Benefit of Industrie 4.0

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What we want to achieve by doing Industrie 4.0

**Strengthening
our customers' competitiveness**

Reducing time to market

- **Shorter innovation cycles**
- **More complex products**
- **Larger data volumes**

Enhancing flexibility

- **Individualized mass production**
- **Volatile markets**
- **High productivity**

Increasing efficiency

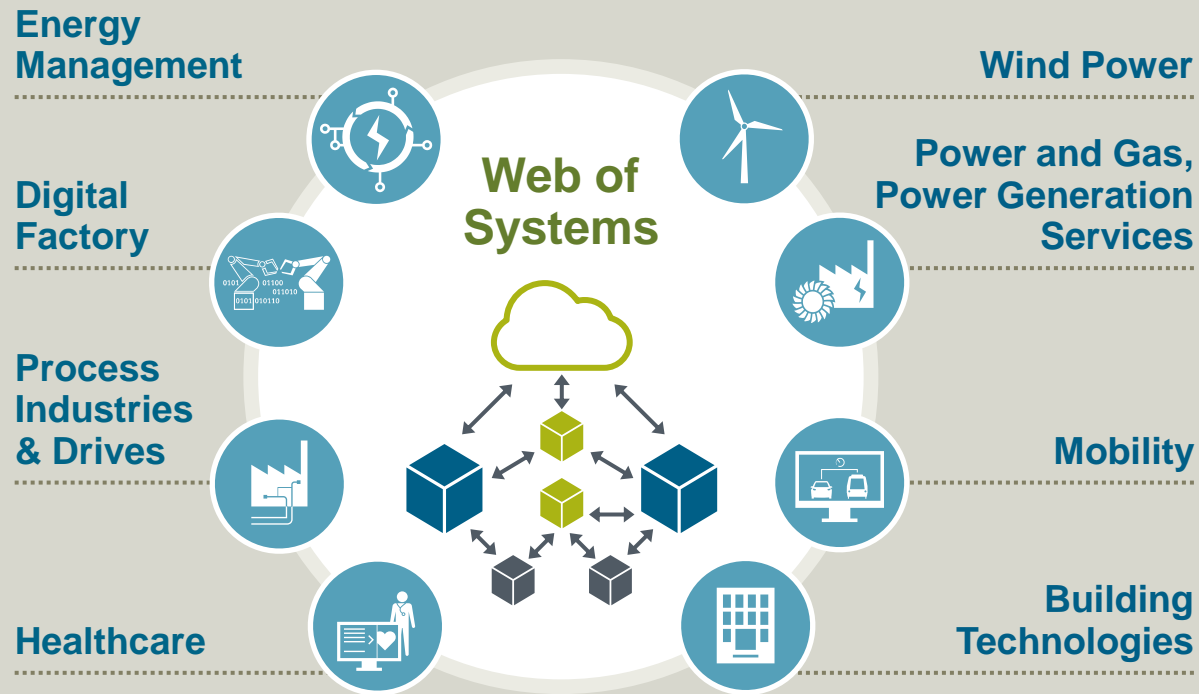- **Energy and resource efficiency as key competitive factors**

Manufacturers must respond with significant improvements in Speed, Flexibility and Efficiency

