



AUBURN HILLS, SEPTEMBER 6, 2017

Leadership in industrial automation

ABB Innovation & Technology Day

Ulrich Spiesshofer, CEO



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/>



ABB: the pioneering technology leader

Offering	Pioneering technology leadership		
	Products	Systems	Software & services
Customers	Utilities	Industry	Transport & Infrastructure
Geographies	Globally		
	Asia, Middle East, Africa	Americas	Europe
	~\$35 bn revenue	~100 countries	~136,000 employees



Why are we here today?



#1 economy in the world

#1 automation market globally for the industry sector

#1 market globally for ABB

- ~20,000 employees
- 60 manufacturing sites
- ~\$11 bn capital deployed since 2010



Auburn Hills

Cradle of robotics in the US



Purpose of today

Inform

Next Level update
Industrial Automation
Robotics & Motion
ABB Ability™
Innovation – what's next?

Experience

Robotics solutions and factory tour
ABB Ability™ System 800xA® – intelligent Chemical Projects
B&R – Machine & Factory Automation
ABB Ability™ – mining solution and platform
ABB Ability™ Collaborative Operations™ – digital transformation in Marine

Discuss

Open forum
Executive and business management dialogue

Agenda

Next Level transformation – update

ABB's leadership in industrial automation

2017: living Next Level

Clear priorities, implementation well under way

Profitable Growth

Driving growth in four market-leading entrepreneurial divisions

Shifting the Center of Gravity: competitiveness, growth, risk

Quantum leap in digital

Value creating, strategic acquisitions and partnerships

Relentless Execution

World-class operational excellence across the whole organization

– White Collar Productivity, Net Working Capital, Quality

Linked strategy, performance management and compensation

Business-led Collaboration

Market focused and lean organization

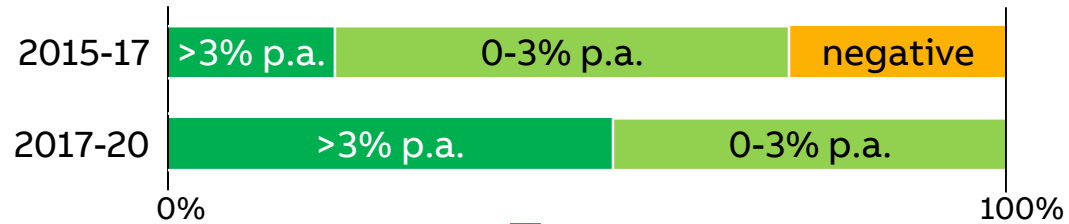
Continued leadership development

Strengthening the global ABB brand

Growth momentum building

Market growth across industry sectors

Share of ABB industry market



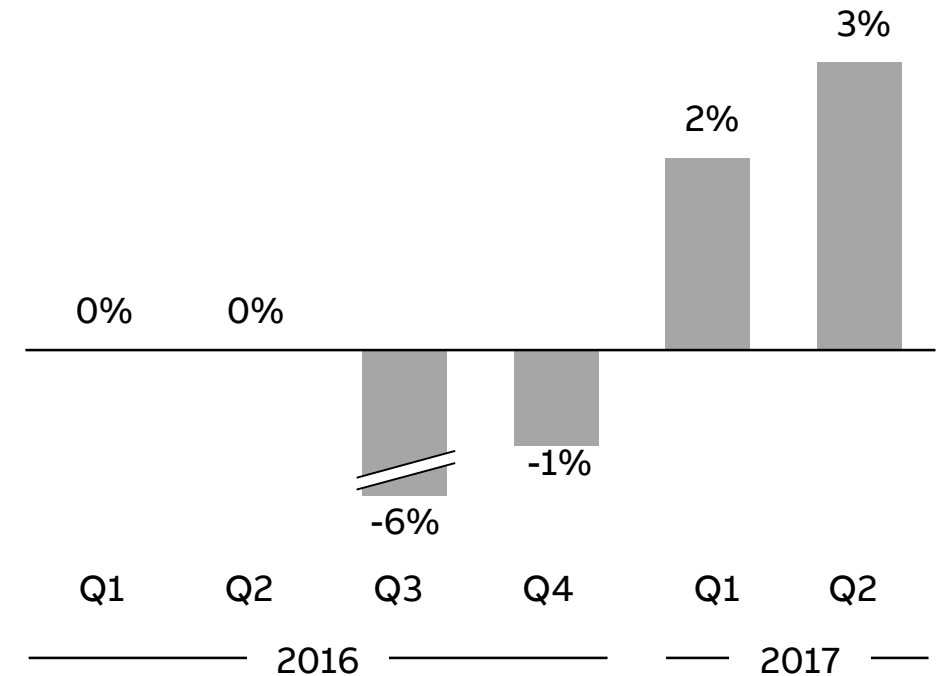
PIE “growth machine” working

Penetration: all regions, food & beverage, automotive, service

Innovation: ABB Ability™, digital substation, select I/O

Expansion: B&R, Robotics acquisitions, Africa

ABB base order growth, yoy, comparable



New division structure working well

Partner of choice for ...

