



Effectively  
Navigating  
Global PH-EMEX



# Evolution & Revolution in Engineering

*Global and local organizational set-up*

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*Pharma-PS Engineering & Maintenance Excellence*



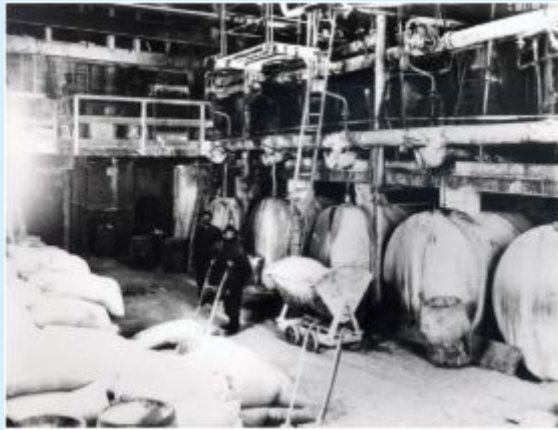
# Evolution & Revolution in Engineering

## AGENDA

- I. History of Bayer and Engineering Evolution*
- II. Revolution with Bayer's New Operating Model*
- III. Evolution after Revolution in Pharma Engineering*
- IV. Success Factors and Perspective*

# Bayer from the cradle in Wuppertal to a global leader promoting the quality of life through advanced science and technology

## History of Bayer



1863 Gründung von Friedrich Bayer et comp.

1881

1886

1895

1904

1929

1989

2002

2010

# What's up today

## Engineering Evolution



### At our two sites in Wuppertal we ...

- research and develop new medicines
- produce new active pharmaceutical ingredients for market launch
- ensure market supply

### Our fields in terms of Biotech:



- Antibody conjugates
- Cell therapy, cell line development, process development
- Analytical development
- Tox and GMP Manuf. Phase I-III



# We're overhauling our operating model to benefit the communities and stakeholders we serve

## *Introducing Dynamic Shared Ownership (DSO)*

**What we focus on**



Critical outcomes that foster our mission

**How we organize & relate**



Empowered teams in a network – collaboration & accountability go hand-in-hand

**How we create value**



Customers and products are front and center, supported by fluid flow of capabilities & resources

**How we get the work done**



Faster, 90-day work cycles with continuous learning & improvement

**How we show up**

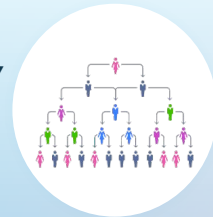


Respect differences, embrace inclusion & show up as our best selves

*Underpinned by a new approach for leadership*

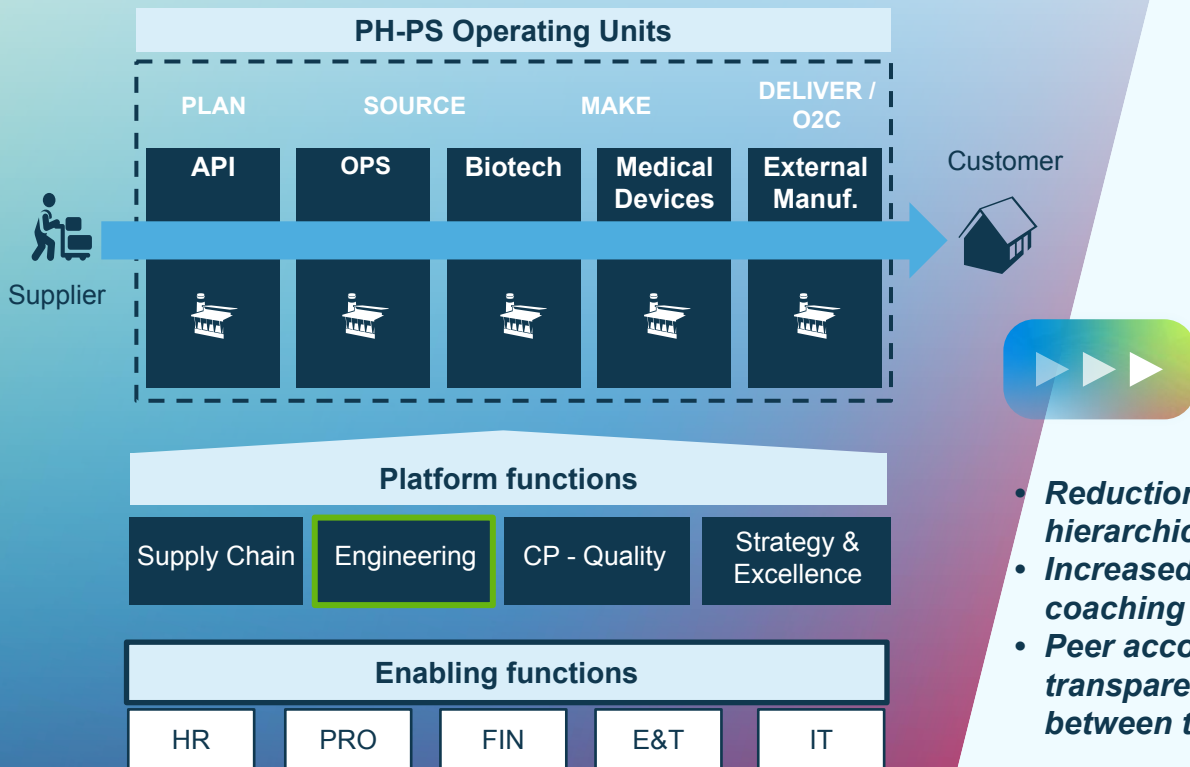
# Transforming organizational structures invites to extend traditional management into thriving leadership

