



AUBURN HILLS, SEPTEMBER 6, 2017

# Partner of choice for perfection in automation

ABB Innovation & Technology Day

Peter Terwiesch, President Industrial Automation Division



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# Important Notices

Presentations given during the ABB Innovation & Technology Day 2017 includes forward-looking information and statements including statements concerning the outlook for our businesses. These statements are based on current expectations, estimates and projections about the factors that may affect our future performance, including global economic conditions, and the economic conditions of the regions and industries that are major markets for ABB Ltd. These expectations, estimates and projections are generally identifiable by statements containing words such as “expects,” “believes,” “estimates,” “targets,” “plans,” “outlook” or similar expressions.

There are numerous risks and uncertainties, many of which are beyond our control, that could cause our actual results to differ materially from the forward-looking information and statements made in this presentation and which could affect our ability to achieve any or all of our stated targets. The important factors that could cause such differences include, among others:

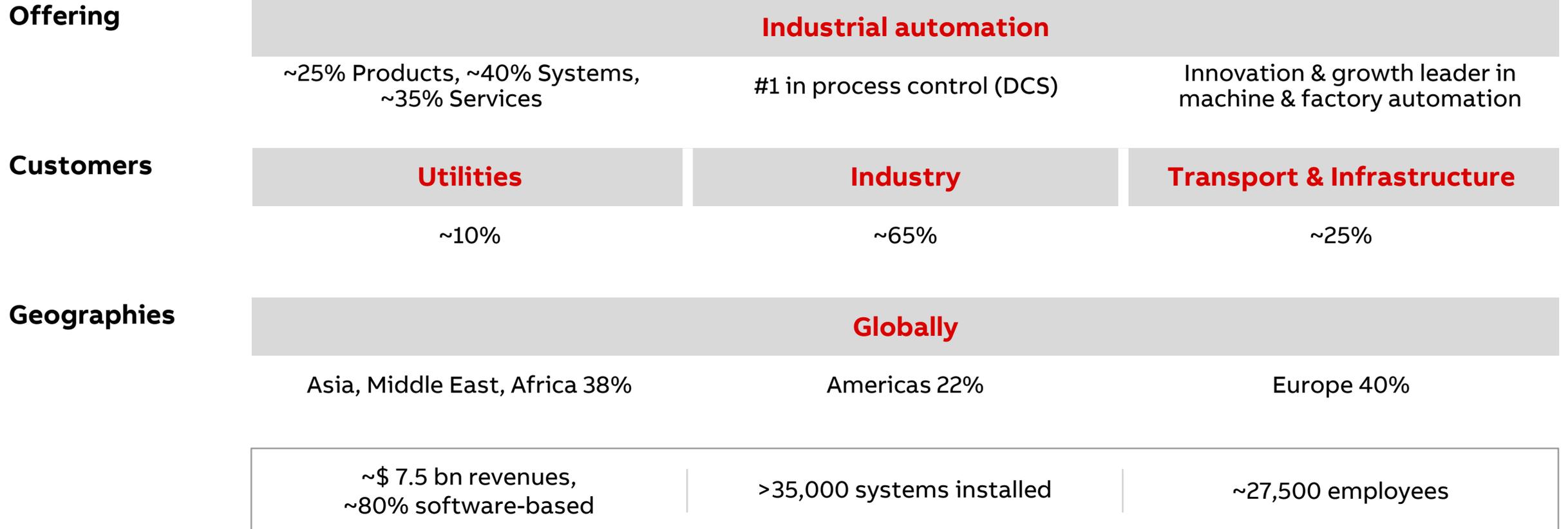
- business risks associated with the with the volatile global economic environment and political conditions
- costs associated with compliance activities
- market acceptance of new products and services
- changes in governmental regulations and currency exchange rates, and,
- such other factors as may be discussed from time to time in ABB Ltd’s filings with the U.S. Securities and Exchange Commission, including its Annual Reports on Form 20-F.

Although ABB Ltd believes that its expectations reflected in any such forward-looking statement are based upon reasonable assumptions, it can give no assurance that those expectations will be achieved.

