# Unternehmensübergreifende Integration für Kollaboratives Asset Management

*oder: Geschichten über Geschirrspüler und Füllstandsmesser*

Dr. Jochen Rode, Head of Program Digital Manufacturing, SAP Research, SAP AG

**SAP**

**SAP RESEARCH**

# Agenda



**SAP and SAP Research**



**Jochen's Dishwasher**



**Endress+Hauser's Radar Level Meter**

Image courtesy of Endress+Hauser.

# SAP

Vision: *Help the World Run Better and Improve People's Lives.*

**190,000+**
customers

**60,000+**
SAP employees worldwide

**1,200+**
service partners worldwide

**120**
countries

**40+**
years of business process experience

**24**
industries

# SAP

Mission: *Help Every Customer Become a Best-Run Business.*
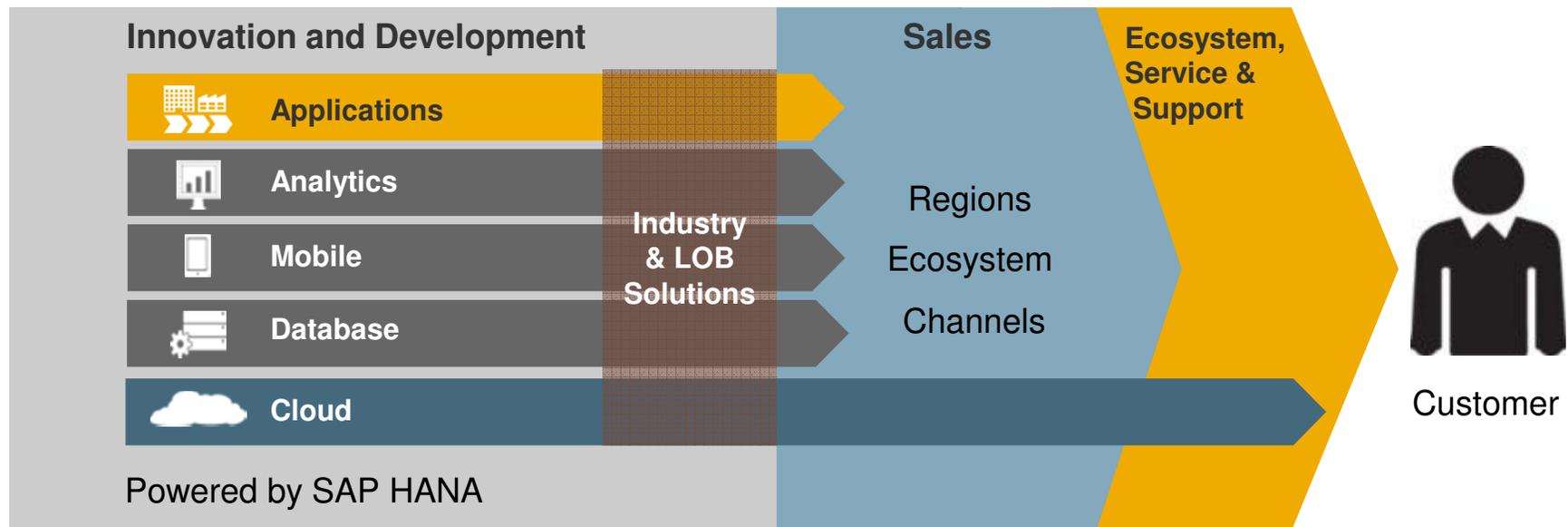


Leverage the true power of SAP: transform key technologies into solutions for industries and lines of business

# SAP Research
## A Global Team

- The **global technology research and innovation unit** within SAP.

- **21 _research_ locations** worldwide with **700 employees**.

- **11 programs** in **Applied Research**, **Advanced Development** & **Global Business Incubator**.

- A network of more than **800 partners from industry and academia**

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Sydney

Locations of the Digital Manufacturing Program

# Jochen's Dishwasher
A True Story

Three months ago a strange noise appeared.

Three weeks ago my dishwasher stopped working.

My wife was in despair. I had a new job – dish washing.

# Jochen's Dishwasher
## A True Story

Do I still have warranty? If so, where?

I spent 30min+ searching for the receipt.

# Jochen's Dishwasher
## A True Story

Where is the support phone number?

