Digitalisierung in Finance Shared Services

Praxiserfahrungen

Kai-Eberhard Lueg | März 2019
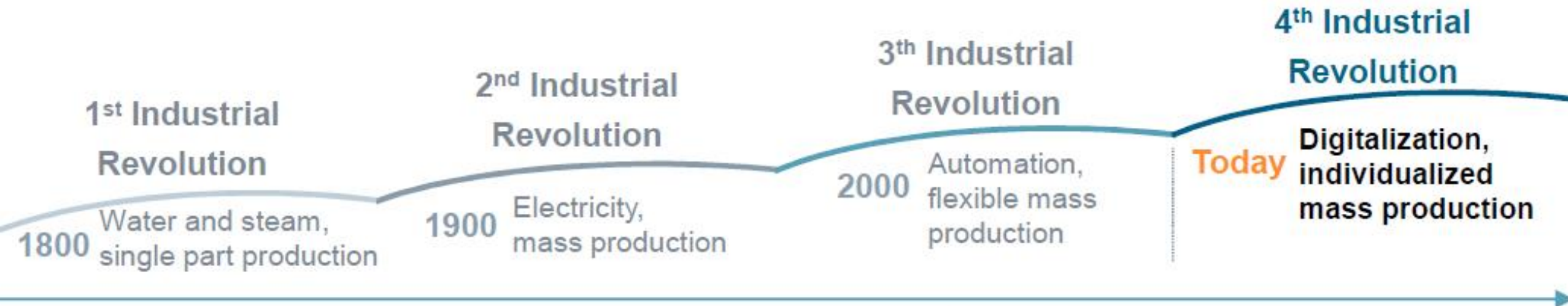
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What is the impact of digitalization?

Digitalization is impacting all of us
…deriving some parallels and having a look at Industry 4.0

4th Industrial Revolution

3th Industrial Revolution

2nd Industrial Revolution

1st Industrial Revolution

1800 Water and steam, single part production

1900 Electricity, mass production

2000 Automation, flexible mass production

Today **Digitalization, individualized mass production**

Digitalization is impacting all of us
…deriving some parallels and having a look at Industry 4.0
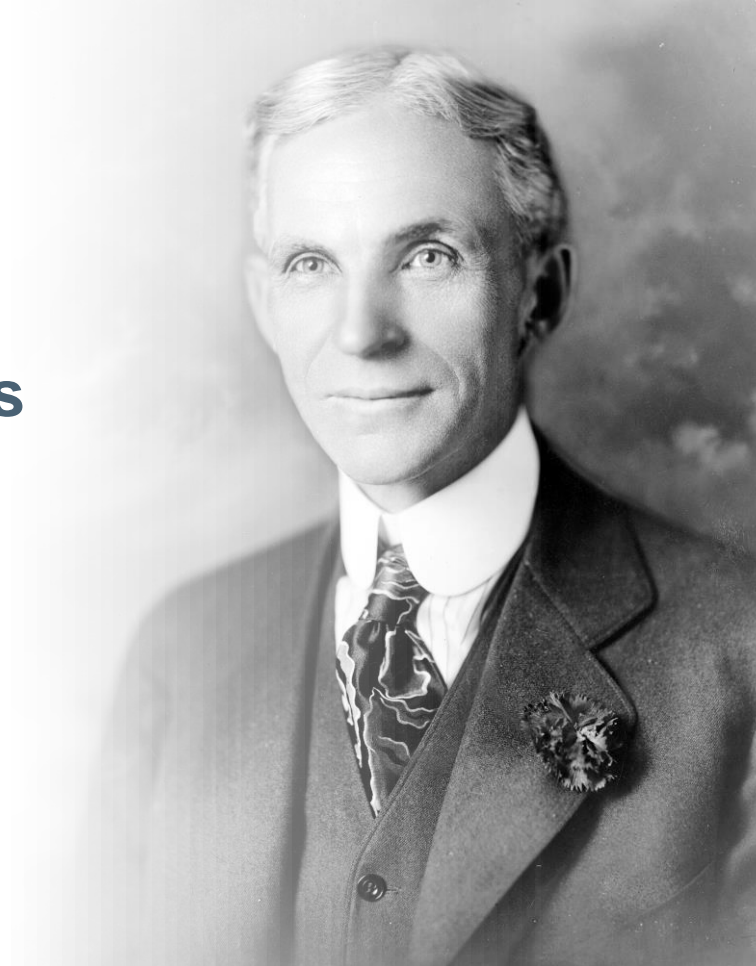
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„Any customer can have a car painted any color that he wants so long as it is black."

Henry Ford
Founder of Ford Motor Company

4th Industrial Revolution

Today — Digitalization, individualized mass production

Digitalization is impacting all of us
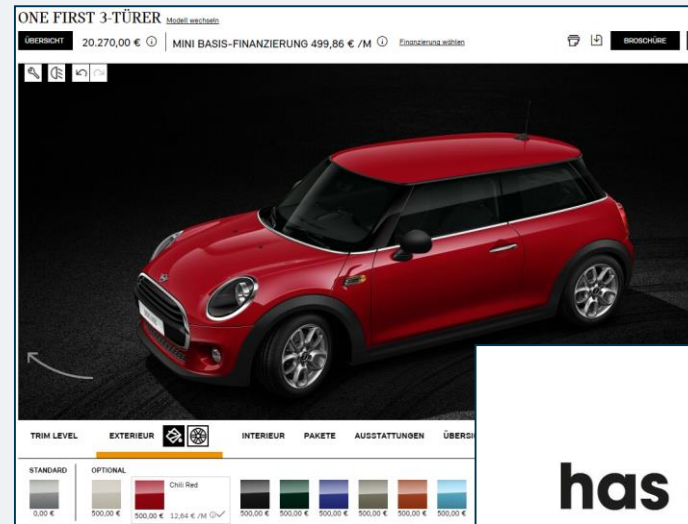…individualized mass production: Some examples

4th Industrial
Revolution

Today   Digitalization,
individualized
mass production

So what has **changed**?

From a standardized, stable and predictive…
…to a flexible, volatile and individualized environment

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3th Industrial Revolution

2000   Automation, flexible mass production

4th Industrial Revolution

Today   Digitalization, individualized mass production

Past	Present
Classic and standardized products: "The lowest common denominator" made it to production	Digitalization makes the production of the **individual product** possible. **Integration** of the customer to the production process.
Standardized production for economies of scale	Digitalization makes the production of the individual product **affordable**
Flexibility and mass production were opposing targets	Digitalization allows for a **highly flexible** production
Products and services were delivered by a "middleman" – call him wholesaler, retailer, service provider….	Direct **delivery and exchange** due to close interaction with the customer

Digital Transformation towards a VUCA[1] environment

[1]VUCA: Volatility–Uncertainty–Complexity–Ambiguity

What does that mean for Shared Service Organizations?

...and for their finance & accounting partners?

Digitalization also has an impact on the evolution of service operating models towards higher integration and customer value

Fragmented Service Centers

Region or BU specific service delivery locations

Functional Service Centers

Functional services factories with common delivery framework

Multifunctional Service Centers

Evolution of E2E services and CoEs across Functions

Reg 1 F1 F2 F3 ...

Reg 2 F1 ...

Reg n F2 F3 ...

F1 F2 F3 ... ...

F1 F2 ...

Infrastructure
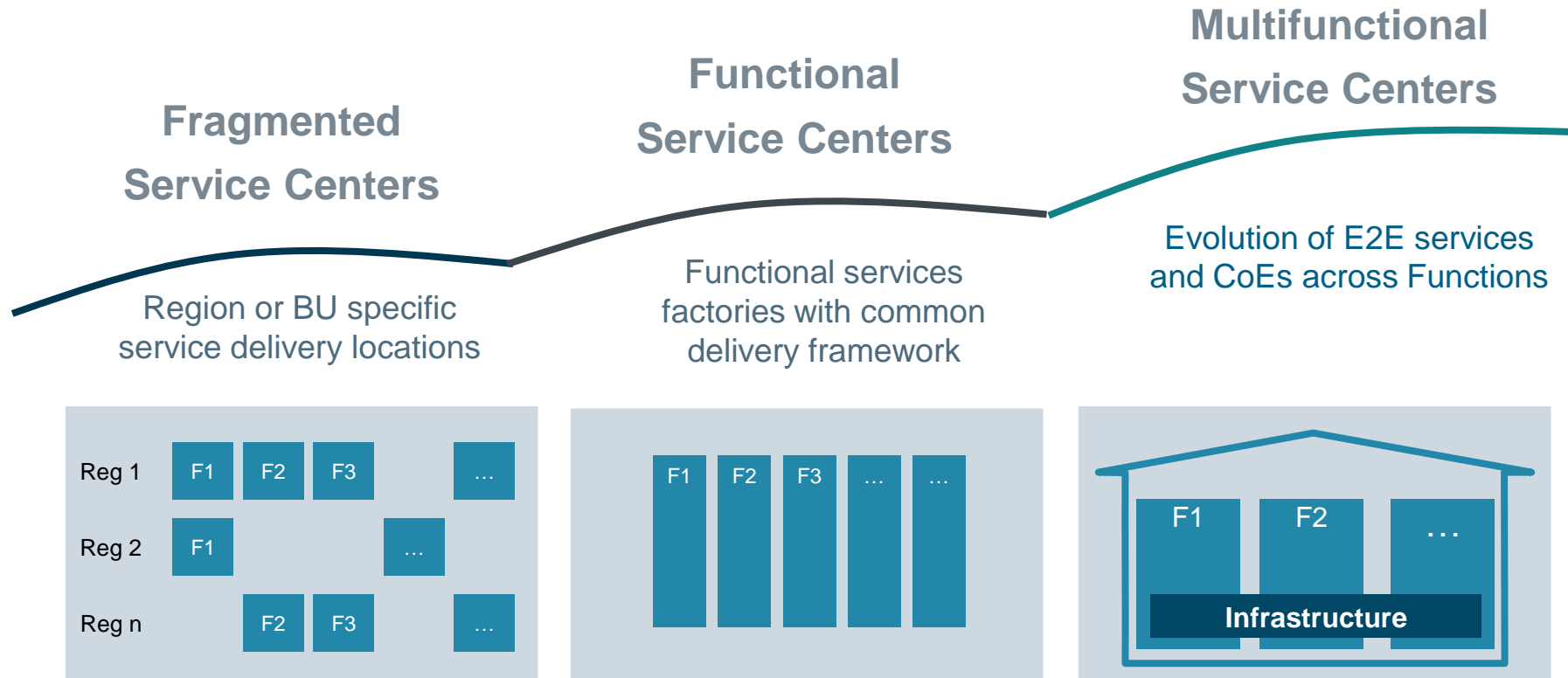
Changing environments call for a changed set-up and service offering

