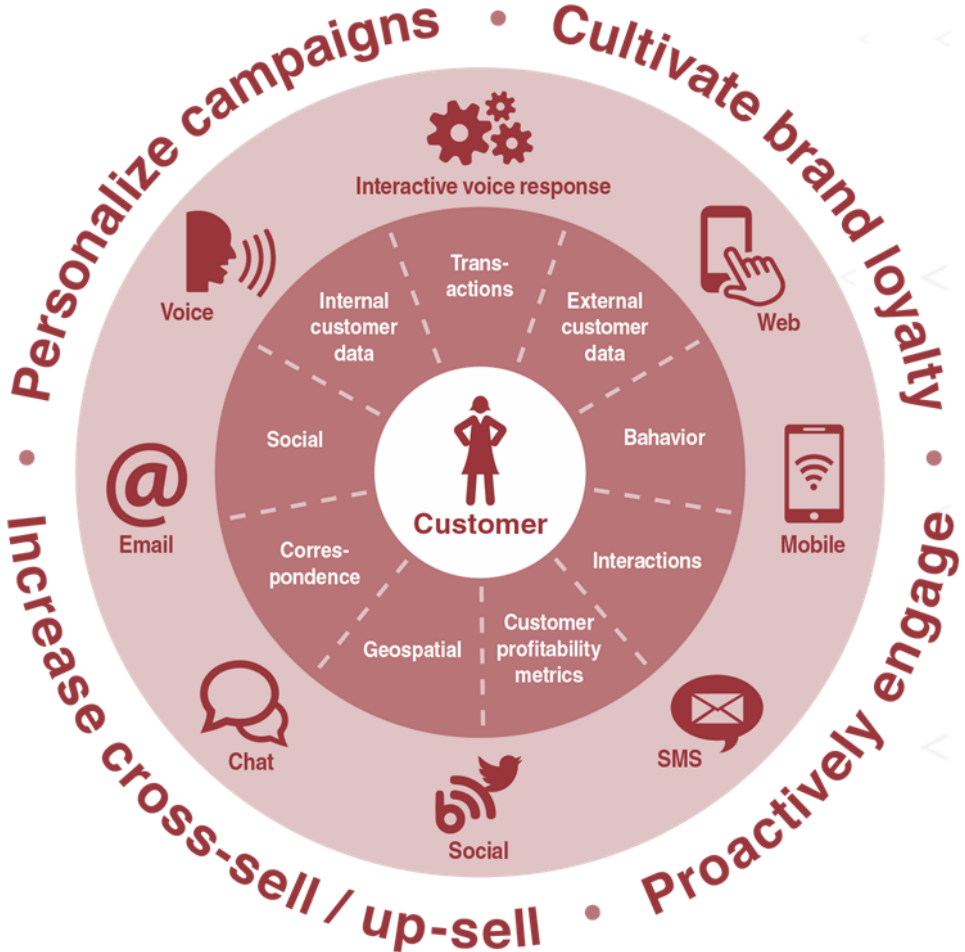
Ingest, prepare and process in real time the massive amounts of data needed to optimize AI and ML apps

5

## Add Intelligence to Your Data Stream

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# Airtel's Digital Brain Customer 360



# How the Edge is Defining Smart Industries



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Grow global GDP by 0.8% (\$816B) in the next decade (Deloitte)



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## Smart City and Infrastructure

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## Aviation

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## Healthcare

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## Connected Vehicle

\$540B market by 2025, driven by safety, maintenance, marketing (BusinessWire)

