



Microsoft Industry 4.0 Day  
February 2018



# Agenda

About ORBIS

AI Transformation

AI @ Freudenberg Sealing

Appetizers

Wrap Up



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# ORBIS – Business Process Consulting



IT strategy consulting



Organization and process consulting



System implementation & -integration



IT products & solutions



Managed Services

Gold  
Microsoft Partner  




2017/2018  
INNER CIRCLE  
*for Microsoft Dynamics*

**SAP® Certified**  
Powered by SAP NetWeaver®

Microsoft  
Partner  
 2017 Partner of the Year Winner  
Germany



# Dynamics 365 – Customer Engagement

Intelligent business applications in the cloud

Microsoft AppSource

 Office 365

+  
Yammer (Social Network)  
SharePoint



Customer & Partner Portal



Integration  
Operations



Sales



Marketing

Microsoft  
Dynamics 365  
Customer Engagement



Customer  
Insights



Project Service  
Automation



Field Service



Customer Service



ORBIS Best Practice Apps & Processes



Power BI

Cortana Intelligence  
Suite

Azure IoT  
Suite

Common application platform: PowerApps, Microsoft Flow, Common Data Model



# Innovation for Discrete Industry



DIRECT/B2B



KAM




INDIRECT/PARTNER




## ORBIS MANUFACTURING ONE

Dynamics 365 for Customer Engagement



Machine Learning


Opportunity Assistant




Advanced Service




SAP Integration ONE




Digital/IoT




Integration Config / Calc



Data Quality ONE



Integrated SAP DVS



Adv. DMS/SharePoint



Process Wiki



# ORBIS MANUFACTURINGONE

Dynamics 365 for Customer Engagement



**DMG MORI**



Herrenknecht  
550 CRM Users

**SICK**  
Sensor Intelligence.

**HEIDELBERG**



DMG MORI  
3.500 CRM Users



ifm electronic



**WOLF**  
Energiesparen und Klimaschutz seriensmäßig

Bystronic  
600 CRM Users

**metabo**  
PROFESSIONAL POWER TOOL SOLUTIONS

Wir messen es. **testo**



Stahl  
300 CRM Users

**LiSEC**

**ph HORN ph**

**Bystronic**

HEIDELBERG  
1.500 Users





**DMG MORI**



**ferrum**

**Bystronic**

**KAISER+KRAFT**

**DMG**

3500 CRM Users (> 550 Service)  
CRM Online

**ZF**

250 CRM Users (>10.000 planned)  
CRM On Premise

**Ferrum**

120 CRM Users, CRM Online

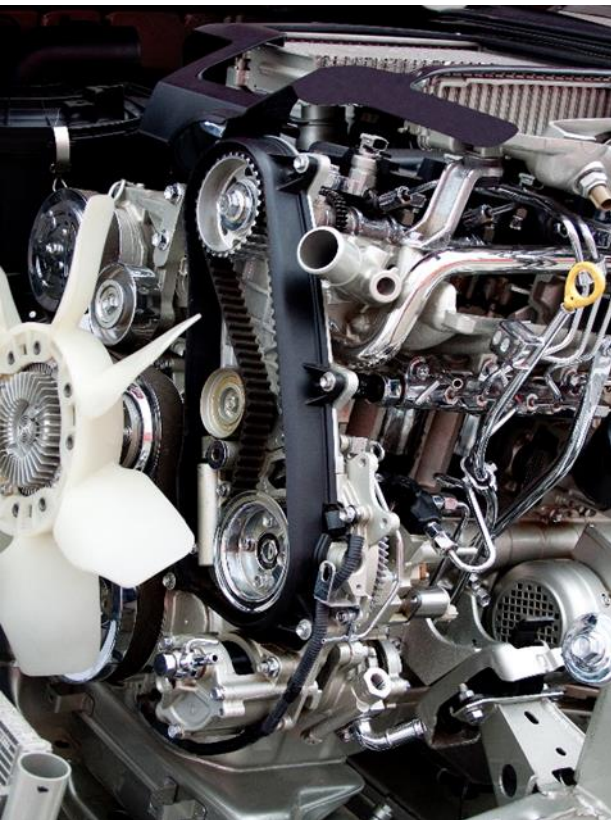
**Bystronic**

410 Users Service, CRM On-  
Premise

**Kaiser+Kraft**

20 Users Service, CRM Online





...

Hirschvogel  
Automotive  
350 CRM Users

WEBASTO  
300 CRM Users (800  
planned)

Freudenberg  
1500 CRM Users

ZF  
350 CRM Users  
(10.000 in Roll-out)

thyssenkrupp  
300 CRM Users (on  
going)





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# Amplifying Human Ingenuity