Power Grids



Transformation progressing

Closing out legacy risks

Business model transformation

Market-leading profitability

Electrification Products

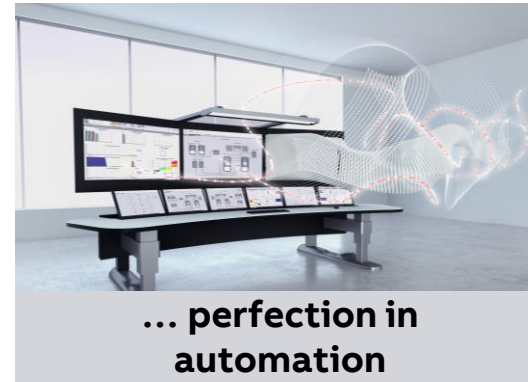


Integration of all ABB LV-/ MV-activities

Innovation, e.g. home automation, smart products

Expansion in growth sectors, e.g. e-mobility, renewables, data centers

Industrial Automation

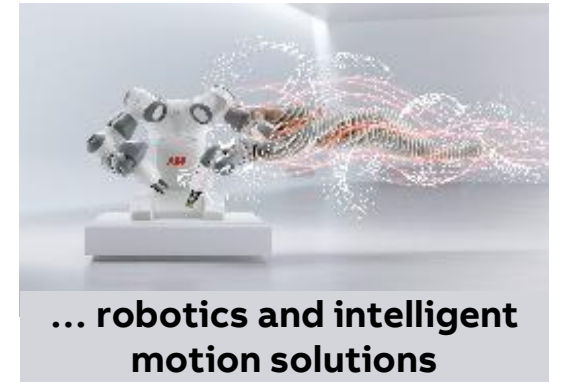


Integration of all control-based solutions: DCS, PLC/IPC¹

Expansion, e.g. B&R, Pharma

Leading in digitalization, software and service

Robotics and Motion



Focused, simplified portfolio

Robotics: innovation & customer value leader

Motion (motors & drives) bottoming out, early cycle momentum building

Shifting ABB's Center of Gravity

Steady action stream driving the transformation¹

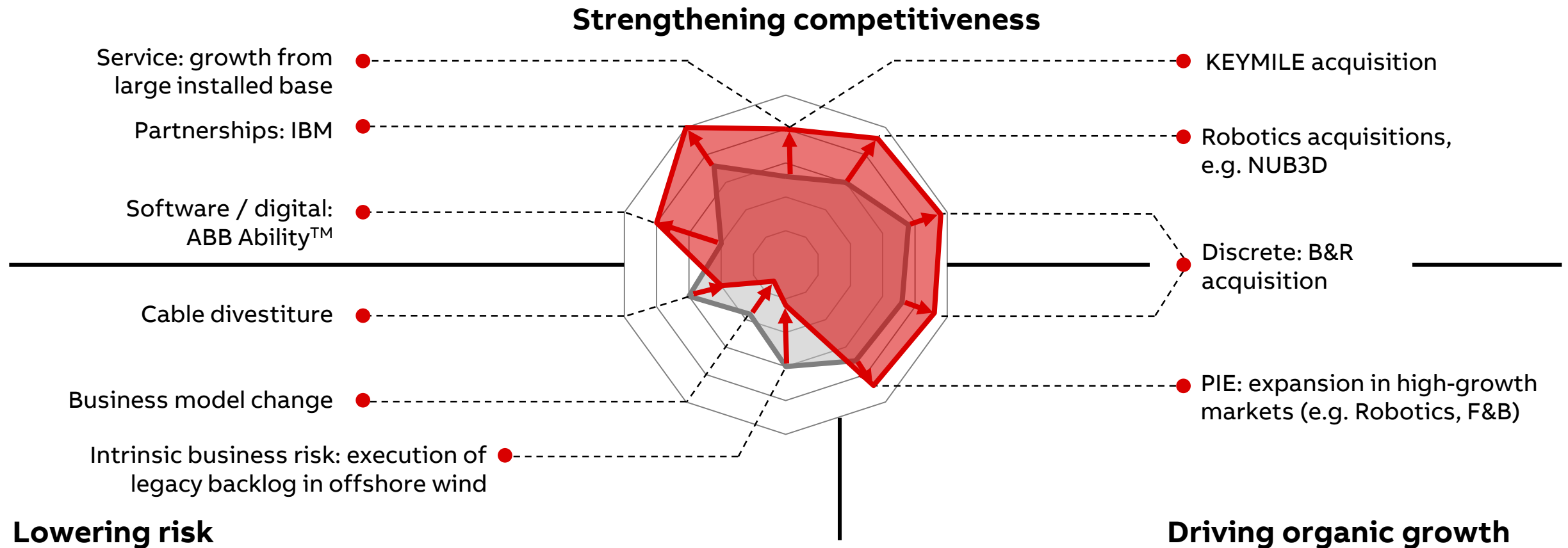
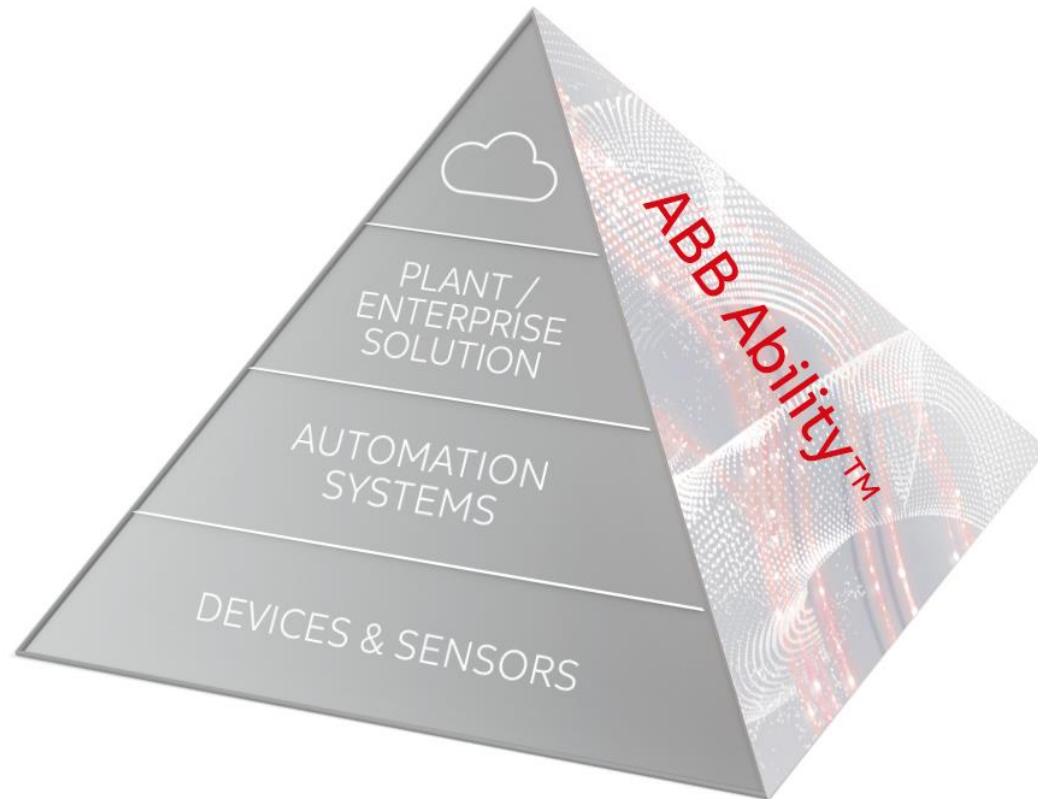
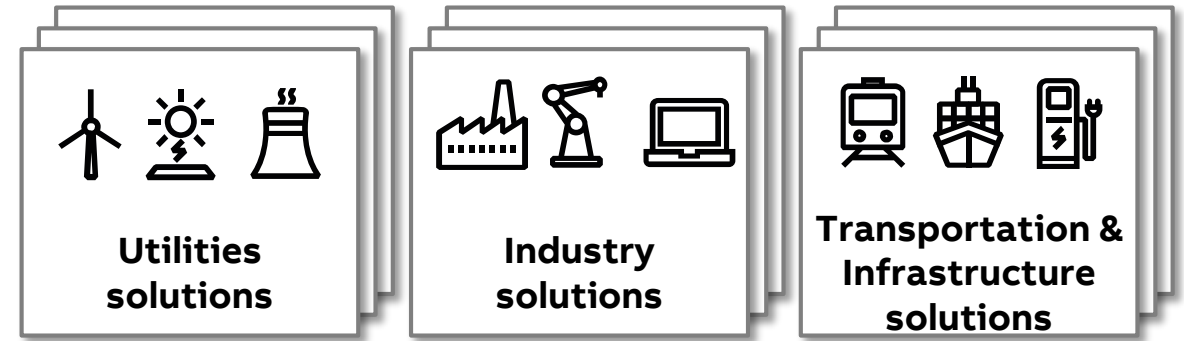