1. Industrie 4.0 is a chance not threat

2. Industrie 4.0 will simplify your process not complicate

3. It is also chance for SMT to access global market

4. Take advantage of globally connected IoT platform is key

What is IoT

Energy Management

Digital Factory

Process Industries & Drives

Healthcare

Web of Systems

Wind Power

Power and Gas, Power Generation Services

Mobility

Building Technologies

Standard technology replace dedicated system

It covers cross industries

MindSphere – a cloud based, open IoT Operating System
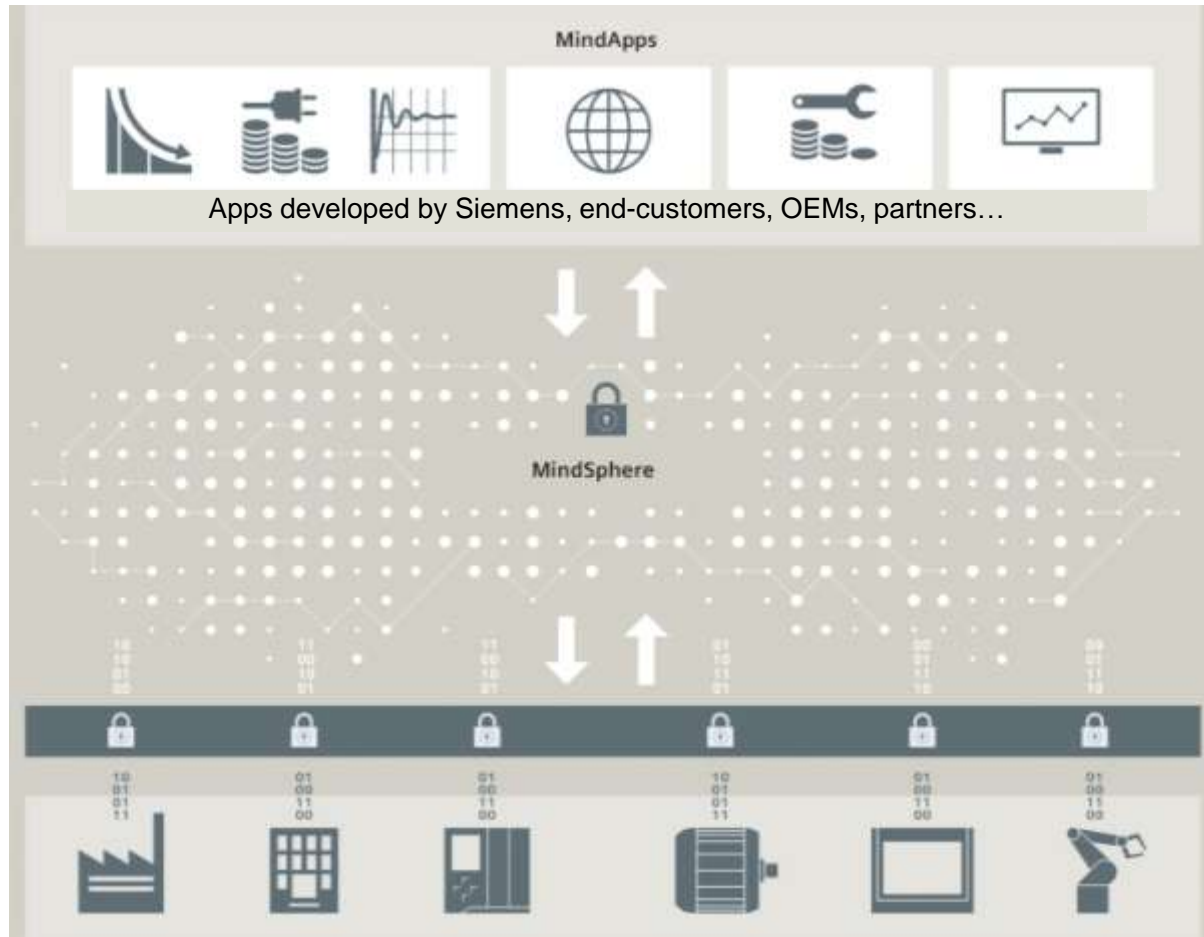
Optimization of plants and machines as well as energy and resources

- **Open standards** for connectivity of Siemens und third-party products

- **Plug and play connection** of Siemens products (engineering in the TIA Portal)

- **Cloud for industry** with open application interface for individual customer applications

- Transparent **pay-per-use pricing model**

- Opportunities for completely new **business models** (e. g. selling machine hours)

MindSphere enables a quick, easy and secure start into data-driven services

STEP 1
Connect

Get MindSphere user-account, receive and integrate your MindConnect element into your machine/equipment