# Trend topics in digitization



Cloud computing



Artificial intelligence



Autonomous driving



Industry 4.0



Smart service



Future of work and society



## Second wave

## Digital data

- Capture
- Store
- Transfer
- Process

- Understand
- Refine
- Use actively
- Make money



Machine **readable** data:  
Internet and cloud technology

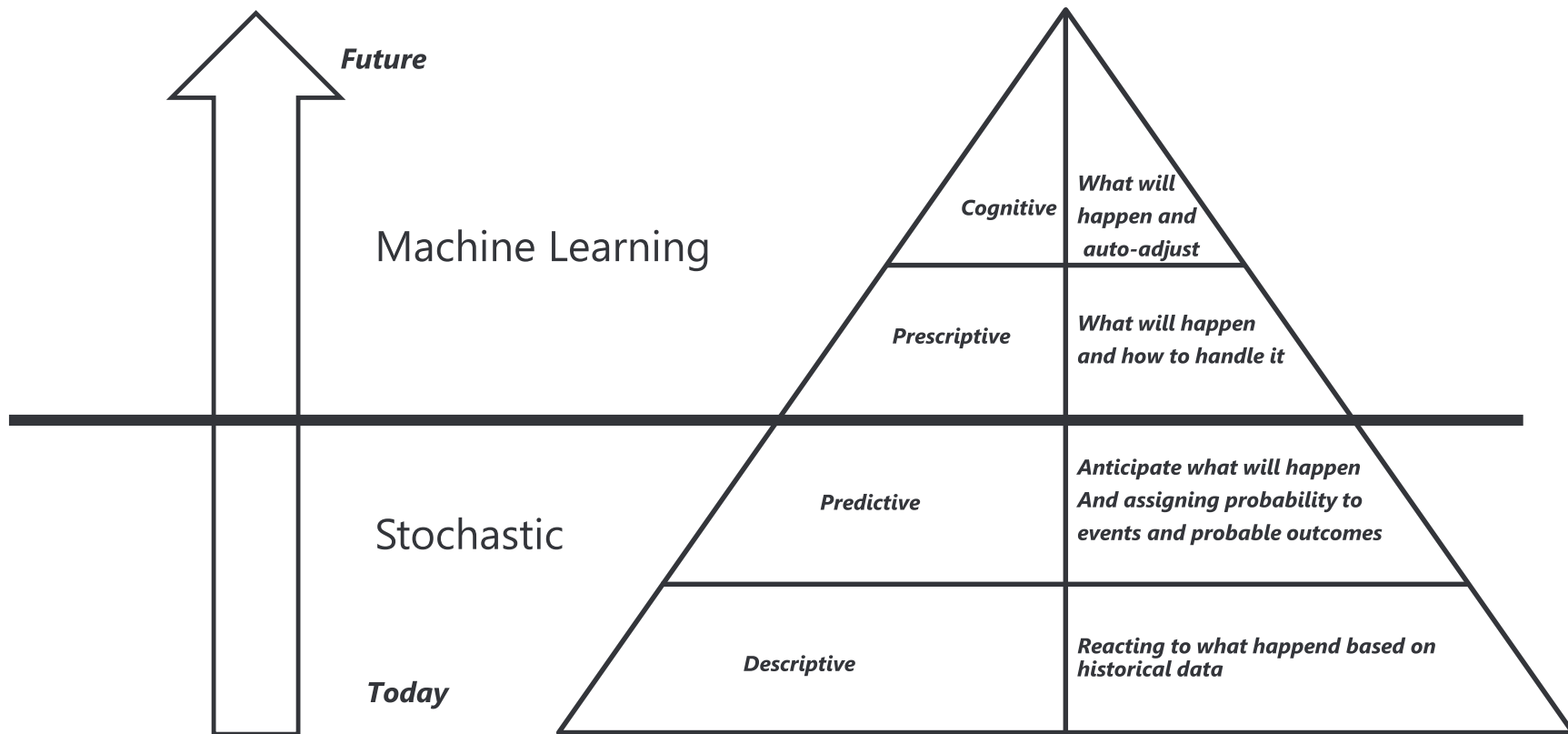
Machine **understandable** data:  
Artificial intelligence and machine learning

## Digitization should make sense and be intelligent





# Intelligence enables decisions



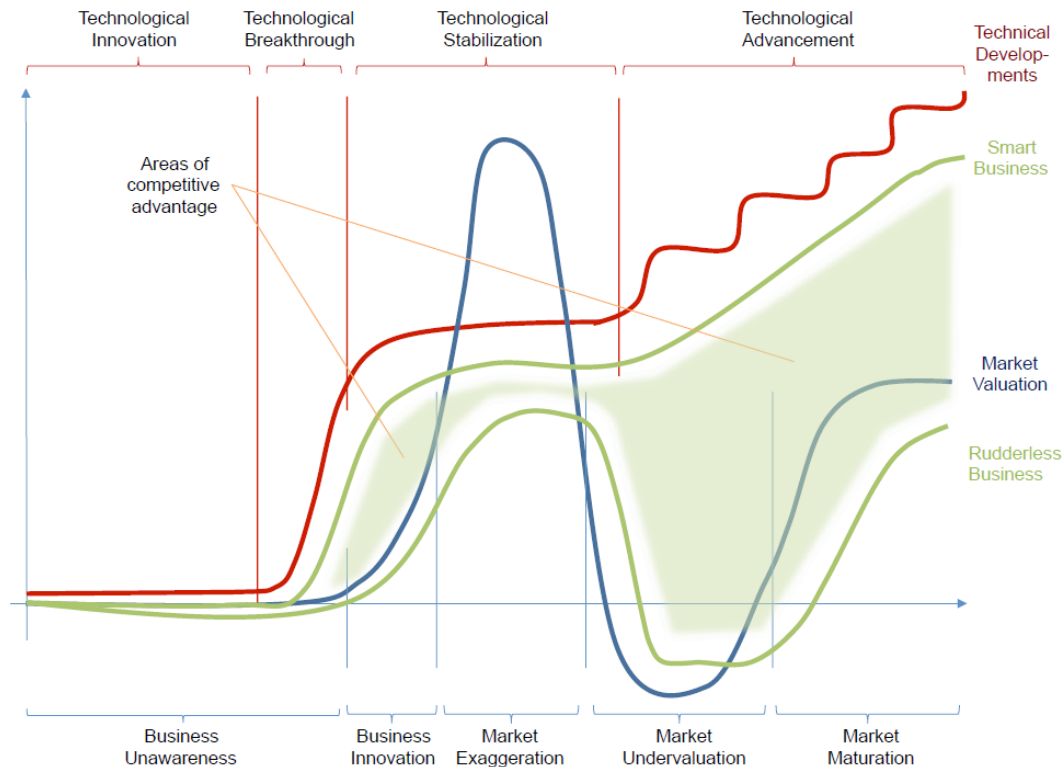
“

The core currency of any business will be the ability to convert their data into AI that drives competitive advantage.

”

-Satya Nadella, CEO, Microsoft

# Adoption of AI



## SUMMARY OF KEY FINDINGS

96%

*96% of the respondents agree that achieving pervasive automation is key to their digital transformation. Yet nearly three in four say their organizations have not automated all the tasks they believe should be automated.*

63%

*63% of the respondents who have achieved their automation mandate, say their organizations developed 20 or more valuable innovations in the past 12 months; with the average being 1-4 innovations for the respondents who have not achieved their automation goals.*

29%

*Only 29% of the respondents who score low on their innovation mandate, rate lifelong learning as extremely important. 77% of the respondents who score high on their innovation mandate state that lifelong learning improves their ability to fit into new roles.*

89%

*Of the surveyed enterprises that are growing significantly, 89% are currently undergoing full-cycle digital transformation encompassing automation and innovation grounded in a foundation of reskilling and learning.*

98%

*98% of all the respondents who used AI-supported activities to power their digital transformation indicate that it generated additional revenue for their organizations.*

automation is key for digital transformation

innovation thrives automation

lifelong learning thrives innovation

→ implement the full circle

→ AI boosts digital transformation

Quelle: [www.infosys.com/human-amplification](http://www.infosys.com/human-amplification)

# Elements of a successful AI Transformation



## Use Cases / Sources of Values

- Innovation management
- Development of a service and Industry 4.0 strategy
- Technological driver
- Economic driver
- Building new knowledge areas
- Cooperations and networks



