SAP® Digital Supply Chain

SAP IoT

Data Lake Abstraction for Timeseries Data

Martin Ebert, Shyam Ravindranathan SAP
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Agenda

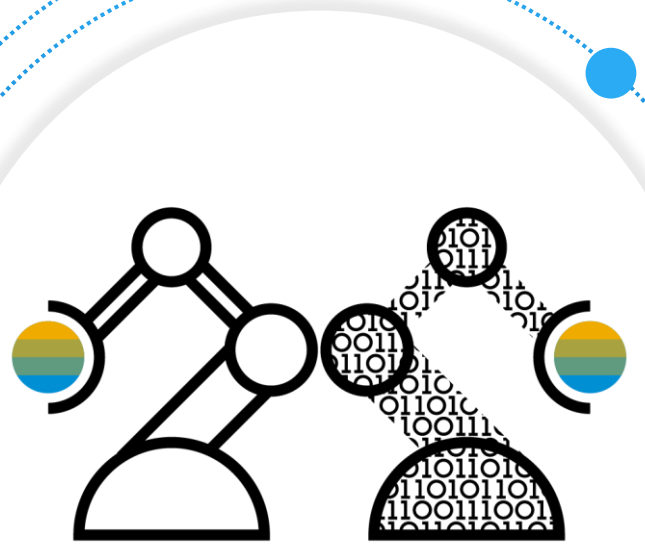
Introduction to the SAP Internet of Things (SAP IoT)

SAP IoT Data Lake Abstraction with Timeseries Data

Q&A

Introduction to the
SAP Internet of Things (SAP IoT)

What Is SAP Internet of Things (SAP IoT)?



The SAP IoT is a network of physical objects that collect and exchange Data

- Machines
- Vehicles
- Containers
- Pallets

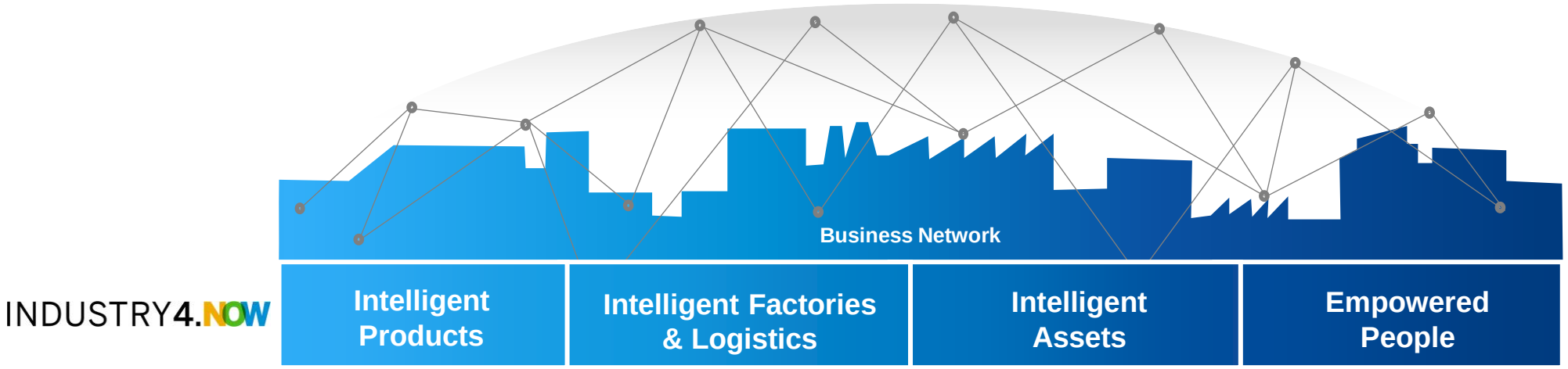
These objects are embedded with sensors that measure data from their environment