ABB Ability™: industry-leading digital solutions

Successful launch in Europe, Americas and AMEA¹ in H1 2017



180+ ABB Ability™ solutions



Microsoft

Platform



(common technologies for device, edge, and cloud)

ABB's group targets 2015-20

Ambition confirmed

Group targets

Revenue growth ¹	3 – 6%
Operational EBITA % ²	11 – 16%
Operational EPS growth CAGR ³	10 – 15%
FCF conversion to net income	>90%
CROI % ⁴	Mid-teens

Next Level – summary

- ▶ Next Level transformation well under way
- ▶ Topline growth and steady profitability despite market head winds & ongoing transformation
- ▶ 2017 crucial transition year
- ▶ Market dynamics improving
- ▶ ABB returning to profitable growth
- ▶ 2018 first year of “new normal”

Agenda

Next Level transformation – update

ABB's leadership in industrial automation

Industrial automation

ABB positioned as pioneering innovation and technology leader¹

ABB's leadership in industrial automation

Global #1 in process control software

Global #1 in motion

Global #2 in robotics, #1 in China

Innovation & growth leader in machine and factory automation

Large installed base incl. motion, robotics, process control systems

ABB Ability™ – leading industrial solutions

Innovation and technology trends



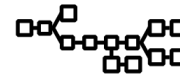
Internet of things / digitalization



Robotics



3D printing



Blockchain



Artificial intelligence

Well positioned in a world of accelerating innovation

Industrial automation market

A >\$200 bn market for ABB expected to grow ~3% p.a.¹

Utilities

Industry

Transport & Infrastructure

Process

Discrete

Oil & gas

Mining & metals

Food & beverage

Packaging & logistics

Automotive

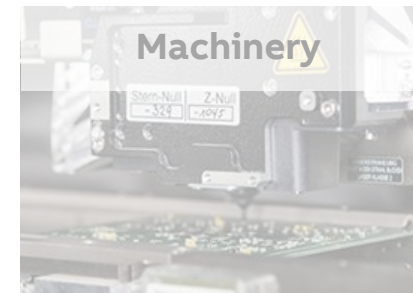
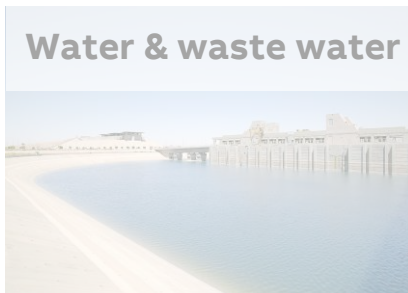
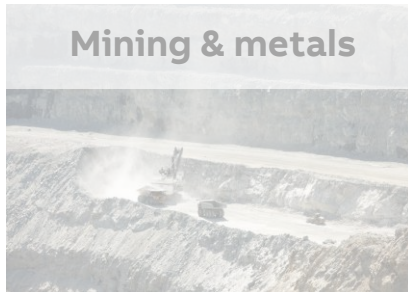
Refining & chemicals

Water & waste water

Pharma

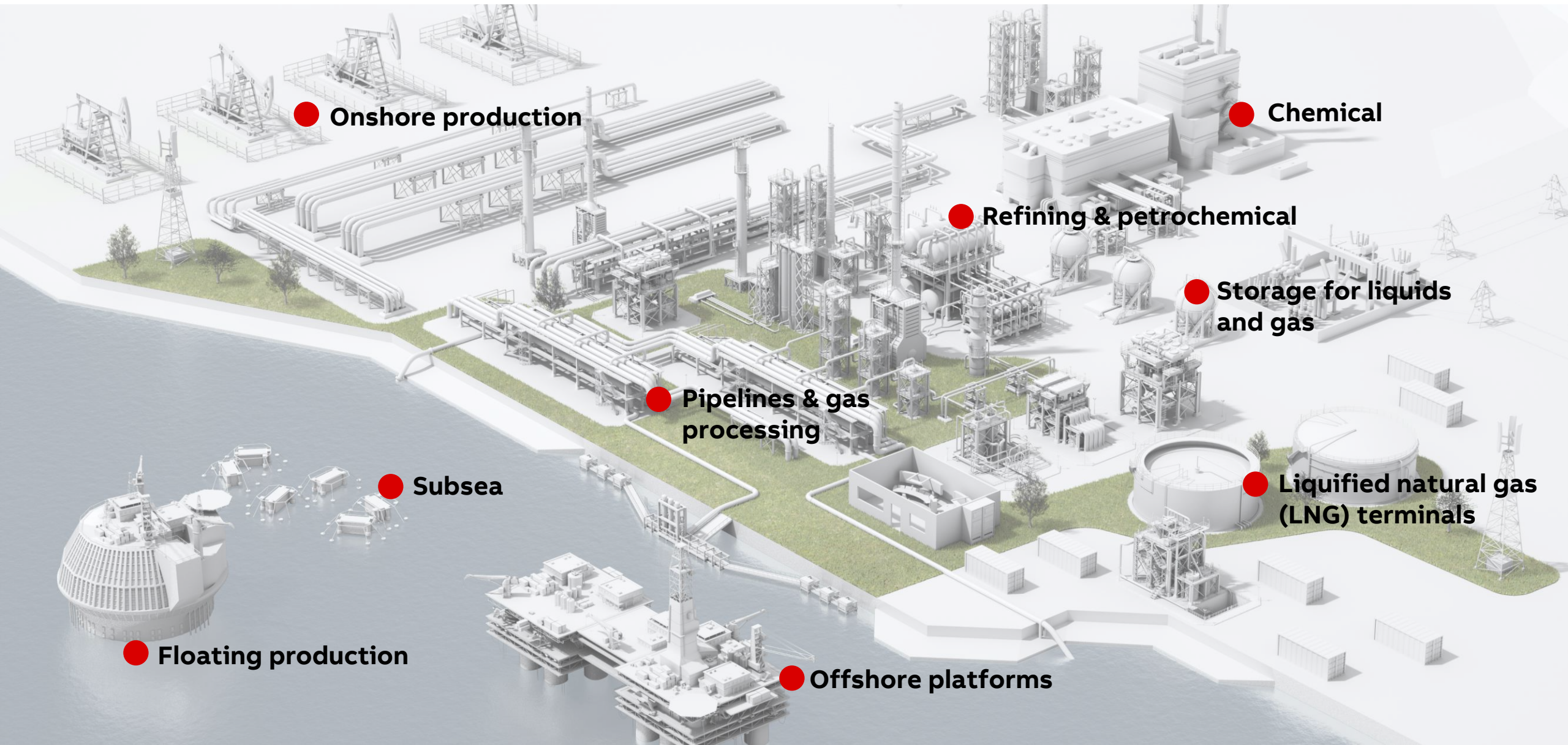
Machinery

Electronics



Our customers' operations

Example: oil, gas & chemicals



● Onshore production

● Chemical

● Refining & petrochemical

● Storage for liquids and gas

● Pipelines & gas processing

● Subsea

● Liquefied natural gas (LNG) terminals

● Floating production

● Offshore platforms

Our customers' operations – example: chemical plant

ABB has a complete offering for process industries



Central control room & process control system (DCS)