„Hello! The warranty contract number please!" Is it …? No! Is it…? No! 10min+
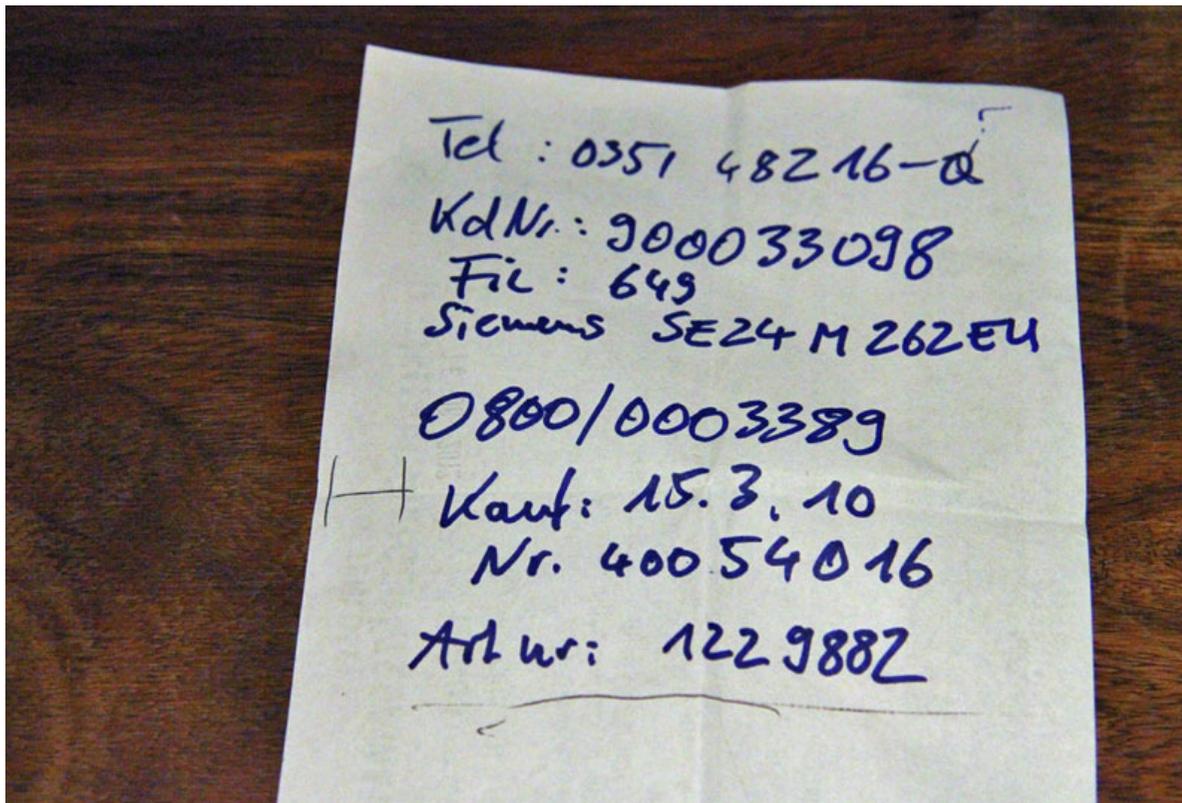
# Jochen's Dishwasher
## A True Story

The culprit: 1cm piece of a porcelain cup handle. Stuck in the pump.

I could have fixed it myself, given the right information.
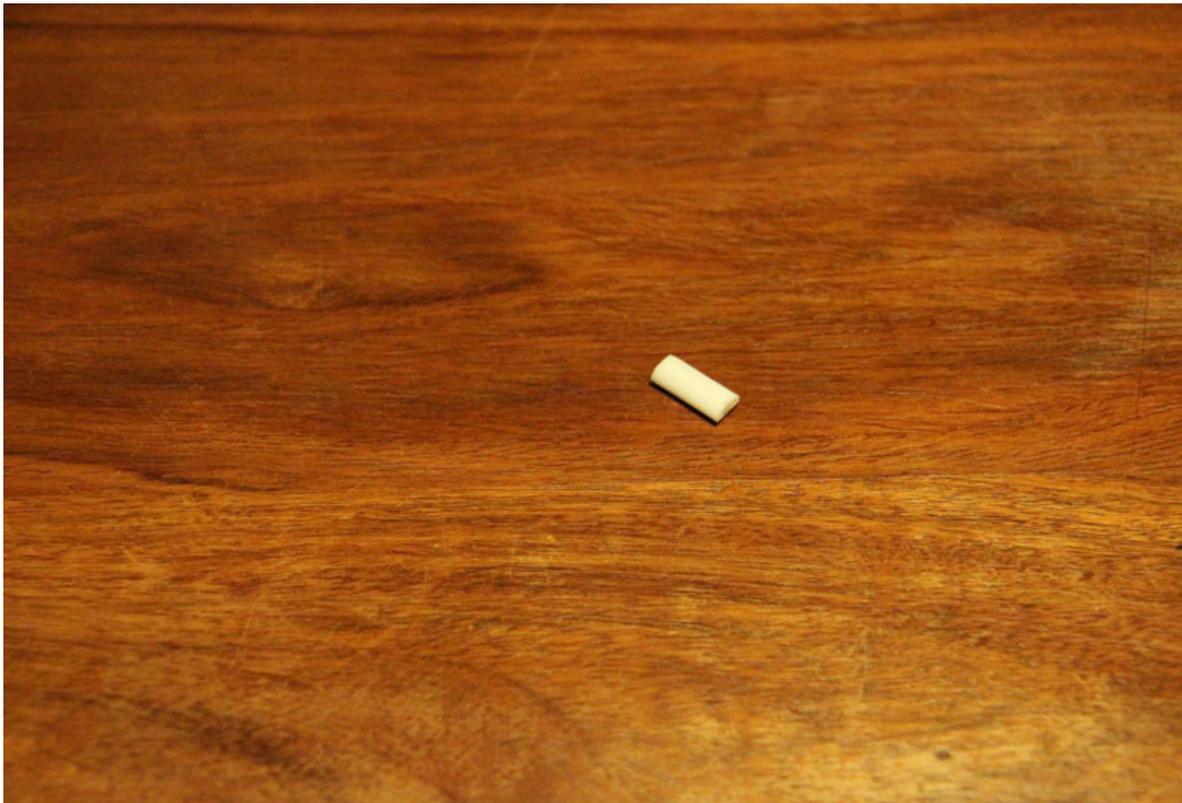
# Jochen's Dishwasher
A True Story