## Data- Ecosystem

- Sensor technology in the production
- Social media
- Sensor in Products and services
- Data sources from third-party



## Technology & Tools

- SQL / noSQL databases
- Data analytics tools
- AI tools
- Tools by cooperation
- In-house development
- Cloud services



## Processes & Integration

- Reorganization by Industry 4.0 principles
- Networking with partners and competitors
- Implementation services strategy



## Open Culture & Organization

- Conversion of the organization to an Industry 4.0 and product Service organization
- Proactive knowledge management



## Business Plan

- Create domain specific services
- Add services into product & service portfolio
- Use new upsell potential



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# Freudenberg Sealing Technologies at a Glance

The world's leading specialist  
for sealing technology

> 2,3 billion  
Euro Sales  
2016

> 15.000  
Employees

Located in more  
than  
**60 countries**  
worldwide



**Largest**  
Business Unit of  
Freudenberg Group



> 5 billion  
seals per year or 20  
million per day

> 1.800  
specific  
material blends and  
1.000 raw materials

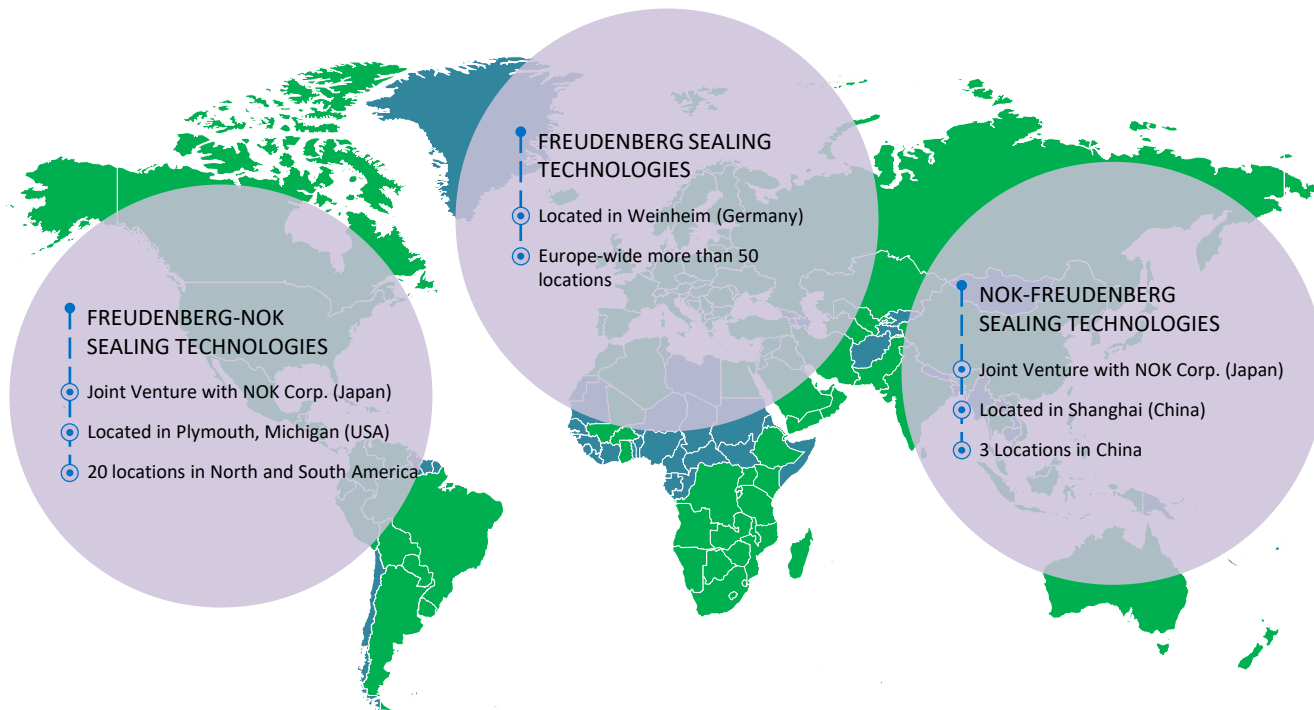
One of the  
biggest  
buyers of rubber  
(without tire  
manufacturers)

Production of the  
first seals  
**1929**

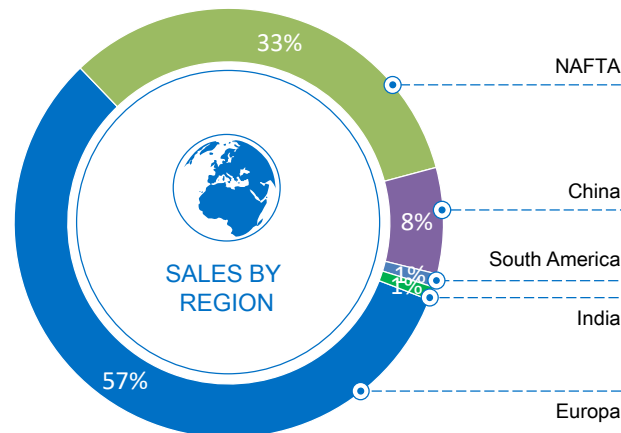
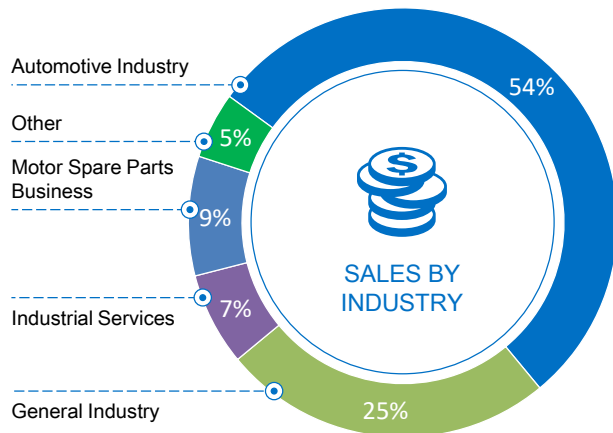
**Successful  
Partnership**  
with NOK in North America  
and Asia