THANK YOU

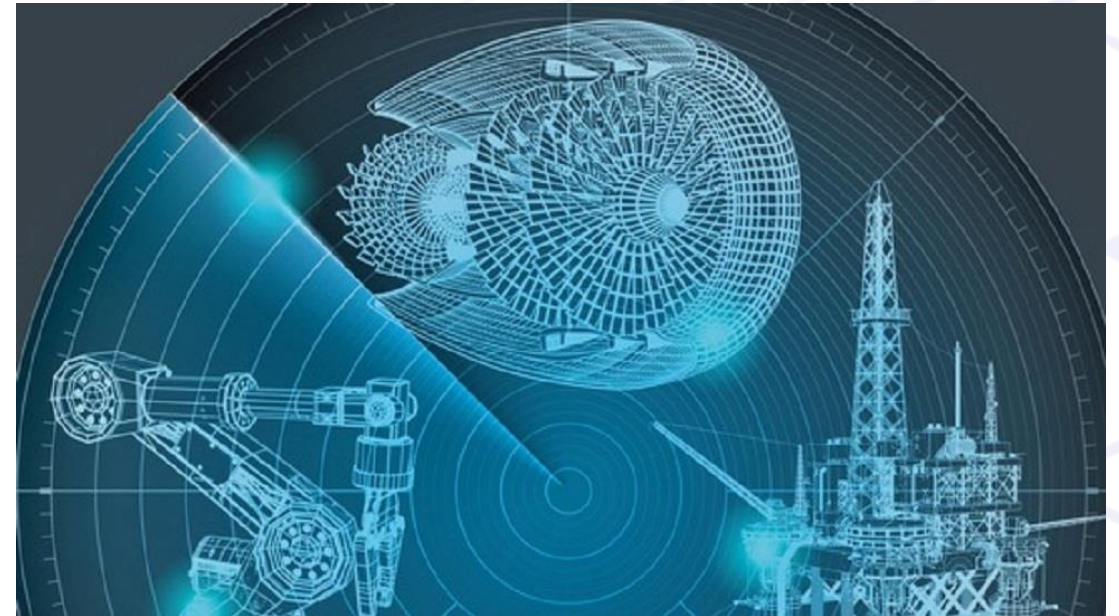
**Over to Ben Gamble**  
**ABLY**





# Digital Twins & the Edge

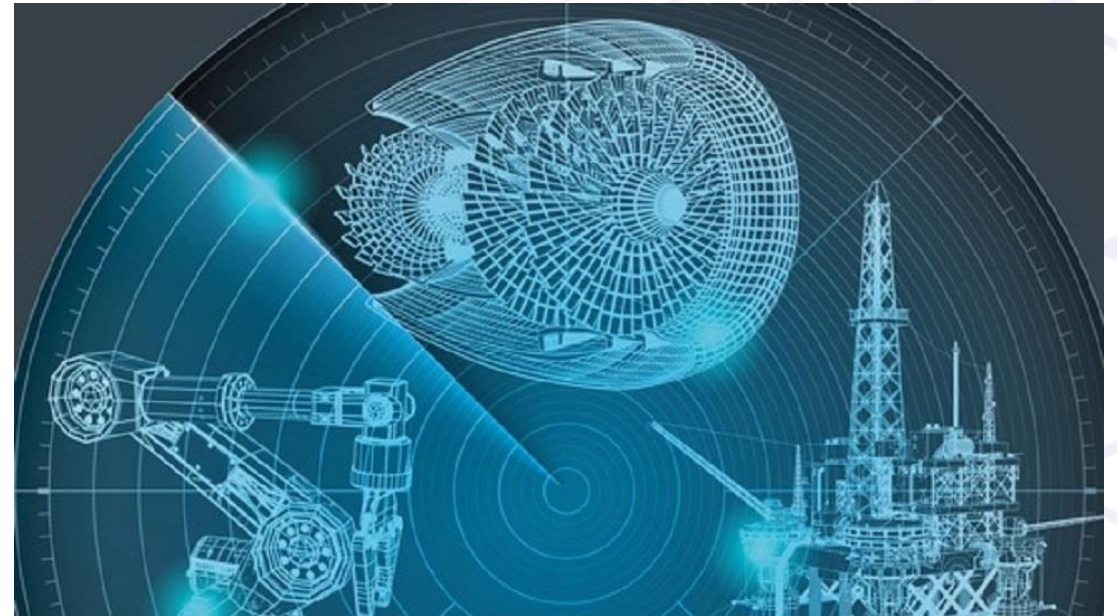
- Design better equipment and products with real-time digital replica data
- Uncover key usage, reliability and performance metrics
- Enable predictive planning, production and maintenance to reduce downtime
- Streamline POC and prototype lifecycles





# Risk Factors

- Stale, Canned data
- Long feedback loops
- How do you put a Human in the loop?



# What is Ably

A realtime communication platform used by developers to power the live & interactive digital experiences we rely on everyday, such as:

- 1:1 and group chat
  - Live GPS tracking and updates
  - Device management and control
- 
- 500+ customers in 80 countries
  - 300 million people reached monthly
  - 1 trillion events processed monthly

HubSpot

split

springboardVR

SEATS IO

OfferUp

TOYOTA

BlueJeans

Bloomberg

Stadion

Actively Learn

Pearson | VUE

yahoo!

