KOTHES!

# Industry 4.0 – and documentation 4.0

# Agenda

1. What does Industry 4.0 mean for information 4.0
2. Challenges and opportunities with information 4.0
3. Which competencies in terms of processes and tools?
4. What – and whom – do we need to bring together?
5. A glance at a state of the art implementation example.

# What does Industry 4.0 mean for information 4.0

- In our day to day life we are increasingly used to receiving pin point, topic oriented information using google or other search tools.
- Big Data, Industry 4.0, smart factories and the Internet of Things are key words that are driving innovations in the mechanical and plant engineering sectors.
- Companies are increasingly installing Digital Solutions departments with the aim of bundling digital and automation activities.

## Real time data management

- Engineering data
- Manufacturing data
- Production data
- Quality data
- Service data
- …

# What does Industry 4.0 mean for information 4.0

**Optimize Key Performance Indicators for**

- Production planning (output, product in stock…)
- Plant condition (plant availability, maintenance stops…)
- Product quality (material, yield…)

In our smart plant the service data have notified the central control system that a pump P-123 in machine 21-6 needs to be replaced in three days. The production data have informed the central control system that machine 21-6 will have a 4-hour production break in two days' time.

The control system decides that the pump P- 123 will be replaced during the production break. At the same time the control system checks that the pump is in stock, that the necessary staff are available and so on… All these decisions were taken during real time data exchange without a single human having to organize anything.

On the planed day we have three maintenance specialists at machine 21-6. They have a time corridor of 4 hours to replace pump P-123.

**Option 1**

iPad with manual, drawings etc.

The maintenance team has an iPad with design plans on the position of P-123 in the machine (or a 3D overlay with the iPad camera). The PDF manual includes procedures that have to be followed to replace the pump; good pictures or 3D graphics of the pump; and of course the safety instructions that tell users how to perform the replacement safely.

The team gets to work – time is critical – they have only 4 hours for the task!

Even though they have all this information, they will probably need to search for information as they would in a paper manual. What is the right procedure? What is the right picture? Is anything else relevant? Where exactly can I find the pump (depending on the size of the machine or plant, this may not be too easy)?

**Option 2**

The maintenance team have an iPad or, even better, smart glasses (Google, Microsoft or similar) with comprehensive up-to-date information about pump 123. AR (Augmented Reality) indicates the pump's position in the machine. The user receives the necessary step-by-step information at the right time and, where useful, is shown a short film. The maintenance user even receives safety instruction where appropriate. Should the maintenance user need to look something up they can do so as they would on Google.

If they discover information that could be useful in the technical documentation, they can enter it via an interface.

Which team will be more efficient and do the work within the 4-hour deadline?

# What does Industry 4.0 mean for information 4.0

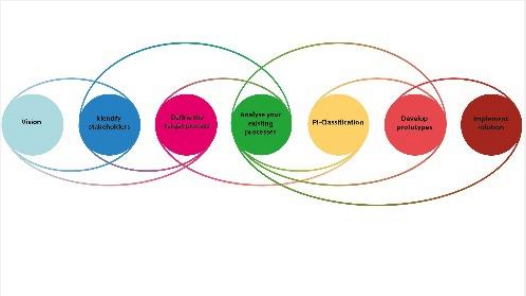
The Goal:

**To close the USERS knowledge gaps as efficiently as possible!**

# What opportunities does information 4.0 bring up?

- The implementation of new and more effective tools will transform the quality of work
- Greater appreciation for your product
- Greater appreciation for the documentation department
- Topics can be easily reused for other areas, such as training or marketing

# Which competencies in terms of processes will be required?




## Process

Understand the company vision and the role that the documentation team will play

- Identify the stakeholders and plan the next steps in detail
- Define the target process that you need
- Analyse your existing processes
- Analyse your Product and information life cycle
- Define your metadata
- Develop prototypes for the selected ideas
- Test the prototypes with the user
- Implement the solution

# Which competencies in terms of tools will be required?

## Tools

- XML Content Management System
- Content Publishing Platform
- Metadata classification tool

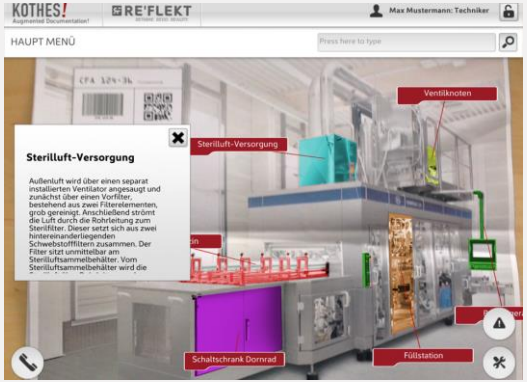
# What – and whom – do we need to bring together?