But I didn't because I hadn't the right information.

I called a service. Technician fixed it in <1min. 100 EUR.

# Jochen's Dishwasher
A True Story

But I didn't pay the 100 EUR. Mediamarkt / Siemens did.

Spot the business case! ☺

# Jochen's Dishwasher
A True Story

How to save these 100 EUR for Mediamarkt / Siemens?

# Jochen's Dishwasher

How things should be.

1. Scan a QRCode (or NFC tag) to identify make, model, and serial number.

2. A mobile app offers a list of information and services for the dishwasher.

3. The app guides to the solution: Help yourself (save money) or use service ($$$).
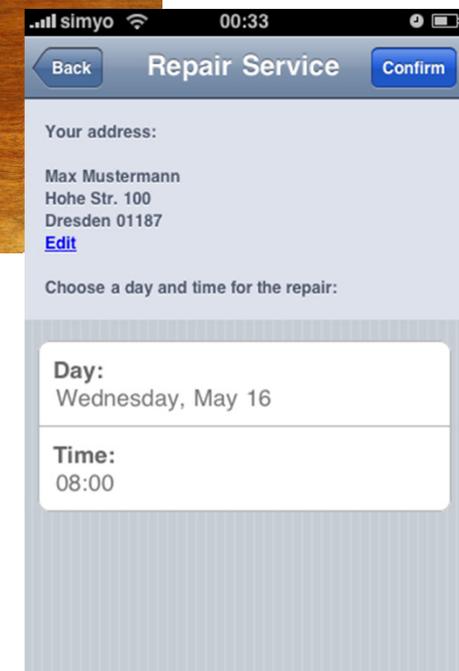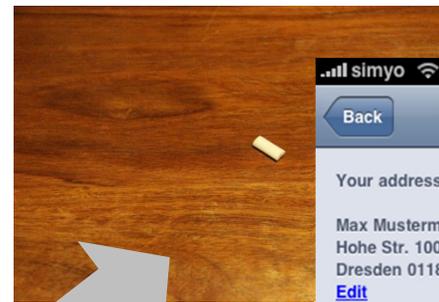
# Jochen's Dishwasher
## How things should be.

