

# 360° Process View in a Complex Company



**Uwe Hartmann,** Chief Information Officer ABB Germany



# **Agenda**

- Introduction to ABB
- Our journey with Celonis
  - Financial Processes Management
  - IT Service Management
  - Corona Virus / Risk Management
  - Role of our Center of Excellence
- Planning for the future



# ABB is a technology leader across businesses

### Organization as of 2020

>130 years tradition

**5** businesses

**100** countries

**147,000** employees(\*)

### Electrification (#2) 1



#### **Industrial Automation (#2)**



#### Motion (#1)



### **Robotics & Discrete Automation (#2)**



Power Grids (\*)



<sup>\*</sup>At the end of 2018 ABB sold its Power Grids (PG) business to Hitachi. PG will remain part of ABB until 2020. Together with Hitachi, PG is the global #1 for a powerful, smart, green grid.



<sup>&</sup>lt;sup>1</sup> Global market position in brackets

# Organization as of 2020



# Pioneering technology leader in digital industries

~\$410 bn market

~\$29 bn revenues

34% Asia, Middle East and Africa 31% Americas 35% Europe

**~110,000** employees



# **ABB** in Germany

Germany is a development and competence center with strong local presence

### **ABB Germany at a glance**



**~10,500** employees



2.78 bn euros revenues in 2018\*

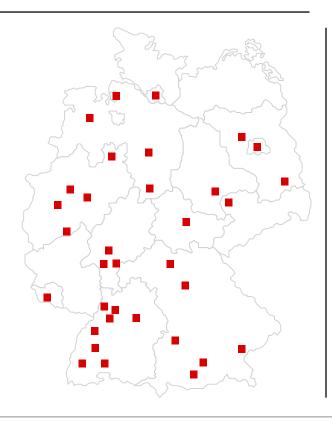


**+10%** increase in revenues since 2017



**17** sales and service locations

**18** production sites





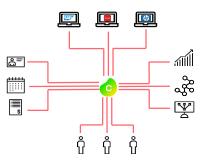


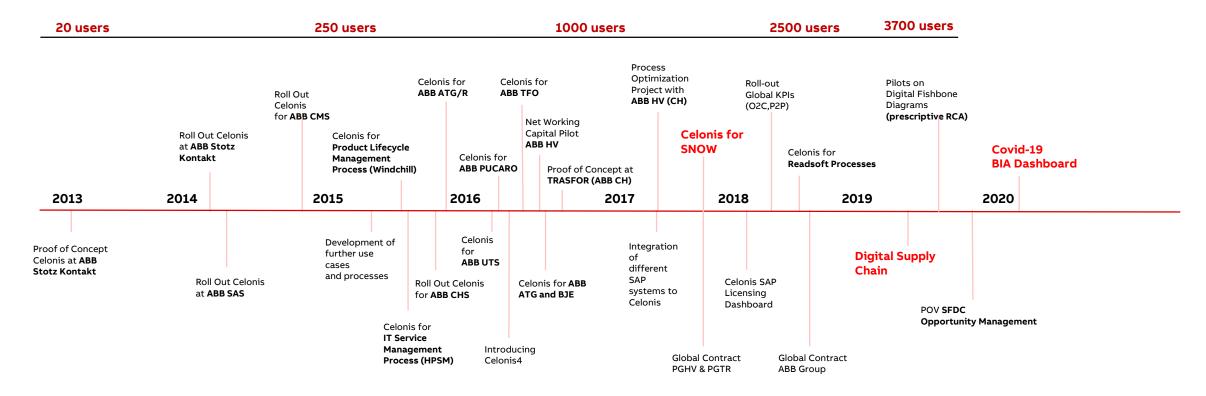






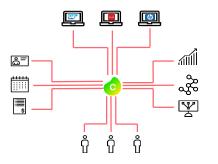
# **History of Celonis in ABB**

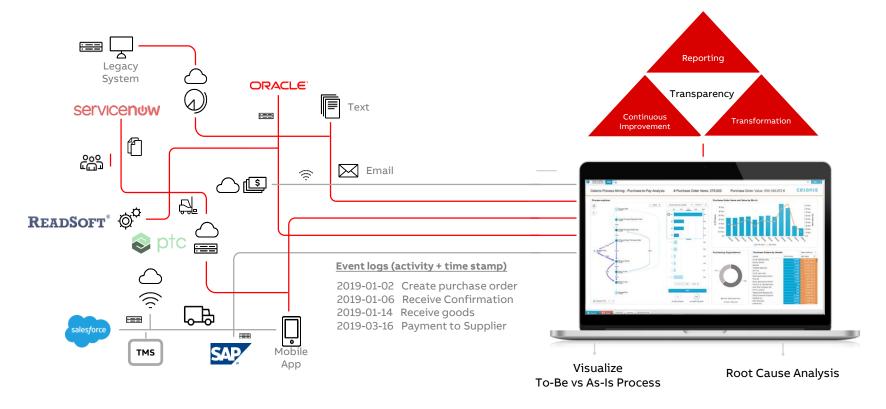