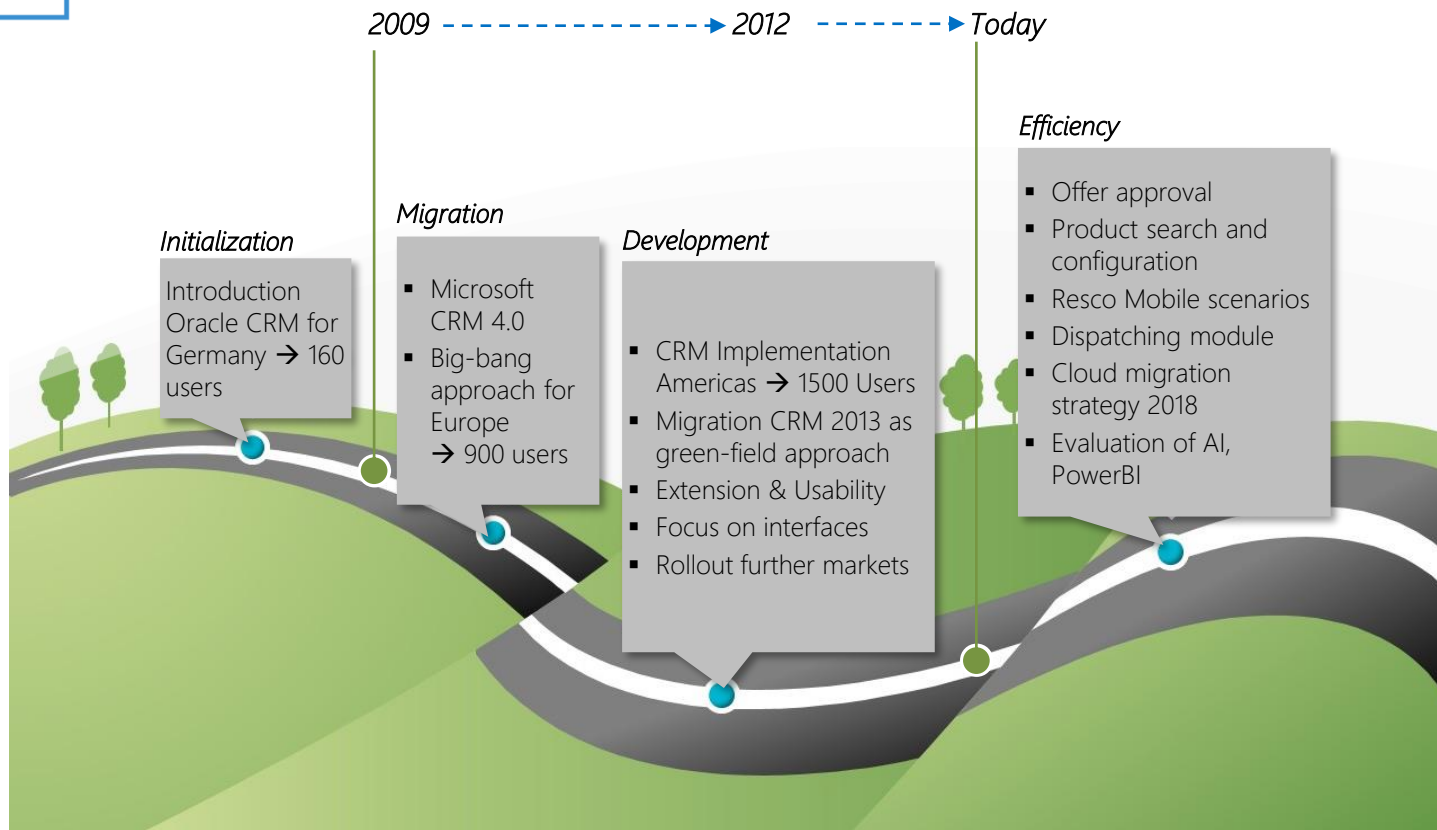
Worldwide Network with strong local players:  
Close to customers in 60 countries with more than 75 locations