Capgemini

verizon

Lightspeed Systems

onedio

AO  
australian open

verbit

Everhour

BROADCOM

tennis

SWITCH  
AUTOMATION

betgenius

VITAC  
ACCESSIBILITY FOR LIFE

Metra

SWOOP

UNIFLY

MobyMax  
Fix learning gaps.

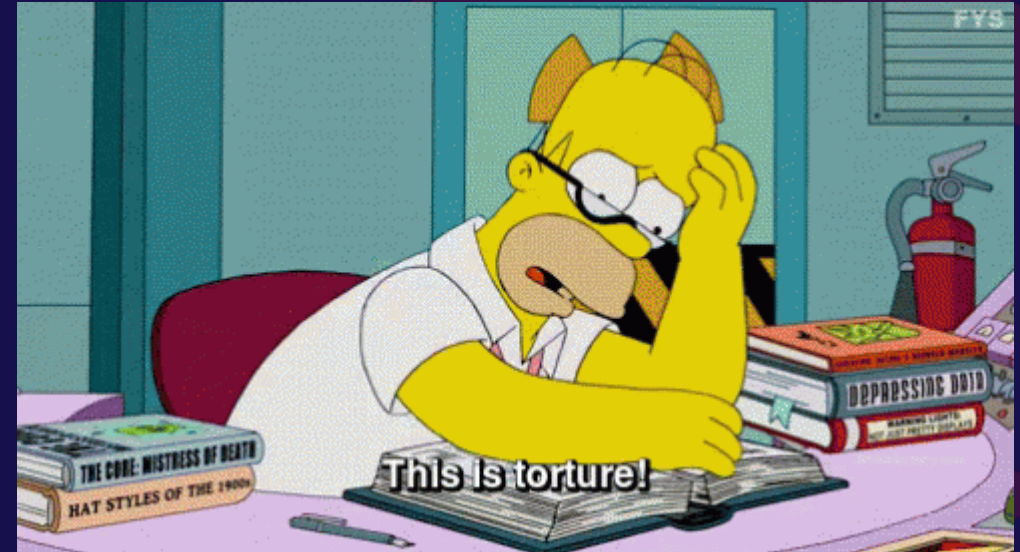
FANMIO

EXPERITY