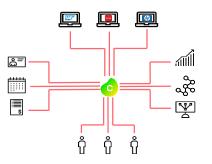
# **Process Mining principles serving multiple purposes**







### **How we use Celonis at ABB**



#### **Organizational Coverage**



3700 licenses



40 ERP's > 10 other apps



60M order lines/year



> 100 countries >1800 Business Activity Locations



30 TB data weekly refreshed



2.5M order transactions/day



From Business Consolidation down to Order details



> 300 analytic reports



Operational impact visible on many RelEx KPI's

#### **Process Coverage**

Purchase to Pay

Order to Cash

Accounts Payables / DPO

**Accounts Receivables** 

Field Service

Depot Repair

Master Data Management

Product Lifecycle Management

Engineering

**Production Planning** 

Sales & Operations Planning

**Inventory Management** 

IS Incident & Request Fulfillment

#### **Use Cases / Root Cause Analysis**

**Payment Terms** 

Inventory Planning

ABC/XYZ Analysis

Slow Moving Analysis

**Production Orders Planning** 

**RPA Assessments** 

Segregation of Duties

Lead Time Reduction

Invoicing throughput times

Benchmarking best practices

**Footprint Analysis** 

Business Impact Analyzer (Covid-19)

Etc.



# Data Analytics and Process Mining Finance

### **Process Coverage**

### **Accounts Payable**

Basware Workflow Process Readsoft Workflow Process

### **Accounts Receivable**

Autobank Dispute Management

### **General Accounting**

#### **Use Cases**



Late Payment (AP/AR)



Workflow Process Quality



Root Cause Analysis



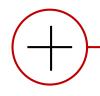
Cash Discounts



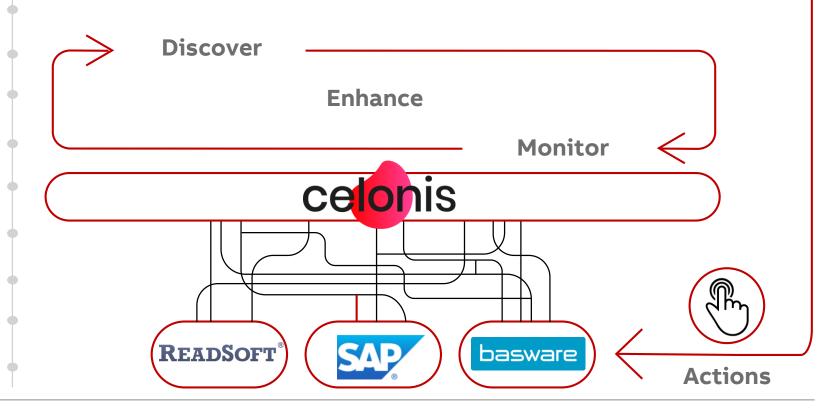
Benchmarking Standardization



Posting Automation



And others...