The presentations and the related discussion may also contain or refer to non-GAAP measures of performance. Definitions of these measures and reconciliations between these measures and their US GAAP counterparts can be found in the “Financial information” documents under “Quarterly results and annual reports” on our website at <http://new.abb.com/investorrelations/>

# Industrial Automation division

## Overview



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# Our main customer segments

A >\$100 bn market for ABB expected to grow 2 – 3% p.a.<sup>1</sup>

## Process industries

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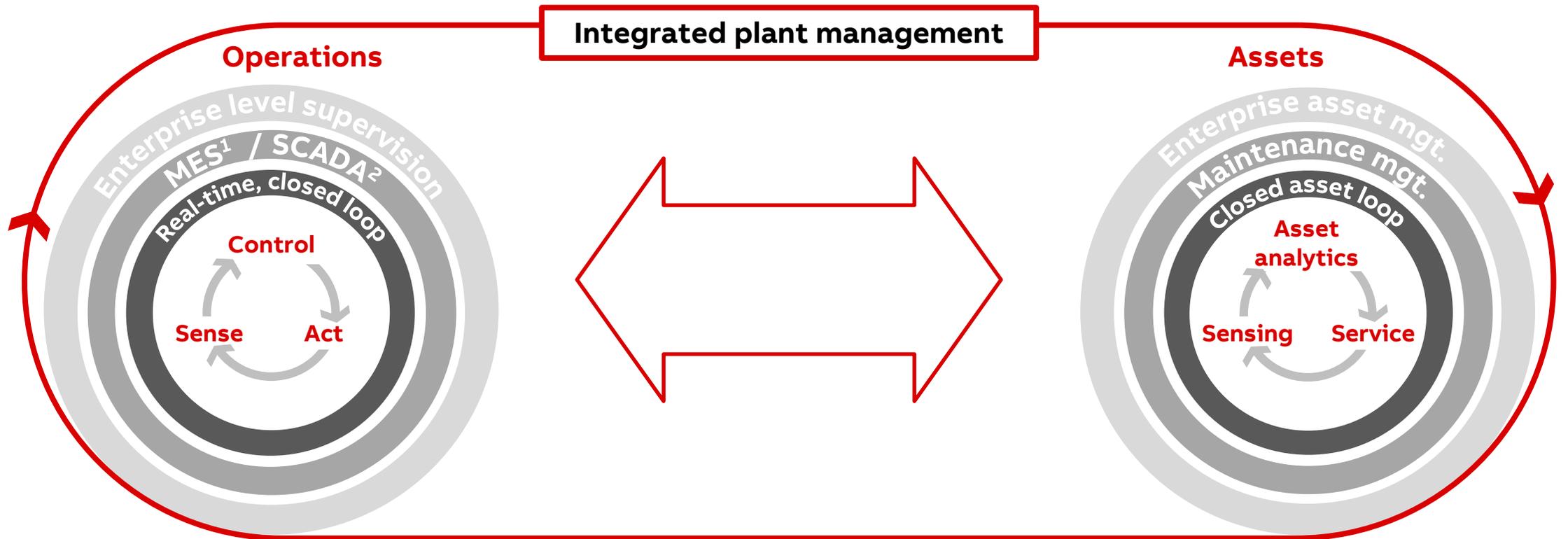
## Discrete & hybrid industries