Telecom systems

Safety systems

Power management system

Programmable Logic Controller (PLC)

Motor control center

Analyzers

Sensors

Intelligent field instruments

Operator mobility

Analyze & control

Chemical plant

Act

Sense

EXAMPLES

Motors

Variable-speed drives

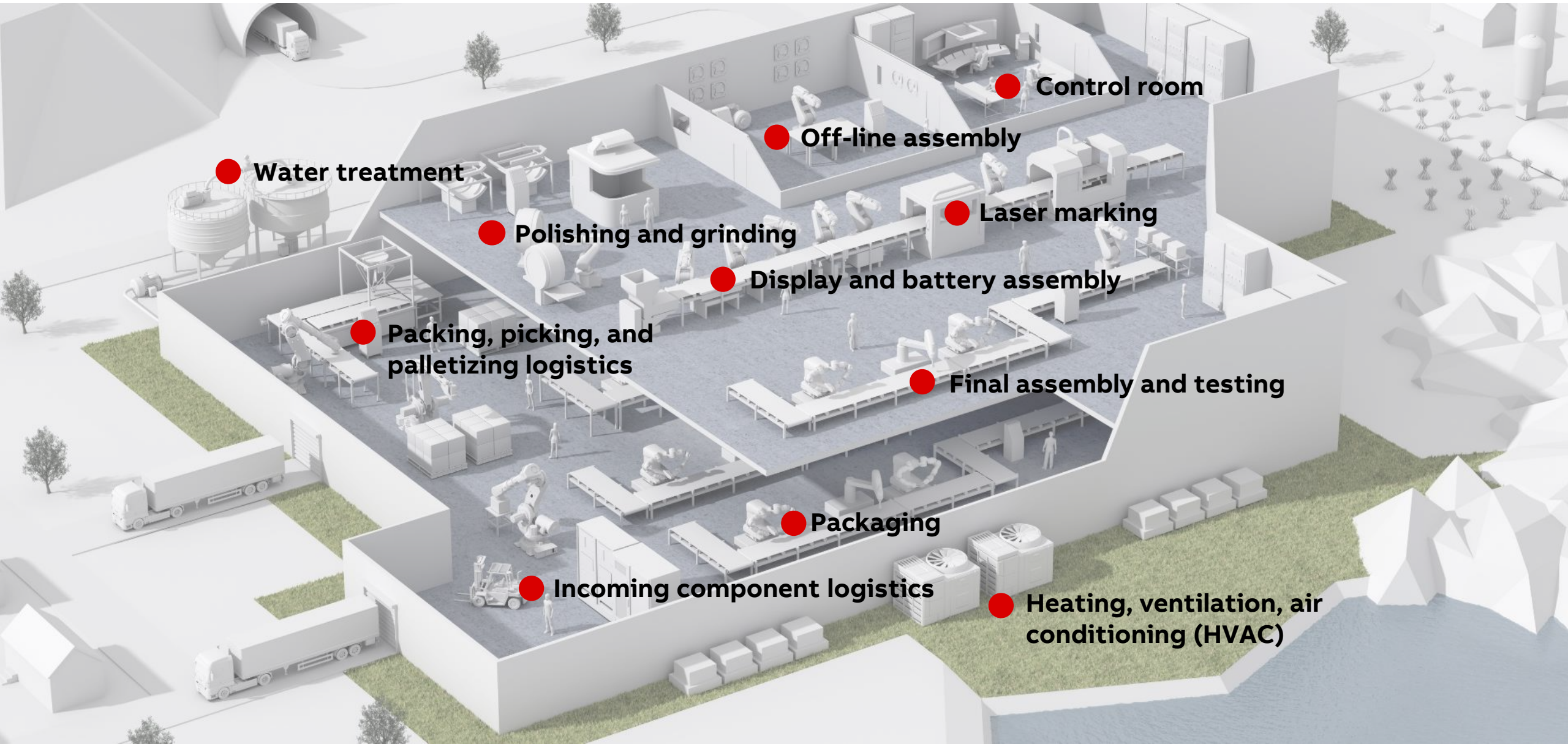
Intelligent switchgear

HV / MV / LV power distribution

ABB Ability™, Software & Services

Our customers' operations

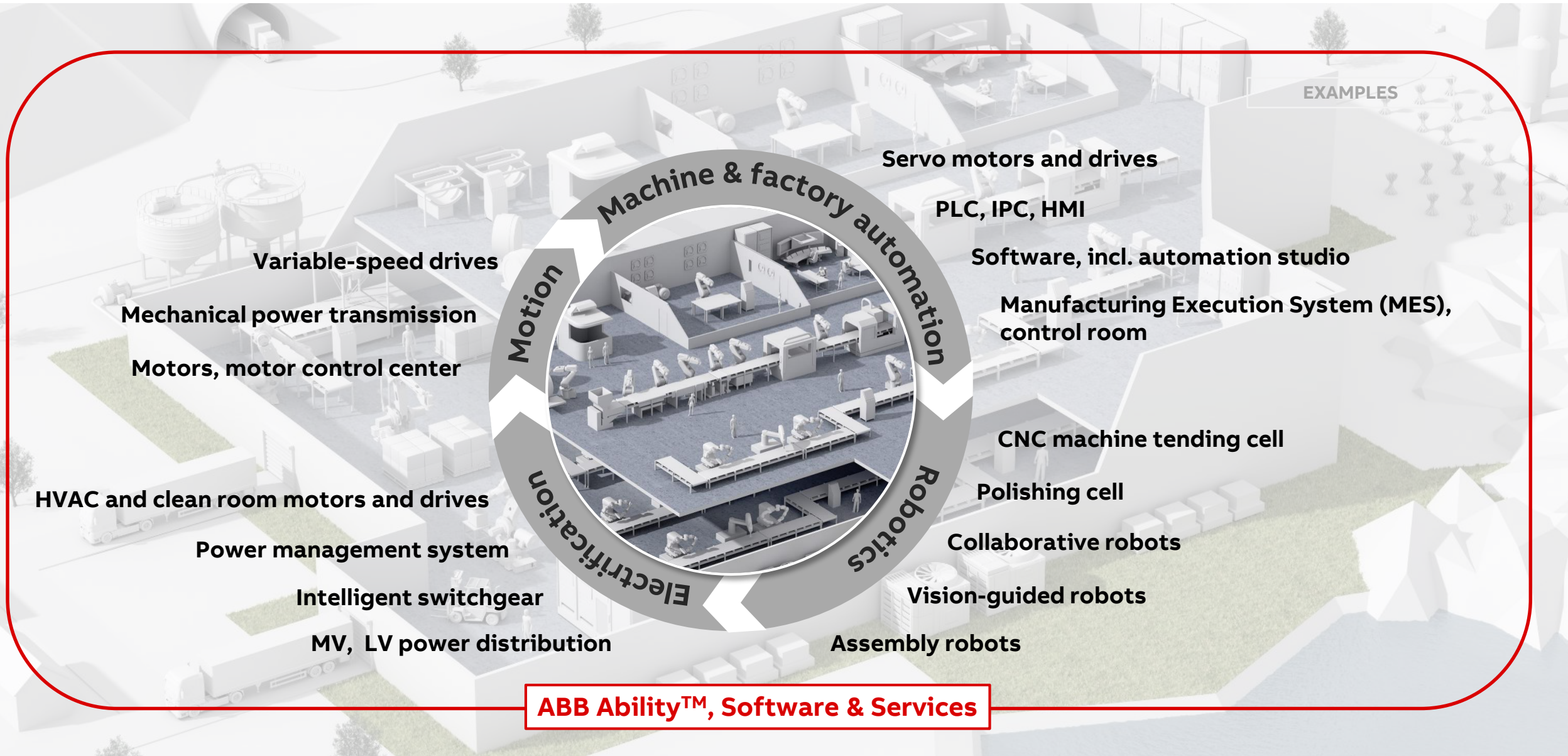
Example: electronics manufacturing plant in discrete industries