**From** *Traditional hierarchy of individuals*

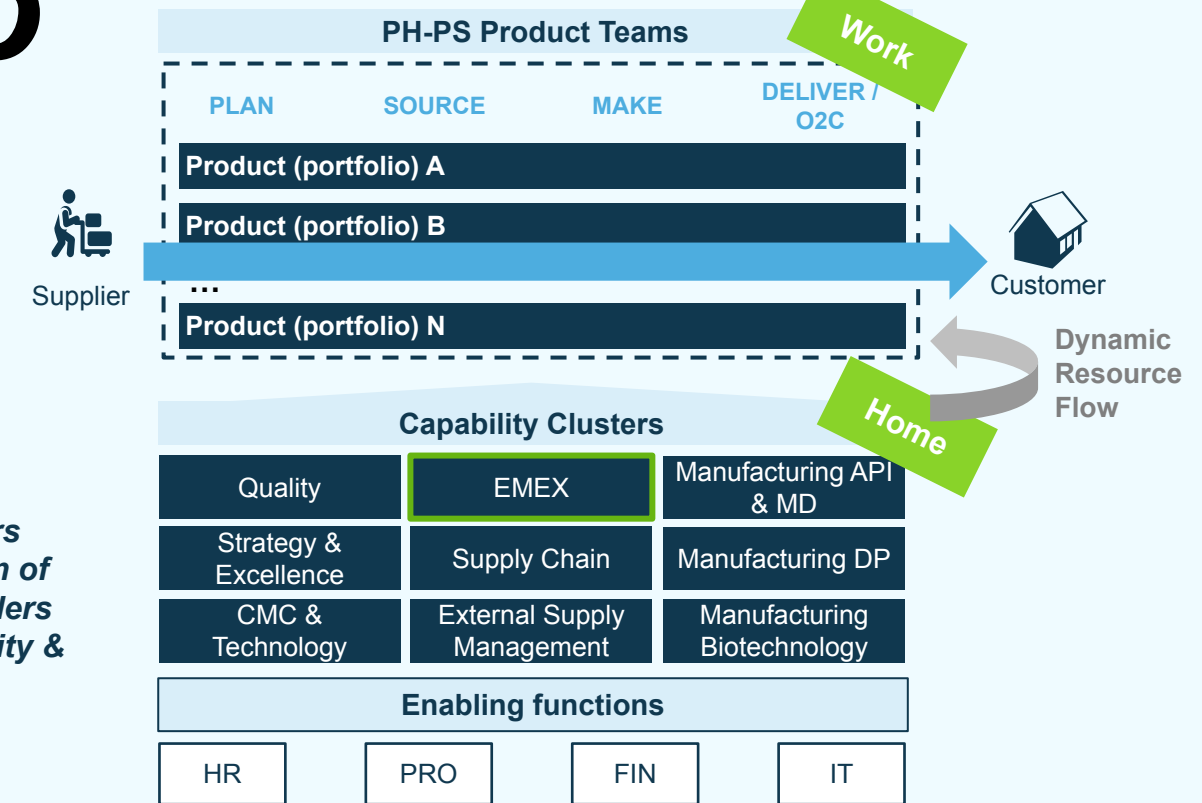


**T  
O**

*Empowering teams to find ownership in their work*



- *Reduction of hierarchical layers*
- *Increased in span of coaching for leaders*
- *Peer accountability & transparency between teams*



# One Home For Capabilities of Engineering & Maintenance (EMEX) Activities

**From** Capabilities spread in many functions

**To** End to End Ownership in one Organization

Engineering & Technology

PH Engineering

HSE

Product

Site Engineering  