STEP 2
Configure

Configure data acquisition, connectivity and Visual Analyzer via MindSphere

Asset Configuration · Customer Management · User Management · Account Overview

Asset Configuration on MindSphere - experience how easy it. Click here

STEP 3
Run the Service

Monitor e.g. health status of all assets and drill into details using MindApp Fleet Manager

MindApps Example: Fleet Manager – visualizing data points
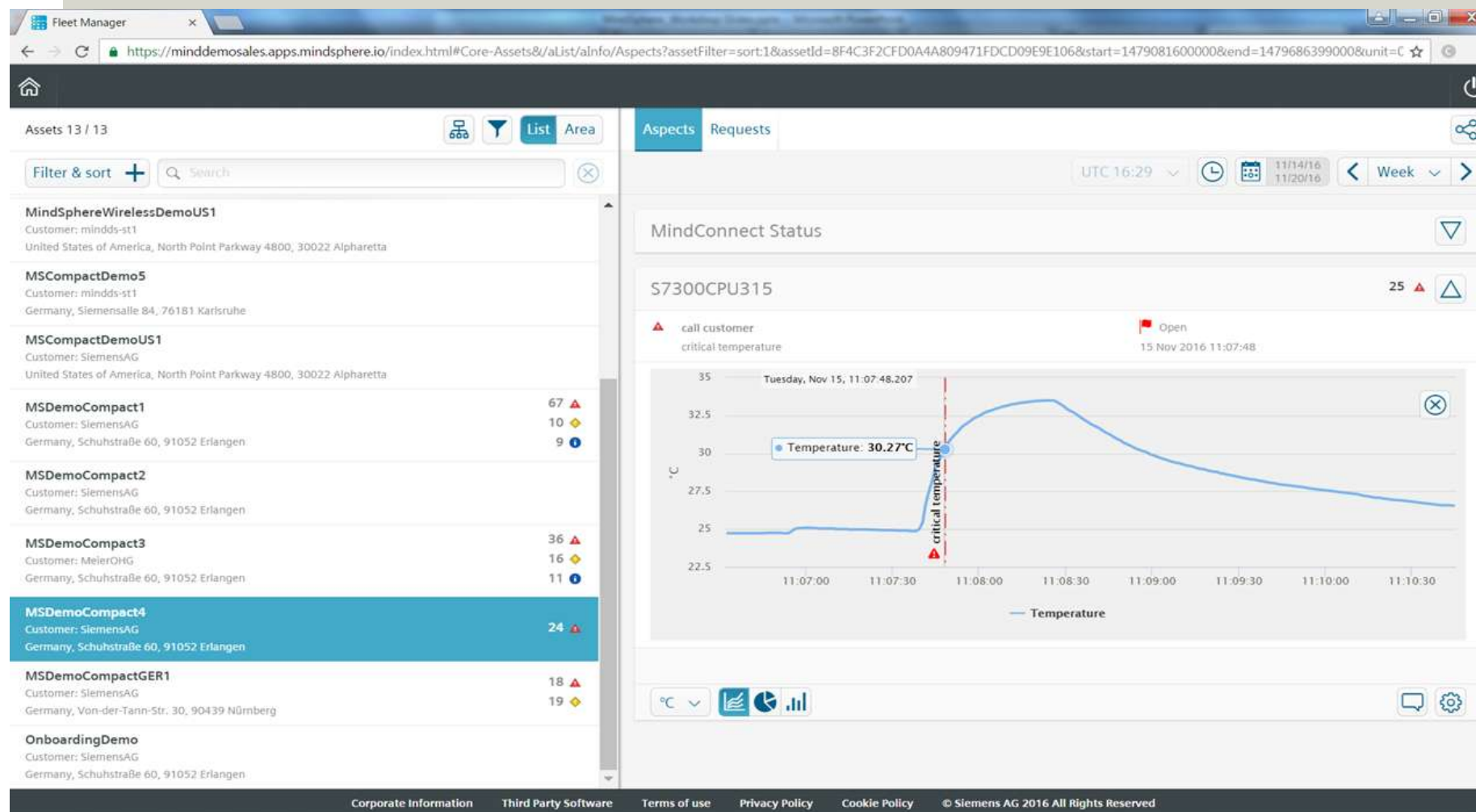
Run the Service
Fleet Manager