Digitalization also has an impact on the evolution of service operating models towards higher integration and customer value

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Global Business Service Centers

Multifunctional Service Centers

Functional Service Centers

Fragmented Service Centers

Region or BU specific service delivery locations

Functional services factories with common delivery framework

Evolution of E2E services and CoEs across Functions

Increased flexibility and agility through E2E services / solutions

Standard processes can be individualized

"Digitalization as a service"

Reg 1	F1	F2	F3	…
Reg 2	F1		…	
Reg n		F2	F3	…

F1	F2	F3	…	…

F1   F2   …

Infrastructure

Global Business Services

Oppor-tunity-to-Cash	Record-to-Report	Purchase-to-Pay	Hire-to-Retire	Business Solutions and Services

Finance & Accounting Shared Services

| O2C | R2R | P2P | H2R | |

Joint operations and digitalization platform

Shared support functions

Digital Transformation towards a VUCA[1] environment

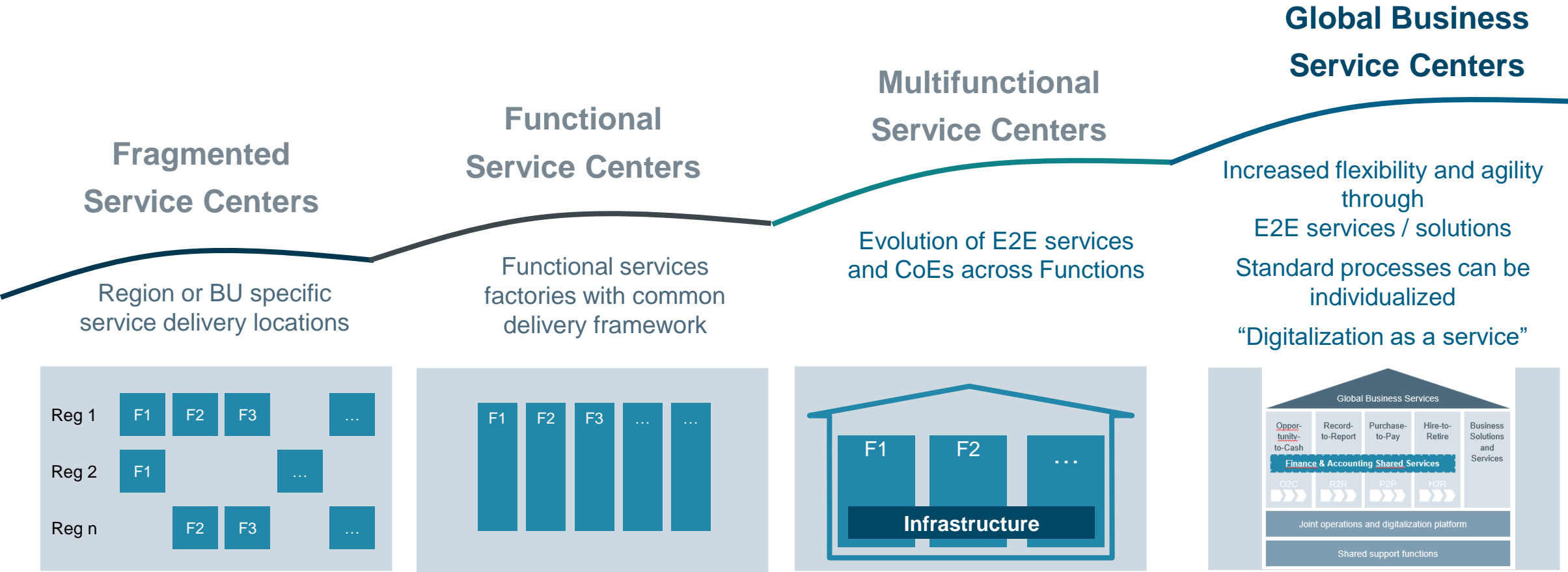[1]VUCA: Volatility–Uncertainty–Complexity–Ambiguity

The digital transformation requires a change in the Shared Services set-up

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Set-up

- From many interfaces to **simplified** and **integrated set-up**

Digital Transformation

- From isolated digitalization projects to **systematic digital transformation**
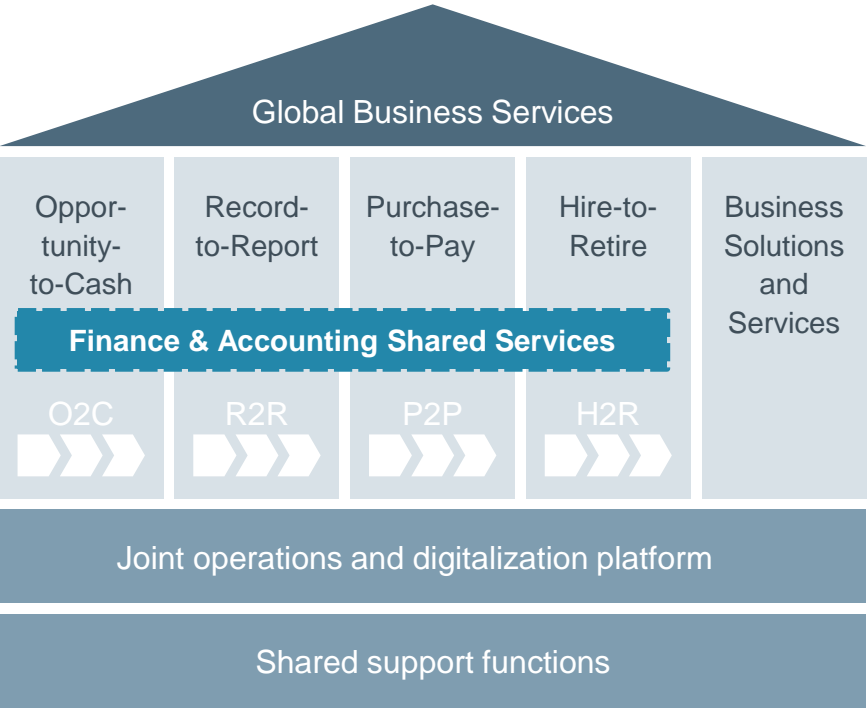
Partner of Choice

- From mandated services to **partner of choice**

An E2E set-up on joint platforms prepares for the challenges of the future

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Global Business Services …

Global Business Services

| Oppor-tunity-to-Cash | Record-to-Report | Purchase-to-Pay | Hire-to-Retire | Business Solutions and Services |

Finance & Accounting Shared Services

| O2C | R2R | P2P | H2R |

Joint operations and digitalization platform

Shared support functions

provides high quality, cost-efficient, user-friendly services based on customer demand

serves the internal and external market as an autonomous Service Company

continuously drives **process innovation, automation** and **digitalization in Shared Services and beyond**