- Temperature
- Acceleration
- Humidity
- Geo Location

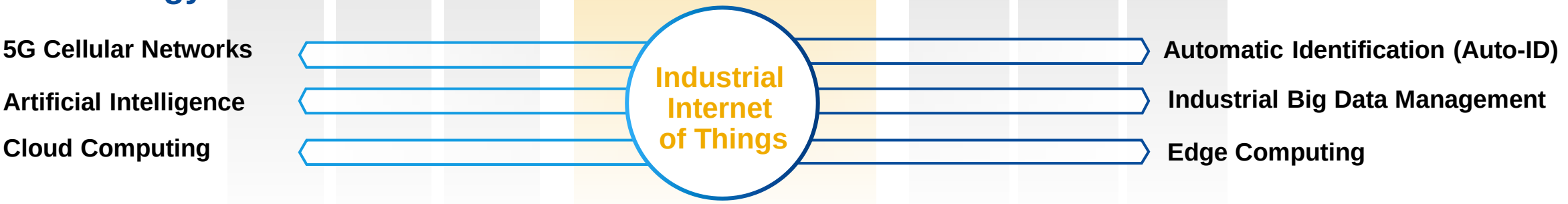
The data is ingested into an edge or cloud solution, where it is processed and analyzed

SAPs Industry 4.0 Strategy is called Industry 4.Now

Leveraging IIoT to Enable Intelligent Enterprise Technologies and Applications



Technology Enablers

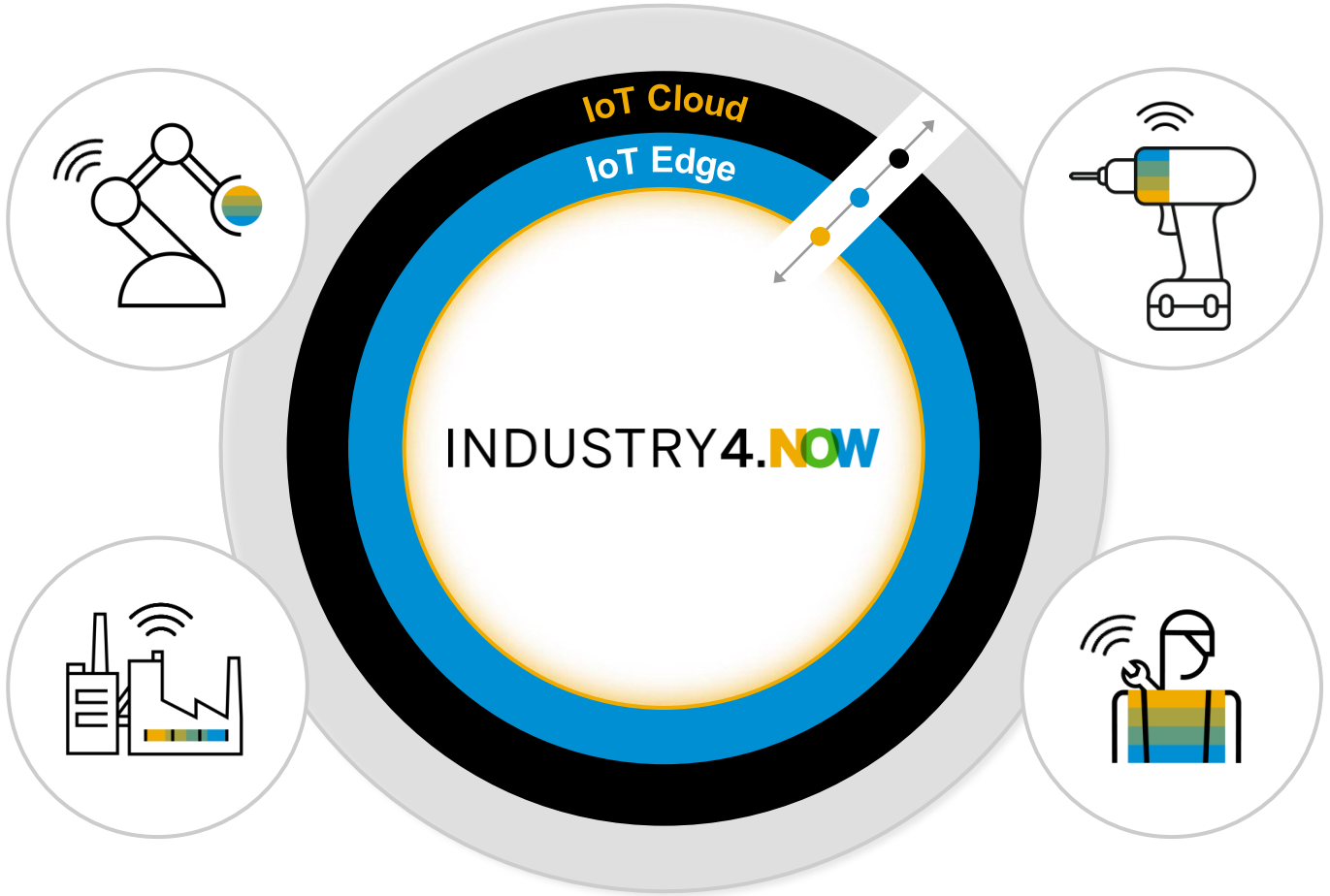