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# **Business Case Late Payments**

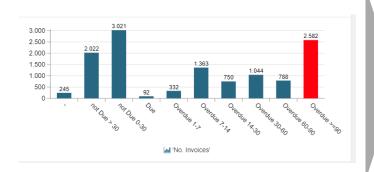
**Accounts Payable** 

**WHAT** is going wrong

WHERE & WHY it goes wrong

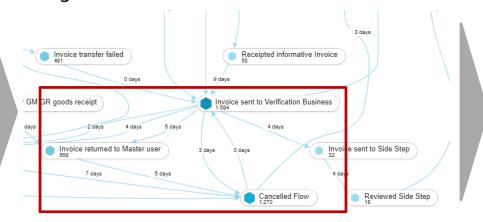
### **Results & Potential**

# Recognize Late Payments that can cause *escalations*



#### **Root Cause:**

Long Validation Time

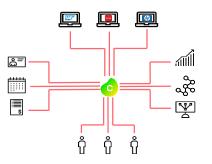


- ✓ Workflow Process Included: End-to-End Process
- Process loops, deadlocks and their root causes identified and analyzed.

- ✓ Increased Paid in time Ratio
- ✓ Decreased time for approval
- ✓ Increased Automation Ratio
- √ Fact-based discussions with business
- ✓ Reduction of the process 'waste'
- ✓ Benchmarking by Process Variants
- √ Standardization of the AP process
- ✓ Predict and avoid long activities



# **Identification of ABB best practices**



### **Key elements**

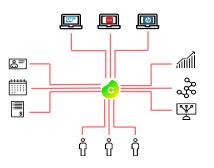
- Identification ABB top business processes
- Selection of best in class process per business type
- Documentation of "as-is" best process blueprint
- KPI and Process Benchmarking in a single view
- On any level (Business, BL, PG, Country, Plant, etc.)
- Impact on Lead Time, ROTD, etc. when unnecessary steps are removed

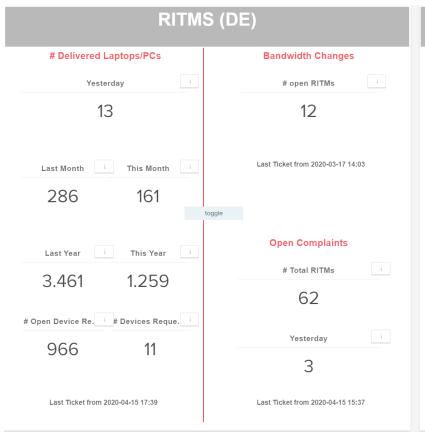




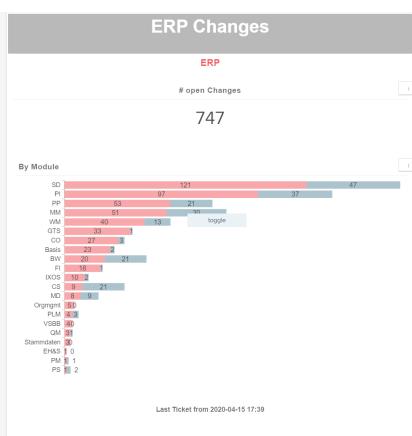
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# **How Celonis helps in IT Service Management**