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# Perfection in automation

Mastering control loops for customer value



# Partnering with our customers along their asset lifecycle

Customer asset lifecycle

Plan / design

Build

Operate

Our enhanced digital value proposition

Our “traditional” value proposition

Our customer relationship



Solutions engineering for machine & factory automation



ABB Intelligent Projects™



ABB Ability™ System 800xA®



ABB Ability™ Collaborative Operations™

EXAMPLES EXHIBITED TODAY

Planning partner

Product, solutions, systems partner

Operations partner

# Sadara – world’s largest petro-chem complex built in one phase

Main automation partner from concept to long-term operations

## Customer asset lifecycle

Plan / design

Build

Operate

### Customer situation

Largest petro-chem complex globally built in one phase

26 manufacturing facilities on site

3 mn metric tons of capacity per year

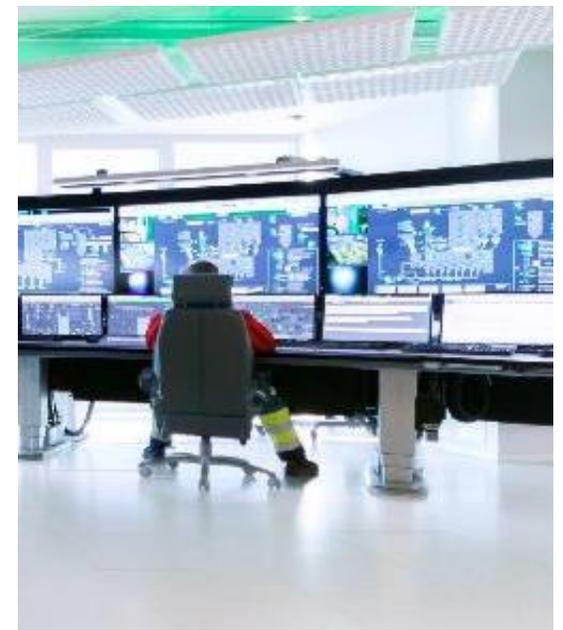
\$ 20 bn project value

### ABB solution

Control center operating 18 distributed control systems (DCS); each DCS running ~50 fully automated production lines