IoT enabling Industry 4.0

SAP IoT enables Industry 4.Now in the Cloud and at the Edge

Intelligent **Assets**

Intelligent **Products**



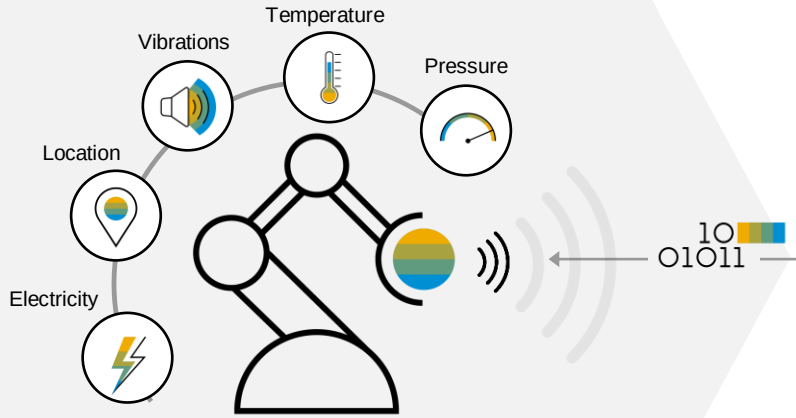
Intelligent **Factories**

Empowered **People**

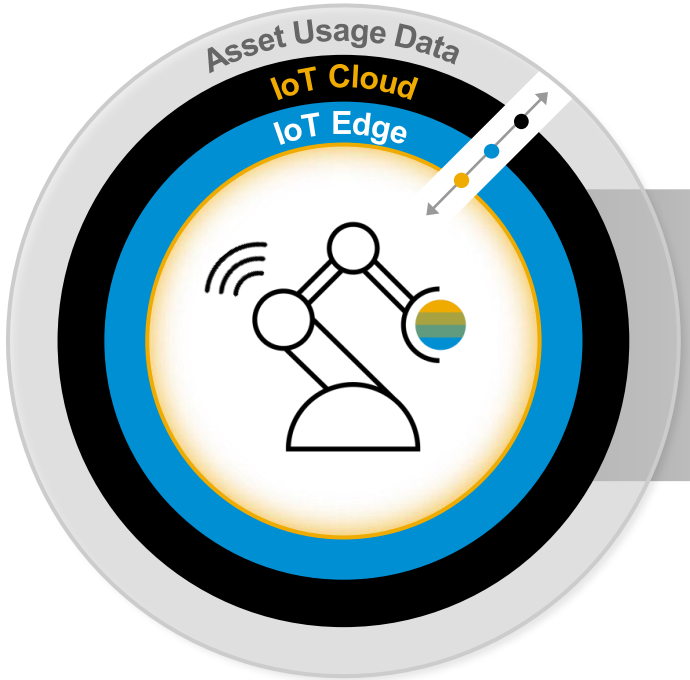
IoT enabling Intelligent Assets

Knowing your asset health and handling data centrally, leads to **higher uptime and efficiency.**