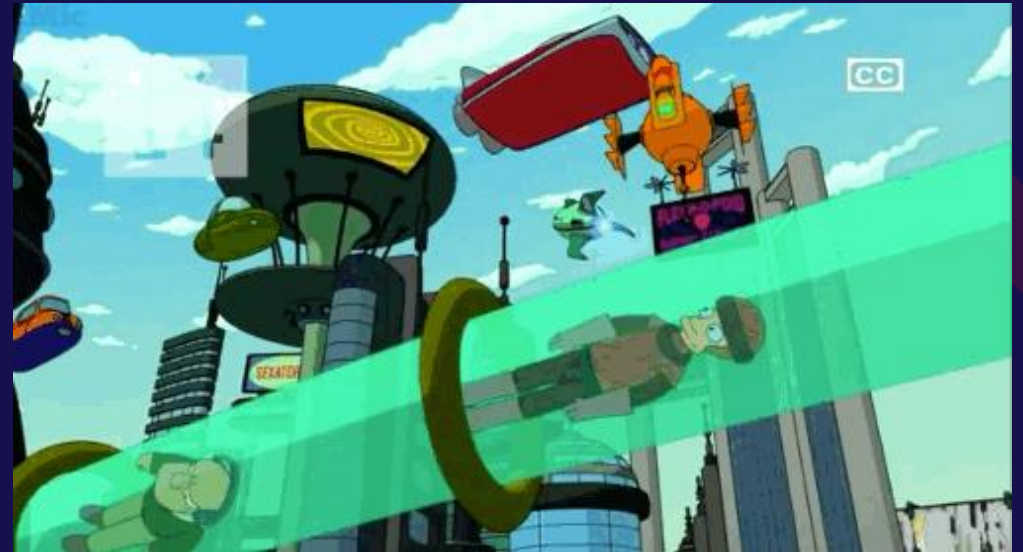
wooclap

sanilea

# TL;DR



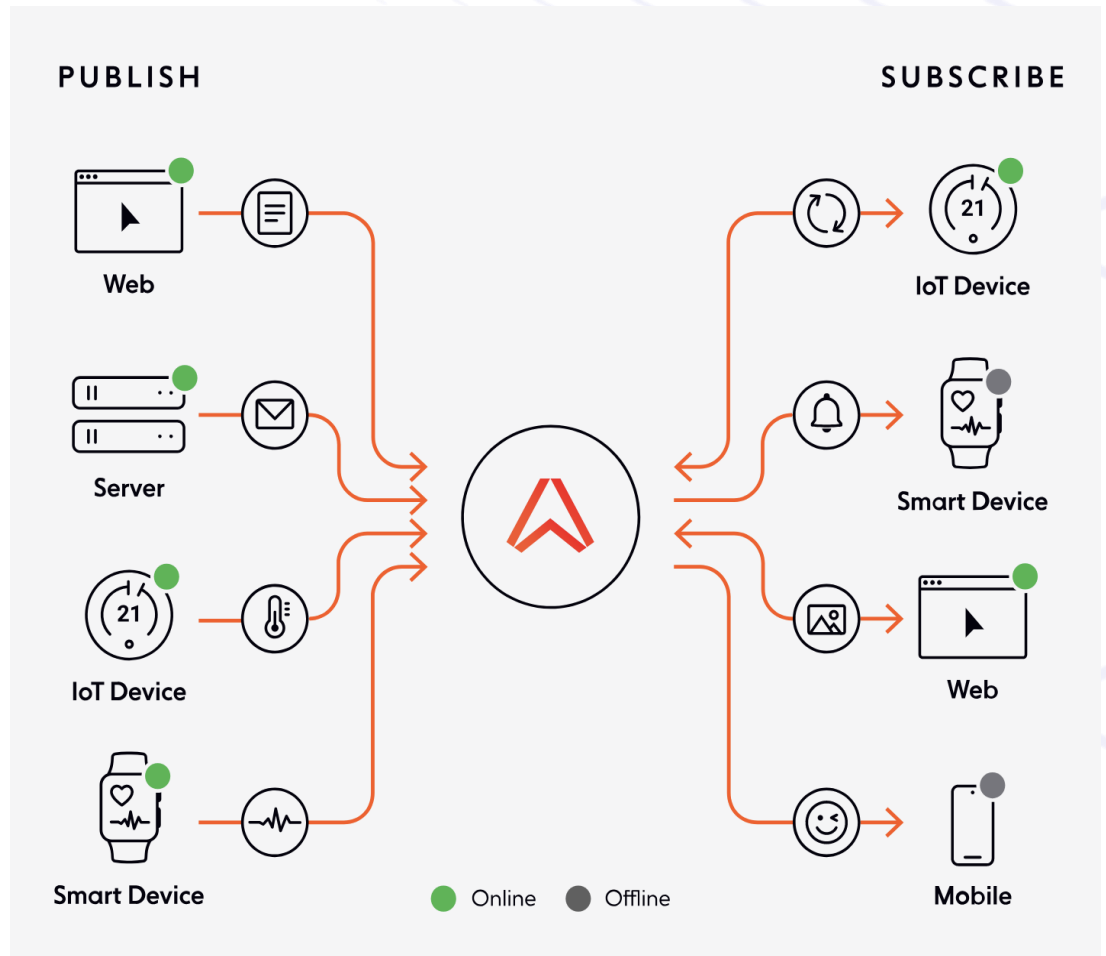
It is a **Fast**,  
Highly **Available**,  
PubSub service built  
to **Scale**



Think **Kafka beyond the firewall**

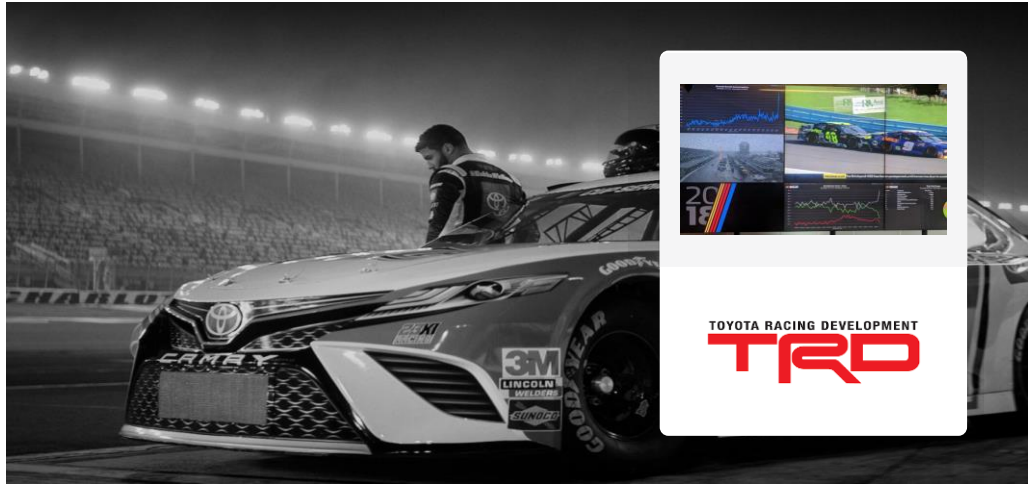
# What is Ably?