150,000 I/Os

260 work stations, 450 servers



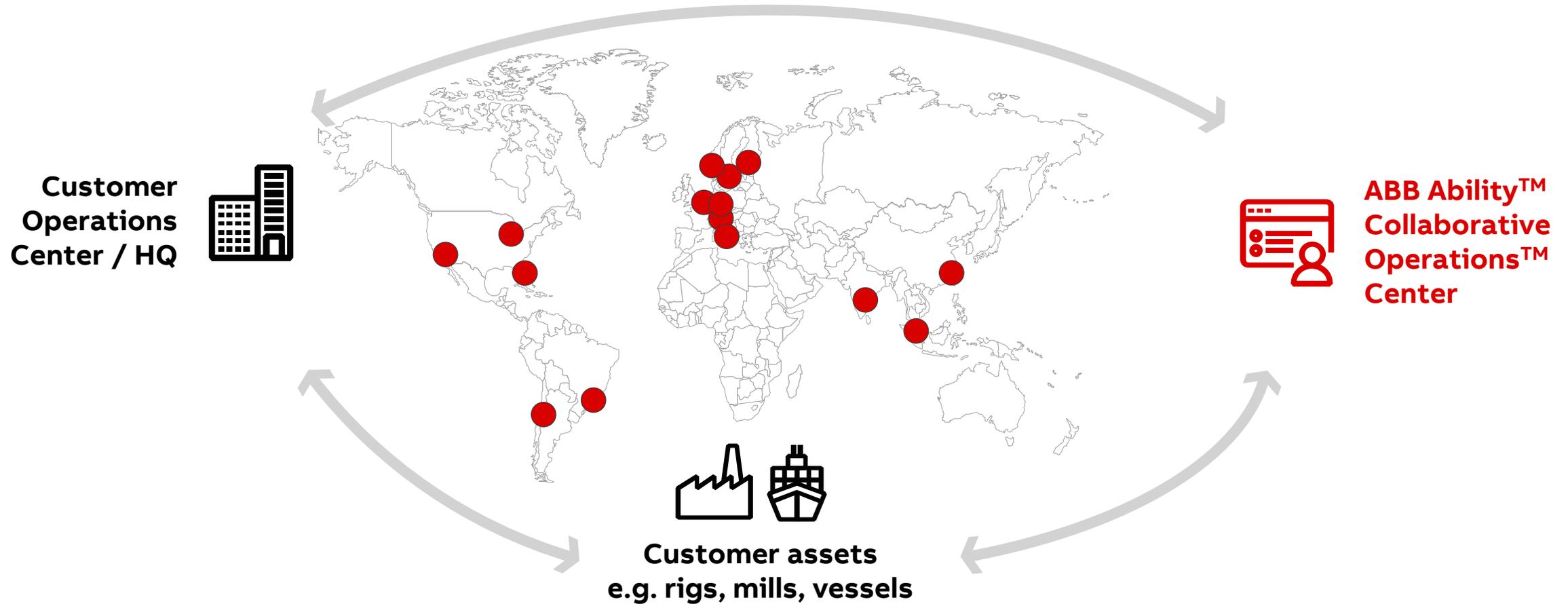
Customer value

Reduced cost, schedule, risk

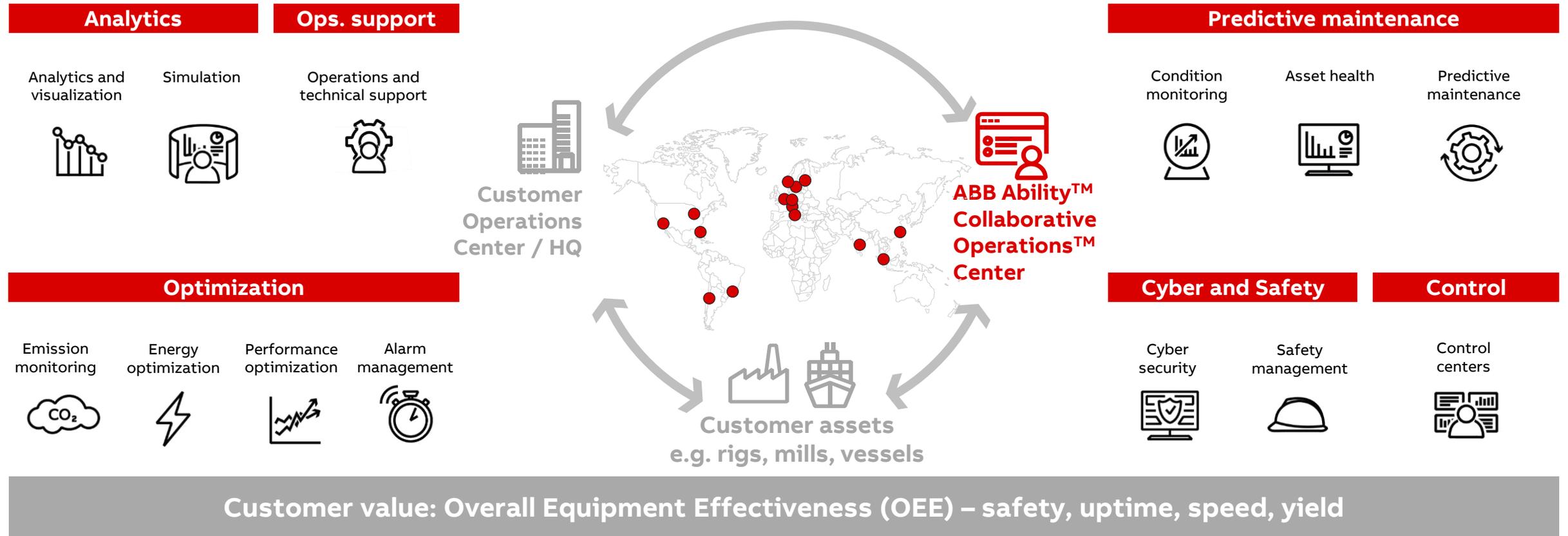
Safety, productivity and energy efficiency

# Transforming the way we work with customers during operations

Customers collaborate with ABB domain experts 24/7



# Leading solutions portfolio for Collaborative Operations™



# Leading solutions portfolio for Collaborative Operations™

## Customer examples

### Aker BP (oil & gas)

Full scope of electrical, instrumentation, automation and telecom to enable digital transformation of value chain



### Leading Indian cement manufacturer

Enterprise-wide digital service partner for energy efficiency and reliability enhancement



### Metsä Fibre (pulp & paper)

Range of digital services for condition monitoring of critical equipment for newest Pulp & Paper plant