Assets



Insights



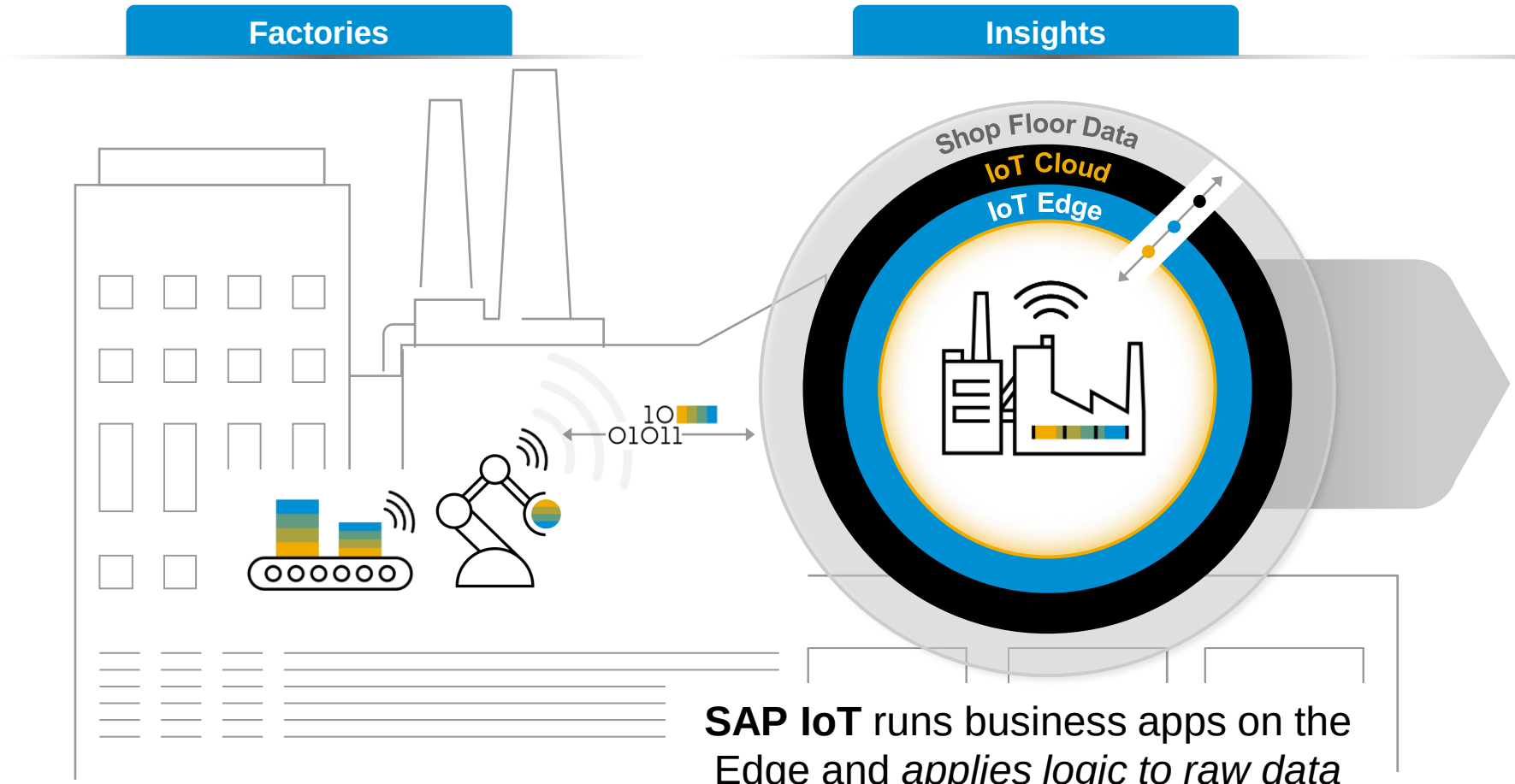
Outcomes

- ✓ Dispatch Field Service
- ✓ Product Replenishment
- ✓ Predictive Maintenance
- ✓ Increase Asset Lifetime
- ✓ Remote Monitoring
- ✓ Anomaly Detection