focus on performance, transparency and customer satisfaction
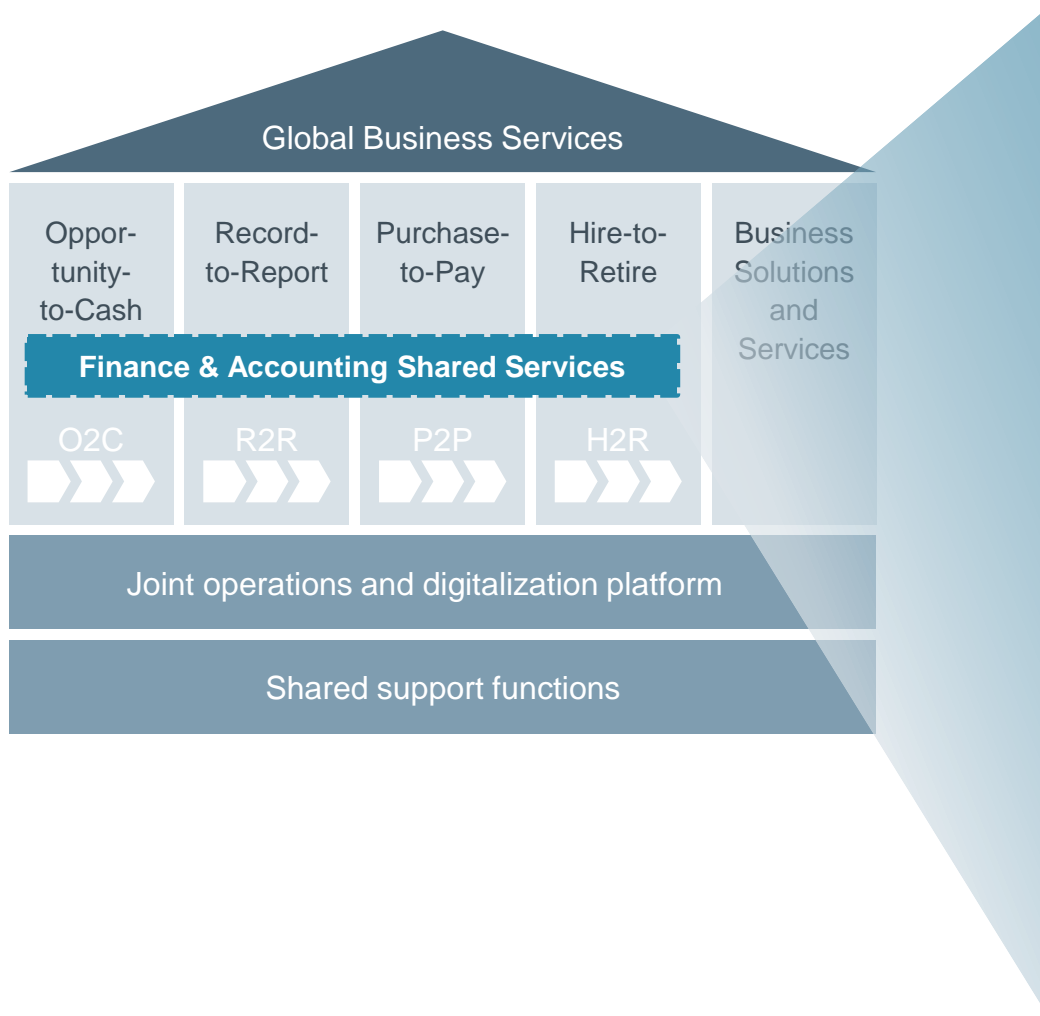
15 years of experience

~600 entities serving

~6000 employees worldwide

10 Key centers serving

8.7 user satisfaction index[1]

80 countries serving

[1]8.7 out of 10. Achieved for CF R FSS in 2018

GBS' Finance & Accounting Shared Services leverage E2E process optimization on joint platforms

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Global Business Services

Oppor-tunity-to-Cash	Record-to-Report	Purchase-to-Pay	Hire-to-Retire	Business Solutions and Services

Finance & Accounting Shared Services

O2C | R2R | P2P | H2R

Joint operations and digitalization platform

Shared support functions

P2P
- Scanning / OCR
- Invoice clarification and posting
- Payment run
- Inter Company Clearing
- …*

R2R
- General Ledger
- Controlling services
- Tax and Customs services
- Fixed Asset and Master Data management
- Closing and Reporting incl. upload to consolidation system
- …*

O2C
- Cash allocation
- Dunning
- Cash collection
- Credit risk management
- Guarantee management
- …*

Supporting Services
- Transition and Transformation services
- Digital services (e.g. BPM, RPA)
- KPI / BVI Reporting and Process Mining
- …*

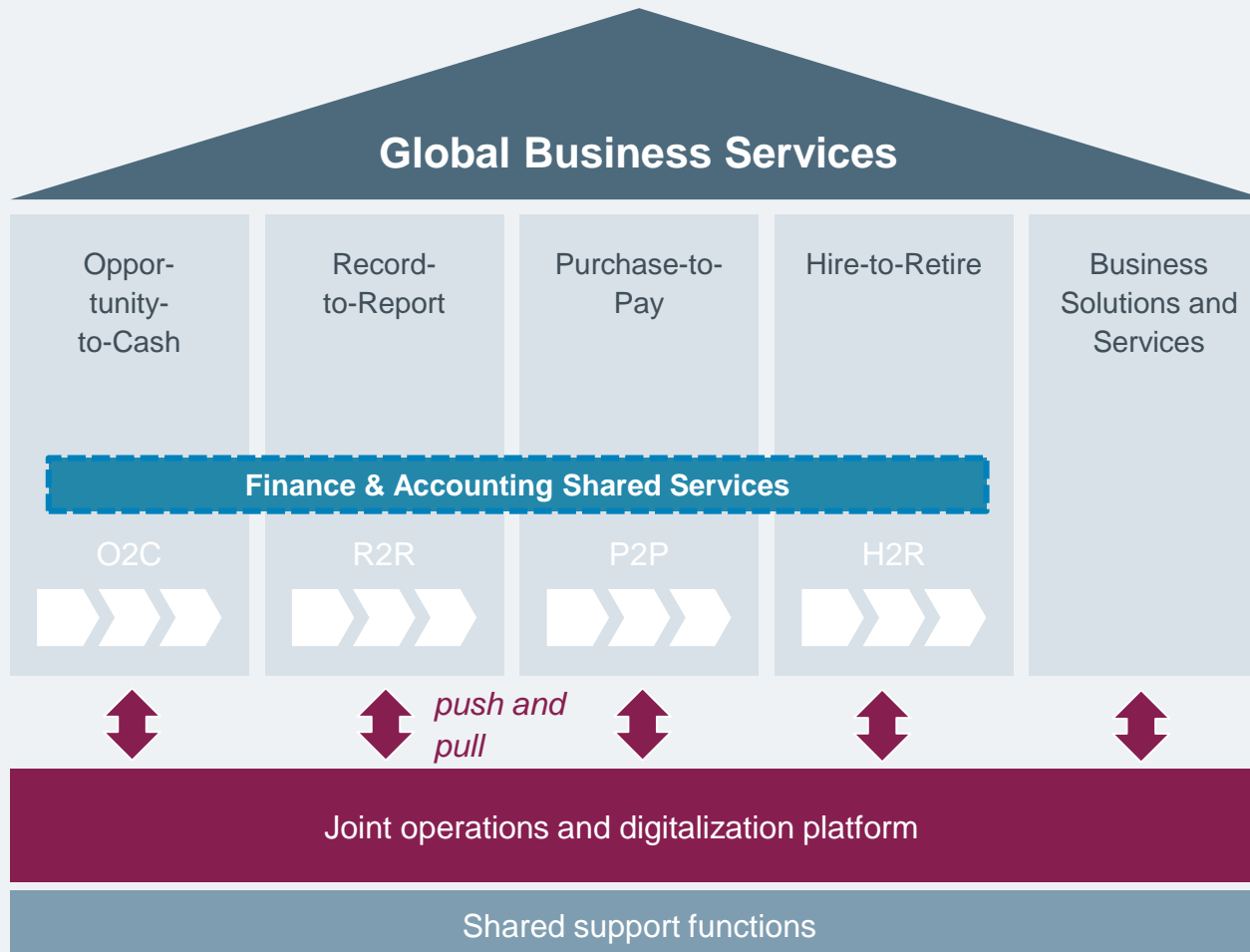* Further services available

Why

Our unique expertise in business services creates valuable impact specific to our customers' needs

What

We design, transform and efficiently operate business services

How

As Partner of Choice we are passionate in providing smart and **digital end-to-end solutions** through our powerful global internal and external network
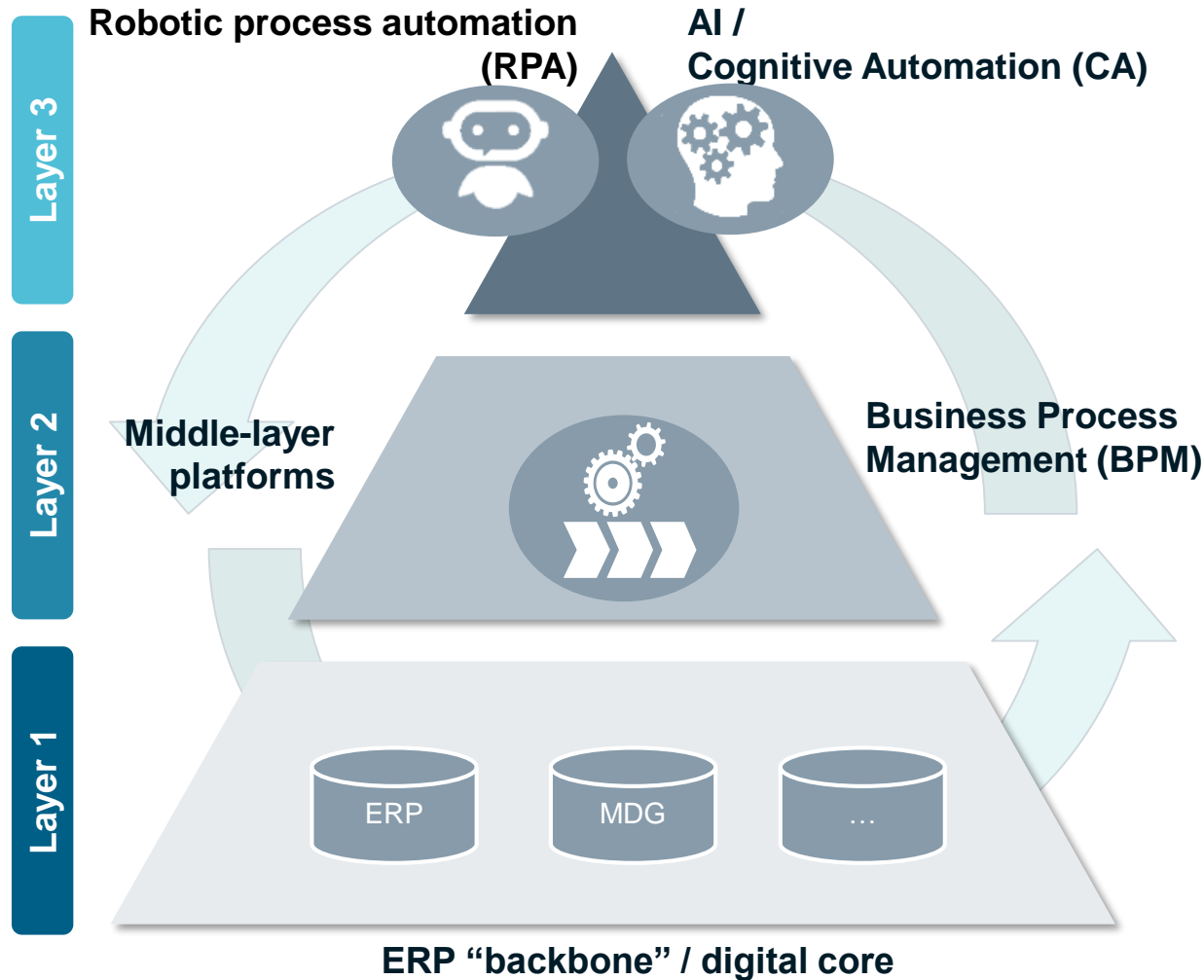
From isolated digitalization projects to systematic digital transformation