You need all stakeholders to be committed if you want to bring the company together and create a substantial solution.

Stakeholders can be:

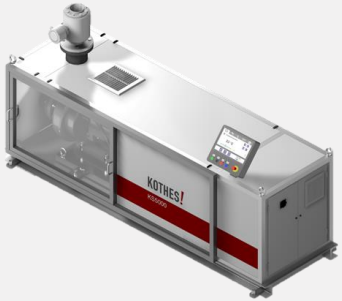
- ✓ Managing directors
- ✓ Head of digital marketing
- ✓ Marketing manager
- ✓ Head of distribution
- ✓ Product management
- ✓ Service manager
- ✓ IT
- ✓ CDO chief digital officer
- ✓ ...

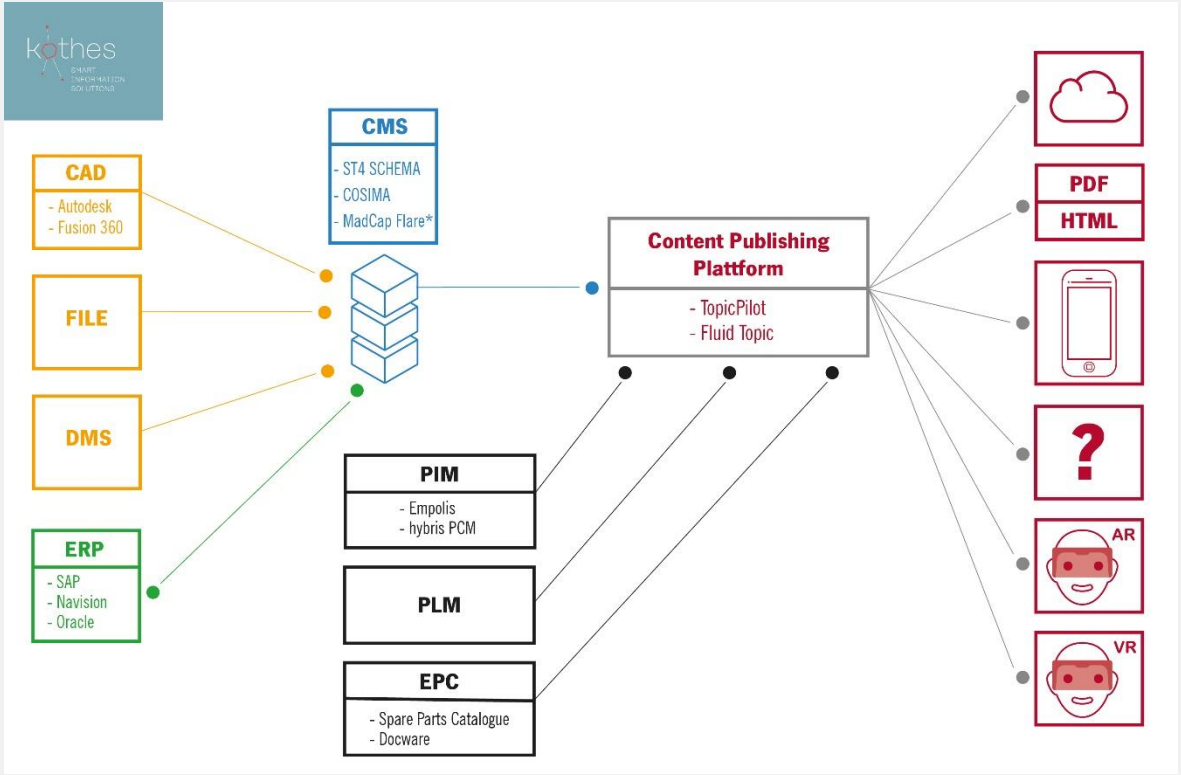