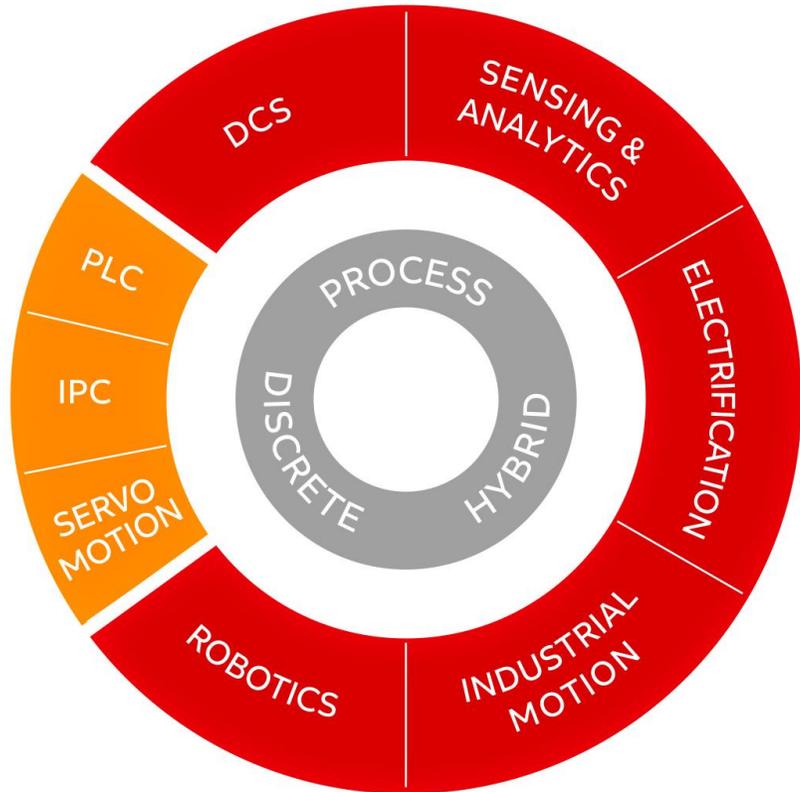
### Genting (marine)

Propulsion, electric power plant, automation, software and digital services for five new cruise ships



# Driving expansion into discrete & hybrid

Quantum leap through acquisition of B&R



## Deal rationale

**Attractive market segment**  
(CAGR 4-5%)

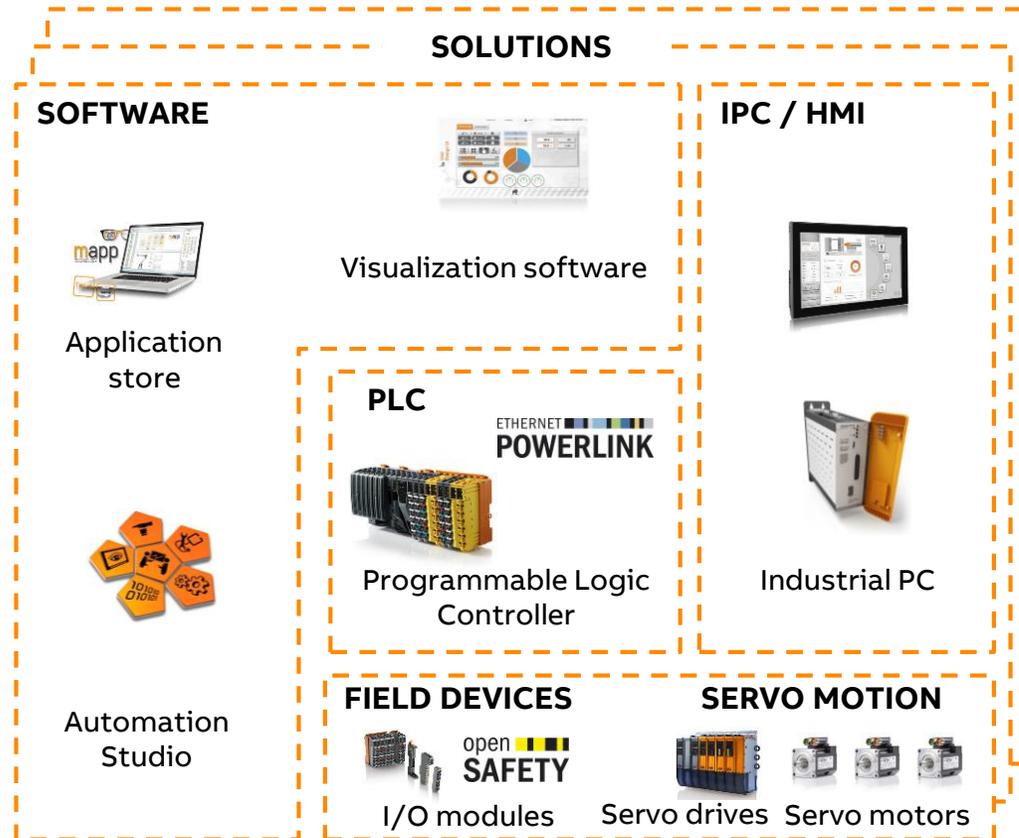
**Attractive company**  
(CAGR ~11%)

