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Digital Strategy at BayWa r.e. Services

# Digital Transformation in O&M

BayWa r.e. Forum, 07.11.2018

# Digital Transformation in O&M

Overview:  
**BayWa r.e. Operation Services**

A clear path:  
**BayWa r.e. Services Digital Strategy**

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4

More than a buzzword:

**Digital transformation unlocks value**

Our commitment to transformation:

**Implementation examples & outlook**



Overview:

# BayWa r.e. Operation Services

# BayWa r.e.: Committed to local markets and empowered through global systems

Over

## 5,200 MW

operated by BayWa r.e.



Quality management system  
certified according to  
DIN ISO 9001:2008.

Successful  
integration of  
9 acquisitions

Cleantech

SYBAC

IKENERGIA

E.ON

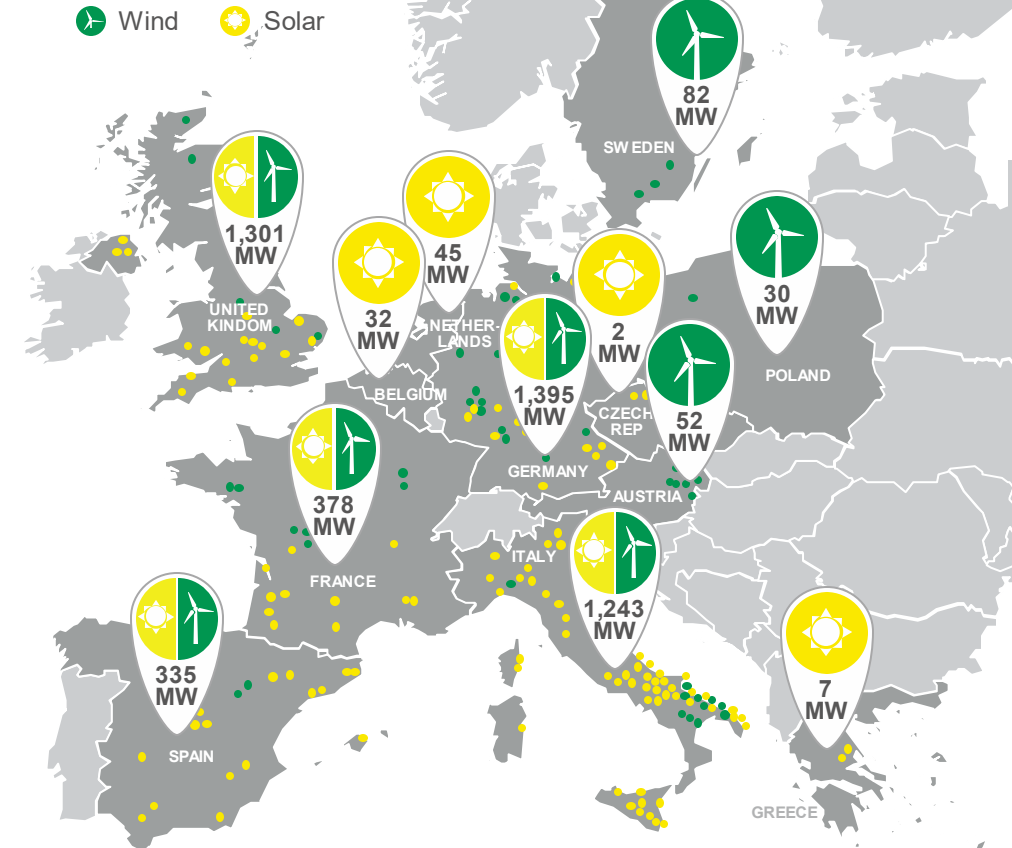
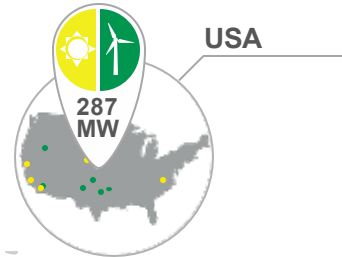
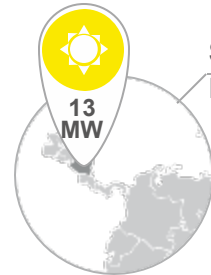
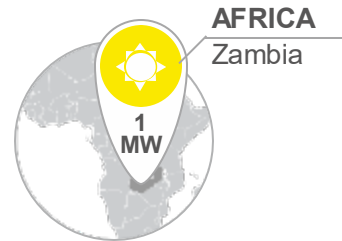
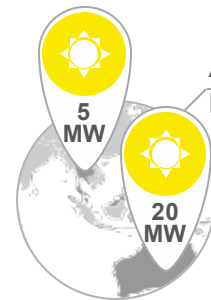
WÜRTH SOLAR