# Sales in 2016 – Freudenberg Sealing Technologies



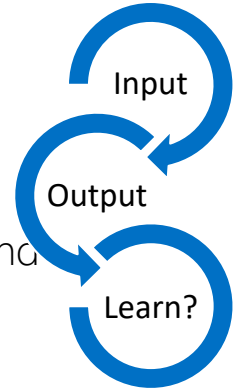
# CRM History



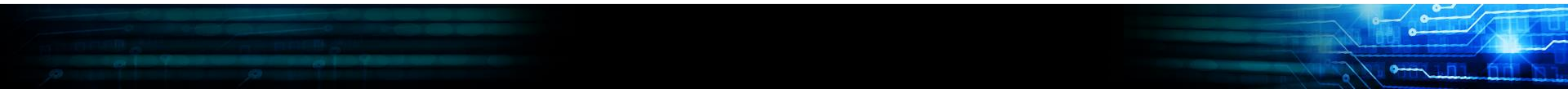


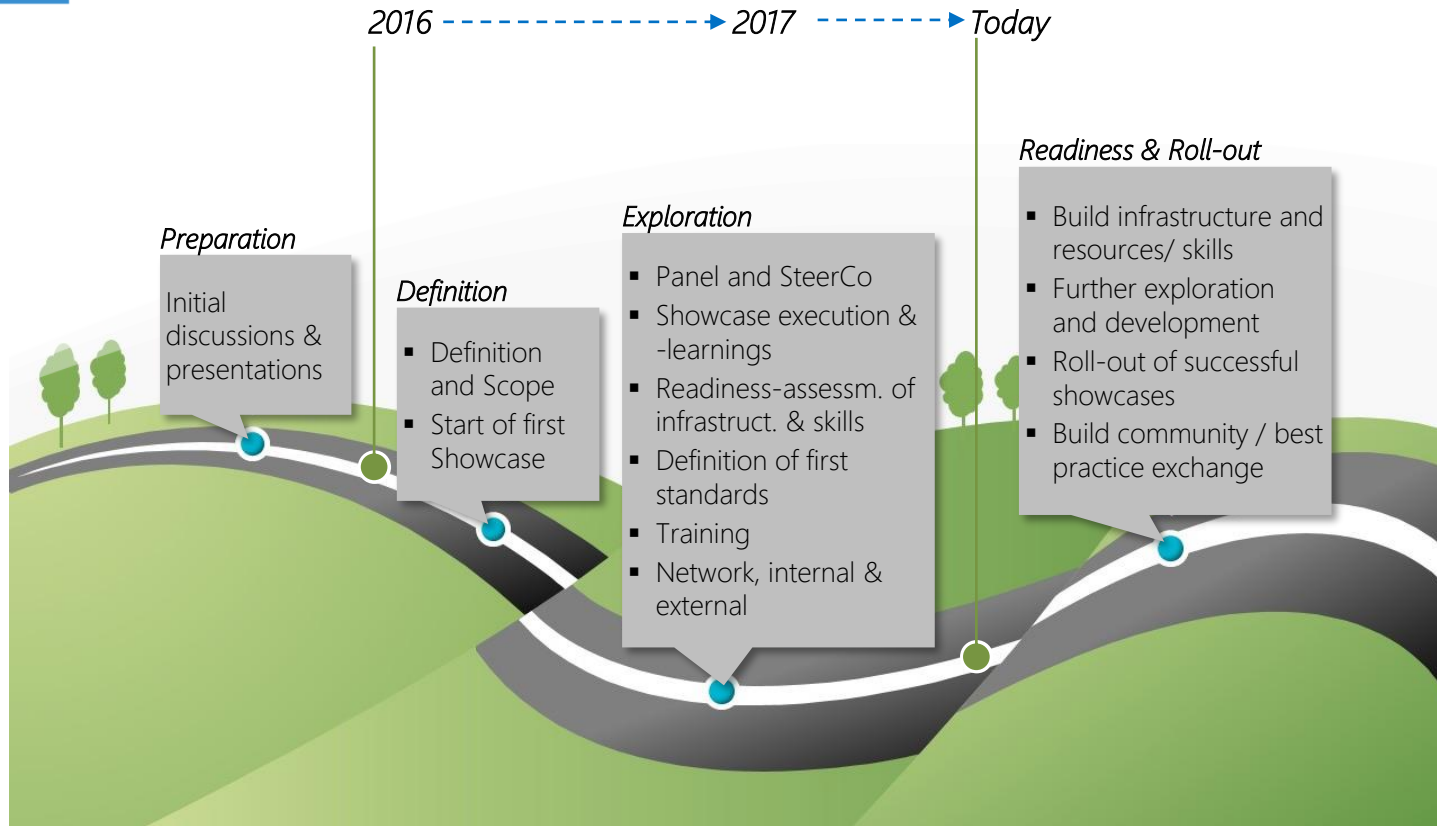
# Where do we stand?

- Working with Microsoft CRM over the last 8 years
- Globally used system with 1500 users
- Diverse application scenarios
- Many new features → core feature is still the request-quotation process
- In the meanwhile there are over 400 new request items coming daily from sales and out of the eCommerce Platform



→ How do we get added value from this data?