Our customers' operations – example: electronics manufacturing plant

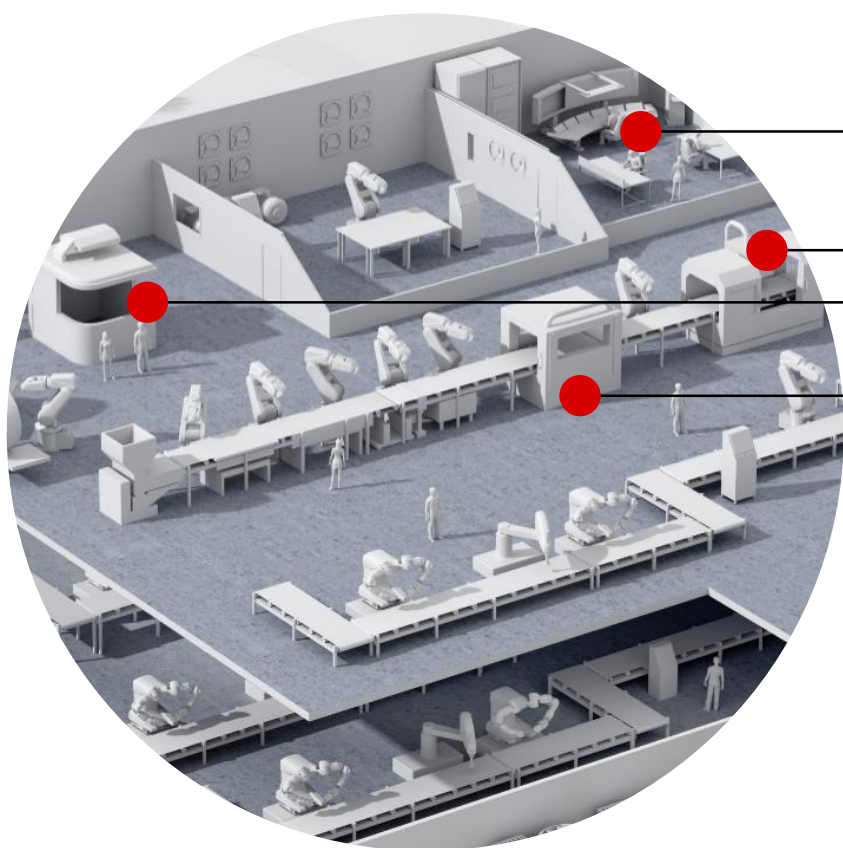


ABB has a complete offering for discrete industries

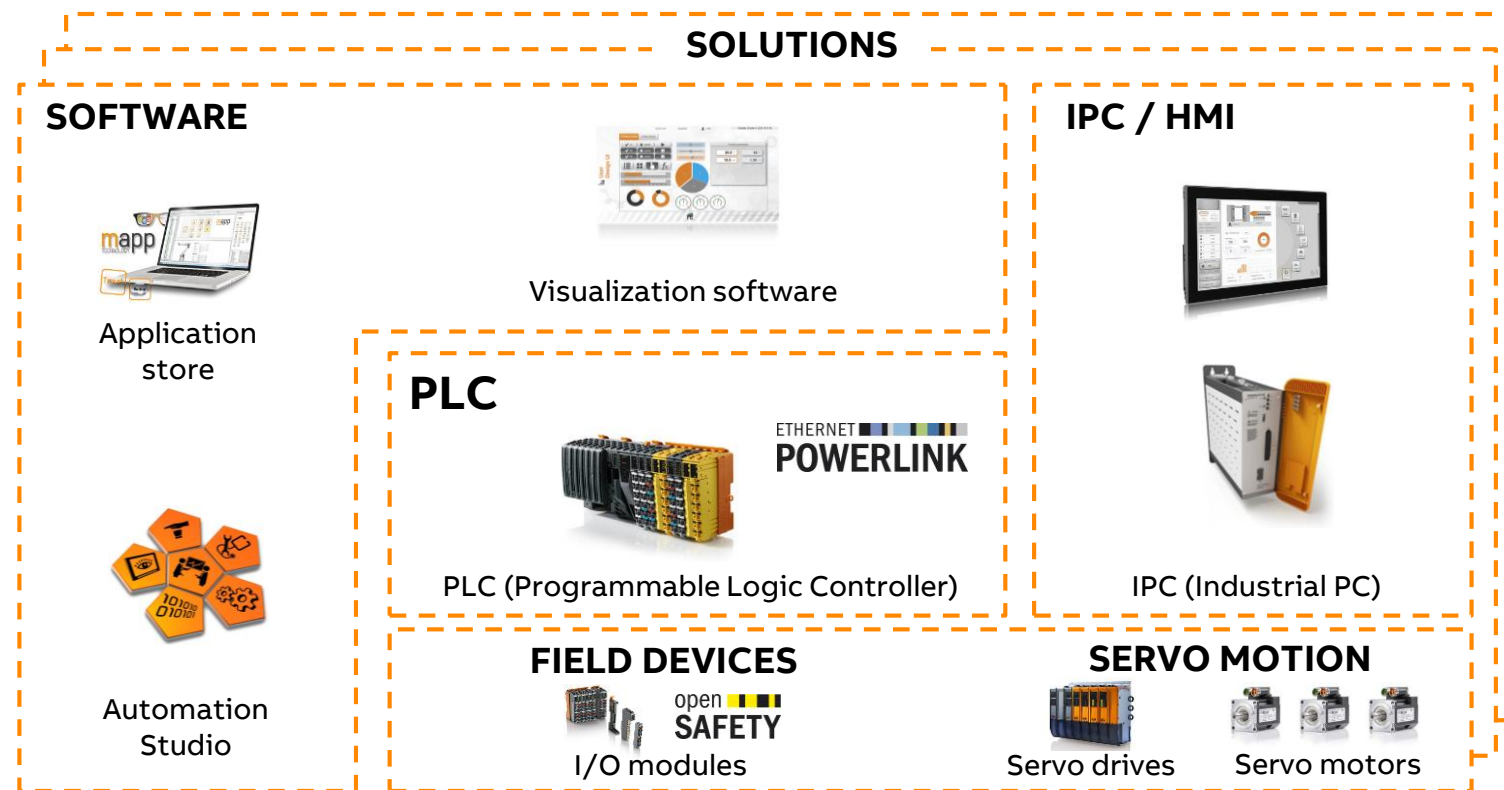




Our customers' operations – example: electronics manufacturing plant