GREEN HEDGE

solesa

ENERGY SYSTEM SERVICES

Becon



Close to the customer  
in all addressed markets



Decentralized set up with local market  
experts, strong partners & relationships



Network set up for  
economies of scale



Financial strength for continuous  
improvement & innovation

# Full Operations Services Capabilities for Wind & Solar



## Power Plant Operation

- Technical Operation Management
- Commercial Operation Management

## Power Plant Maintenance

- On-Site Service
- Rotor Blade Service
- Heavy Load Logistics
- High Voltage Services

## Monitoring, Data & IT Security

- 24/7 Control Center
- Inhouse SCADA & Cybersecurity Experts

## Engineering & technical consultancy

- Technical Due Diligence
- Yield & Performance Analysis

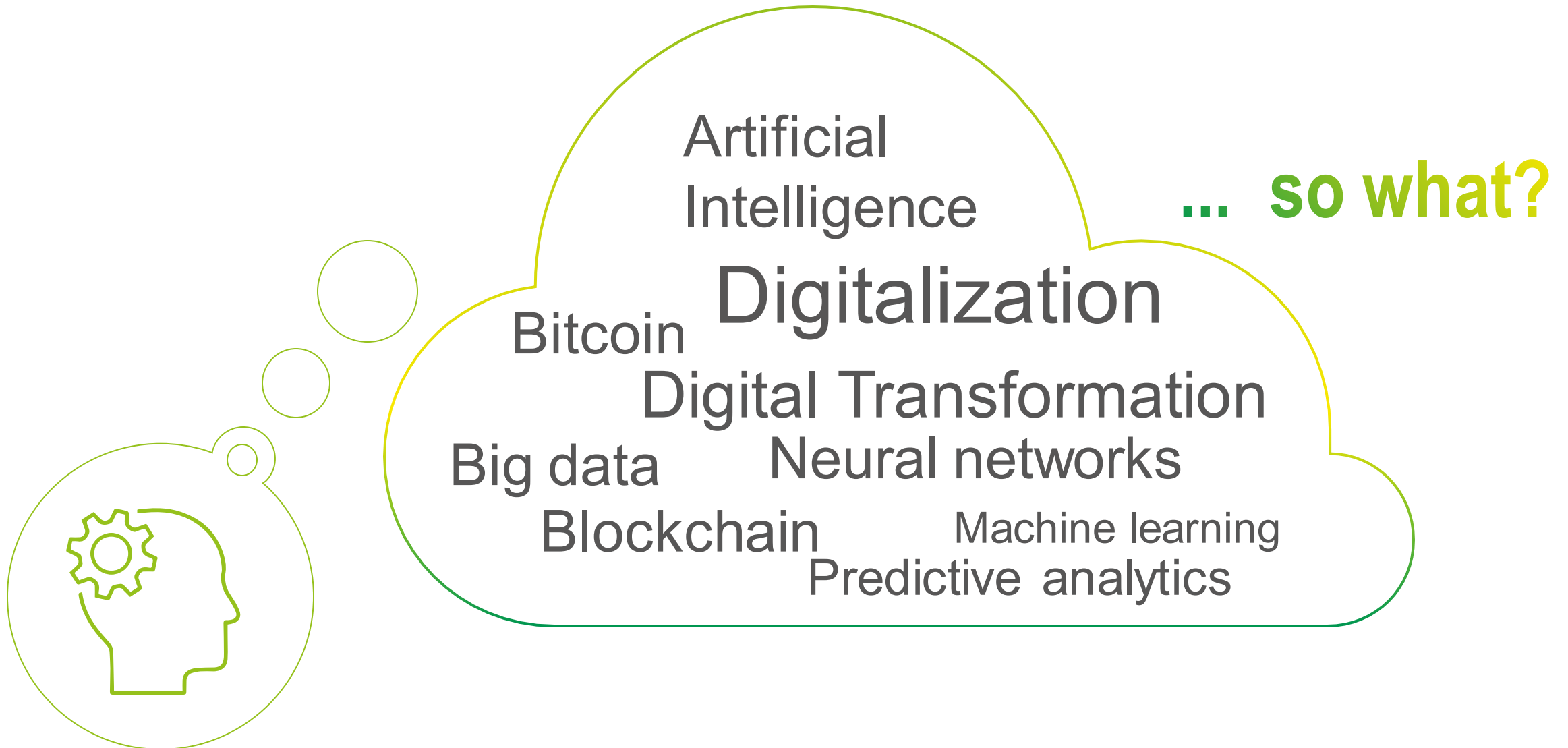