**Attractive strategic rationale**  
(shaping global #2 in industrial automation)

**Attractive financials**  
(incl. strong growth and cost synergies)

# B&R – innovation & growth leader in machine and factory automation

Driving the expansion into discrete & hybrid markets



Unrivalled application expertise

Innovative products in PLC, Industrial PCs, servo motion



Open architecture

Strong solution-based business model

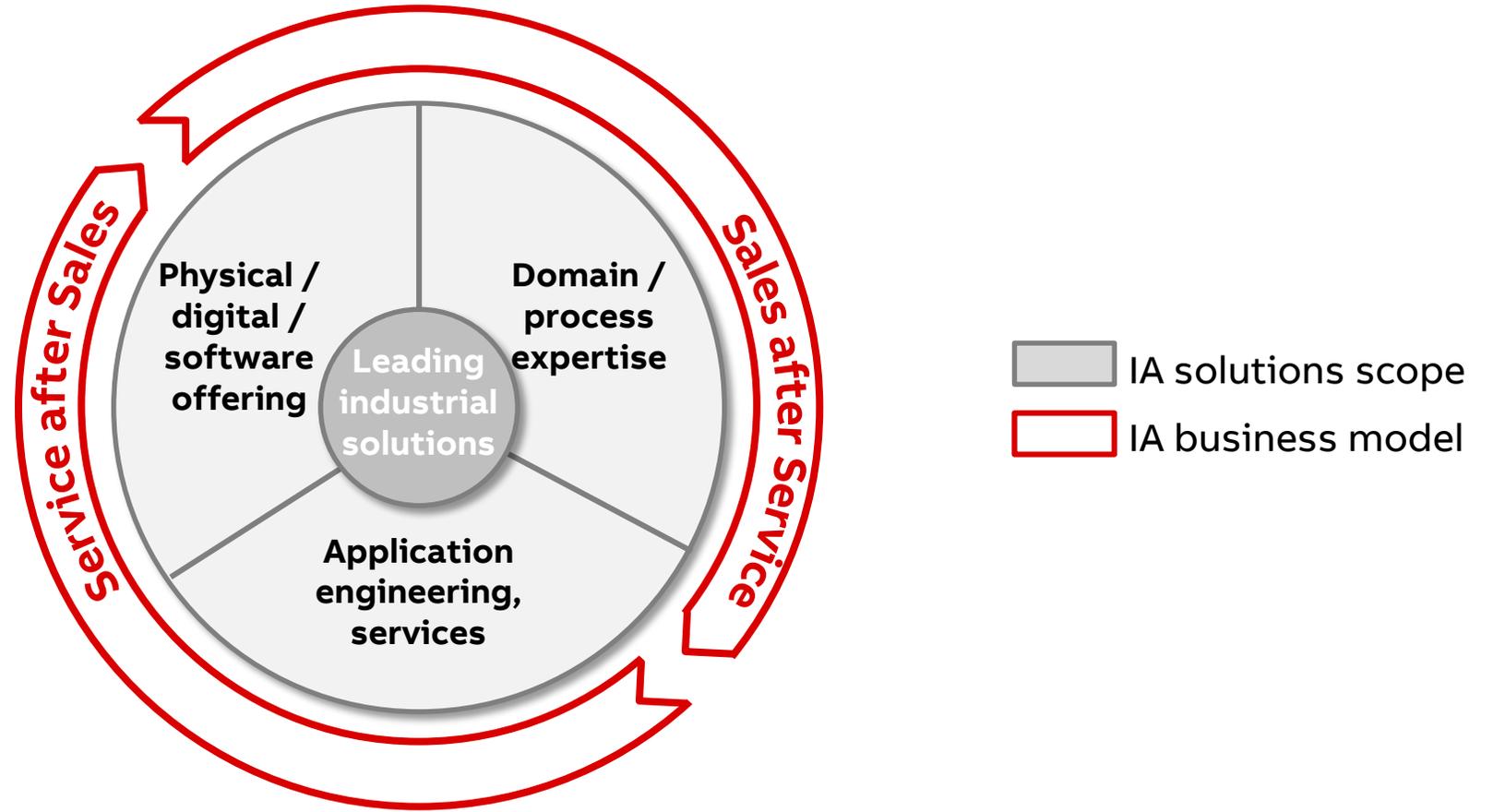


Deep domain knowledge to develop new software-based services and solutions for end-to-end digitalization