Monitor the health status of all assets in the Fleet Manager and analyze problems in detail

MindSphere Automotive Customer
Gehring Technologies GmbH

Challenge

- Digital Service Vison: „"We want to convince our customer of the value of our services worldwide."

Solution

- Connection of machines via S7
- 6 Data Points on Honingmachine (End customer Weber Automotive)
- Creation of rules for failure alarming using the Fleet Manager on MindSphere

Profile

- Globally operating machine tool company in the area of honing technology (market leader)
- Technicians support located in China, Brazil, India, the USA, France and Germany

Customer benefit

- Out-of-the box digital service offering for end-customers
- Insights about usage of machines

MindSphere Automotive Beta-Customer
JTEKT corporation
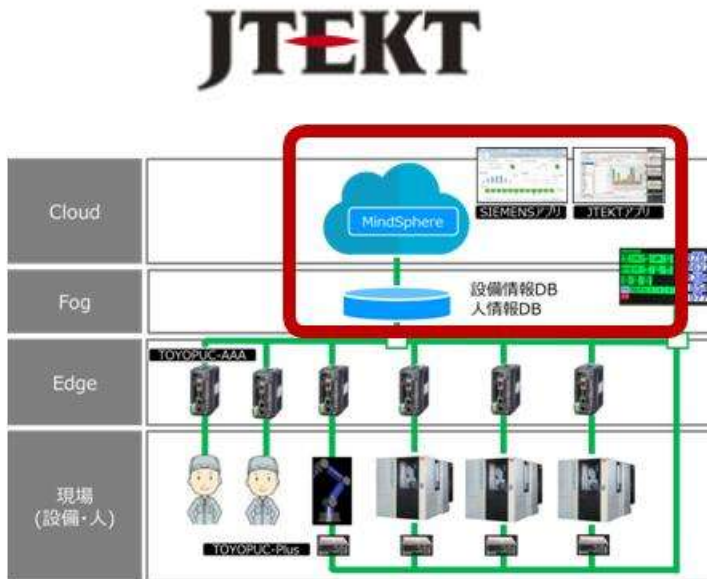
Source: JTEKT CORPORATION

Challenge
- To realize their vision, "Smart Factory with human as the lead, harmonizing human and facilities, utilizing human brains", it is required to have a "Chain Solution", a collaborative solution by JTEKT and their customers

Solution
- Going to implement MindConnect to TOYOPUC AAA, the edge type analysis module, TOYOPUC plus, the connective PLC etc.
- Going to develop JTEKT application using MindSphere

Profile
- Global major manufacturer of auto parts and machine tools
- Focusing on the "connected industries" to support the reform of manufacturing for small and medium-sized manufacturers

Customer benefit

Customers who have difficulty implementing IoT due to the security, IT engineers availability and the costs, will be able to easily realize the smart factory with low costs, and then contributes to their customer's competitiveness innovation

Contribution to "Connected Industries"

Siemens K.K. contributes to "Connected Industries" / the 4th Industrial Revolution through the activities of RRI (Robot Revolution Initiative), that collaborates with Plattform Industrie4.0 in Germany.

"Connected Industries"
New vision for the future of Japanese industries

Collaboration between Platforms

Plattform Industrie4.0 and the RRI agree on cooperation regarding Unrestrictedet of Things / Industrie4.0 (28th,Apr.,2016)

https://www.jmfrri.gr.jp/english/info/256.html

the Hannover Declaration

http://www.meti.go.jp/english/press/2017/0320_001.html

http://www.meti.go.jp/english/press/2017/0320_002.html

Thank you