API, OP, MD & BT<sup>1</sup>  
Including Infrastructure Services

R&D

Site Maintenance

Engineering & Maintenance Excellence (EMEX)



Focus on product and customer needs



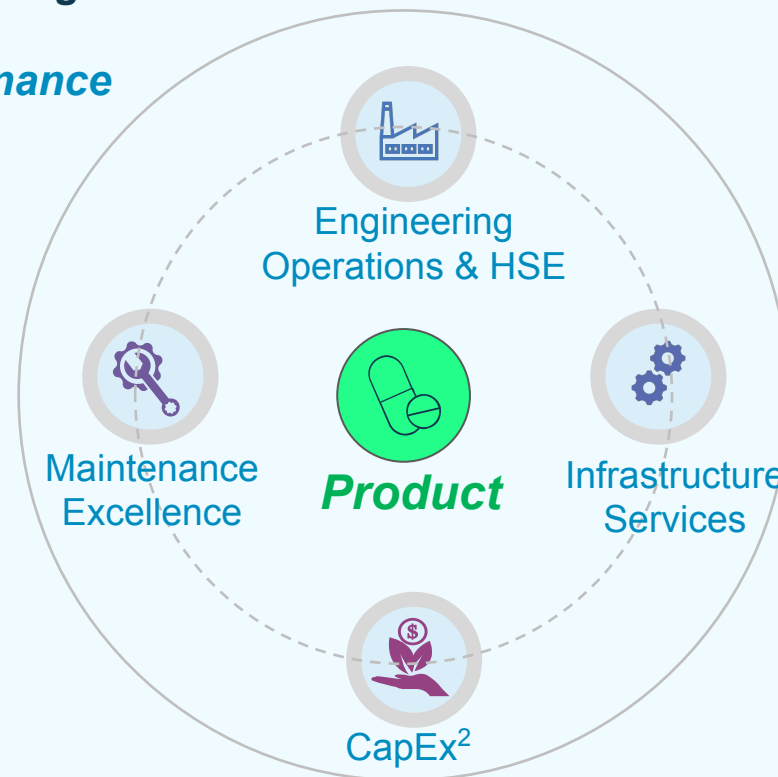
Bundling of capabilities



Development of capabilities & employees



Flexible deployment of resources



<sup>1</sup> Active Pharmaceutical Ingredients, Operations, Medical Devices, Biotech  
<sup>2</sup> Capital Expenditure

Instead of operating in manufacturing plant silos, teams from different *Homes* flow to where they create the most value