Easily offer value-added services, from user's guide to feedback to manufacturer.
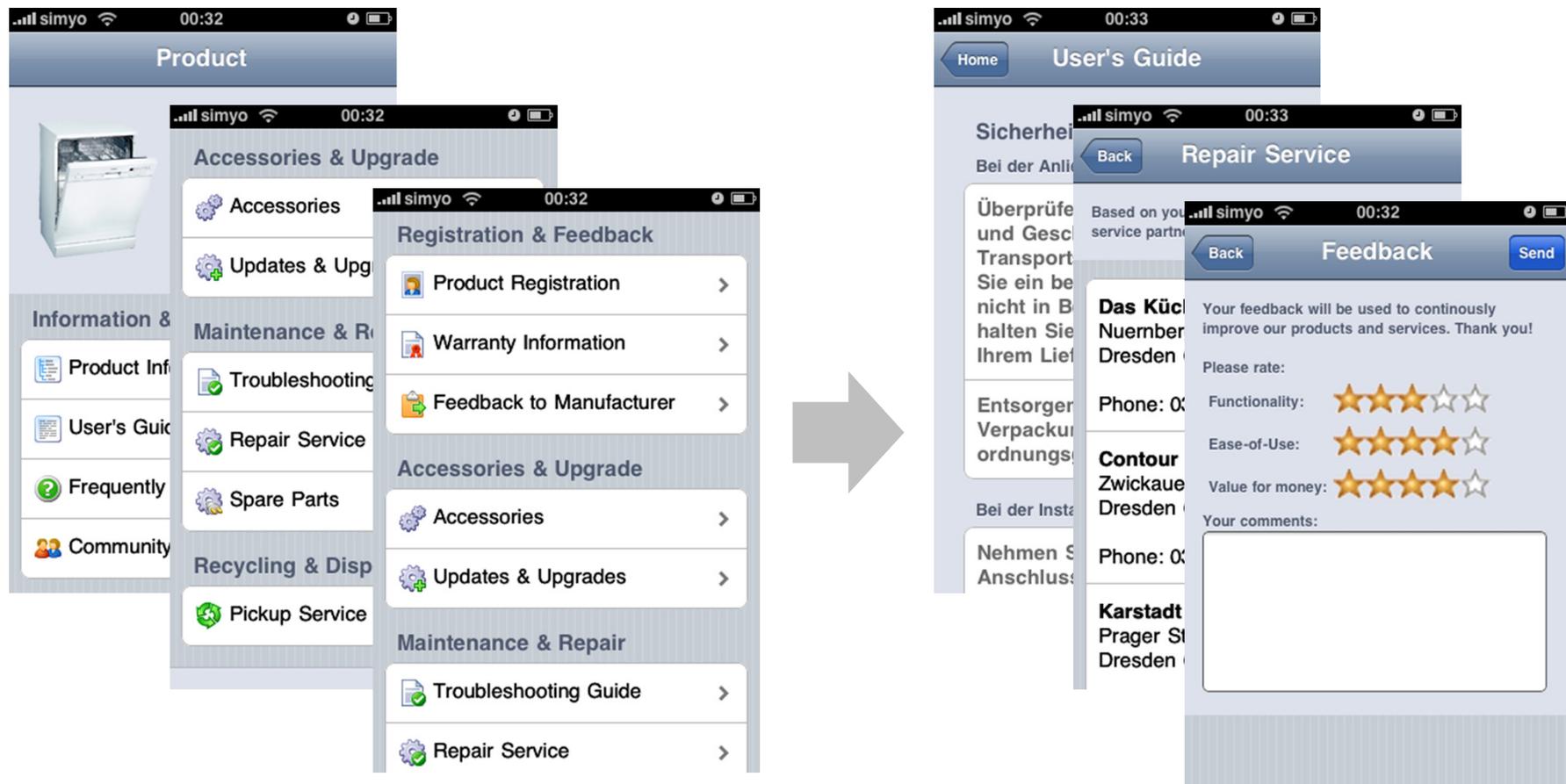
# Jochen's Dishwasher
How things should be.

Or how about 3D printing a spare part on demand?
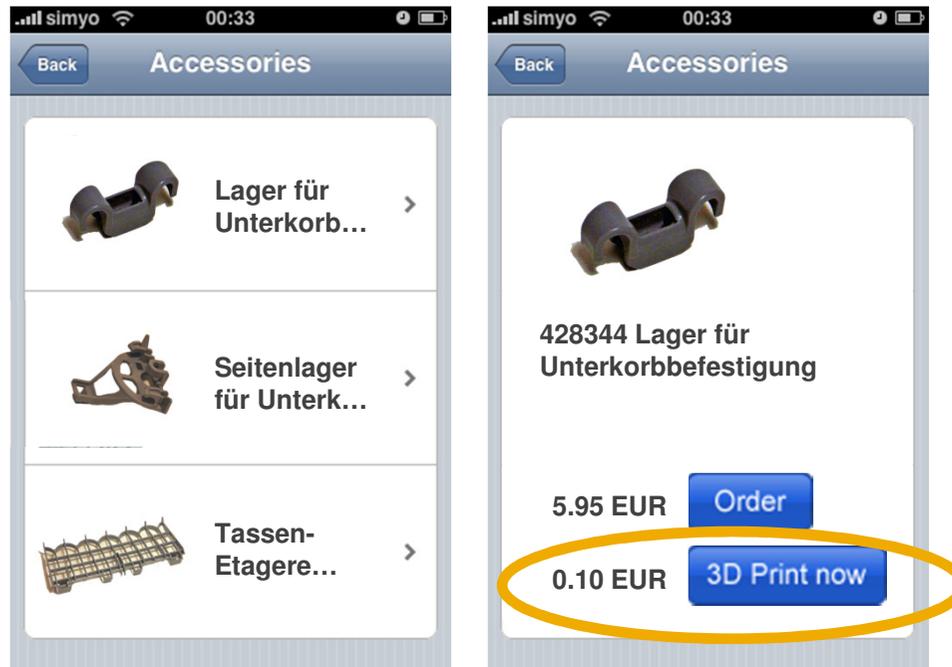
# Jochen's Dishwasher
How things should be.