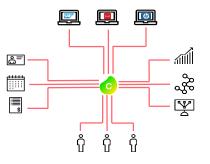


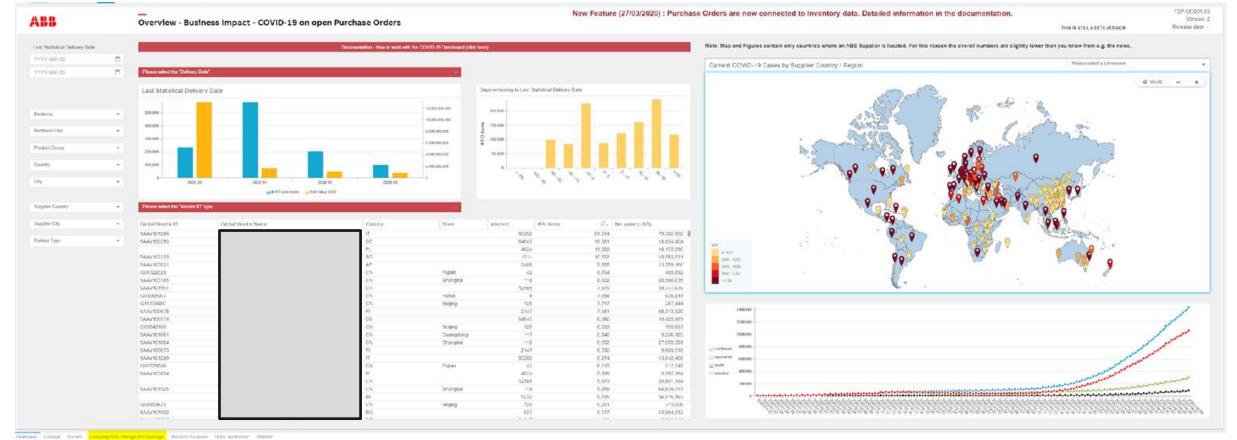




# Corona: ABB data combined with Corona countries/regions

### Based on geo-data

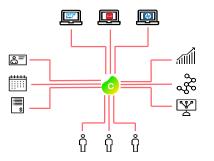






# **Process optimization proposal**

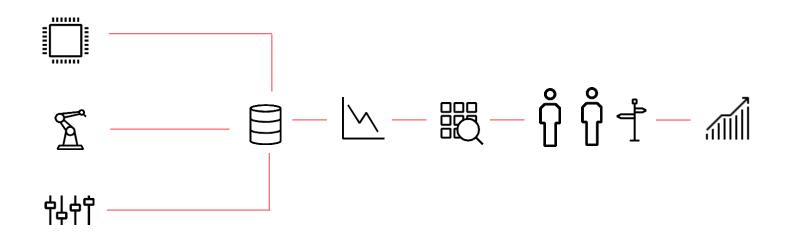
How our CoE brings value to the business



#### Shift our role as an IT supplier to a true Business Partner

#### Services provided:

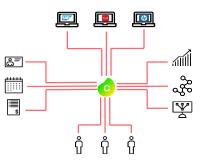
- Data extraction
- Analysis creation
- Insight identification
- Optimization plan creation
- Change management support





# **Process optimization proposal**

What it looks like



Date Range 01.01. – 31.12.2019 Number of Process

Number of Use Cases
11

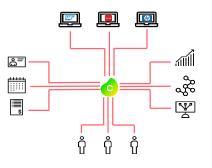
Optimization Potential 5

Process	# Objects	# Use Cases	# Optimization Potential
O2C (Order-to-Cash)			
P2P (Purchase-to-Pay)			
PP (Production)			
Inv (Inventory)			
AR (Accounts Receivable)			
AP (Accounts Payable)			
QM (Quality Management)			



# **Process optimization proposal**

## What it looks like



Use Case	# Objects	Insight	Proposed Optimization
Automation Rate – ABB Internal	87 %	Low automation rates are concentrated in large customers	Look for automation opportunities, focusing on large customers
Approve Credit Check and Deny credit check same day	64% (106 of 166)	This is illogical given the short time span; there may be an issue with Credit master data	Check Credit master data for any issues
Creation of Order Confirmation	26 % (31547)	Many customers aren't getting order confirmation notifications	Closely review process and identify root cause as confirmation emails are key to customer satisfaction
Duration between Order Confirmation and confirmation Updates	23 day		
Date changes (requested and confirmed delivery date)	1% (1025 order items)		
Usage of Billing Blocks	1% (961)		
Remove Billing block and set back within 1 day	89 % (857 of 961)		
Duration of Goods Issue Posting and Invoice Creation	2 days		
Change in the net price	0% (105)	•••	



# **Next steps for our CoE**

- Business Process Improvement
- Data Lake / daily data load
- S/4 Hana Migration Support
- Crisis Management / Business Impact Analysis (Covid-19, Cyber Attacks Customer/Vendor)
- Digital Supply Chain → See presentation from Heymen Jansen





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