Industrial IoT — Digital transformation of the factory

CloudRail

Felix Kollmar, CEO at CloudRail

Agenda

- Industrial Internet of Things (IIoT)

- Customer reference

- CloudRail solution

- Live demo

- IIoT starter bundle

- Summary

- Q&A

IoT devices

What is IoT?
IoT refers to the connection of physical devices to the internet.

Why do devices need to be interconnected with the internet?
- Gather and analyse collected data
- Trigger control functions
- Tracking of devices

SMART GRID

Example: Benefits for the operator of smart solar panels

Trigger alarms in case of malfunctions or anomalies

Monitor the energy generation from a central system

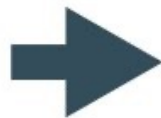Switch on electronical devices to consume generated energy

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Industrial IoT (IIoT)

Connect machines to cloud-services to:

- Real-time production monitoring
- Acquisition of process parameters
- Analyse gathered production data
- Enable Predictive Maintenance

Value created by IIoT services:

- Maintenance process improvement
- Reduction of waste
- Suppy chain integration
- Vendor asset monitoring

Cloud Service

Customer: Healthcare manufacturing organization

- Top 5 pharmaceutical manufacturer

- Over $30B annual revenue

- More than 70 manufacturing sites across 32 countries

- Provides healthcare solutions across 170 countries

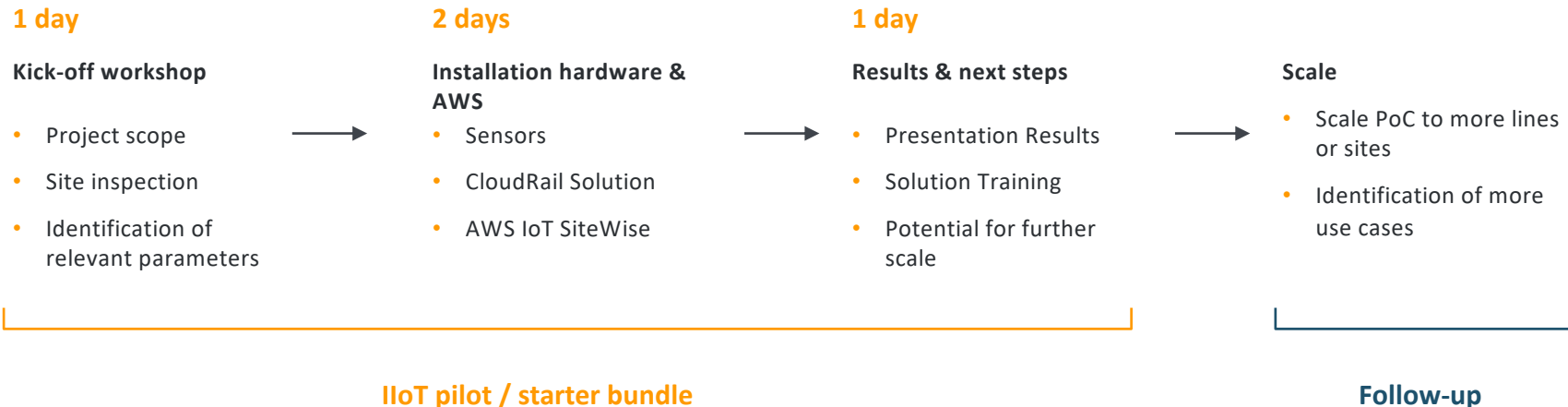# Customer challenge: Lack of valuable production insights

Use case:

- Producing tablets in tubes at 220 tablets per minute
- Limited quality assurance at only 4 checkpoints

Missing insights:

- Scrap factor
- OEE factor
- KPIs
- Potential for higher efficiency

IIoT implementation with Bechtle

1 day

Kick-off workshop

- Project scope
- Site inspection
- Identification of relevant parameters

2 days

Installation hardware & AWS

- Sensors
- CloudRail Solution
- AWS IoT SiteWise

1 day

Results & next steps

- Presentation Results
- Solution Training
- Potential for further scale

Scale

- Scale PoC to more lines or sites
- Identification of more use cases

IIoT pilot / starter bundle

Follow-up

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Improved KPI tracking with Bechtle