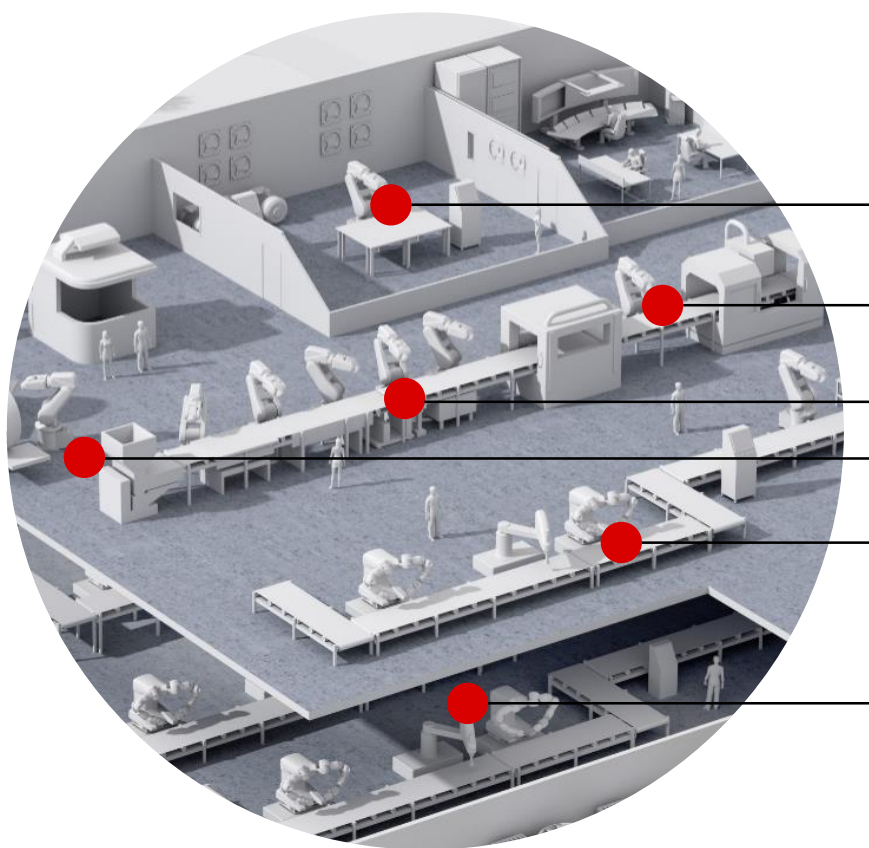
B&R – solutions for machine and factory automation



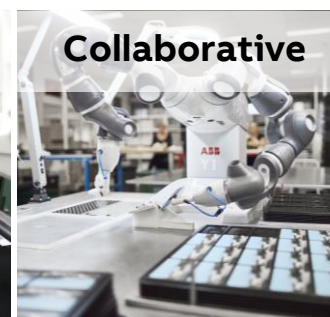
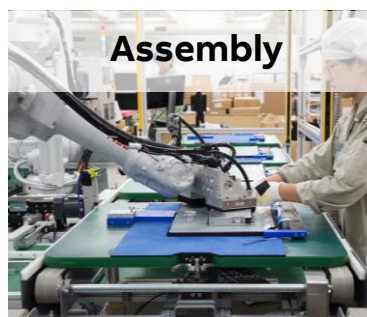
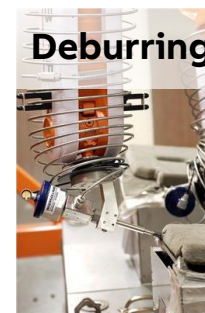