SAP IoT *contextualizes* raw asset data with business data

IoT enabling Intelligent Factories

A smart factory is agile, adaptable, and efficient. Decisions can be taken **real-time at the Edge.**



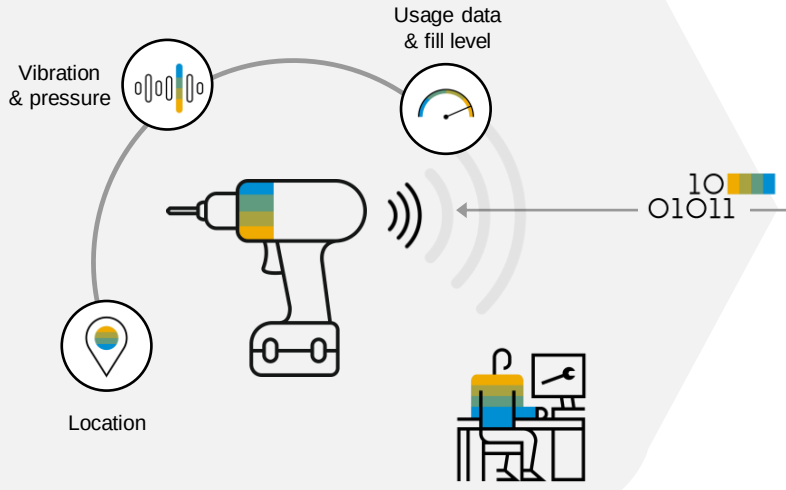
- ✓ Multi-factory Visibility
- ✓ Data Driven Quality
- ✓ Manufacturing Execution
- ✓ Real-Time Kanban
- ✓ Increase Availability

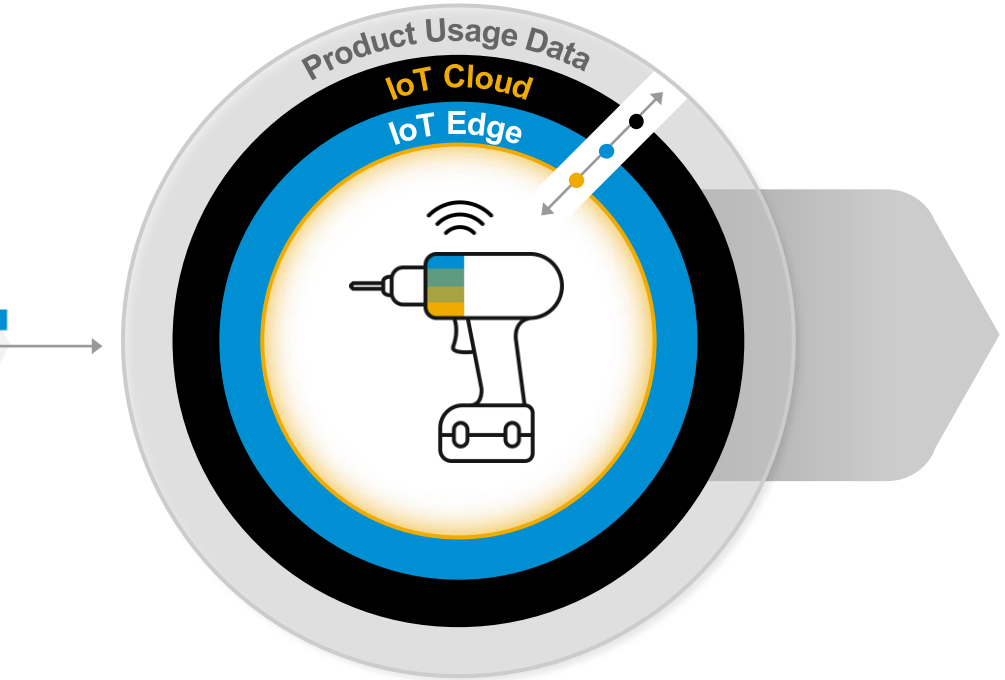
SAP IoT runs business apps on the Edge and *applies logic to raw data*

IoT enabling Intelligent Products

Being able to design and service intelligent and highly customized products
requires embedded technologies.