Central tracking of KPIs

- Processing time
- Scrap analysis
- KPIs & OEE

Project completed realized within 4 days

Next steps and process improvements defined

Scrap rate reduction from 20% to 8% (7k€ savings / day)

CloudRAIL

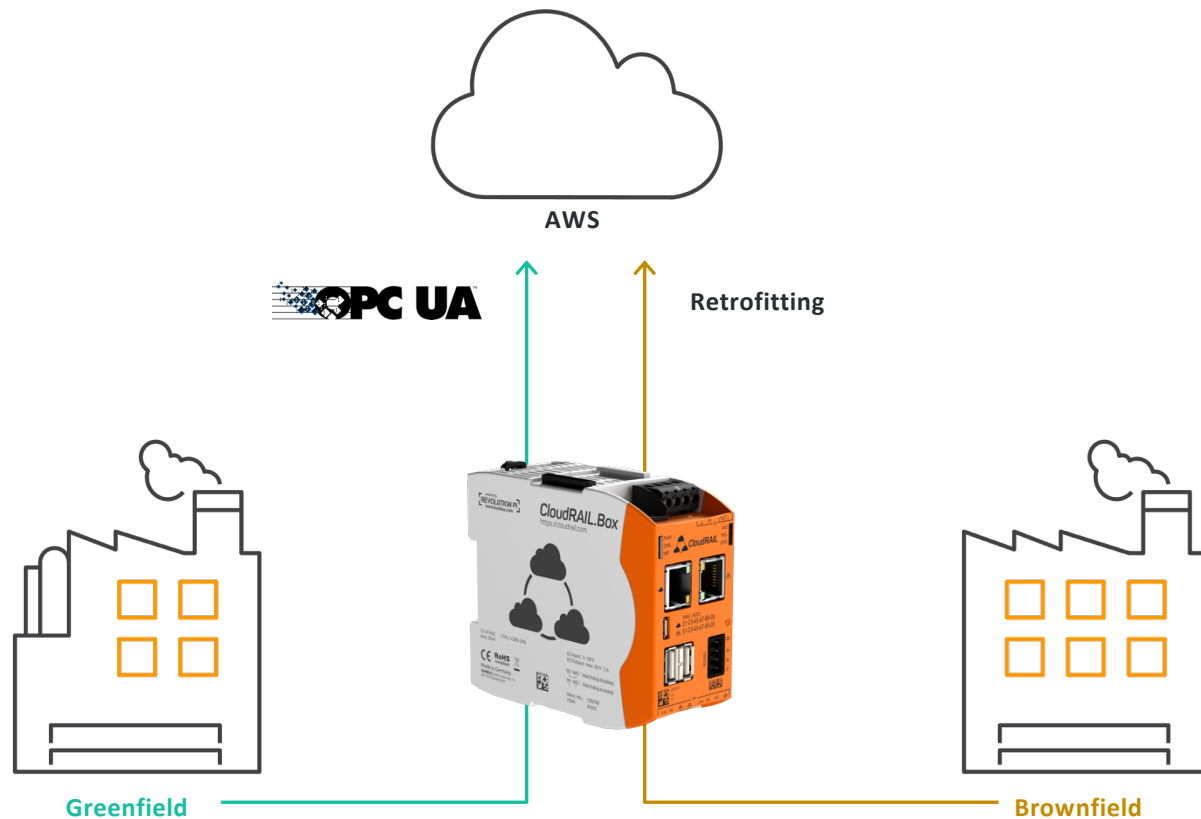**aws**

CloudRail solution

Challenges connecting to IIoT

Connectivity challenges

- OT / IT compatibility
- Security
- Scale
- Cost

CloudRail on AWS

CloudRail solution

Management

CloudRail DMC (SaaS)