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Global Business Services

| Oppor-tunity-to-Cash | Record-to-Report | Purchase-to-Pay | Hire-to-Retire | Business Solutions and Services |

Finance & Accounting Shared Services

O2C   R2R   P2P   H2R

push and pull

Joint operations and digitalization platform

Shared support functions

A powerful digitalization platform across functions…

…implements and provides cross business line as well as GBS external digital services

…orchestrates digital program activities

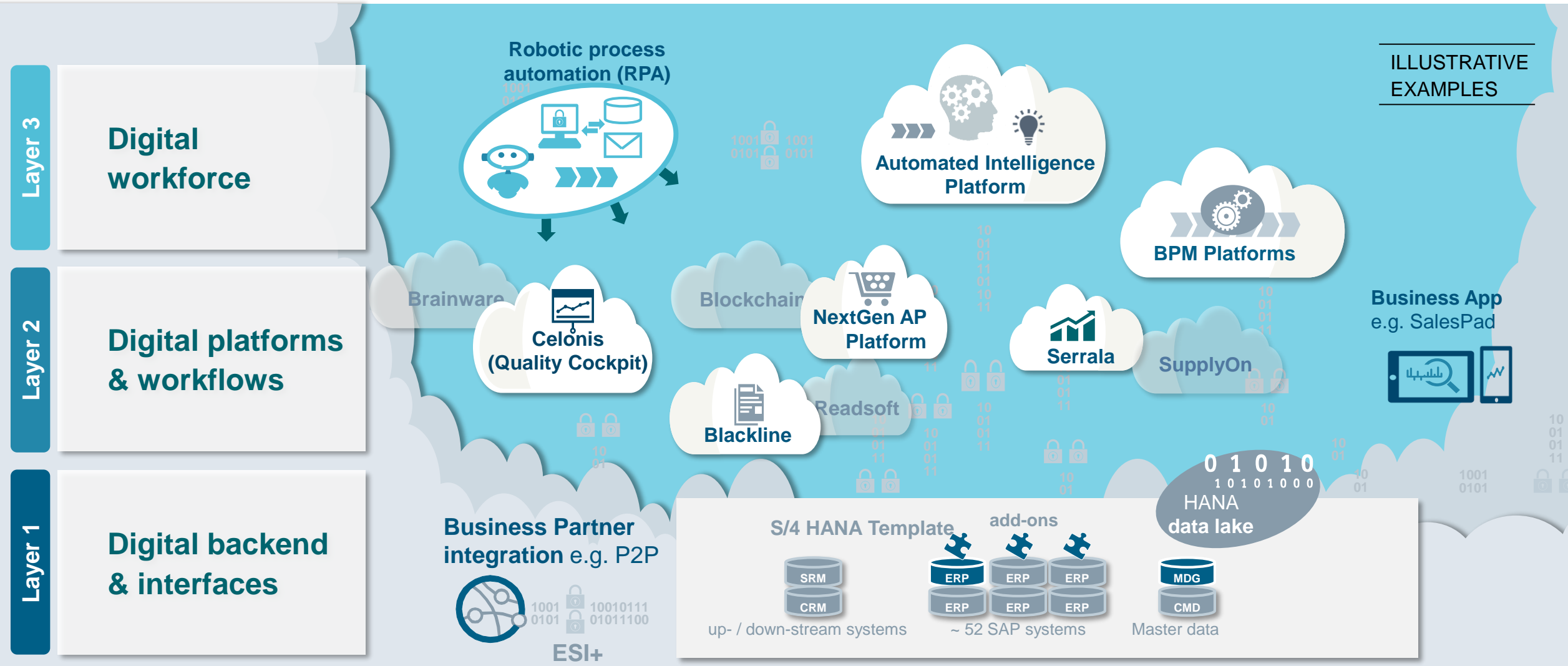…creates transparency

…ensures re-usability across business lines

There are multiple ways to drive digitalization:
Introducing the digital ecosystem

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Robotic process automation (RPA)

AI / Cognitive Automation (CA)

Layer 3

Layer 2

Middle-layer platforms

Business Process Management (BPM)

Layer 1

ERP

MDG

...

ERP "backbone" / digital core

3 *Robotics & AI/CA: flexible mix of on-premise and cloud services to enable user level and cognitive automation without changing existing processes or systems/platforms –*

enables automation without standardization with short ROI

2 *Middle Layer Platforms: Cloud platforms for end-to-end integration of processes across many backend systems –*

lower complexity to deploy standards, higher flexibility and usability (multi device)

1 *Backend / ERP: On-premise systems of record with complex, standardized value flows and core processes – enables deeper optimization of data and processes, but long ROI*

There is no one size fits all. The right technology mix (toolbox) is key!

Based on these three technology layers, we have built a powerful Finance and Accounting ecosystem

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Layer 3 — Digital workforce

Robotic process automation (RPA)

Automated Intelligence Platform

BPM Platforms

Layer 2 — Digital platforms & workflows

Brainware

Celonis (Quality Cockpit)

Blockchain

NextGen AP Platform

Readsoft

Blackline

Serrala

SupplyOn

Business App e.g. SalesPad

Layer 1 — Digital backend & interfaces

Business Partner integration e.g. P2P

1001 0101   10010111 01011100

ESI+

S/4 HANA Template

SRM
CRM

up- / down-stream systems

add-ons

ERP   ERP   ERP
ERP   ERP   ERP

~ 52 SAP systems

0 1 0 1 0
1 0 1 0 1 0 0 0

HANA data lake

MDG
CMD

Master data

P2P Digitalization – a cross-functional initiative to digitize the E2E Purchase-to-Pay process globally

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Targeted benefits through P2P Digitalization:

- **Digitization** of >80% transactions end-to-end from order to invoice (>90.000 suppliers, ~220 factories)

- Increased process & cost efficiency (saves up to ~40 minutes manual effort per process)