This also is an information management problem.

How does the CAD drawing get from the OEM to the 3D printer – securely?
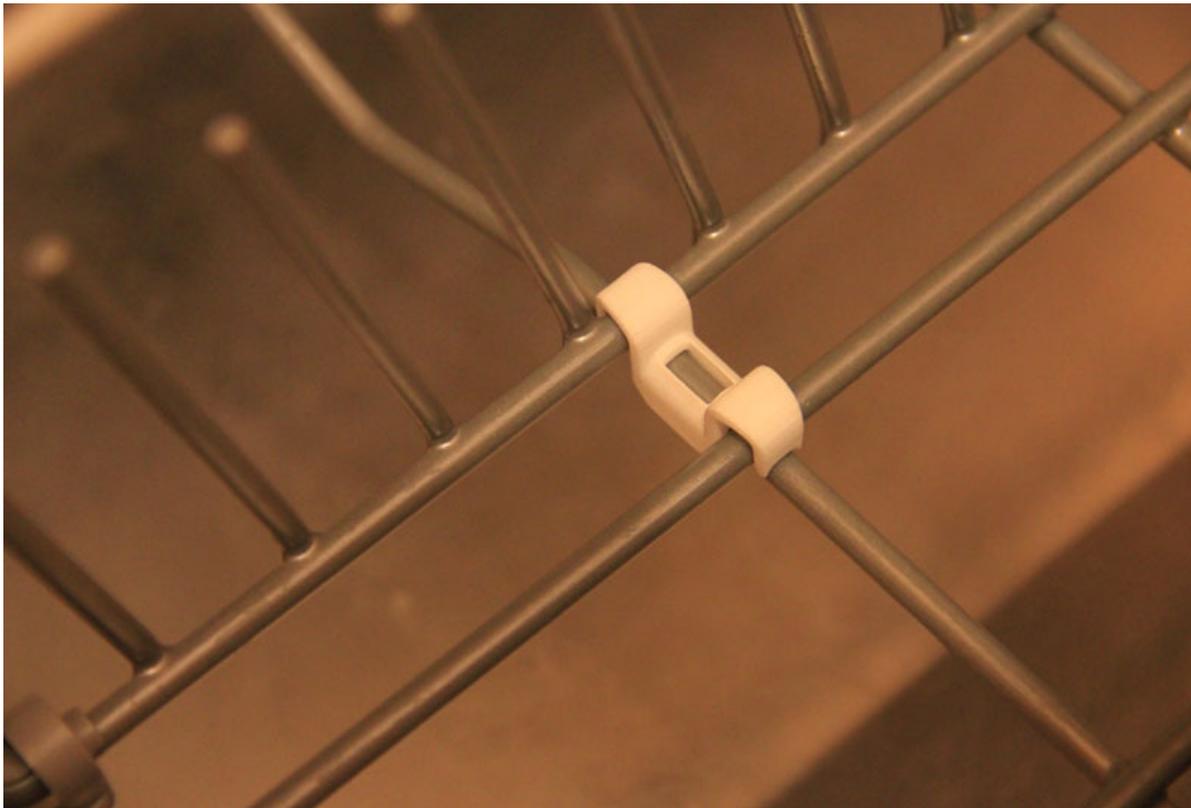
# Jochen's Dishwasher
How things should be.

„We need to talk!" Enterprises must collaborate, exchange information.
Consumer, OEM, supplier, support, repair shop, insurance company...

Consumer

OEM

...