Device provisioning

Cloud

AWS

Configuration & updates

Sensor data
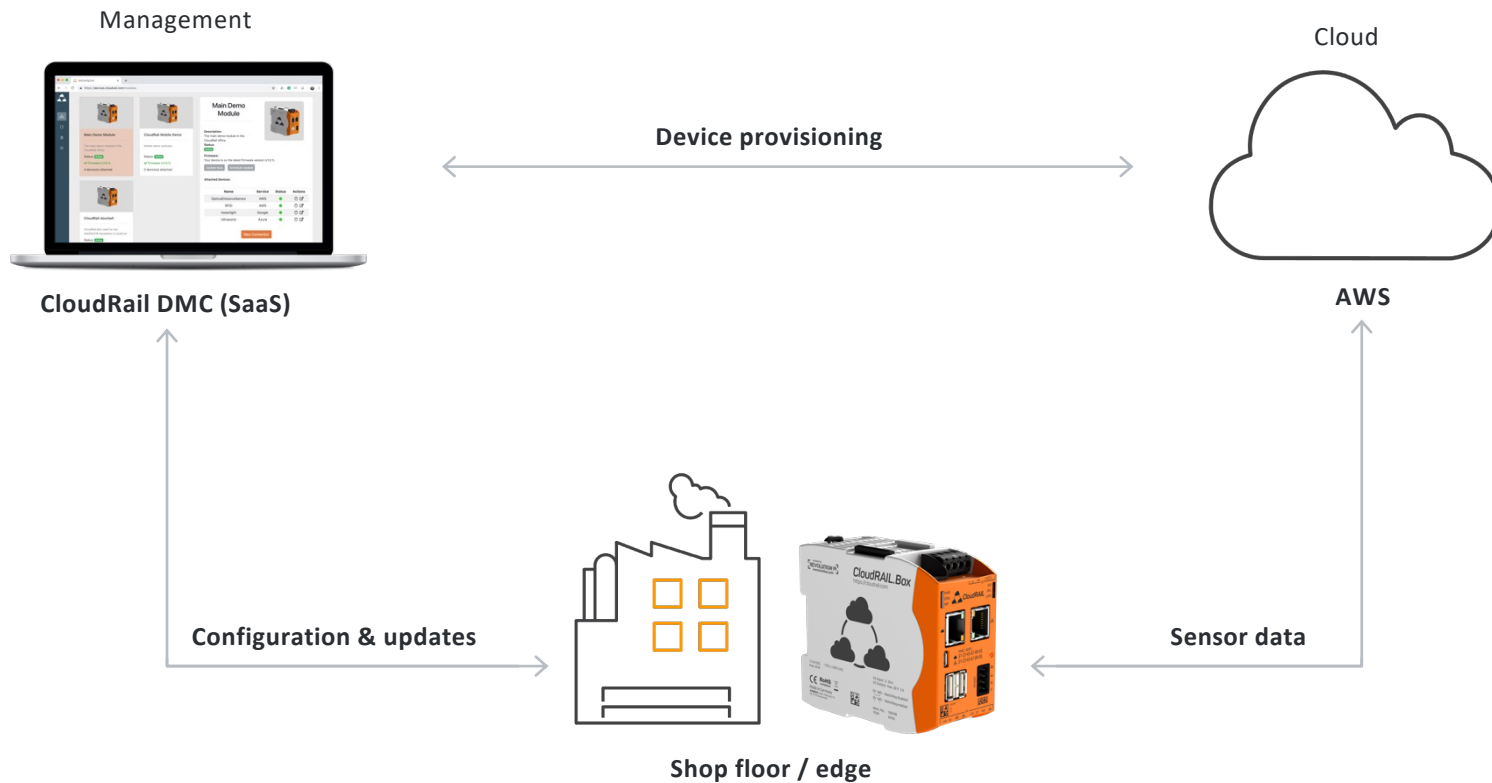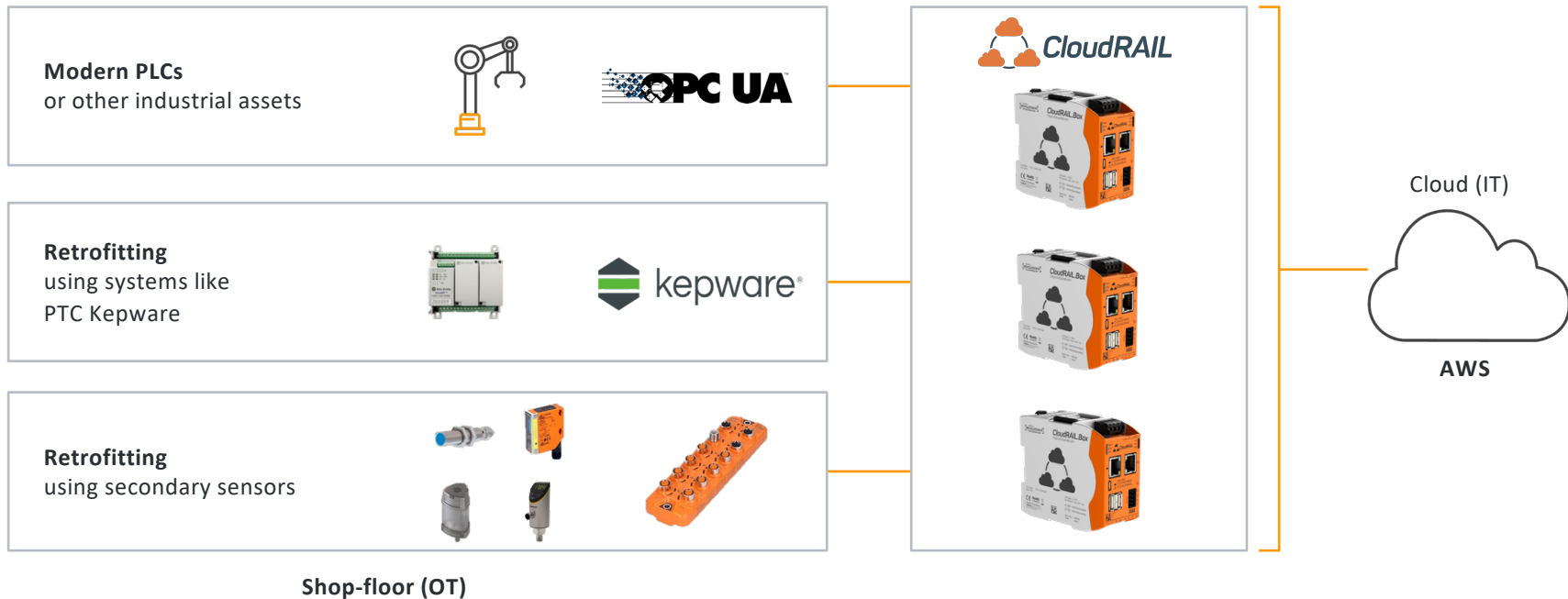
Shop floor / edge