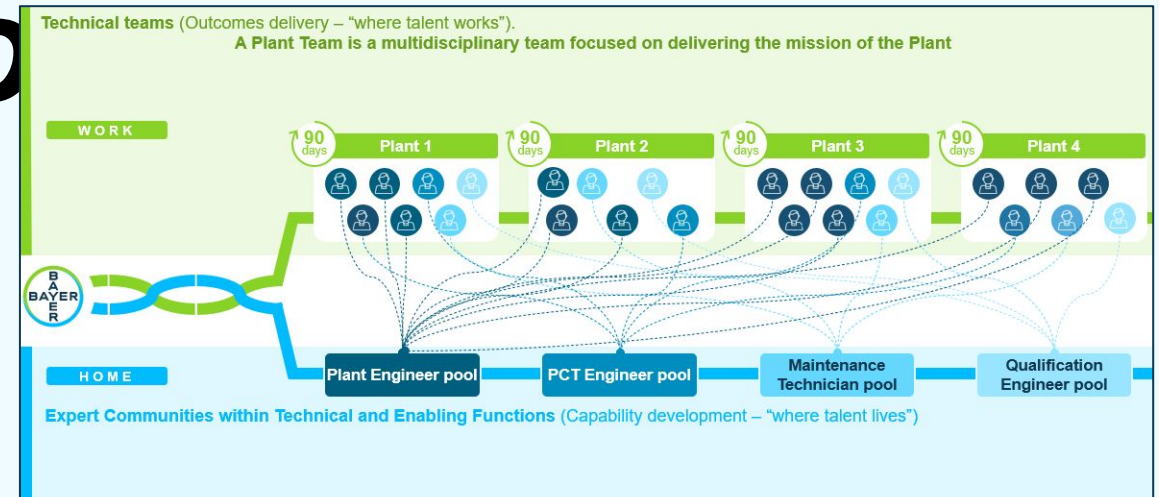
# From

“Good” old times



# To

Revolution



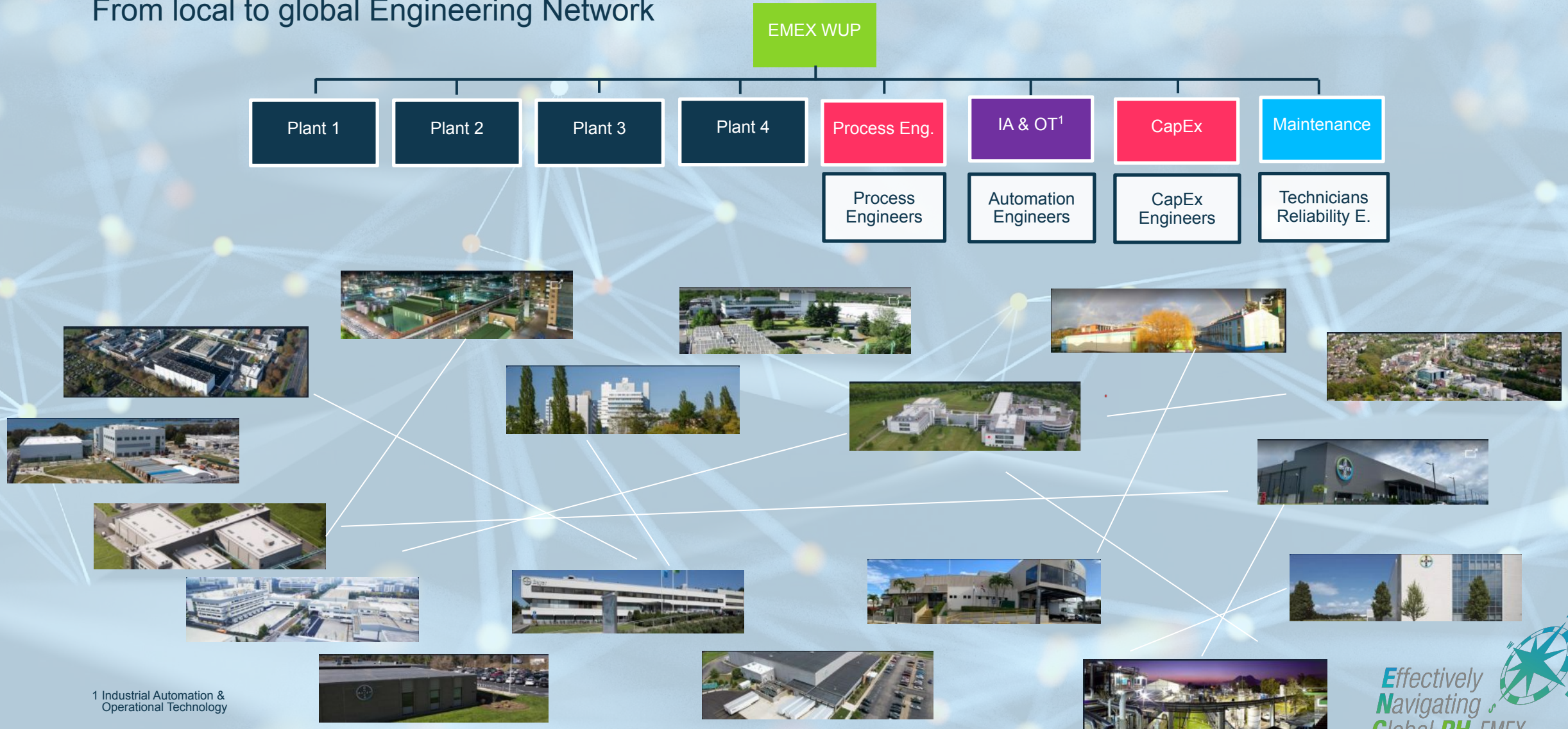
### Characteristics of new agile ways of working