Our customers' operations – example: electronics manufacturing plant

ABB robotic solutions tailored to customers' process and needs

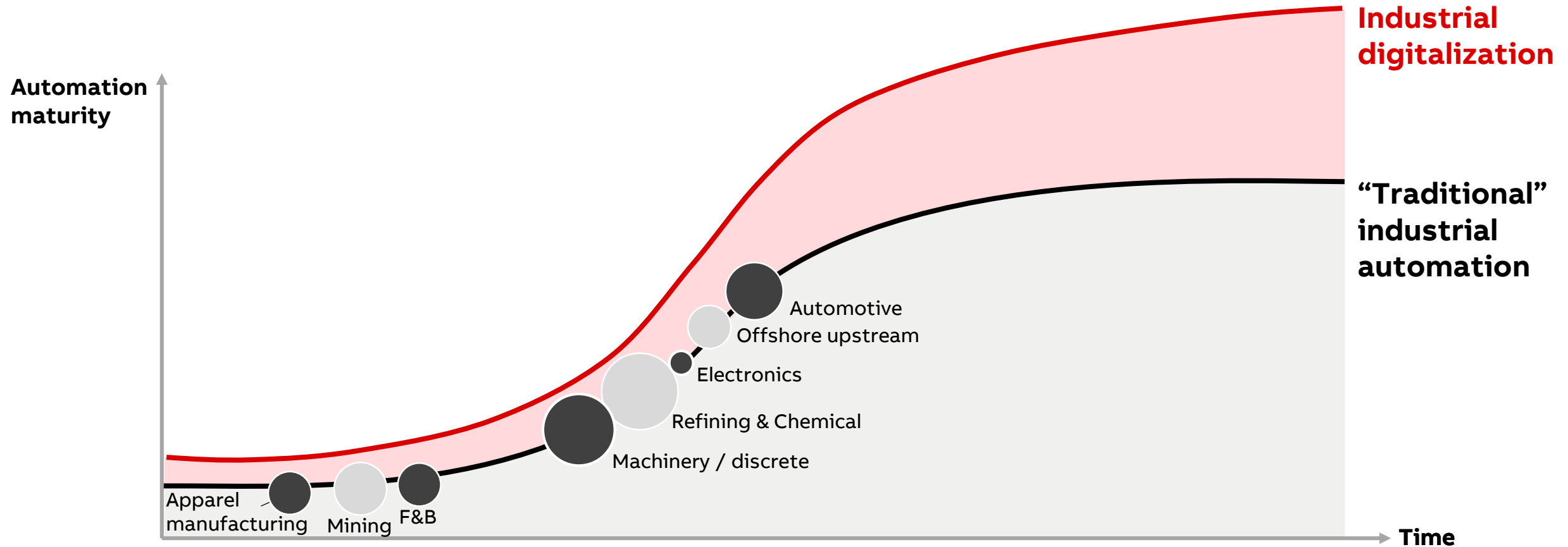


Examples of processes with ABB robotics solutions



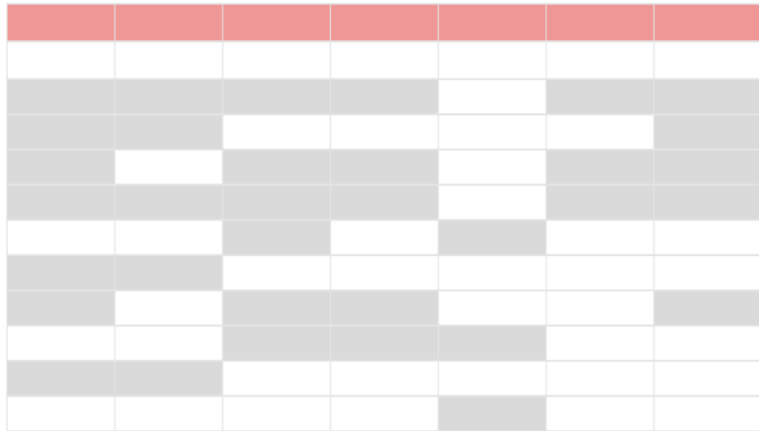
Our customer value proposition for industrial automation

ABB is the partner of choice for value creation through automation and digitalization

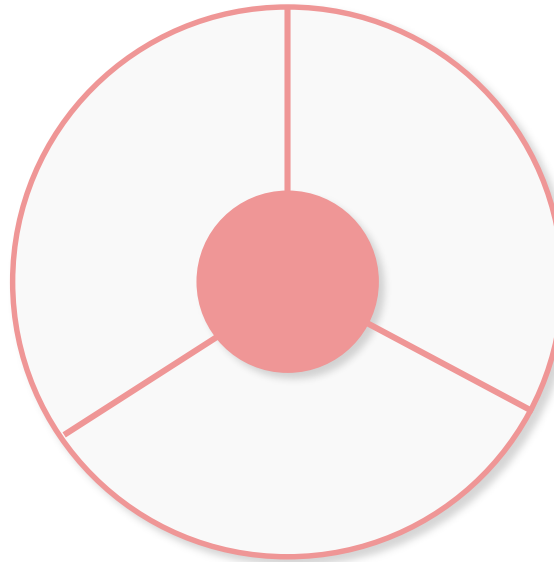


ABB's unique competitive differentiation

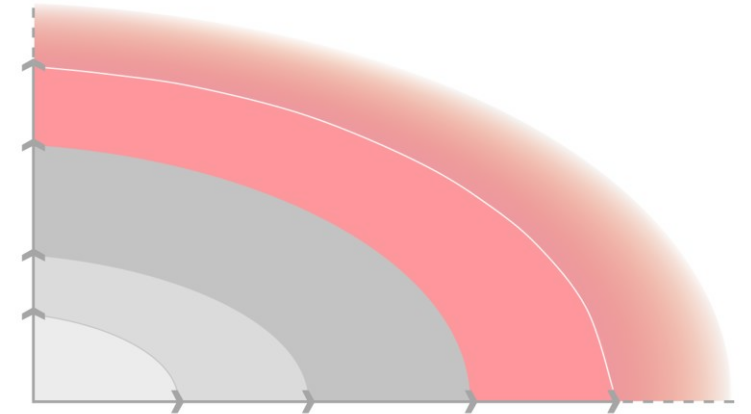
Three building blocks



Leading portfolio



Solution-oriented business model



Innovation dynamics

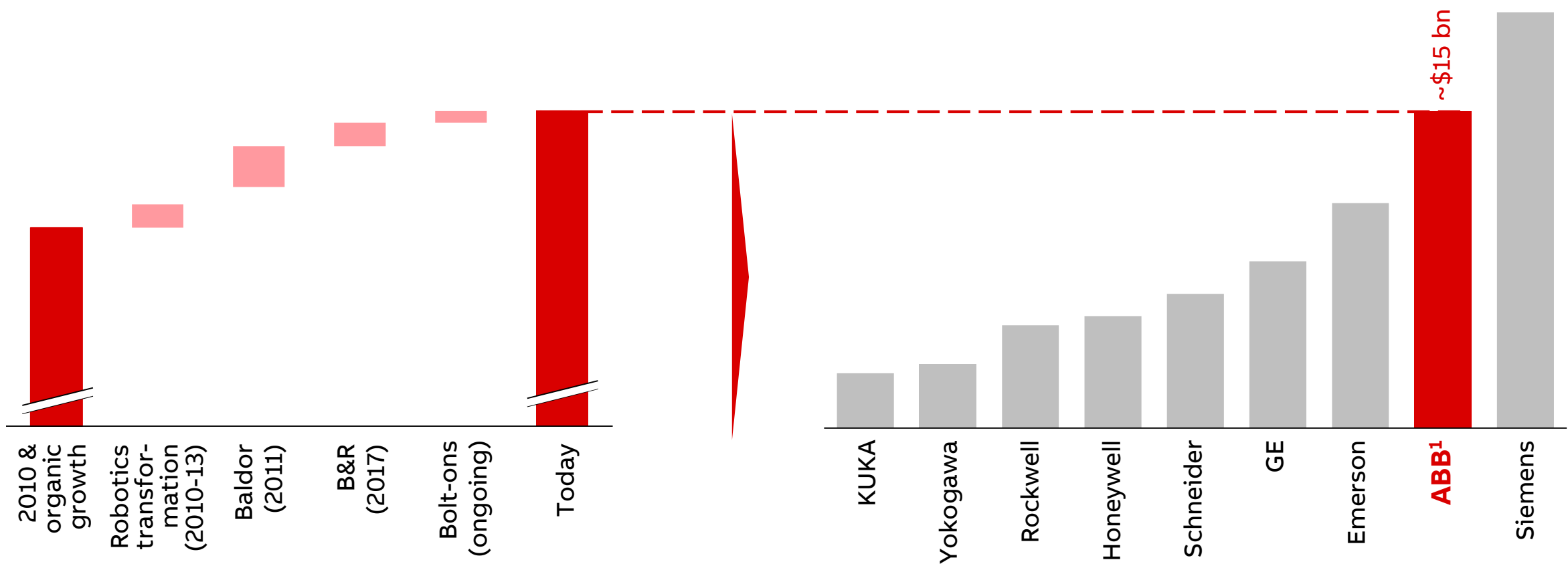
ABB's leading industrial automation portfolio

	Sensing & analytics	DCS ¹	PLC / IPC ² servo motion	Industrial motion ³	Robotics	Digital platform	Electrification ⁴
ABB							
Siemens							
Emerson							
GE							
Schneider							
Fanuc							
Honeywell							
Rockwell							
Yaskawa							
Yokogawa							
KUKA							