Live demo
CloudRail & AWS IoT SiteWise

aws

Connect any type of industrial machinery to the cloud

CloudRail acquires all data from the shop-floor (OT) and provides it ready-to-use for IIoT applications (IT)

Modern PLCs
or other industrial assets

Retrofitting
using systems like
PTC Kepware

Retrofitting
using secondary sensors

Shop-floor (OT)

Cloud (IT)

AWS

Bechtle & IIoT starter bundles

aws

IIoT starter bundles

Components

Sensors

Gateway

Platform

BECHTLE

Professional service

- Kick-off workshop
- Implementation
- Configuration
- Hands-on training
- Follow-up workshop

4.500 €

(excl. VAT)

Offering

- Components
- 3-month subscription
- Prof. services

CloudRAIL aws

Bechtle & CloudRail drives your IIoT journey by...

1

...enabling faster IIoT projects at lower cost

- Automated plug & play device provisioning connects industrial assets to any cloud within hours instead of weeks
- Centralized & cloud-based management lowers maintenance costs
- Starter bundles include all required components and services

2

...providing secure edge-to-cloud communication

- Fulfilment of IT security and compliance requirements for enterprise customers from industries such as FMCG, pharma & healthcare and industrial equipment
- Automatic remote updates and security patches

3

...enabling future-proof data acquisition

- Single standardized solution for brown- and greenfield data acquisition
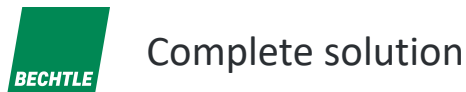- Scalable solution from the first PoC to the roll-out of an IIoT-ecosystem with up to millions of installations

4

...providing strong project know-how

- Largest Systems Integrator in EMEA
- Certified AWS experts at 70 sites across DACH
- Strong IoT expertise

Summary & next steps

Partnership

 OT → cloud

 Cloud services

 Complete solution

Start your IIoT journey:

- Discuss your IoT needs
- Request a live demo
- Talk to IoT experts
- Order an IoT starter bundle

https://cloudrail.com

Thank you!