# Key Points



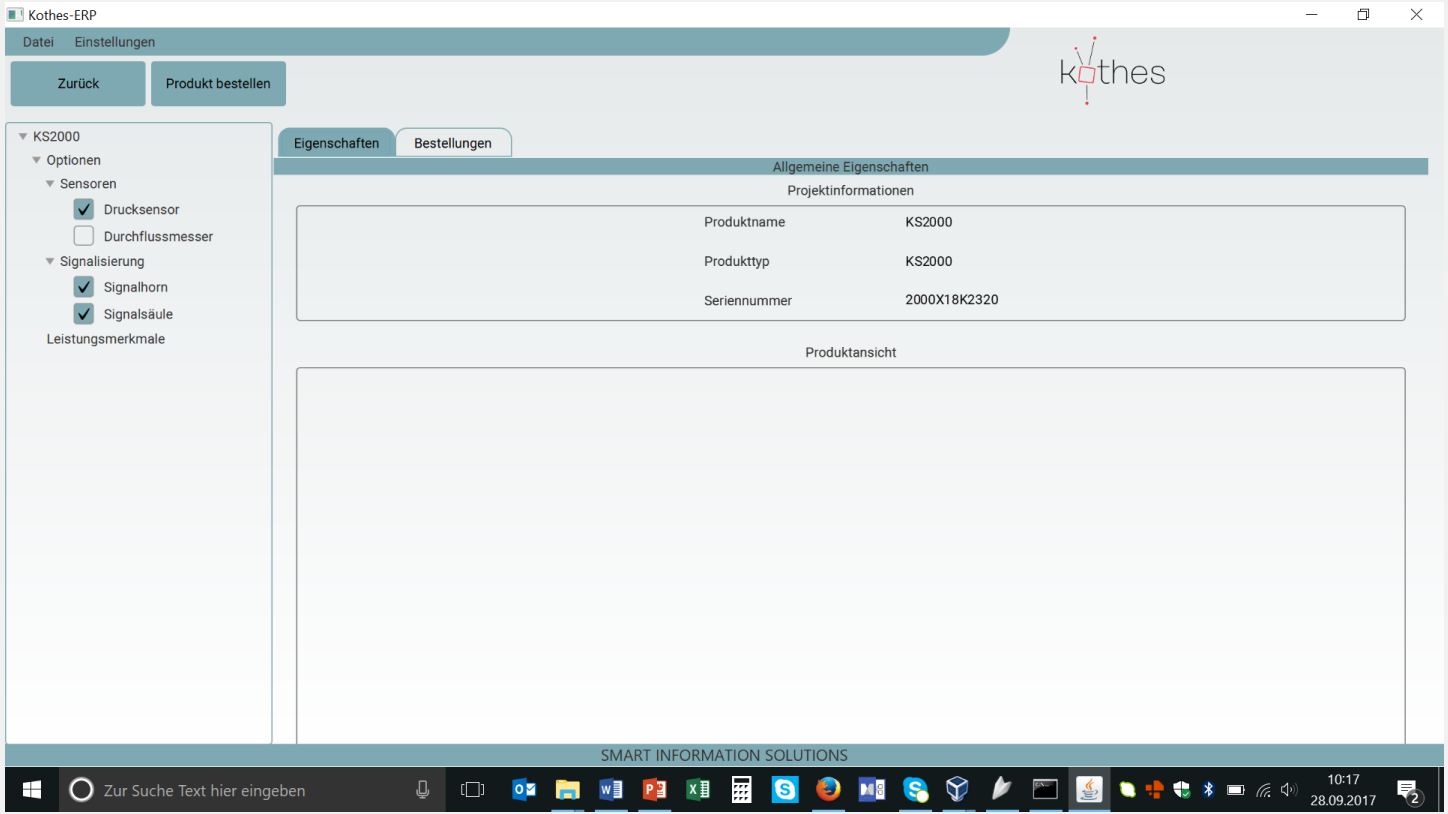

- Use the advantages industry 4.0 to help your user
- Master the challenges by structuring your content and defining your user and his needs
- Use the opportunity to give your users a positive Information experience and they will reward you with trust and their business.
- With Information 4.0 you will add to the success of your company's Industry 4.0 Vision