- High **standardization** globally

- Control through better **transparency**
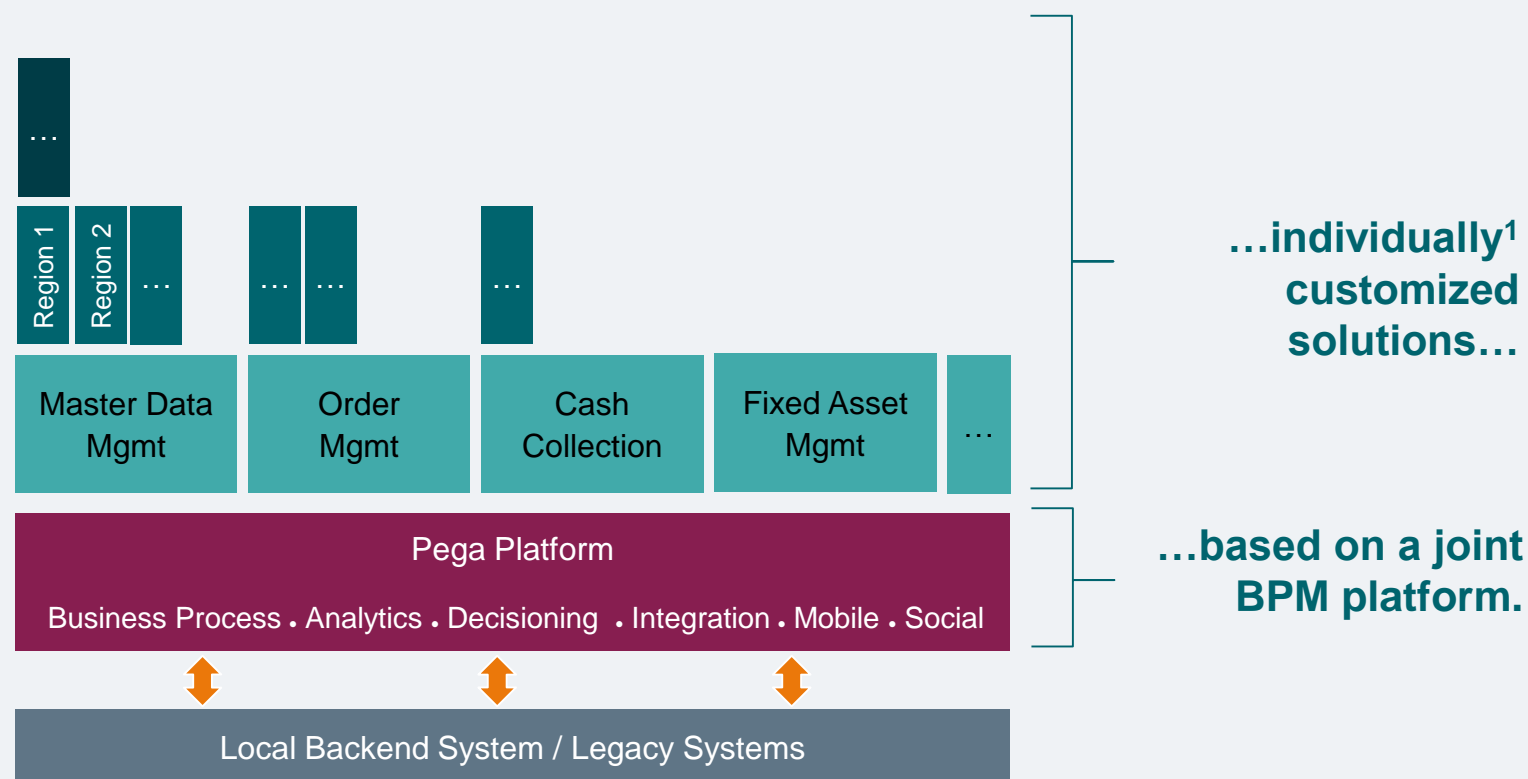
- Reduced **cycle times**

5 e-messages

Order

Order Confirmation

Order Change

Dispatch Advice

Invoice
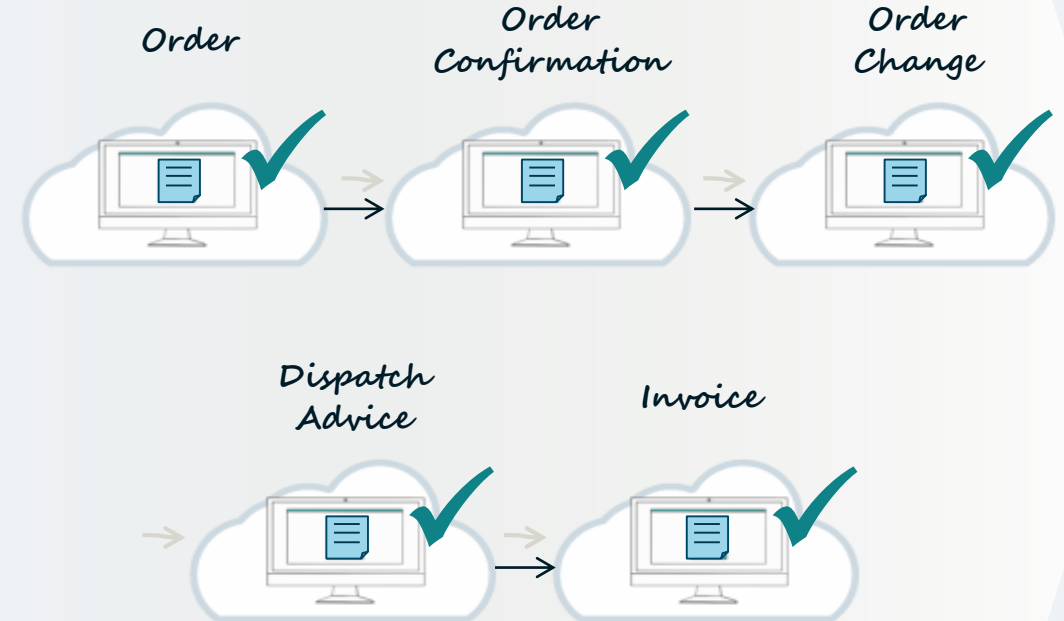
Business Process Management - providing individualized solutions based on one joint platform

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ILLUSTRATIVE

GBS BPM Layer Architecture offers…

...individually[1] customized solutions...

...based on a joint BPM platform.

Region 1 | Region 2 | …

Master Data Mgmt | Order Mgmt | Cash Collection | Fixed Asset Mgmt | …

Pega Platform

Business Process ⋅ Analytics ⋅ Decisioning ⋅ Integration ⋅ Mobile ⋅ Social
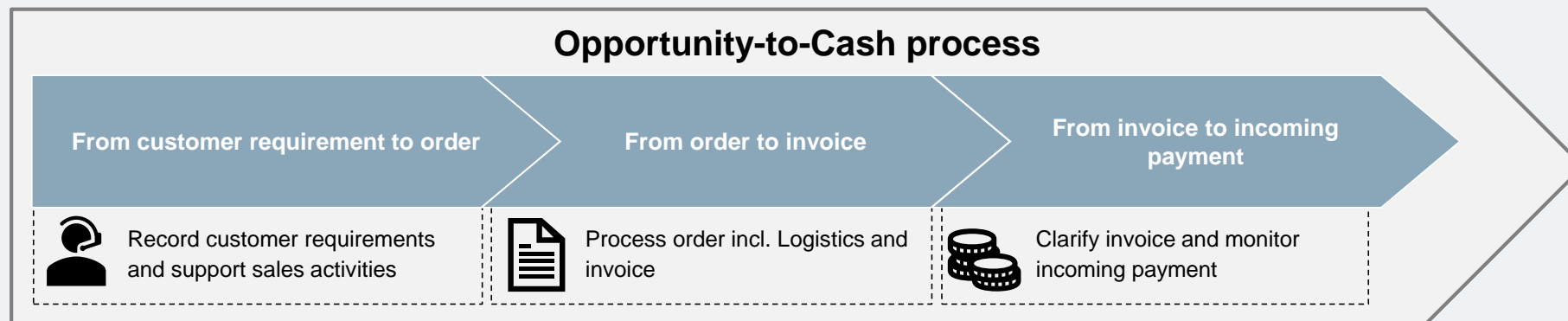
Local Backend System / Legacy Systems

[1]E.g. based on different Customers, Processes, Regions, etc.

- Single **workflow / management** (middle-layer) platform replacing existing local/regional solutions

- **Fully integrated** into existing landscape

- **Re-use** of already set up layers

- **Real time** integration

- **Mobile use**

- **Accessible** by Siemens externals (e.g. customers / suppliers)

- …

Example: End-to-End Process set-up
…full responsibility for all sub-processes

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Opportunity-to-Cash process

O2C

From customer requirement to order	From order to invoice	From invoice to incoming payment
Record customer requirements and support sales activities	Process order incl. Logistics and invoice	Clarify invoice and monitor incoming payment

Today: Four Business Lines involved with fragmented responsibilities for sub-processes

GS BPS BSS	GS SCM FSS	GS BPS BAS	CF R FSS

Future: One Business Line is responsible for all sub-processes

GBS Opportunity-to-Cash Services (GBS O2C)

Expected benefits of E2E set-up[1] combining four formerly separate organizations

- Significantly better process cycle times (**cycle time reduction, meaning faster service for our Siemens customers**)
- Typically **increased process efficiency** (time/effort reduction for GBS, and for internal partners e.g. in Siemens sales)
- Increased **customer satisfaction** as a result of a more holistic customer service and a **reduced error rate**
- Harmonized automation landscape with better **data quality** and transparency, less process interruptions
- and improved employee satisfaction as a result of co-creation of processes

[1] Estimations - Extended team responsibility when fully operational and scaled; validated by two pilots in Portugal and Malaysia which started already with end-to-end process responsibility

Global Master Data Mgmt – a global platform driving end-2-end digitalization and efficiency

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What is it about?

- single, globally aligned digital workflow solution for business partner master data mgmt.

- full integration in to existing IT landscape and external data sources

- covers creation, updating, extension, blocking and unblocking of business partners

What are the main advantages?