Products | **Insights** | **Outcomes**



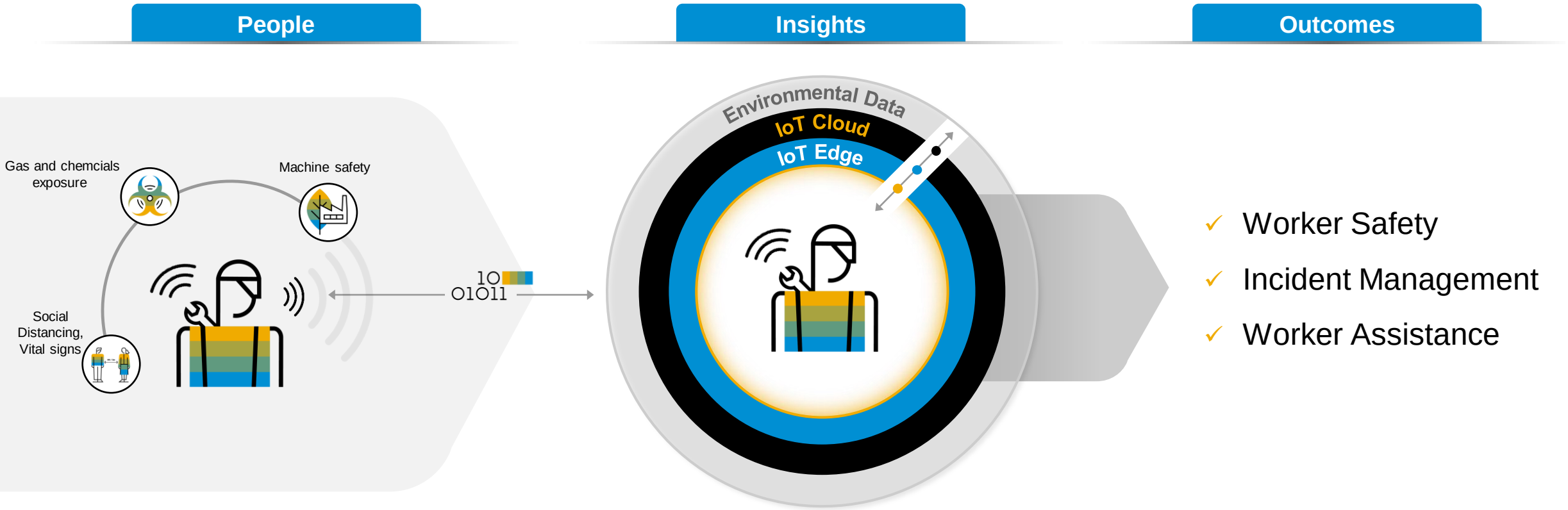


- ✓ Customized Products
- ✓ Automatic Service Calls
- ✓ Remote Monitoring
- ✓ Product as a Service
- ✓ Usage Tracking
- ✓ Delivery Insights

SAP IoT *connects product usage data* to customer experience

IoT enabling Empowered People

Giving employees the **tools they need to do their jobs effectively** increases reliability and worker safety.



Value Proposition

Embed
IoT in line of business and industry business applications

Extend
line of business and industry business processes with IoT

Edge
Run business processes at the edge orchestrated from the cloud

Cloud Providers Choice
Customer choice and avoid lock-in with hyperscalers abstractions & telcos interoperability

Collect, Store, Transform, Enrich & Analyze IoT Sensor Data as key enabler for Business Outcomes in SAP Industry 4.Now Applications at the edge and in the cloud

Enabling Technologies

- Cloud Computing
- Internet of Things
- Industrial Big Data Management
- Edge computing
- 5G Cellular Networks