# A glance at SMARTY



# ERP (Kothes)


Kothes-ERP
Datei
Einstellungen
Zurück
Produkt bestellen
kothes
KS2000
Optionen
Sensoren
Drucksensor
Durchflussmesser
Signalisierung
Signalhorn
Signalsäule
Leistungsmerkmale
Eigenschaften
Bestellungen
Allgemeine Eigenschaften
Projektinformationen
Produktname
KS2000
Produkttyp
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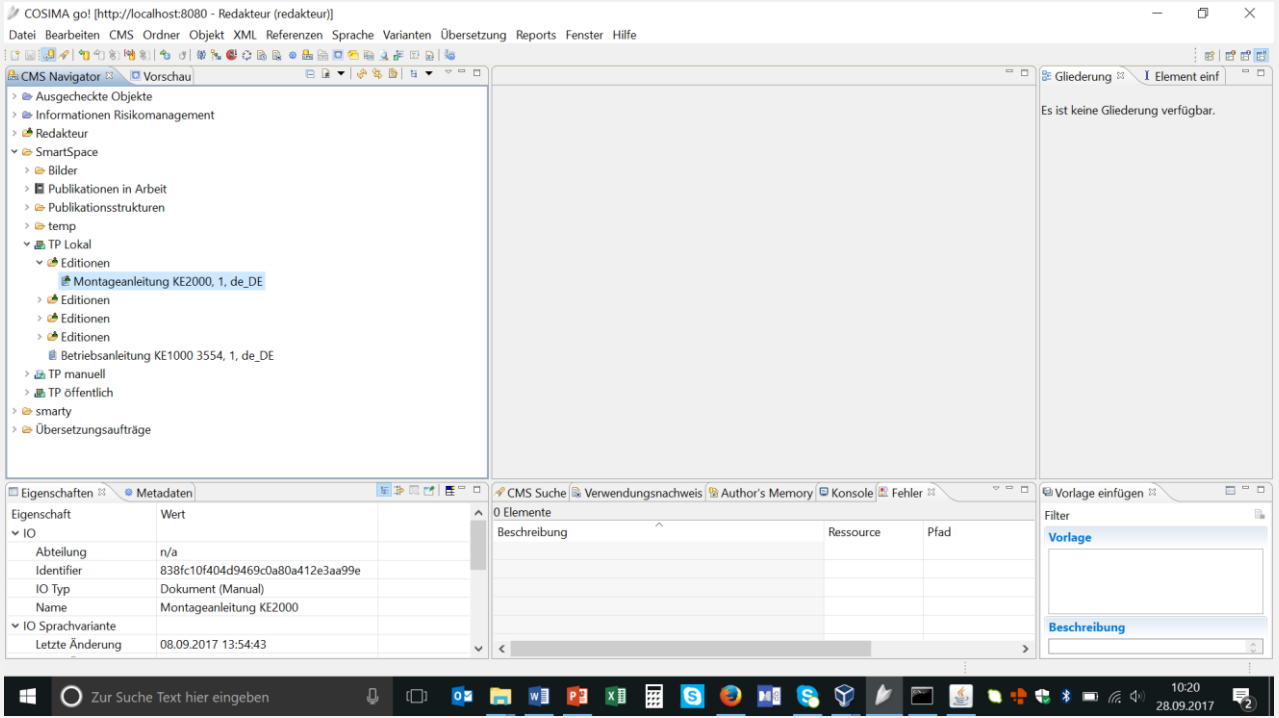
28.09.2017