- Realtime updates
- Audience engagement
- Synchronized collaboration





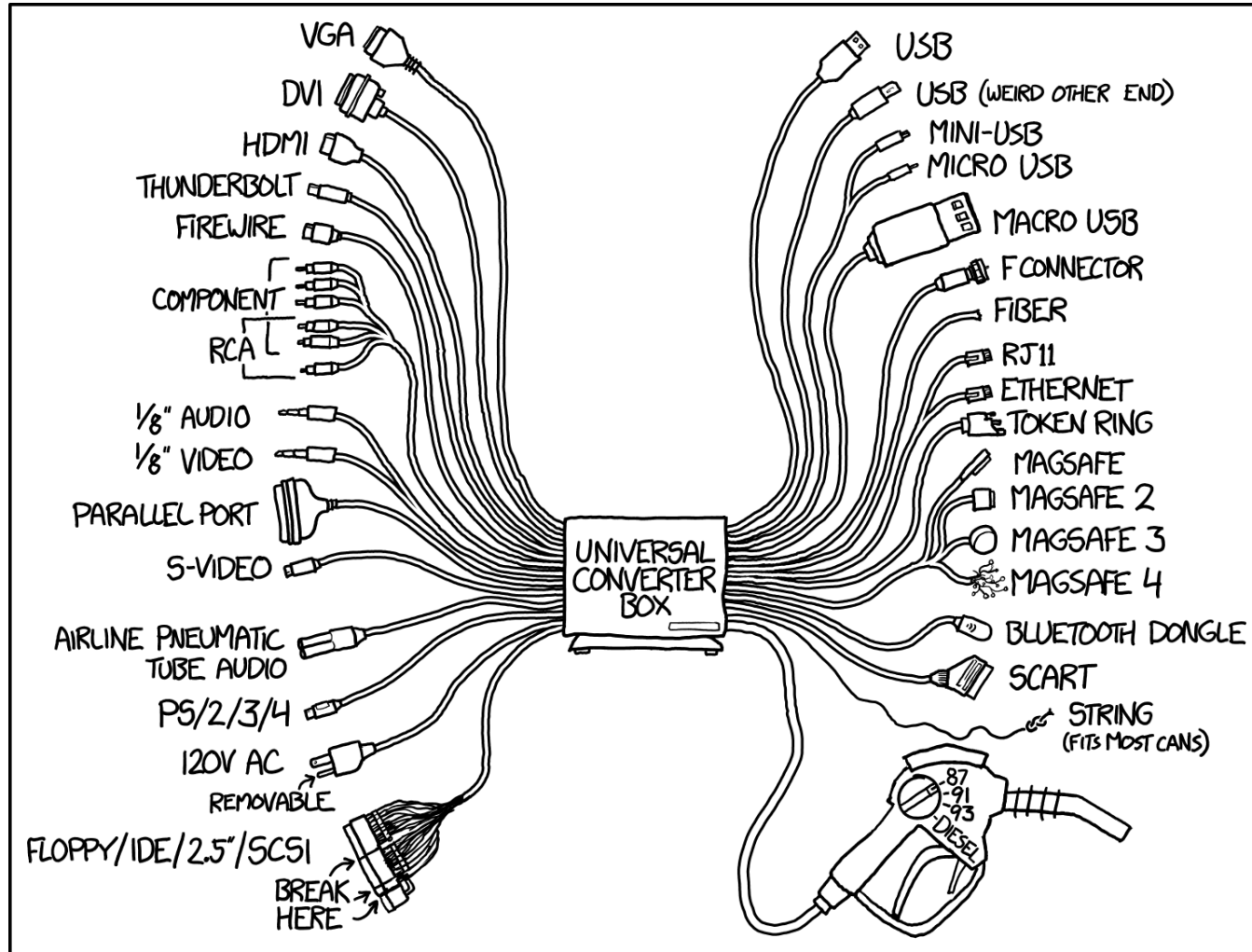
# Who do we power?