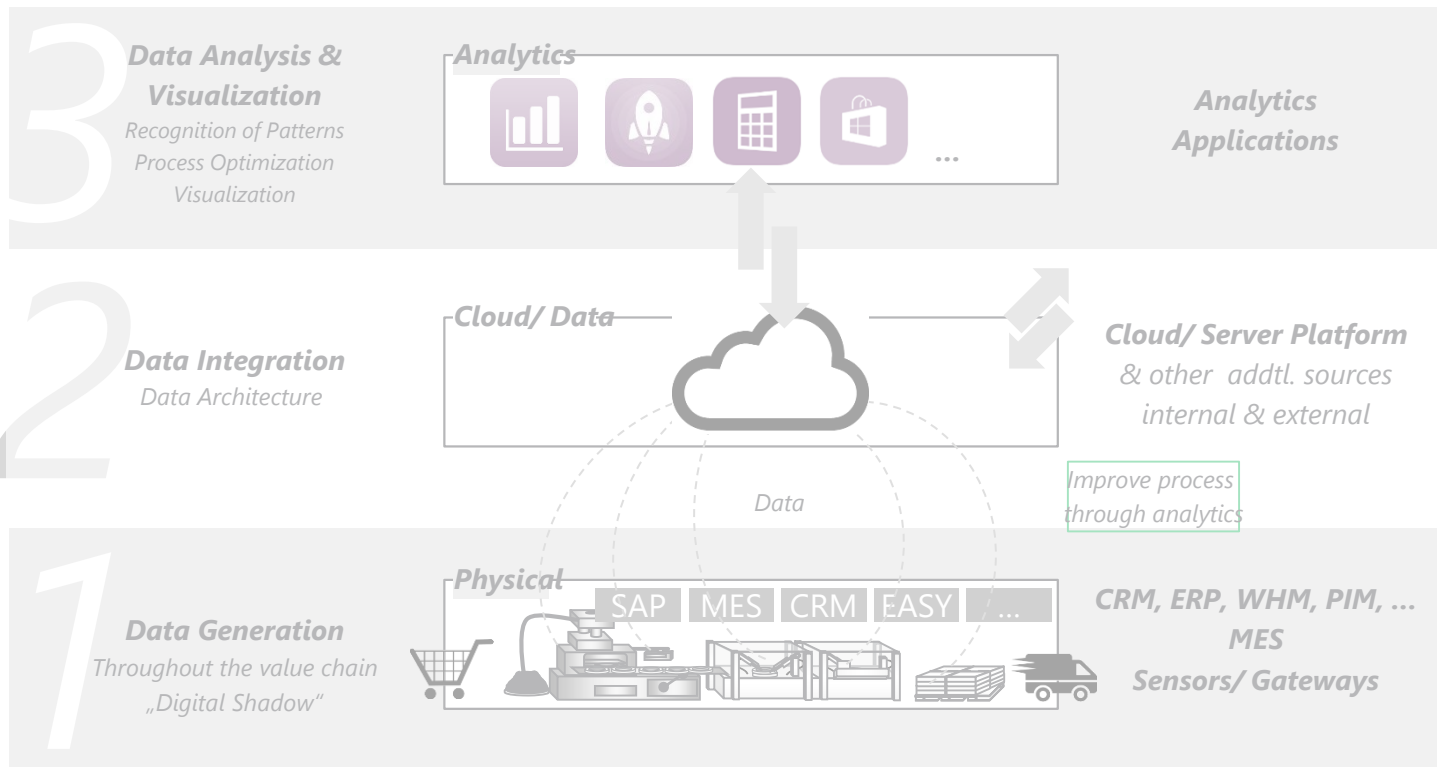


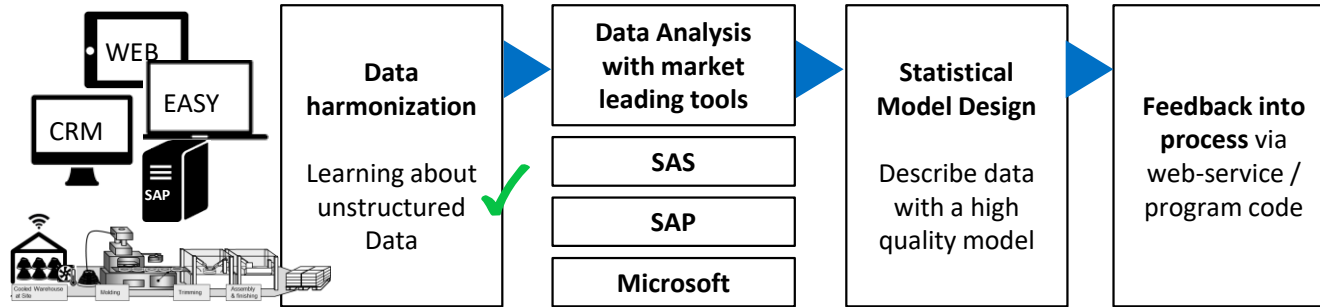
# FST's Digitalization Hierarchy

**Task**

**Structure**

**Systems**





## Definition

Develop a model to predict the Win Probability of CRM Opportunities

## Showcase Results

### Showcase successfully implemented

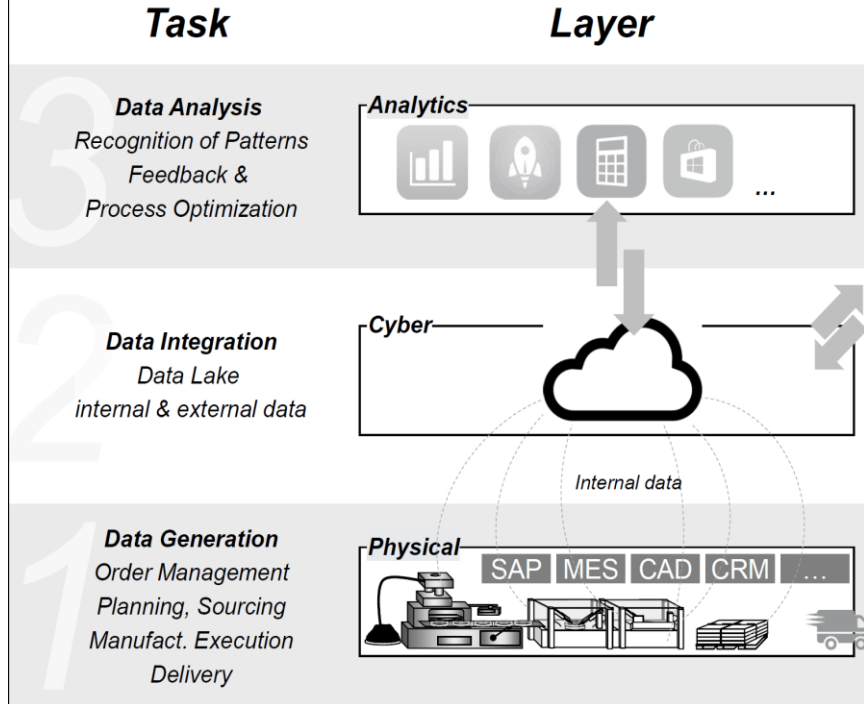
- Data aggregation and harmonization implemented
- Creation of a statistical model based on Azure Machine Learning
- Technical integration into Microsoft CRM
- Ongoing live-evaluation of CRM Opportunities implemented within productive CRM

## Participants

Internal IT + Business + Partner



## Digital Data Hierarchy



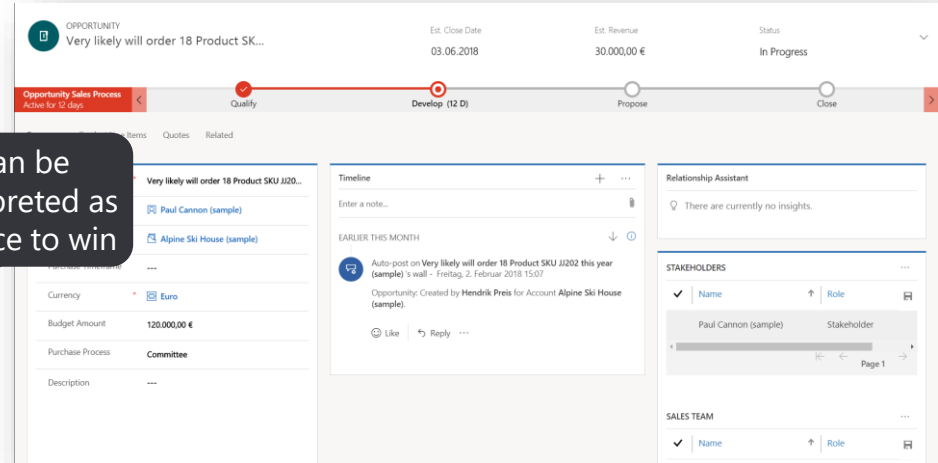
150ms





- 1 create new opportunity
- ↓
- 2 calculates approximation to a typical winner
- ↓
- 3 simulation to receive possible actions to increase likelihood