# CMS


COSIMA go! [http://localhost:8080 - Redakteur (redakteur)]
Datei Bearbeiten CMS Ordner Objekt XML Referenzen Sprache Varianten Übersetzung Reports Fenster Hilfe
CMS Navigator
Vorschau
Ausgecheckte Objekte
Informationen Risikomanagement
Redakteur
SmartSpace
Bilder
Publikationen in Arbeit
Publikationsstrukturen
temp
TP Lokal
Editionen
Montageanleitung KE2000, 1, de_DE
Editionen
Editionen
Editionen
Betriebsanleitung KE1000 3554, 1, de_DE
TP manuell
TP öffentlich
smarty
Übersetzungsaufträge
Gliederung
Element einf
Es ist keine Gliederung verfügbar.
Eigenschaften
Metadaten
Eigenschaft
Wert
IO
Abteilung
n/a
Identifier
838fc10f404d9469c0a80a412e3aa99e
IO Typ
Dokument (Manual)
Name
Montageanleitung KE2000
IO Sprachvariante
Letzte Änderung
08.09.2017 13:54:43
CMS Suche
Verwendungsnachweis
Author's Memory
Konsole
Fehler
0 Elemente
Beschreibung
Ressource
Pfad
Vorlage einfügen
Filter
Vorlage
Beschreibung
Zur Suche Text hier eingeben
10:20
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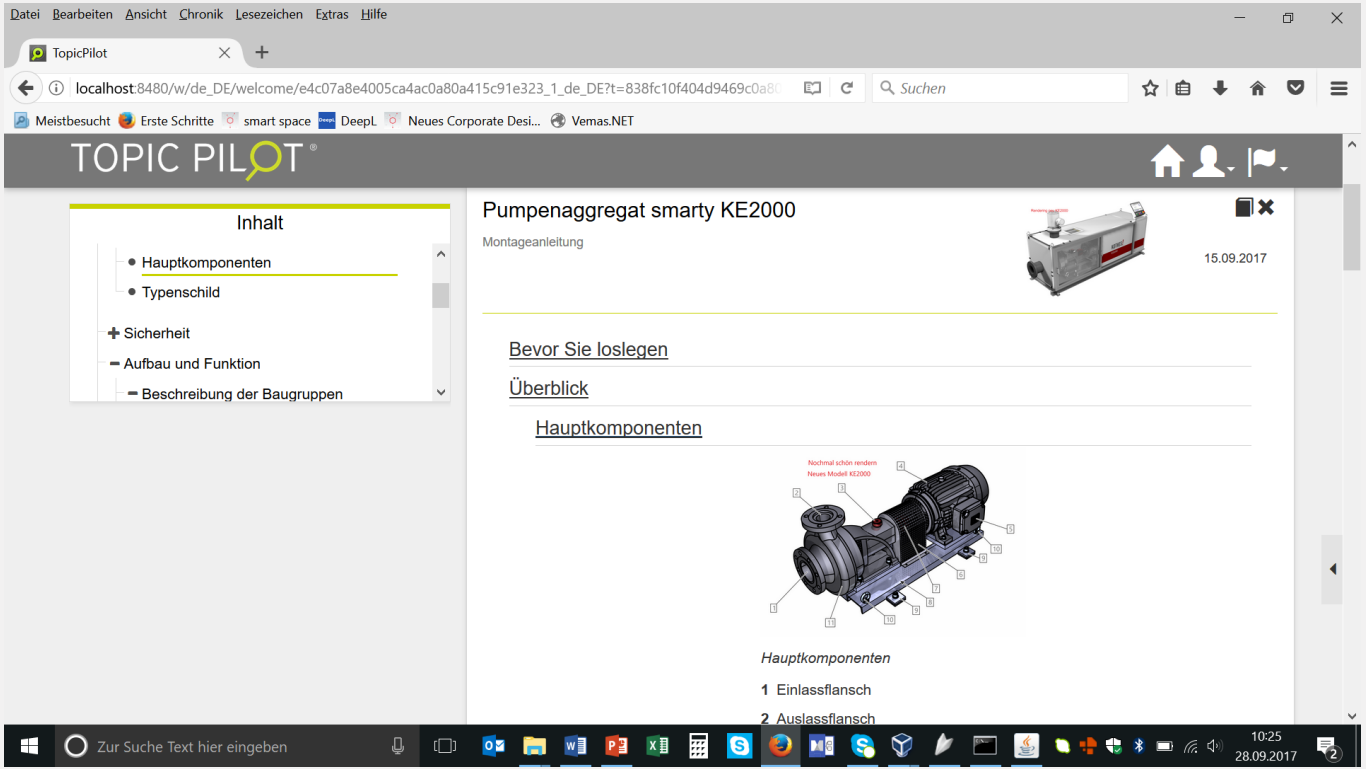
# Topic Pilot


Datei Bearbeiten Ansicht Chronik Lesezeichen Extras Hilfe
TopicPilot
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Suchen
Meistbesucht Erste Schritte smart space DeepL Neues Corporate Desi... Vemas.NET
TOPIC PILOT
Inhalt
Hauptkomponenten
Typenschild
Sicherheit
Aufbau und Funktion
Beschreibung der Baugruppen
Pumpenaggregat smarty KE2000
Montageanleitung
15.09.2017
Bevor Sie loslegen
Überblick
Hauptkomponenten
Hauptkomponenten
1 Einlassflansch
2 Auslassflansch
Zur Suche Text hier eingeben
10:25
28.09.2017

# tekom 2017

Visit us at the

we are looking forward to meeting you!

# Questions?

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