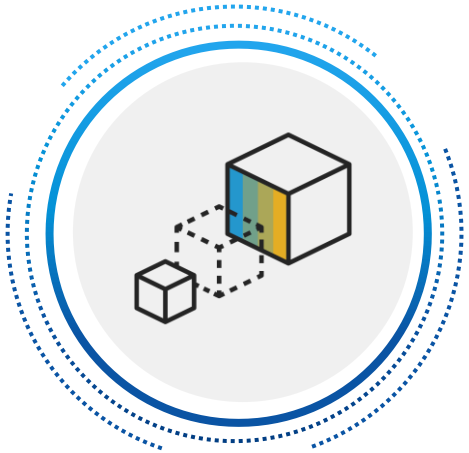
SAP IoT Data Lake Abstraction
with Time Seriesdata

Leveraging IIOT to Enable the Intelligent Enterprise with Industry 4.0

Data Lake Abstraction with Time Seriesdata

Our customers have a choice how to bring industrial (IoT) data to the cloud and how to orchestrate it.

SAP Industry 4.0 offers the complete flexibility to either directly ‘harvest’ and process device/machine data in SAP or integrate to customer’s own data lakes.

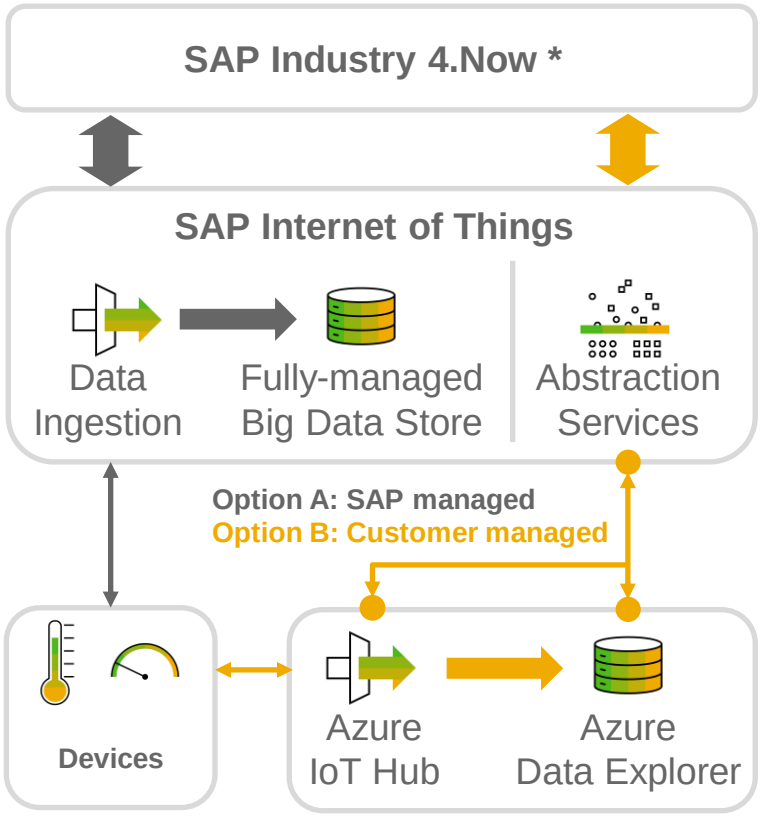


With Microsoft as a frontrunner we offer an IoT data storage in a Microsoft MSFT Azure Data Explorer which is deeply integrated out of the box into SAP IoT.