- empowered cross-functional teams
- open communication
- shared accountability
- quick decision-making
- working in short cycles with defined outcomes
- continuous learning



# Connecting the Dots to Make the Net Work

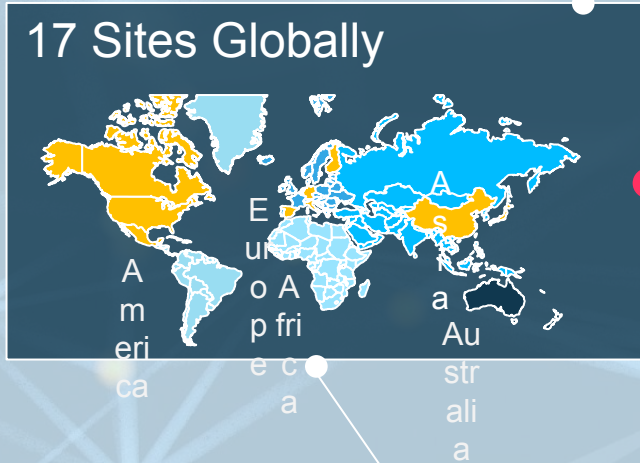
From local to global Engineering Network



1 Industrial Automation & Operational Technology

# Connecting the Dots to Make the Net Work

## Global Engineering Network

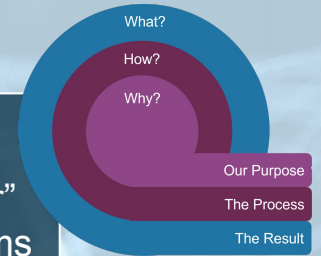


### Arms-Length Companies



### Change & Communications

- Change management “EMEXchanger”
- Close collaboration with Global Comms



### PH-EMEX Network

### Communities of Practice (CoP)

Project Management // Clean Media // Commissioning & Qualification // Conditioned Based & Predictive Maintenance // HSE // HVAC & Cleanroom // Let's AI // Sustainability // ....

### Mission Teams

CoP missions // ONE EMEX // Culture // People // Development // Cross-cluster collaboration

### DSO Champions

- DSO immersives & trainings
- Working in 90-day cycles
- Global champions community

# Critical Success Factors for our *Dynamic Shared Ownership* Journey

## Clear Mission & Outcomes

- Communicate the mission clearly and regularly
- Set clear, measurable outputs and outcomes together
- Encourage open dialogue so everyone feels ownership and pride in the team's direction



## Strong Collaboration Amongst Teams

- Change of leadership behaviors (VACC<sup>1</sup>) and reduction of hierarchies
- Work together across functions (*Home / Work* concept)
- Fast decision making on basis of data and industry standard processes



## Empowered Mindset and Behaviors

- Encourage self-reflection and adapt and evolve flexibly if necessary
- Support new ideas
- Set small achievable goals and celebrate progress
- Trust and support each other



## Focus on Creating Value for Customers

- Establish cross-functional product teams that prioritize activities and drive outcomes according to customers' needs
- Assign budgets flexibly towards projects that create most value, rather than being tied to departments



**Making  
„Health  
for all“  
Real**

<sup>1</sup> Visionary, Architect, Catalyst, Coach



***Creating the best  
version of Bayer,  
together.***



**Thank  
you!**



# Forward-Looking Statements

Mandatory for last chart in presentations!

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