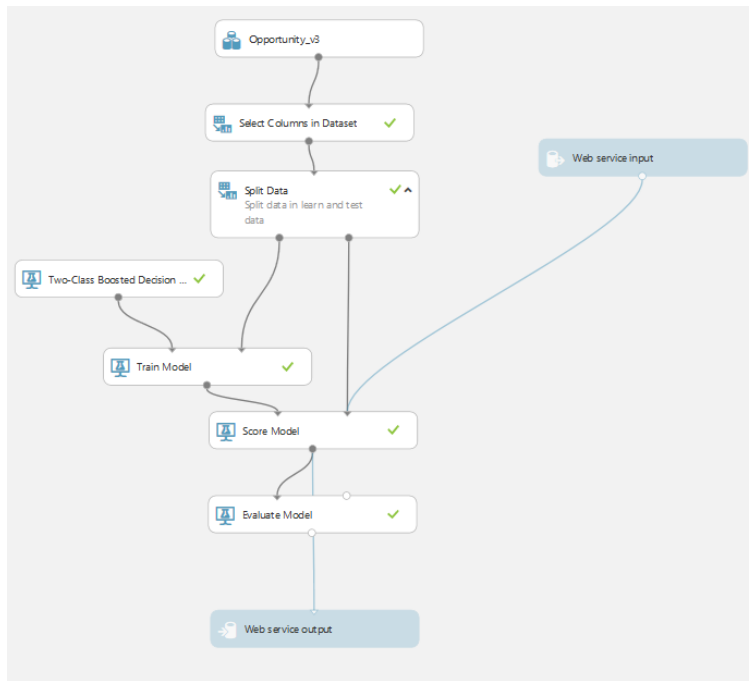
Can be interpreted as chance to win



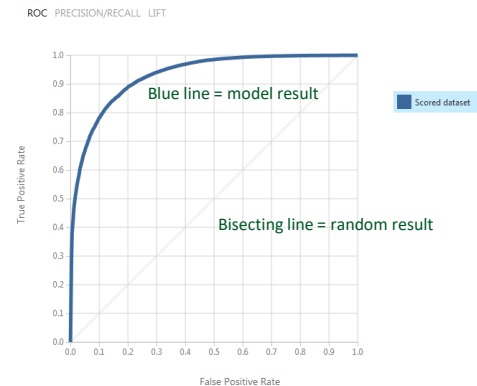
The screenshot displays a CRM interface for an opportunity. At the top, it shows the opportunity title 'Very likely will order 18 Product SKU J202', the estimated close date '03.06.2018', the estimated revenue '30.000,00 €', and the status 'In Progress'. Below this is a progress bar with stages: 'Qualify', 'Develop (12 D)', 'Propose', and 'Close'. The 'Develop' stage is currently active. The main content area is divided into several sections: 'Items' (listing 'Paul Cannon (sample)' and 'Alpine Ski House (sample)'), 'Currency' (set to 'Euro'), 'Budget Amount' (120.000,00 €), 'Purchase Process' (Committee), and 'Description'. A 'Timeline' section shows a recent auto-post from Hendrik Preis. On the right, there are sections for 'Relationship Assistant' (no insights) and 'STAKEHOLDERS' (listing Paul Cannon as a stakeholder). At the bottom right, there is a 'SALES TEAM' section.

...ship available parts earlier  
 ...replace by alternative product  
 ...place quote within 2 days