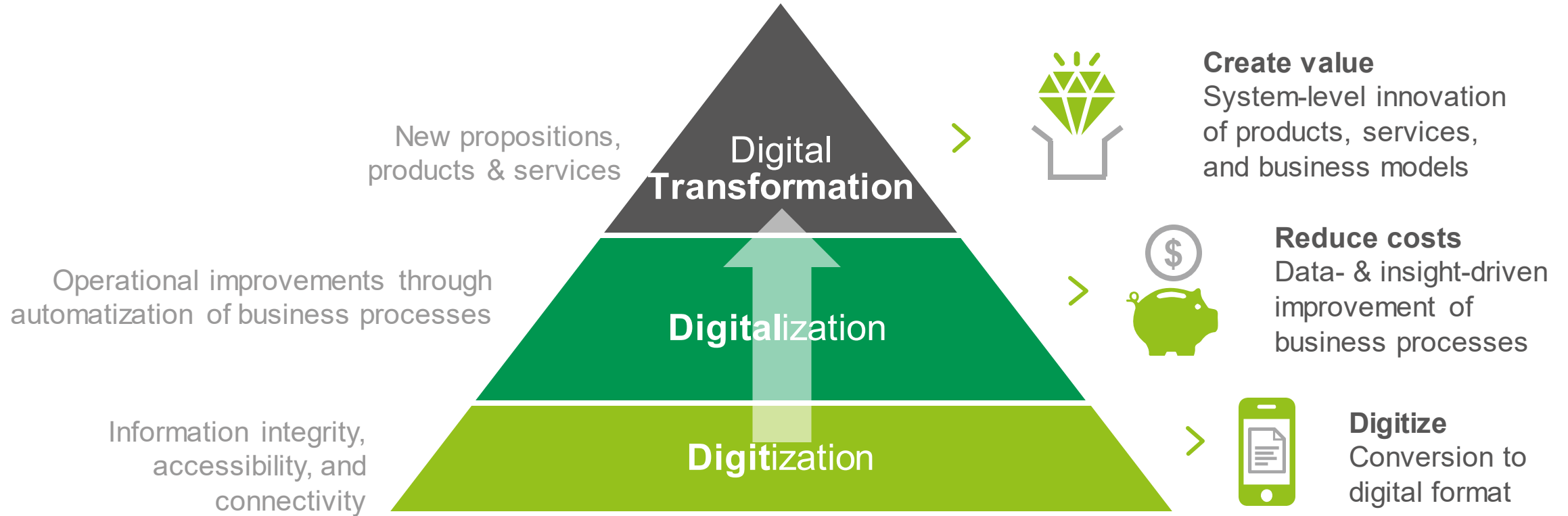
More than a buzzword:

# Digital Transformation unlocks value





# Digitalization unlocks value creation



**Result: Long-term best-in-class SERVICE QUALITY and REDUCED OPEX for our customers**





A clear path:

# BayWa r.e. Services Digital Strategy

# Our digital roadmap

## Set up integrated Digital Enterprise Architecture

BayWa r.e. O&M  
Smart Services for Customers

Production Optimization	Technical Work Management	Service Level Management	Cyber Security
Predictive & Prescriptive Maintenance	Unified Digital O&M Processes	Forecasting Service Demand (AI)	3 <sup>rd</sup> Party Services, Plug-in Management
Supply Chain Optimization	Field Service Management	Service to Cash (Commercial) Management	Customer 360 View