- combines **standardized process** with **local flexibility**

- automated **data validations** ensure data **quality** and **increases efficiency**

- **user friendly** UI and workflow process

- **transparency** for all Siemens entities over data maintenance process and efficiency

Achievements so far

of countries live: **24**
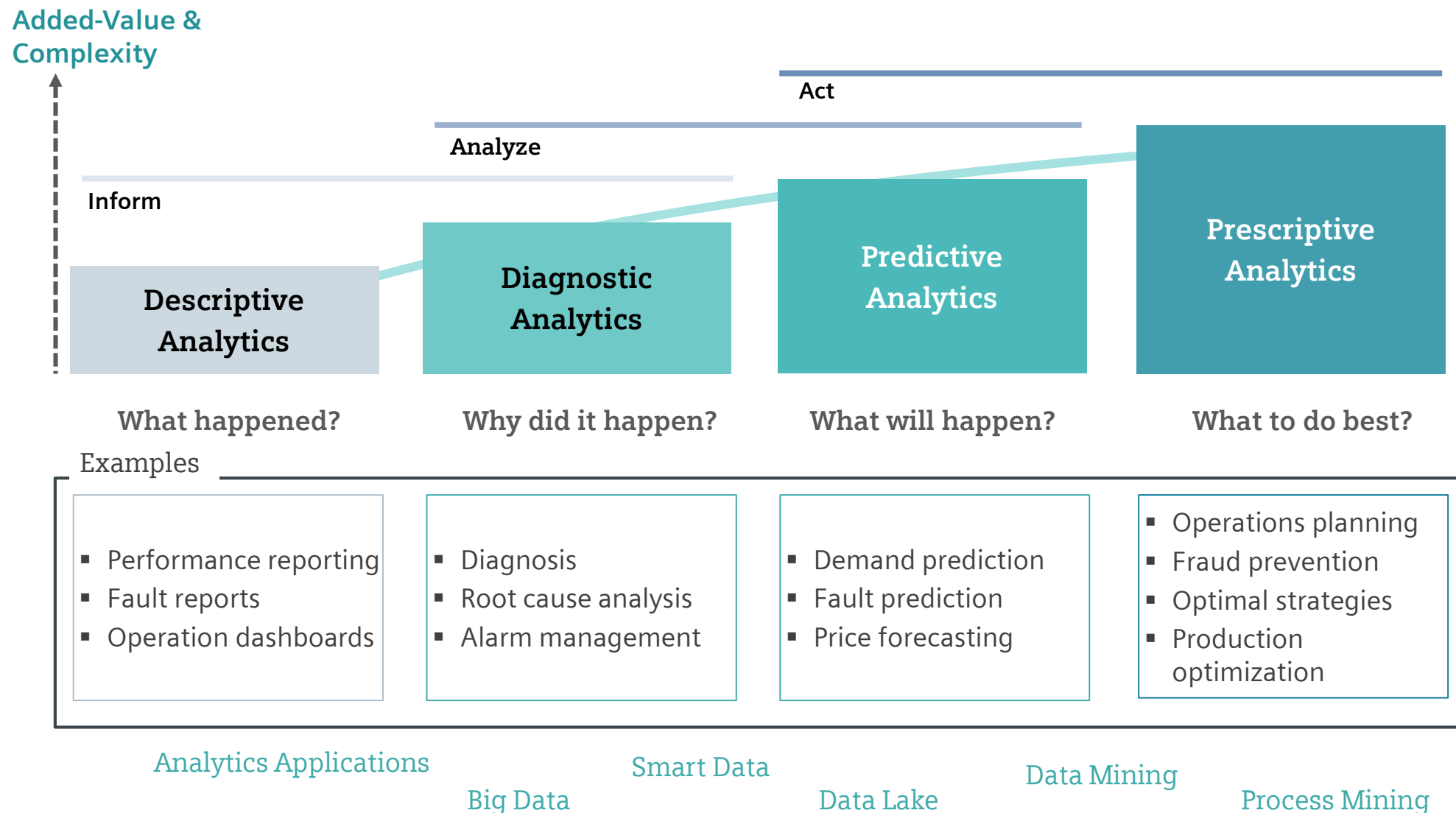
Users in total: **~21.300**

SAP systems connected: **8**

Companies live: **102**

Quality Dashboard - Our journey so far
…from descriptive to prescriptive analytics

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Added-Value & Complexity

Act

Analyze

Inform

Descriptive Analytics	Diagnostic Analytics	Predictive Analytics	Prescriptive Analytics
What happened?	**Why did it happen?**	**What will happen?**	**What to do best?**

Examples

▪ Performance reporting ▪ Fault reports ▪ Operation dashboards	▪ Diagnosis ▪ Root cause analysis ▪ Alarm management	▪ Demand prediction ▪ Fault prediction ▪ Price forecasting	▪ Operations planning ▪ Fraud prevention ▪ Optimal strategies ▪ Production optimization

Analytics Applications

Smart Data

Big Data

Data Lake

Data Mining

Process Mining

Quality Dashboard – Data Analytics providing transparency on a global level

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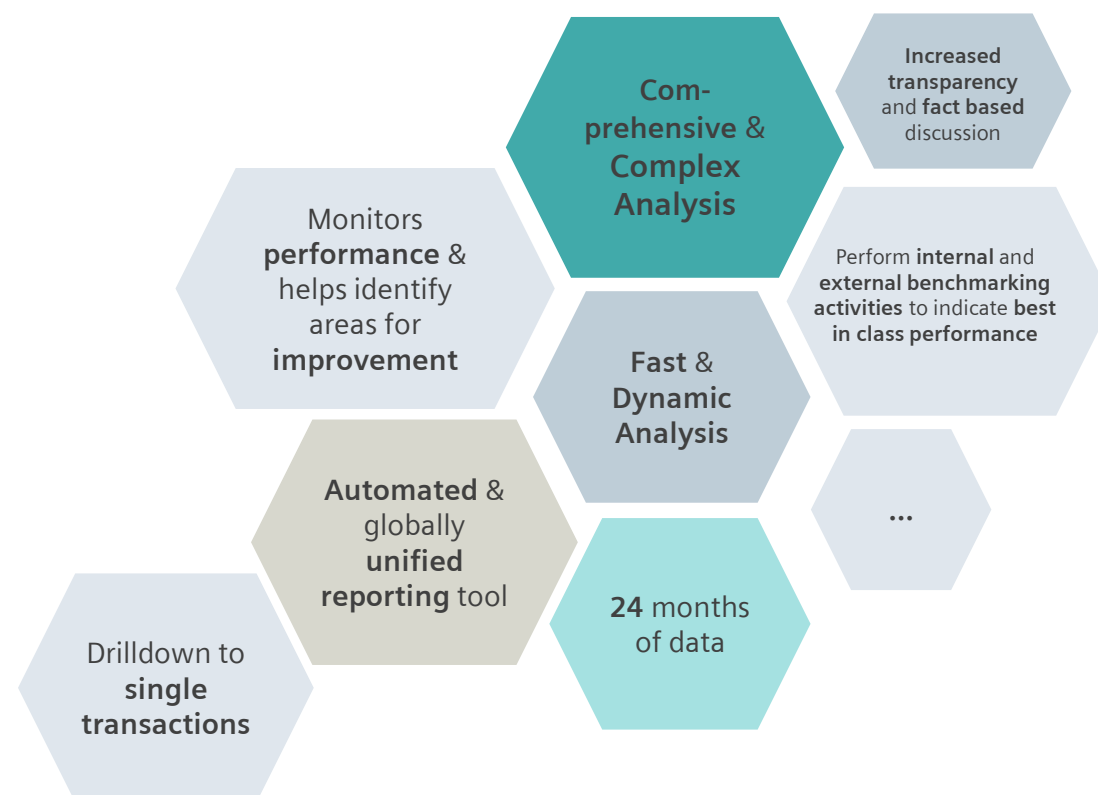**28 KPIs**

591 entities

52 ERPs

We cover E2E processes across all service lines:

ACCOUNTS PAYABLE
FTE Productivity, Automation, Late Payments, EDI Ratio, Adjustment Ratio, Backlogs
ACCOUNTS RECEIVABLE
Automatic Allocation, Unallocated Cash, finCIS
INTERCOMPANY CLEARING
Unposted ICC IDOCs, Clarifications, Automation
CLOSING AND REPORTING
ESPRIT Reopens, Validation Errors, Complexity

Key Benefits

Monitors **performance** & helps identify areas for **improvement**

Com-prehensive & Complex Analysis

Increased **transparency** and **fact based** discussion

Perform **internal** and **external benchmarking activities** to indicate **best in class performance**

Fast & Dynamic Analysis

Automated & globally **unified reporting** tool

...

Drilldown to **single transactions**

24 months of data

Robotic Process Automation (RPA) today paves the way for the smart ´Digital Workforce´ of tomorrow

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Global Business Services

Piloting & Service Setup

RPA today

rule-based, routine and predictable tasks based on structured, stable data

Robotics 2.0

judgement-based, dynamic/ad-hoc and unpredictable processes based on unstructured, volatile data

Multi-channel

chat

mail

voice

Multi-talent

observe
interpret
evaluate
learn
decide

Multi-purpose

Understand data

Generate insights

Predict outcomes

Perform actions

Overview
What is RPA?