Component
Supplier

Support

Repair
Shop
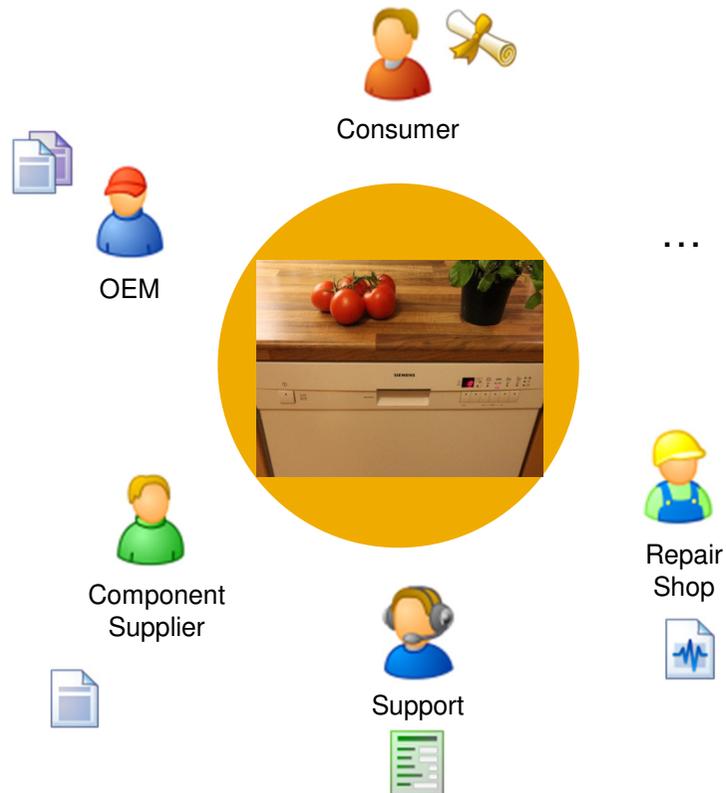
# Industrial Asset Information Management
What's the problem?

Find the differences to Jochen's dishwasher! Not many.

The problem? Organizational boundaries!
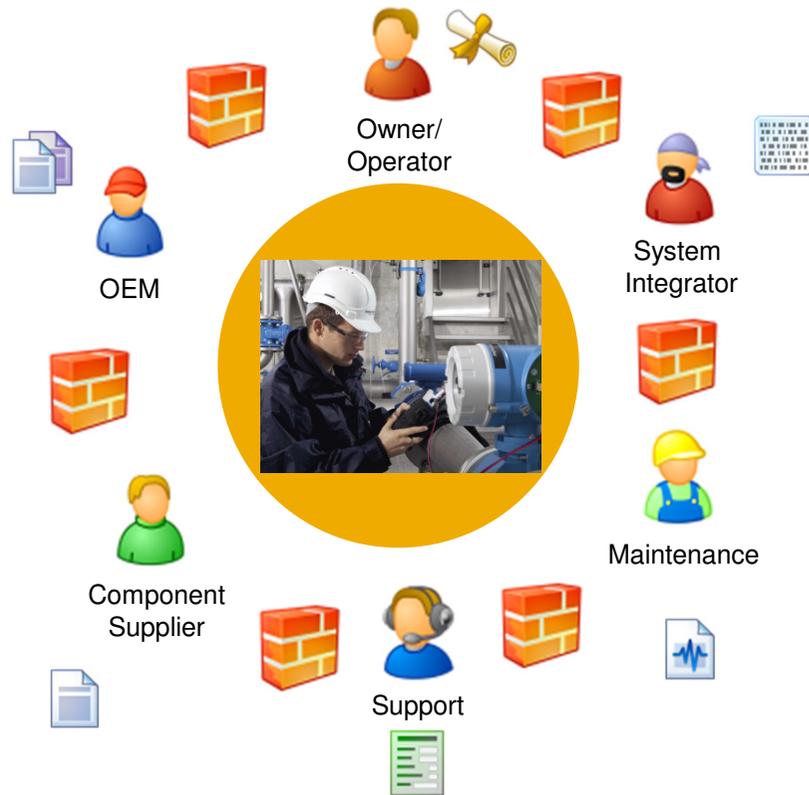


Image courtesy of Endress+Hauser.

# Industrial Asset Information Management
An Example

Let's assume we are responsible for maintenance in a large chemical factory.

…and have a problem with a radar level meter.*



*which won't happen with a device of Endress+Hauser. ☺

# Industrial Asset Information Management
## An Example

To solve the problem we need:

…info from the ERP system about the asset and its maintenance history.

# Industrial Asset Information Management
## An Example

…info from the asset supplier like repair manuals and software updates.



Screenshot courtesy of Endress+Hauser.

# Industrial Asset Information Management
## An Example

Often we do paper work.

Or manually search several IT systems.

# Industrial Asset Information Management
## An Example

Or we spend our morning on the phone with the asset supplier.

# Industrial Asset Information Management
## The Vision

Picture this AIM ☺: Transparent and secure access to asset information from various data sources distributed across different organizations.



Image courtesy of Endress+Hauser.

# Industrial Asset Information Management
## The Future

The smart asset will directly send a malfunction notification to your ERP system.

Or tell itself when a part has been exchanged.

# Industrial Asset Information Management
## The Future

Do you want to get all info on your smart phone? Just scan the asset!