Renewables O&M Service Platforms Management

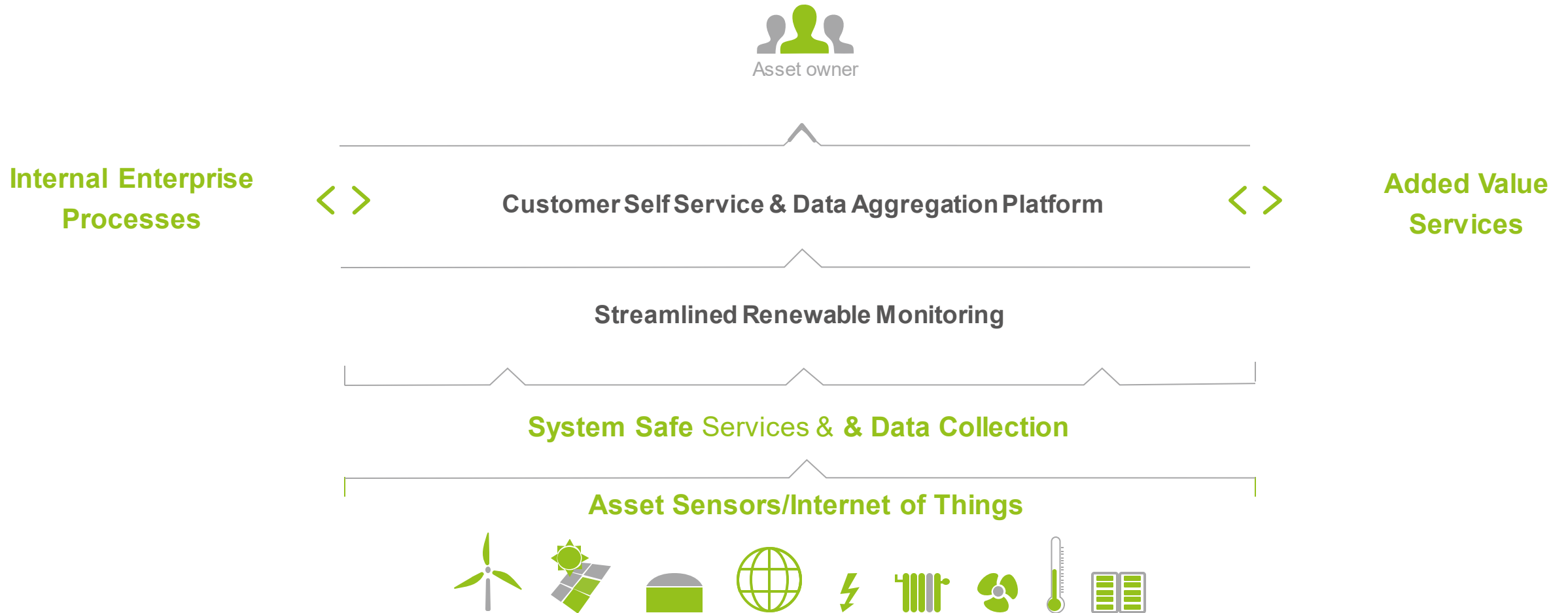
Renewables Technical Asset Management

Acquisition & Communication Management

Optimize existing operations

Co-create new business models

# Key component: Fully integrated Digital Enterprise Architecture

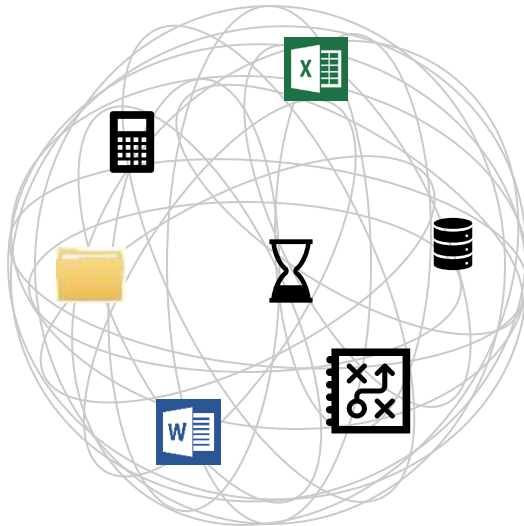


# Our Digital Transformation journey

## Standalone systems

Yesterday

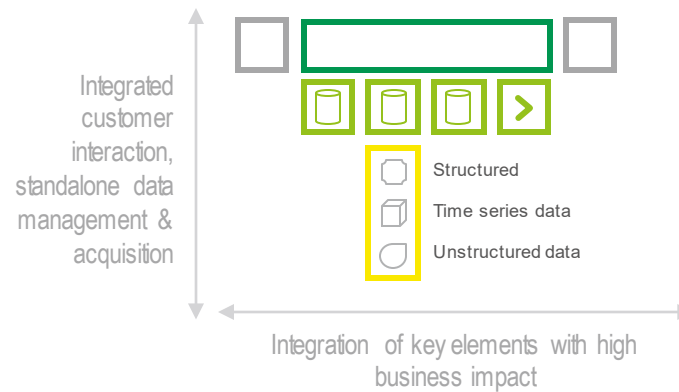
- **Low integration** between systems and across business entities
- Little positive effects from scale



## Transition Architecture

Today

- Efficiency increase by **integration of key elements** with high business impact
- **Significant investments**
- Redundant/parallel systems



## Fully integrated Digital Operation Architecture

Tomorrow

- **Significant efficiency increase**
- Enables insight-driven improvement of business processes





Our commitment to transformation:

# Implementation examples & outlook

# PowerHub: Customer Self Service and Global Service Platform



## Efficient Portfolio Management

Have an overview of your assets, your projects and all operational KPIs.