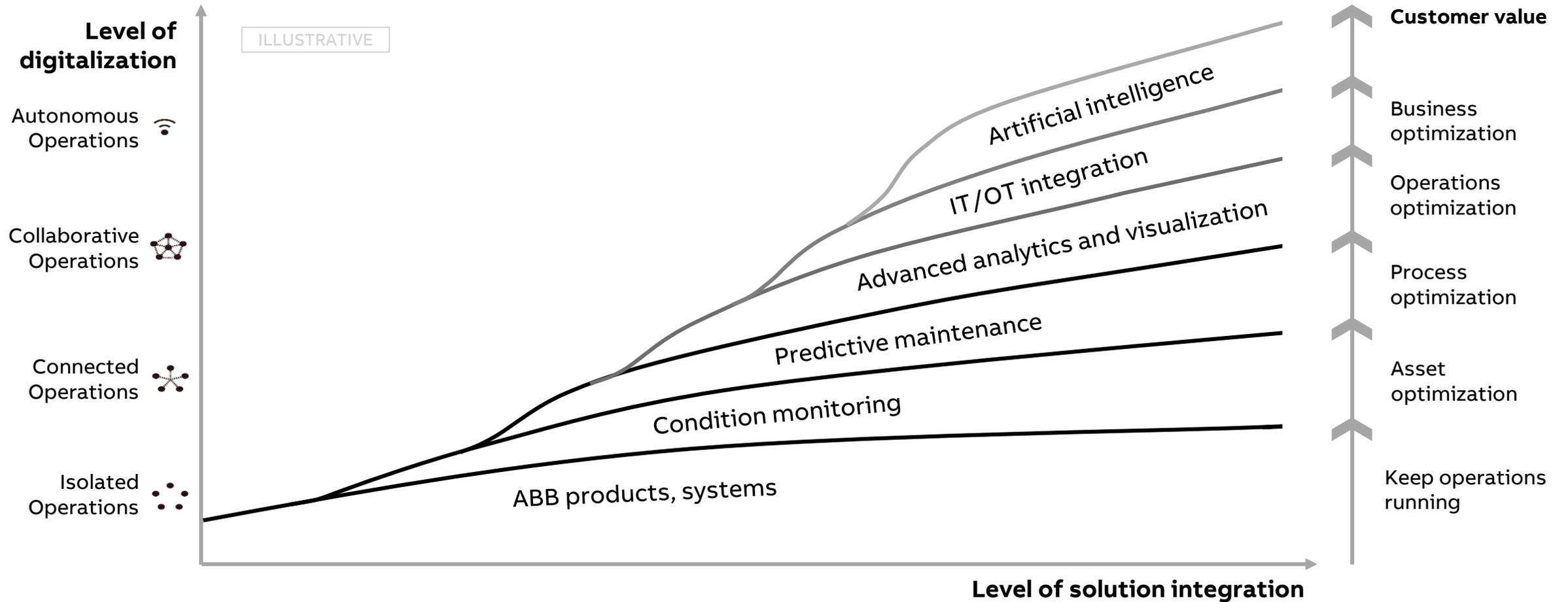
Long-term, deep customer relationships

# Solutions-oriented business model as competitive differentiation

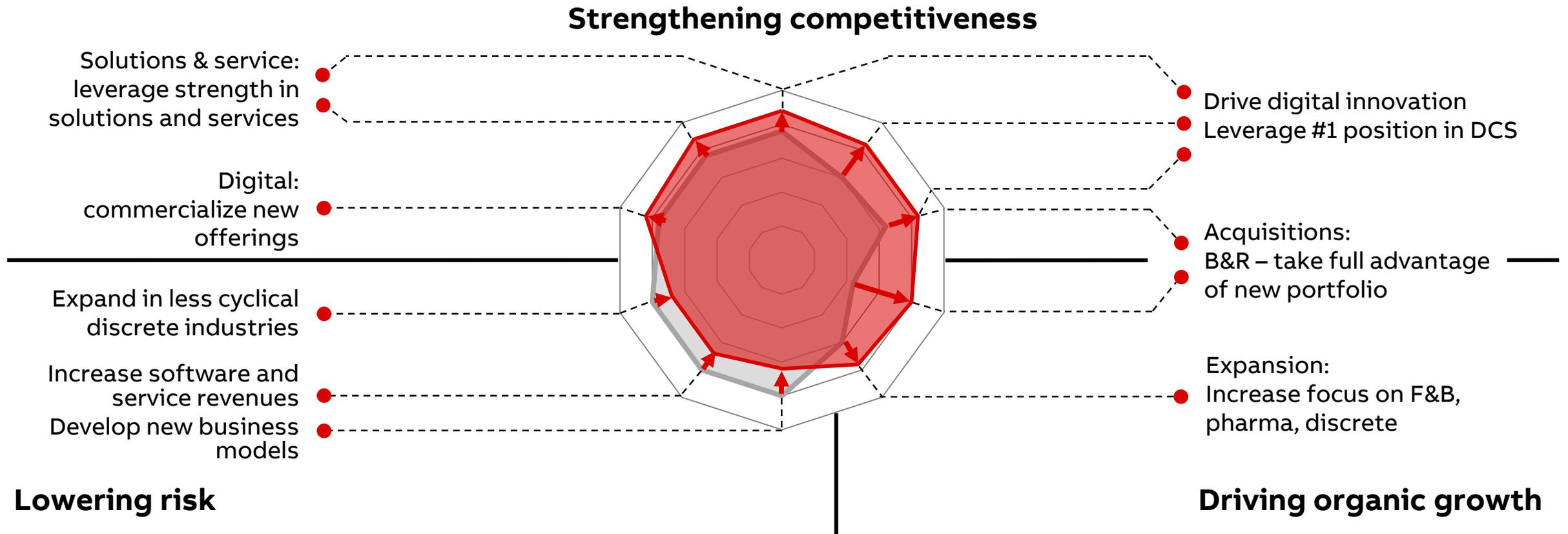
Virtuous cycle of continuous customer value creation and revenue generation



# Our future: portfolio development for enhanced customer value creation



# Continuously shifting IA's Center of Gravity



# What you will see today

## ABB Ability™ System 800xA®, Intelligent Projects™



## B&R – Machine & Factory Automation



## ABB Ability™ Collaborative Operations™, Digital transformation in Marine



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Partner of choice for...

## Perfection in Automation

We enable customers to lead in safety,  
productivity and energy efficiency through  
**digital, collaborative operations.**

**ABB**