(Remember Jochen's dishwasher? ☺)

# Industrial Asset Information Management
## The Future

You will see all asset-related information regardless of their source!

# Industrial Asset Information Management
## The Future

Boring?

How about an animated repair instruction in a 3D PDF file?



First Step    Next Step    Play All Steps    ▶ ❚❚ ◀❚    Reset All    Previous Step    Last Step
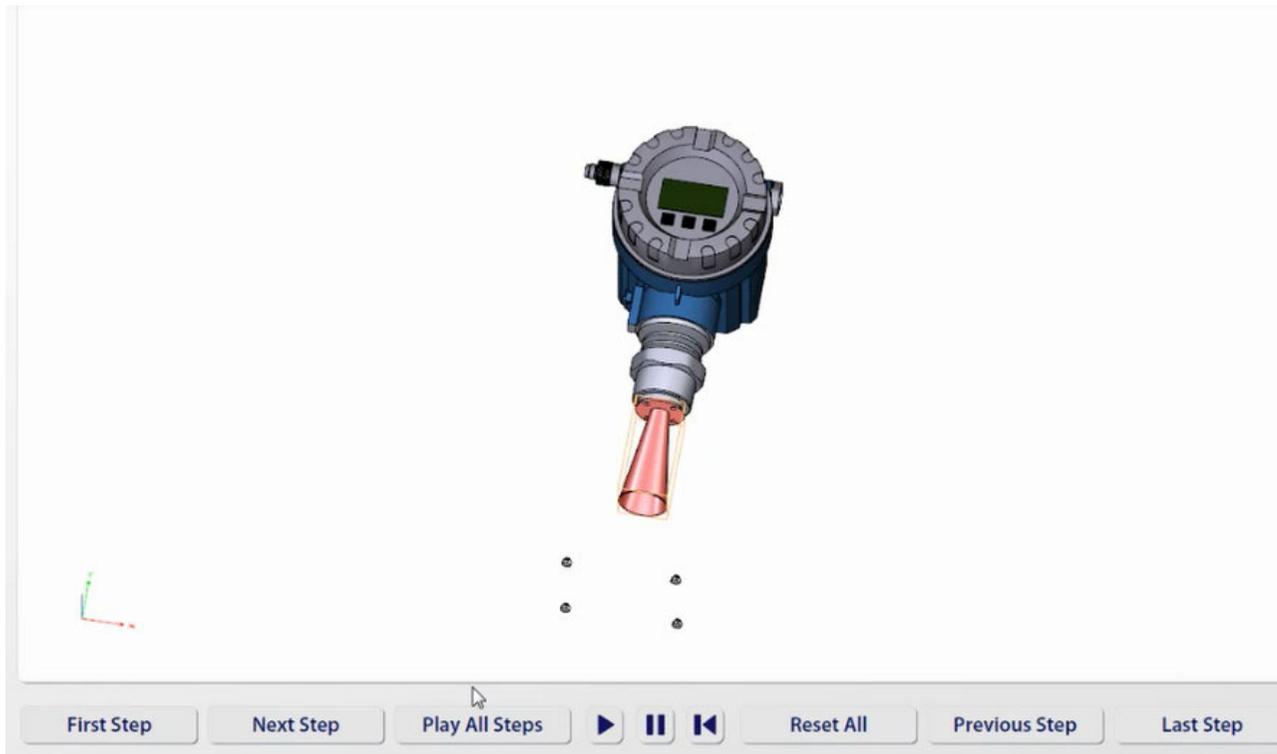
3D model courtesy of Endress+Hauser. Visual work instructions powered by SAP Visual Enterprise.

# Industrial Asset Information Management
## Why?

Less time for information search means more time for problem solving.

Less time for fixing means less downtime and more time for production.

Less effort for data management means lower costs.
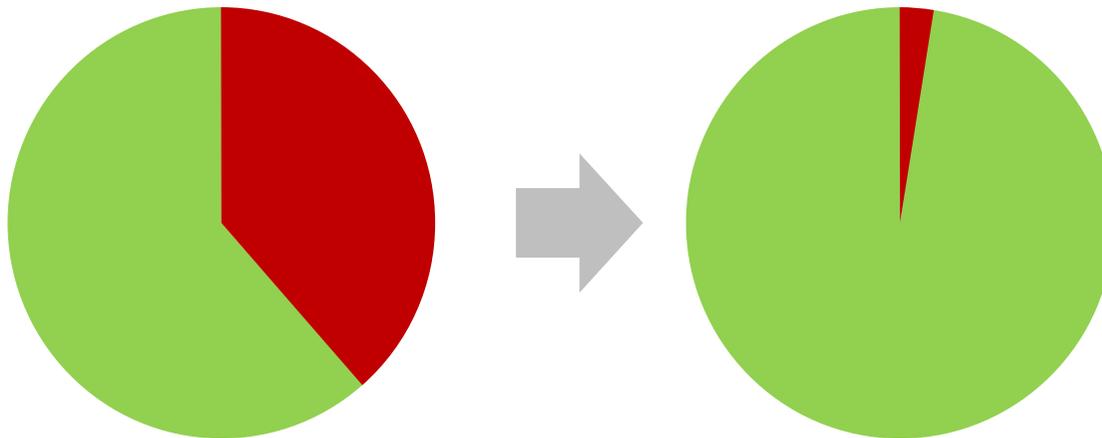
# Industrial Asset Information Management
How does this work?