SAP IoT Data Lake Abstraction for SAP Industry 4.Now

Key Messages

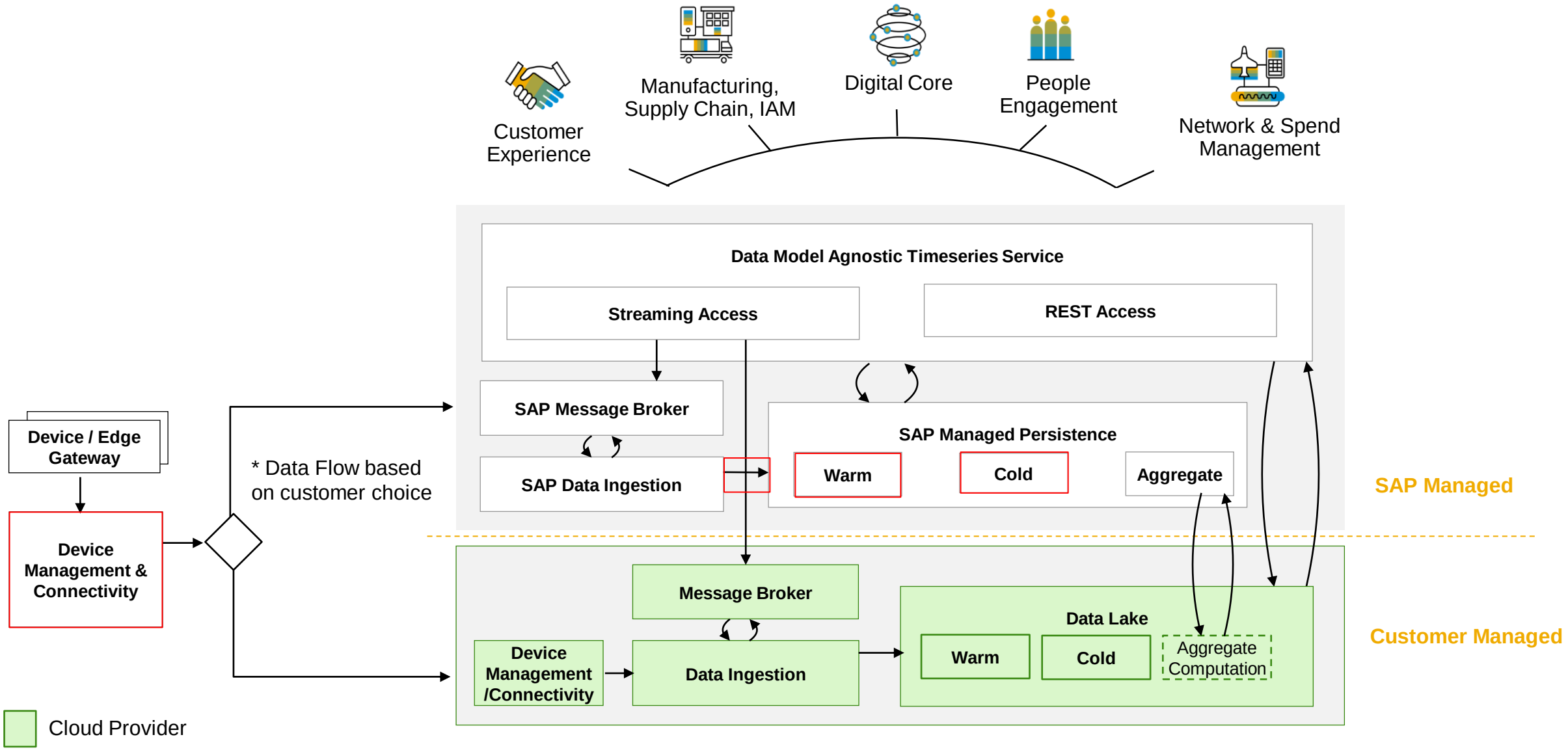
- SAP customers have the choice to use SAP's data lake or bring their own Non-SAP data lakes for managing IoT data
- SAP customers also have the choice to use device connectivity from SAP or other cloud providers
- SAP Enterprise Product Development (Intelligent Products) and SAP Predictive Insights* (Intelligent Assets) are the first business applications released with IoT Data lake abstraction on Microsoft Azure Data Explorer



*** Future product functionality**

Lab Preview

SAP IoT Abstraction Layer – Architectural Overview



Discussion Round

Discussion Round

Do you currently use IoT?

What is your use case?

Do you have plans to implement IoT?

Thank you.

Contact information:

Martin Ebert
Chief Product Owner, SAP IoT
Martin.ebert@sap.com

Contact information:

Shyam Ravindranathan
Product Expert, SAP IoT
Shyam.ravindranathan@sap.com