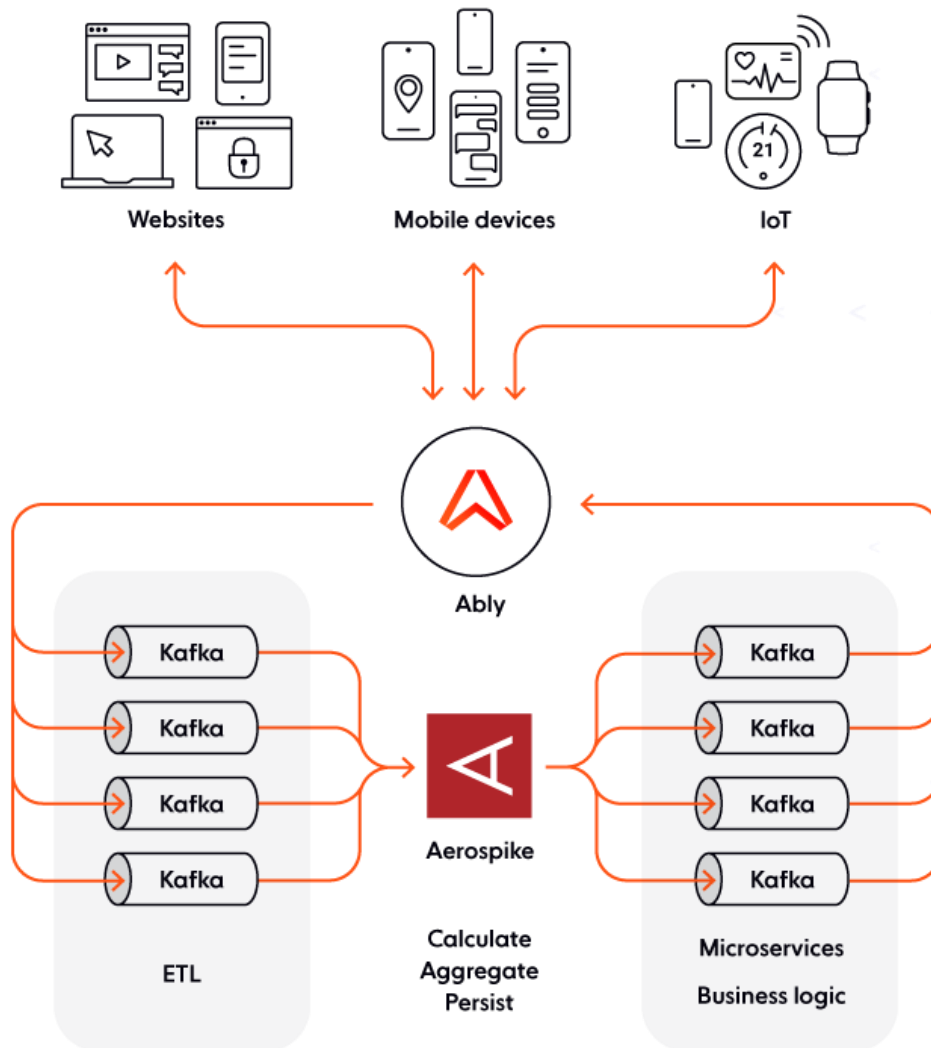
**Metra**®  
*The way to really fly.*



# How does it fit together?



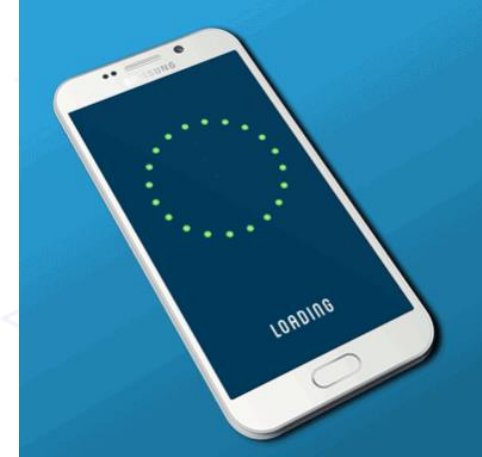
# How does it fit together?





# Devices are everywhere

- More data, more spikes and higher expectations
- User experience demands speed and responsiveness
- Customer loyalty requires reliability



# End to end experiences