- ✓ Efficient asset management
- ✓ Centralized information and documentation
- ✓ Intelligent task and events management



## Advanced Data Management

We help you to make informed decisions by turning data into information.

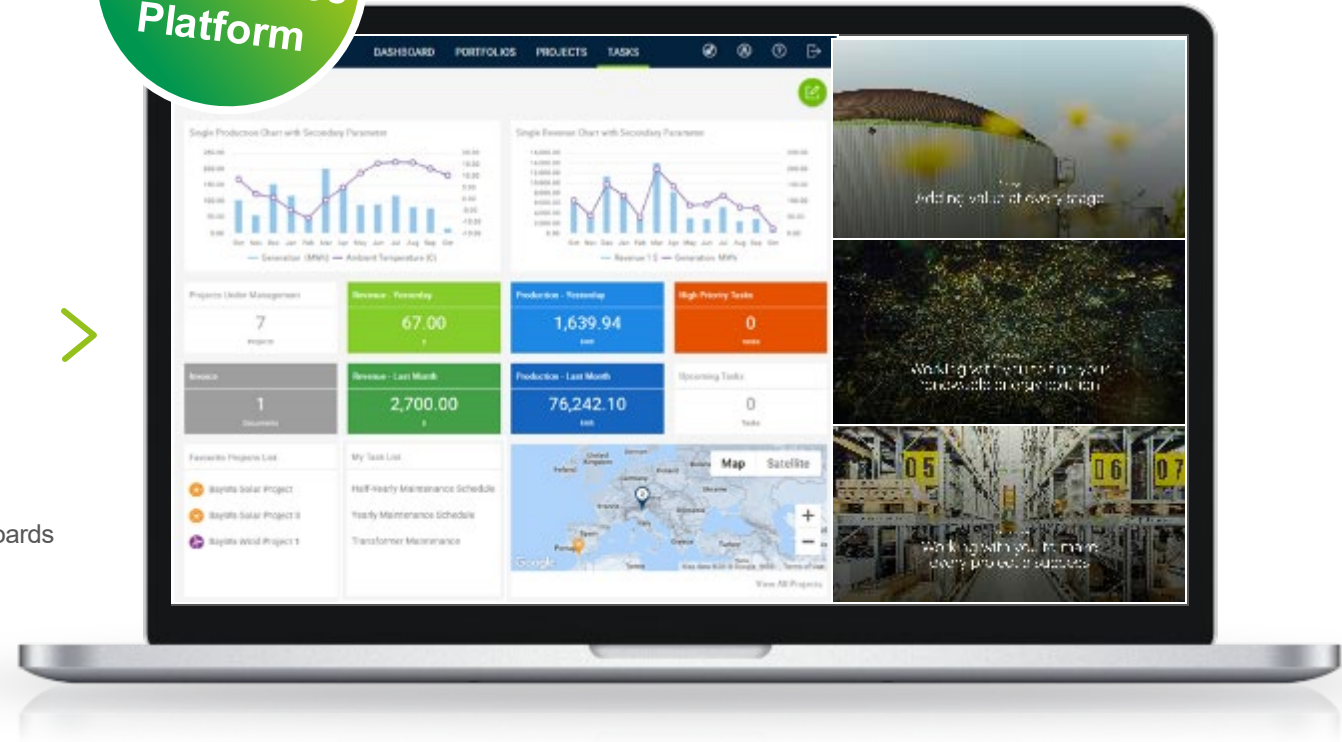
- ✓ Automatic workflows and reports
- ✓ Intelligent performance and assets reports
- ✓ Intelligent financial information



## Unique Customer Experience

Customizable features, adapted to your needs, allow for a more efficient review of your assets.

- ✓ Absolute information transparency
- ✓ Customize your dashboards
- ✓ Customize your reports



Complete software solution to streamline diverse data systems into **single source of truth**

## Current initiatives: Immediate business impact & concrete steps toward the fully integrated O&M experience



Less manual reporting effort, less effort for management of tasks & compliance, less data input, less manual invoicing/billing → **more capacity for value-adding tasks**



r.e.levant    r.e.sponsible  
r.e.duce    **r.e.think**    r.e.cycle  
r.e.spect    r.e.flect    r.e.lation  
r.e.newable

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# Live Hack





Kritis-Verordnung:

# Was bedeutet das IT-Sicherheitsgesetz für Ihre Anlagen?

BayWa r.e. Forum, 07.11.2018

r.e.levant r.e.sponsible  
r.e.duce **r.e.think** r.e.cycle  
r.e.spect r.e.flect r.e.lation  
**r.e.newable**

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