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Candidates for RPA

- Multiple Data Entry in disparate systems
- Manual Processing
- Many transactions, frequent execution
- Rule-Based Decision Making
- Structured and Digital Data
- Limited Exception Handling
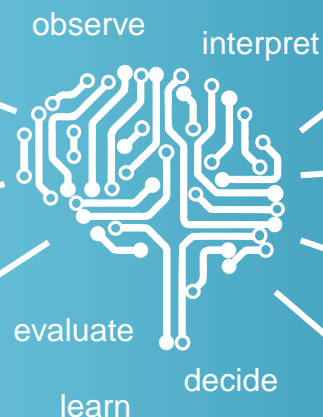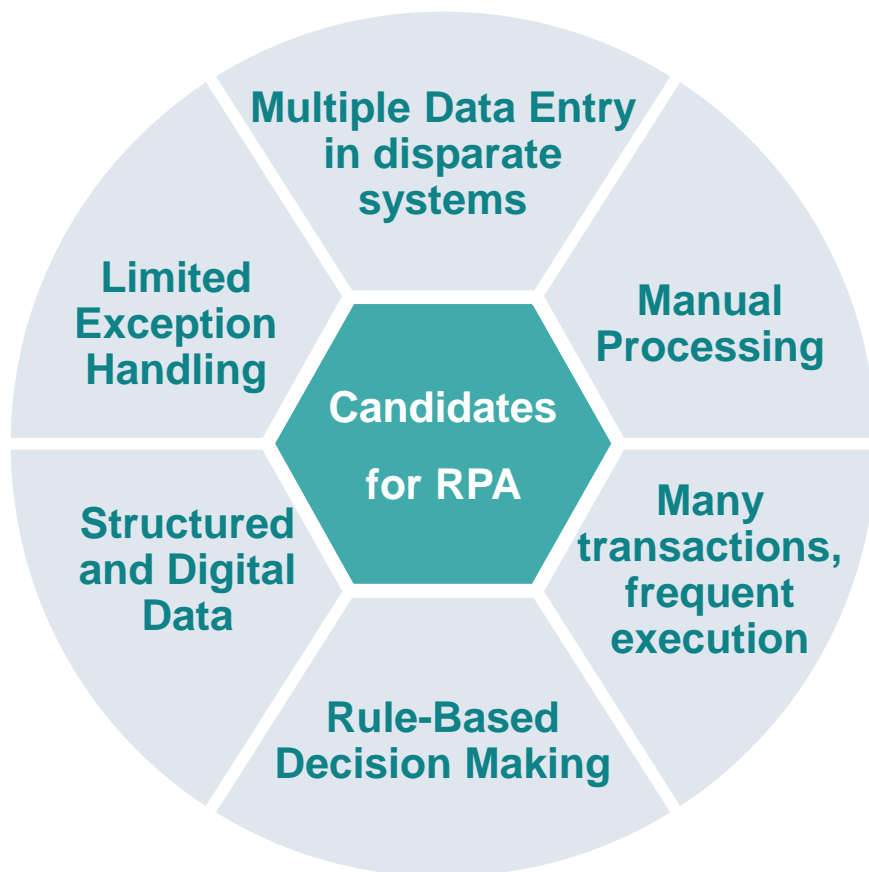
WHAT ROBOTS CAN DO....
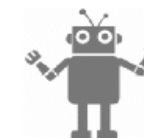
READ STRUCTURED DIGITAL INPUTS	INTERACT VIA USER INTERFACE	OUTPUT/ UPLOAD THE DATA
✉ E-mail	🖱 Click	✉ E-mail
Spreadsheets	Run program	Spreadsheets
Work Flow	Extract	Work Flow
PDF (digital type)	↻ Compare	Database
Database	Copy	ERP/ CRM
ERP/ CRM	**DECISIONS BASED ON BUSINESS RULES**	Web services
Web services		Report

Robots use <u>existing user interfaces</u> to automate instead of heavier backend integration

Example: Energy Management in UK - Purchase Order Creation

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12,000 Purchase requisitions had to be processed manually…

Problem Statement

High manual efforts

Non-standard process steps

Excel, Paper based requisition approvals

Solution

IT Workflow solution integrated with Robotics

Standardized Requisition, approval and PO creation process by reducing process steps

Identified required data in multiple systems like Outlook, Excel and SAP

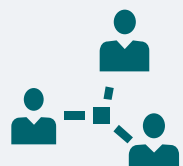*Open requisition in workflow Match supplier Extract supplier#*

SAP®

Open SAP Enter supplier#

Create PO Send copy to supplier via mail

Attach copy of supplier mail to SAP

Impact

- **Automation of 70% volume**
- **Effort reduction** by **65%**
- **Prevent** Invalid Data entry
- **Reduced** cycle time by **80%**

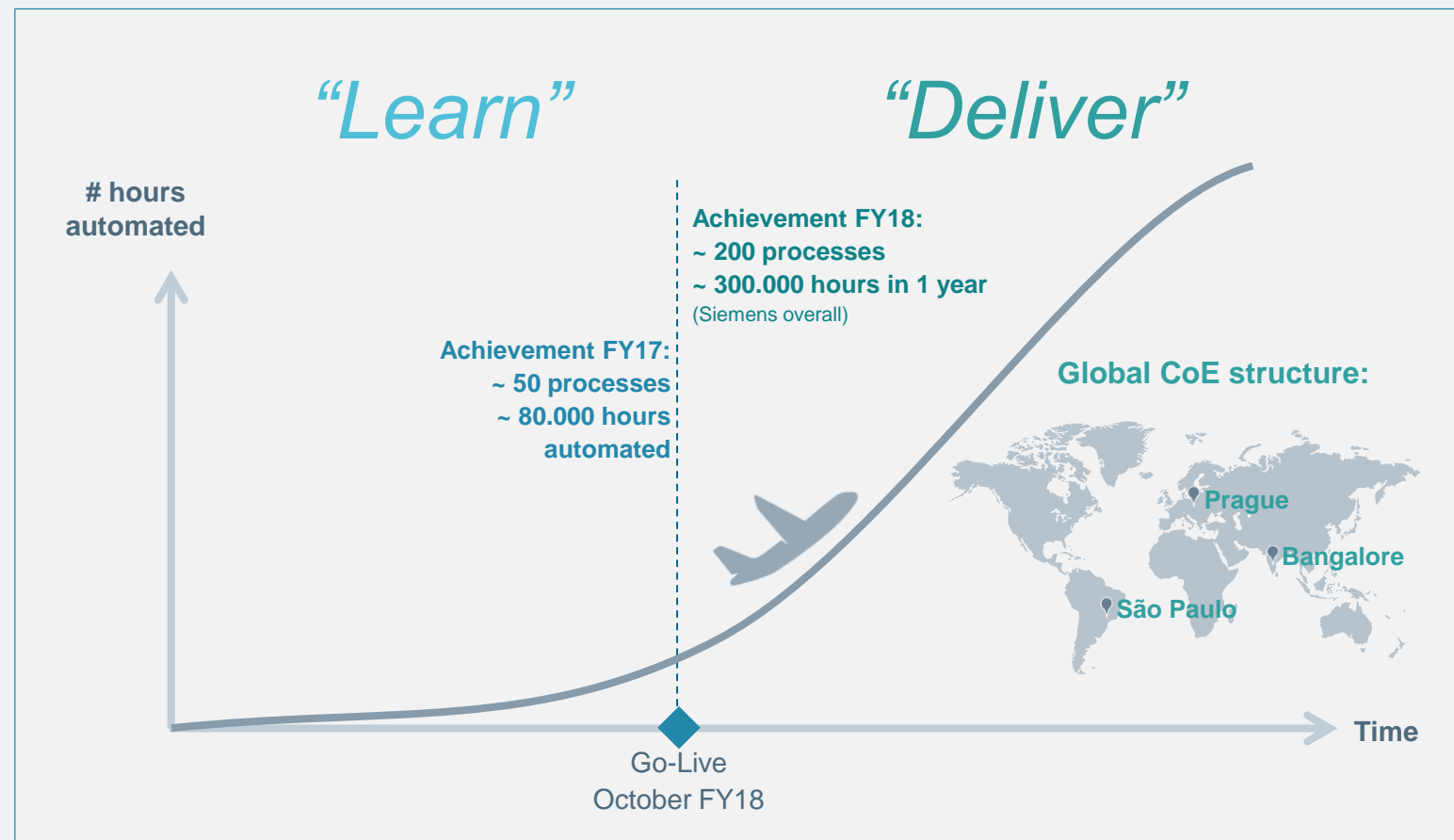# RPA – global CoE to digitalize processes "on demand" 3 hubs ramped-up in less than a year

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Robotics
as
a
Shared Service

- Collaboration
- Speed
- Impact

"Learn"   *"Deliver"*

hours automated

Achievement FY18:
~ 200 processes
~ 300.000 hours in 1 year
(Siemens overall)

Achievement FY17:
~ 50 processes
~ 80.000 hours
automated

Global CoE structure:

Prague
Bangalore
São Paulo

Go-Live
October FY18

Time

The RPA service and delivery model is based on close cooperation between Shared Services and IT

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CoE as part of Shared Services due to high degree of process competencies required