All data stays where it is. With its owner! No copy&paste, no redudancies.

A cloud-based platform maintains links pointing to the original data sources.

This central „white-label" platform carries the logo of the OEM.



Owner/Operator    Maintenance    …

**Asset Information Management**
operated by [OEM], powered by SAP

OEM    Component Supplier    Support    System Integrator    Owner/Operator    Maintenance    …
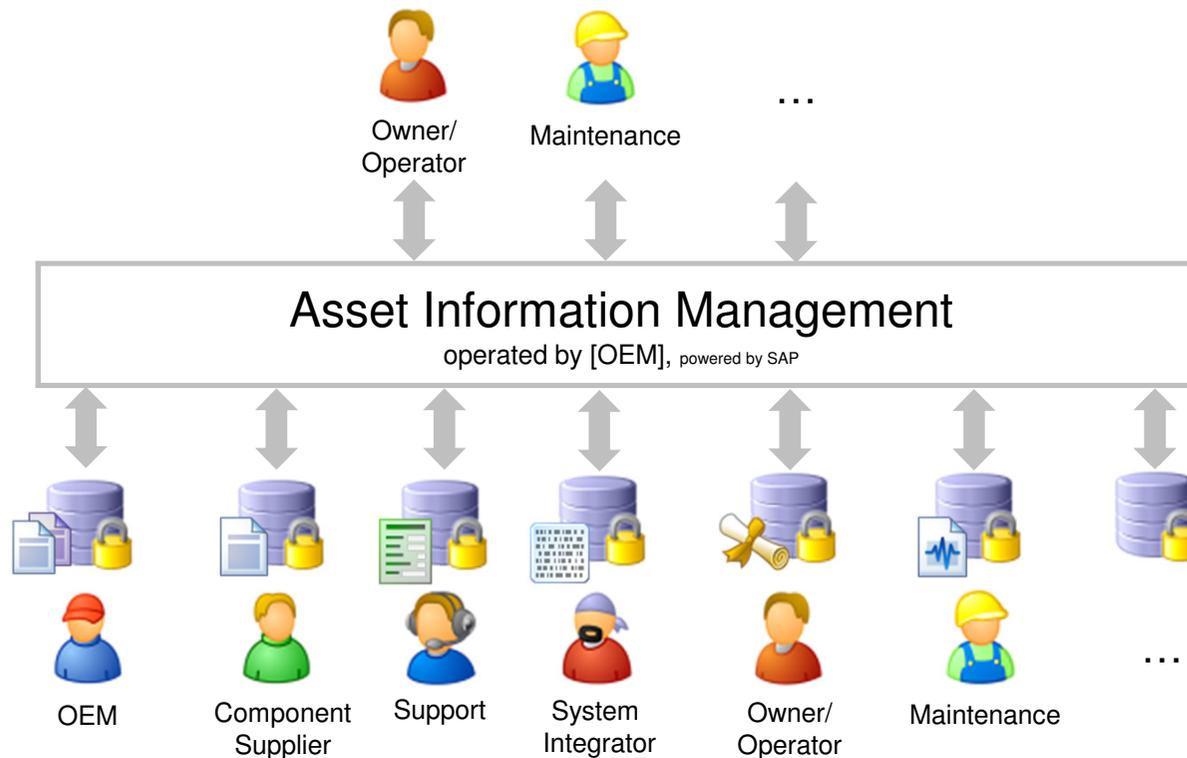
# Industrial Asset Information Management
Don't fire your support staff!

Not everything can or should be automated.

Leave the complex problems to humans and the tedious work to AIM!

31

# Thank You!

PS: We're looking for pilot customers. Apply now for your pilot license! 🕵️

**Dr. Jochen Rode**
Head of Digital Manufacturing
SAP Research

**SAP AG**
Chemnitzer Str. 48
01187 Dresden, Germany

**T** +49 351 4811-6110
jochen.rode@sap.com

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