## The model creation



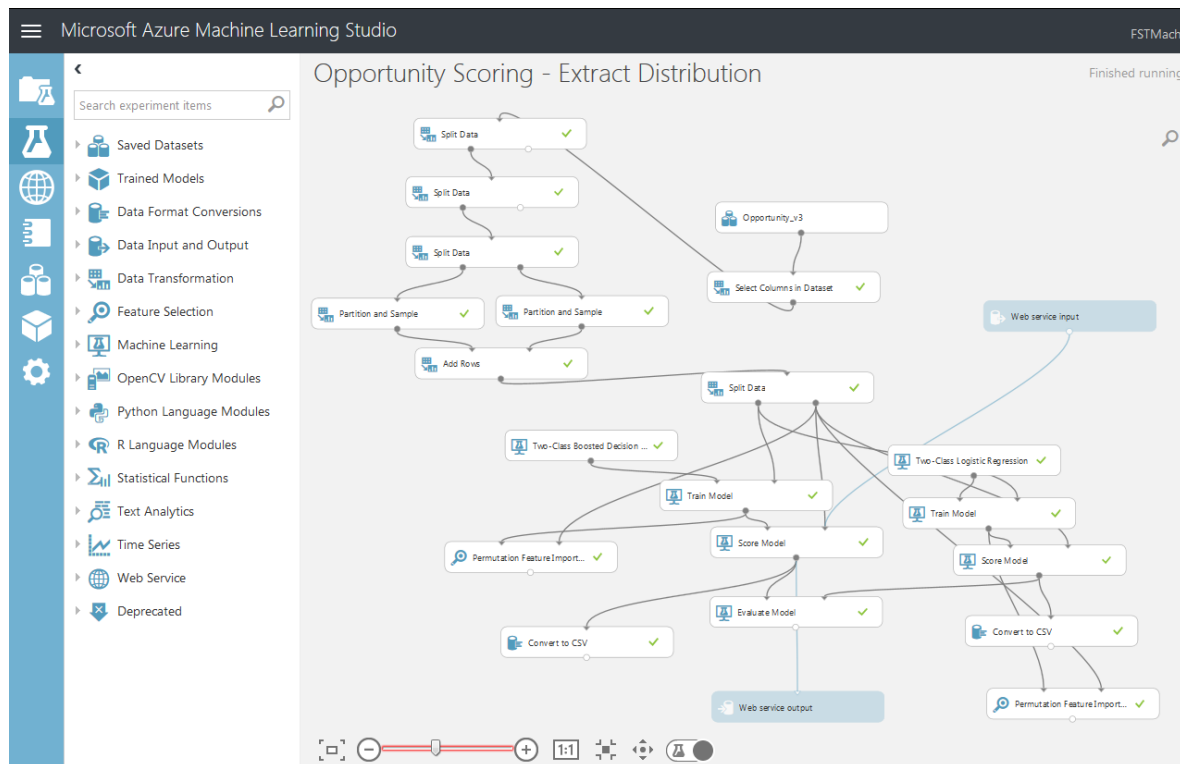
## ... and its result

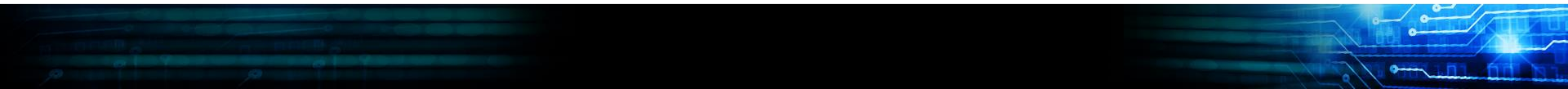
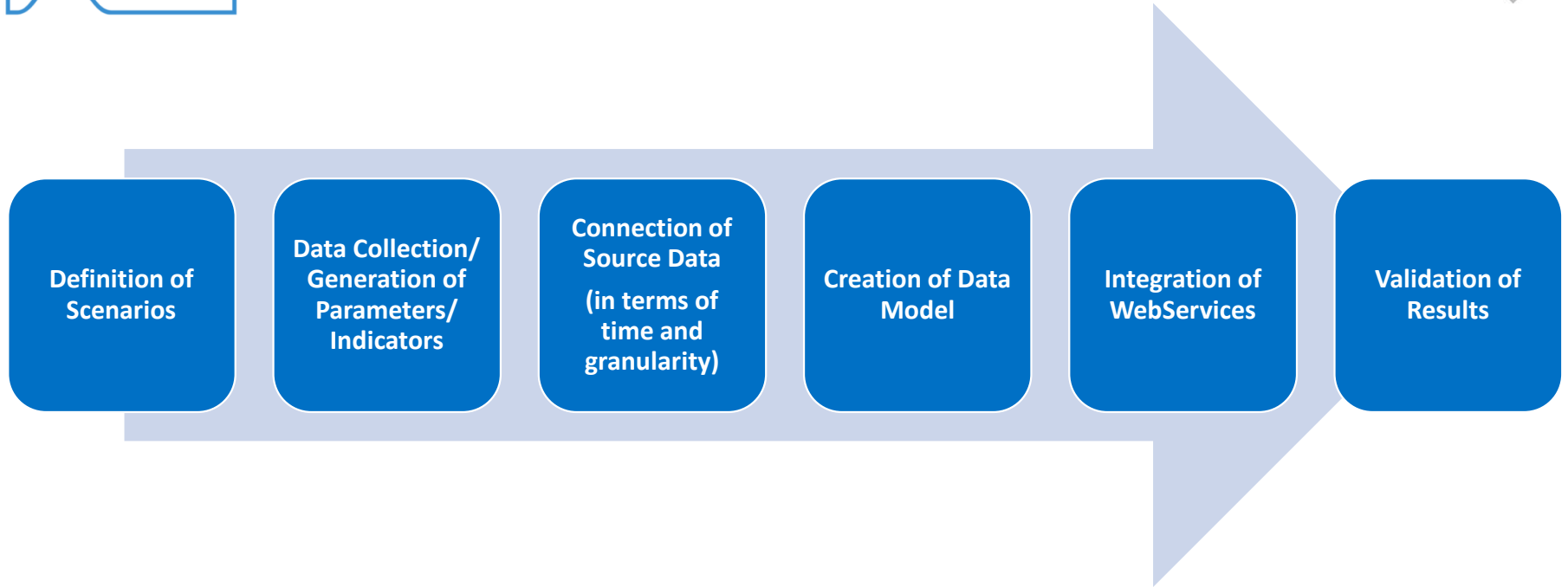


Prediction	Reality	
	Lost	Won
Lost	2185	712
Won	334	1276
<b>Total</b>	<b>2519</b>	<b>1988</b>

4507 Opportunities evaluated in 6 weeks  
Accuracy 76,8% (=2185 + 1276 / 4507)

# It May Look Like This: Determination of Influencing Factors





What do we do with these results?

- Understand the influence factors on the probability of winning
- Evaluate the model accuracy within the single steps of the request process
- Rollout per sales area and production unit
- Apply the technology to other cases/applications







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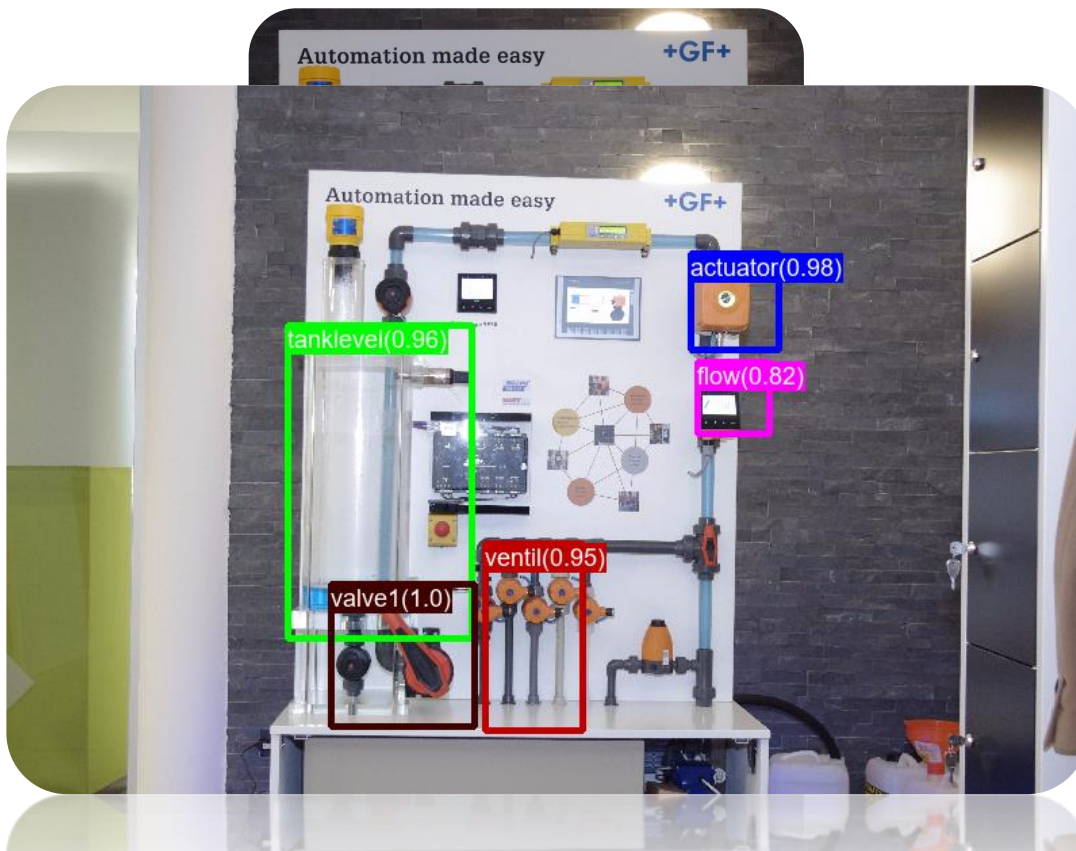
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# IoT Pump 4.0



**DIE LINKE.**  
IM BUNDESTAG

**FDP**  
Die Liberalen

**Alternative**  
für  
Deutschland

**SPD**

**CDU**

 **PIRATEN  
PARTEI**

**BÜNDNIS 90  
DIE GRÜNEN**

**CSU** 

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**Use Cases / Sources of Values**



**Data-Ecosystem**



**Technology & Tools**



**Processes & Integration**



**Open Culture & Organization**



**Business Plan**

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## Getting the use case (1d)

- 1 Day Workshop
- Get your Use Cases and make it ready for AI



## Deep Dive into your data (2d)

- 2 Days Workshop
- Deep Dive into your Data- Ecosystem and prepare for your use case



## HelloWorld@MachineLearning (1d)

- 1 Day Training
- be able to solve a complex problem in a simple way



## Prepare the project (1d)

- 1 Day Workshop
- Now we are ready to define the project (backlog; split of work)



## Do the project (?d)

- Individual project
- Defined by Statement of Work
- Contracted individually



# Democratizing AI

For every person and every organization



Agent



Applications



Services



Infrastructure





# Thank you!