Hub setup leverages **synergies** and ensures customer proximity
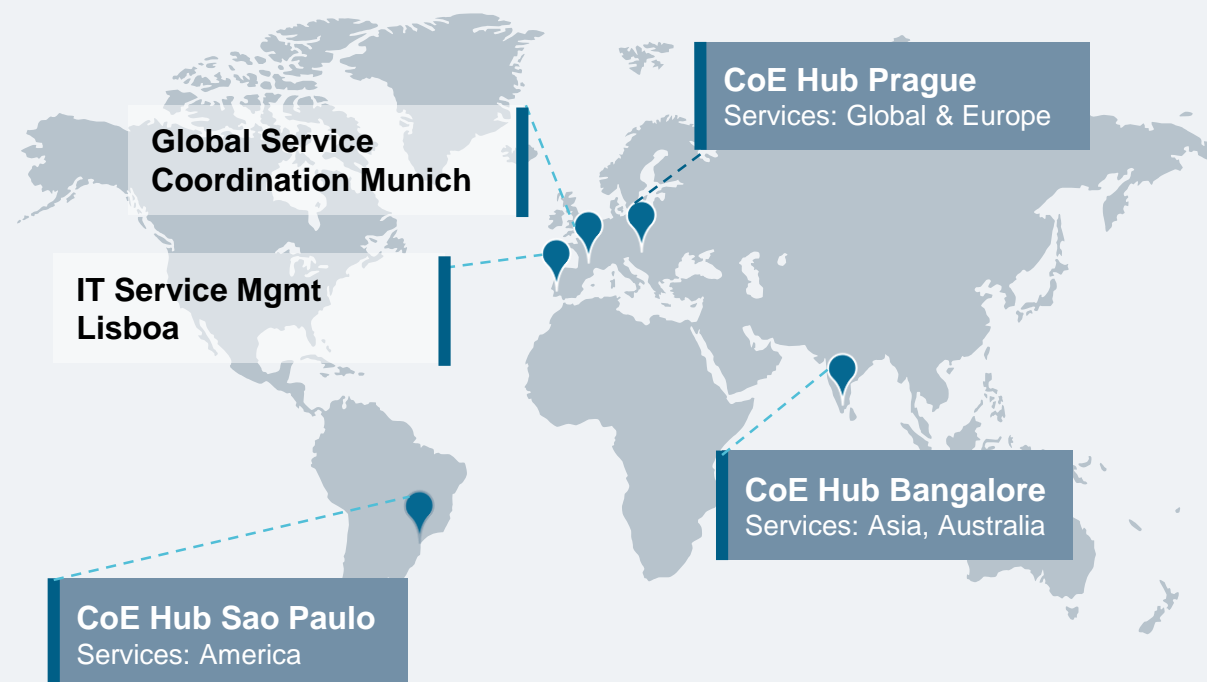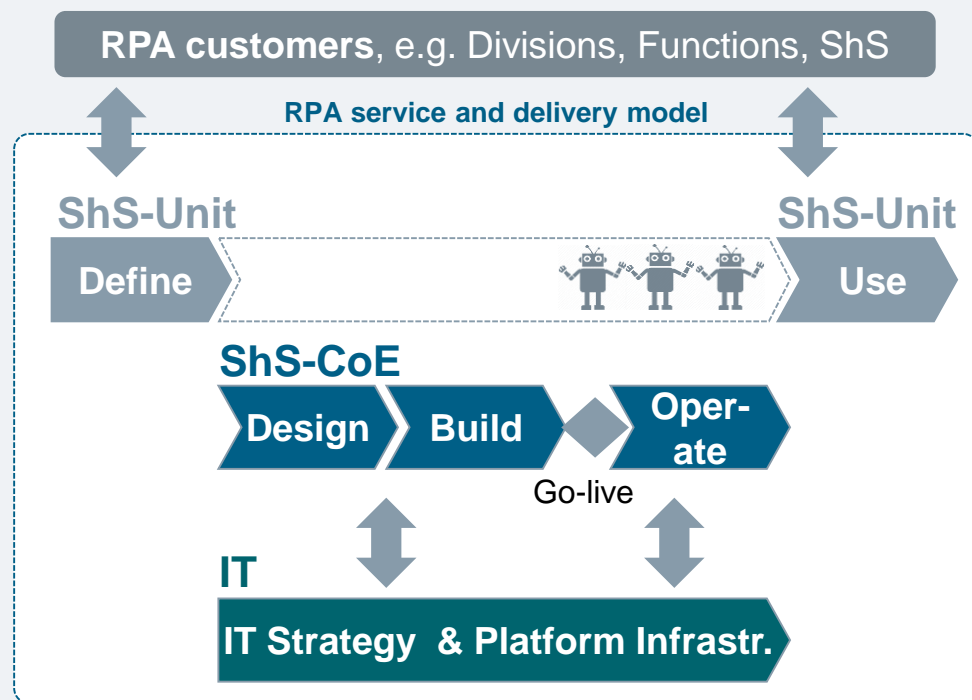
RPA customers, e.g. Divisions, Functions, ShS

RPA service and delivery model

ShS-Unit — Define

ShS-Unit — Use

ShS-CoE — Design → Build → Oper-ate

Go-live

IT — IT Strategy & Platform Infrastr.

Global Service Coordination Munich

IT Service Mgmt Lisboa

CoE Hub Prague
Services: Global & Europe

CoE Hub Bangalore
Services: Asia, Australia

CoE Hub Sao Paulo
Services: America

RPA today paves the way
for the smart ´Digital Workforce´ of tomorrow

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RPA today

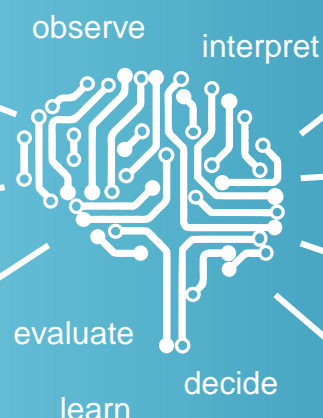rule-based, routine and predictable tasks
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Robotics 2.0

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Multi-channel **Multi-talent** **Multi-purpose**
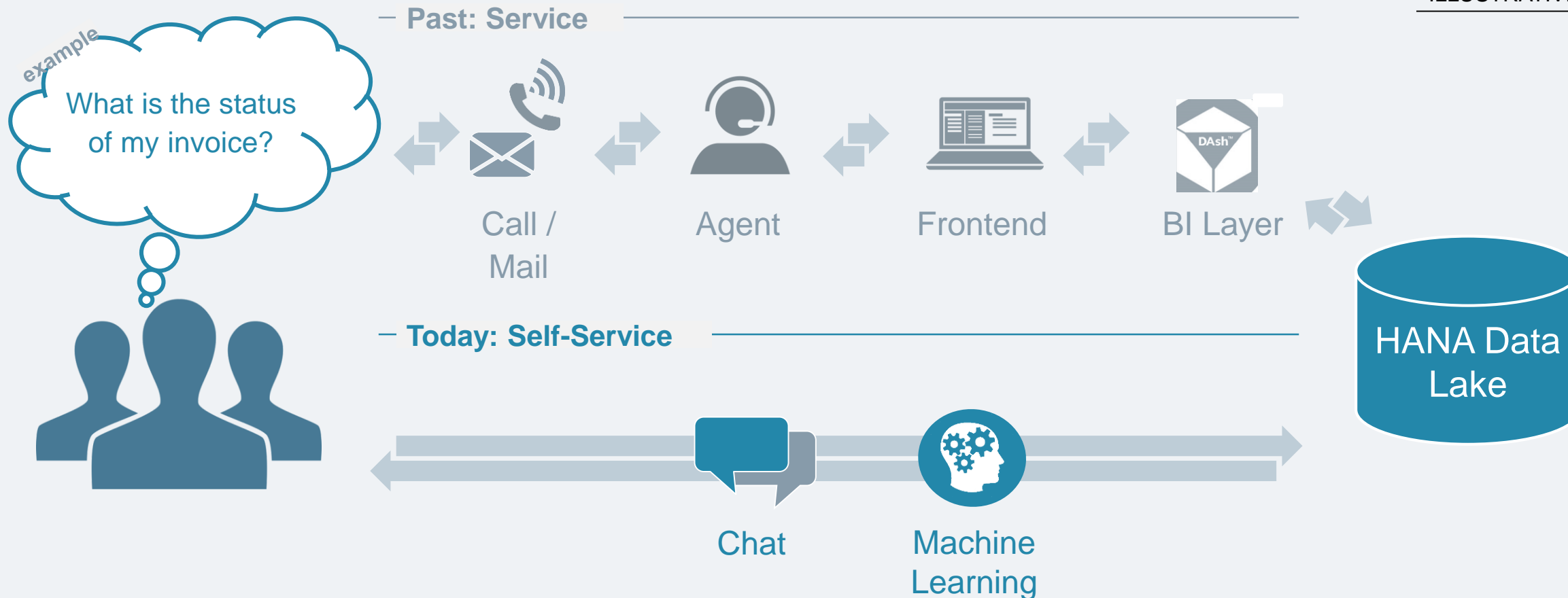
chat

mail

voice

observe   interpret

evaluate

learn   decide

Understand data

Generate insights

Predict outcomes

Perform actions

Our chatbot 'Payton' is able to answer invoice status related inquiries using real-time data

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Past: Service

example

What is the status of my invoice?

Call / Mail

Agent

Frontend

DAsh™

BI Layer

HANA Data Lake

Today: Self-Service

Chat

Machine Learning

What´s next?

Shared Services can serve as digital transformation engine for the Finance function

In 2025, GBS'…

…digital workforce handle every back-office process, cognitive and enhanced workflow capabilities enable them to interact with humans seamlessly.

…human workforce focus on exceptions and value-adding, relationship-based activities, always working closely with technology.

…digital transformation has achieved enormous efficiency by consequently harnessing automation and by leveraging disruptive trends early, resulting in leaner cost structures, individualized processes and new digital service offerings.

…customers enjoy exceptional services – individual customer-oriented services, seamless interfaces and faster, easy-to-use workflows.

The role of Shared Services is changing…

…to a Partner of Choice

…to a Driver of Change

From a cheap industrial mass production set up…

Factory set-up

Repetitive process execution

Transactional tasks

Labor Arbitrage

Standardized delivery

…

Process Bundling

Digitalization driver

Active contributor to change

Transformation machine

E2E optimization

Innovation ambassador

Process re-design

…

Customized service delivery

Thank
You

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