————— Industrial Automation ————— ————— Robotics & Motion ————— — ABB Ability™ — — EP⁵, PG⁶ —

ABB's leading industrial automation portfolio

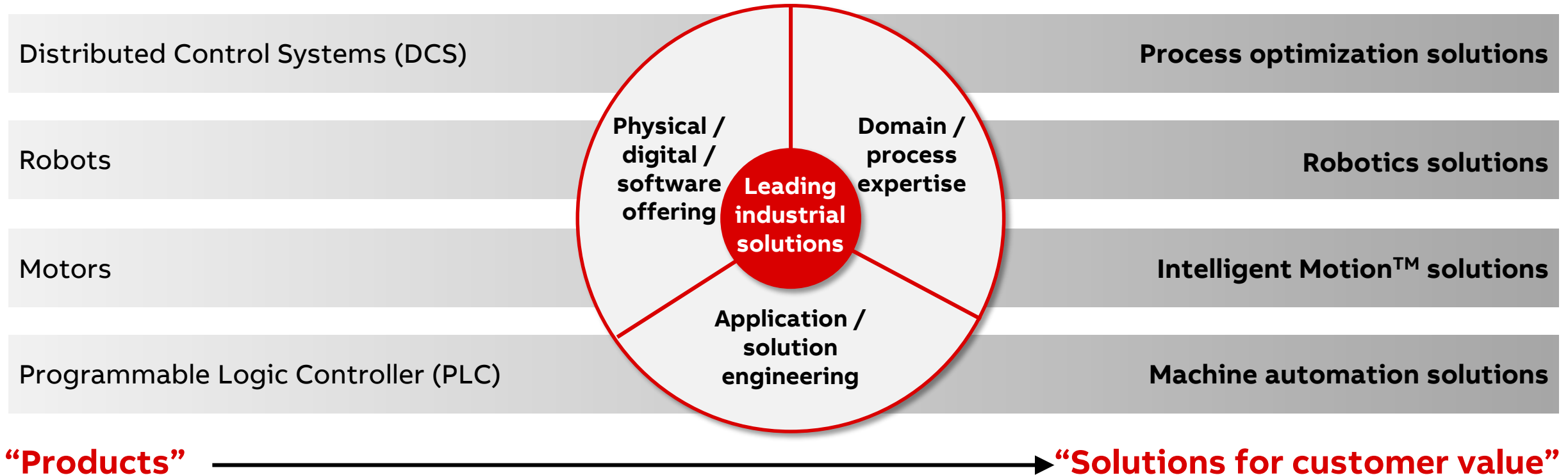
Targeted portfolio development results in solid #2 position



Solution-oriented business model for industrial automation

From...

To...



Solution-oriented business model for industrial automation

Increasing customer value along the entire lifecycle with ABB Ability™

Customer
asset lifecycle

Plan / design

Build

Operate

Our enhanced
digital value
proposition

130+ ABB Ability™ solutions
for industry

Our “traditional”
value proposition

Our customer
relationship

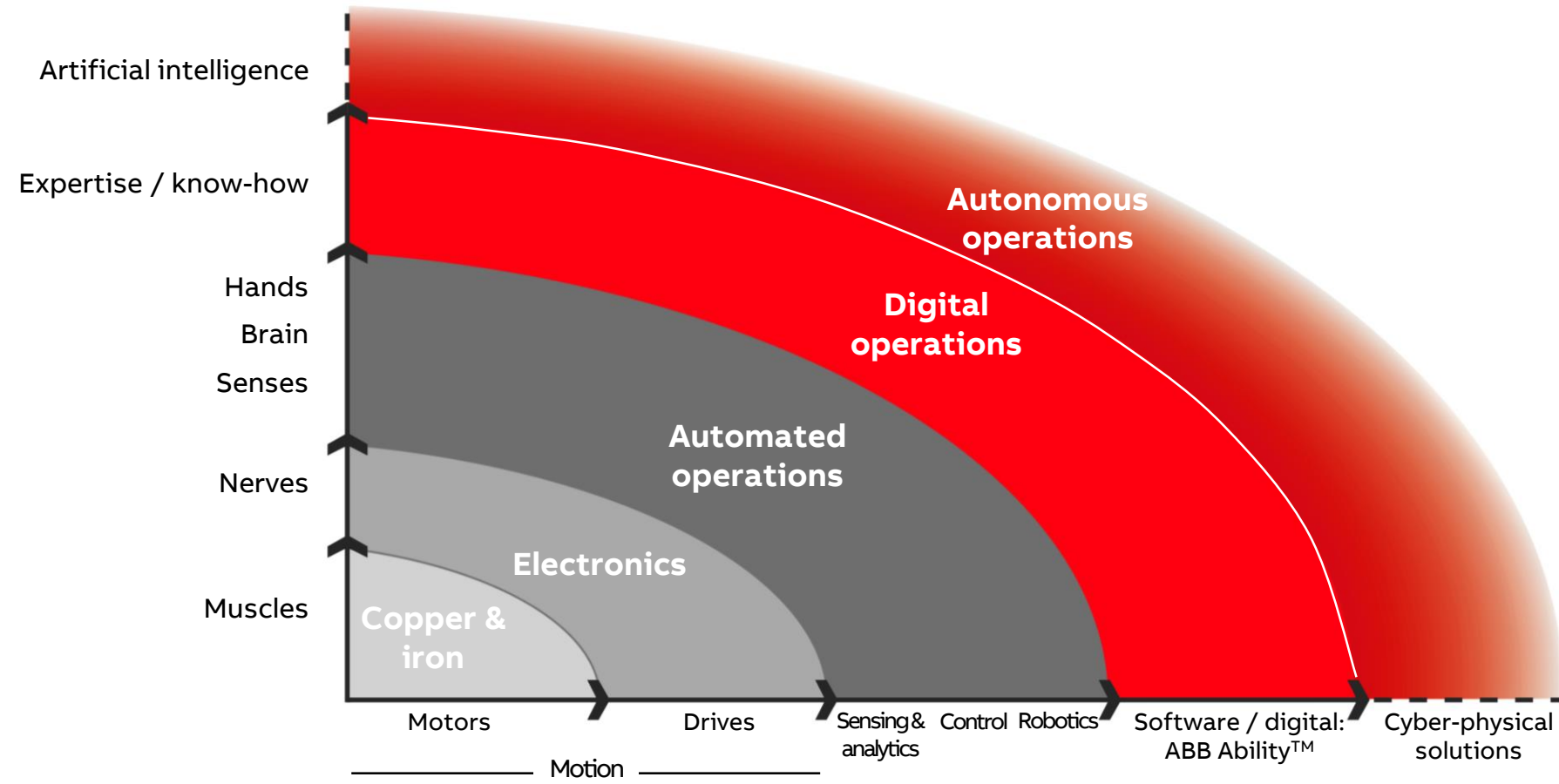
Planning partner

Product, solutions, systems partner

Operations partner

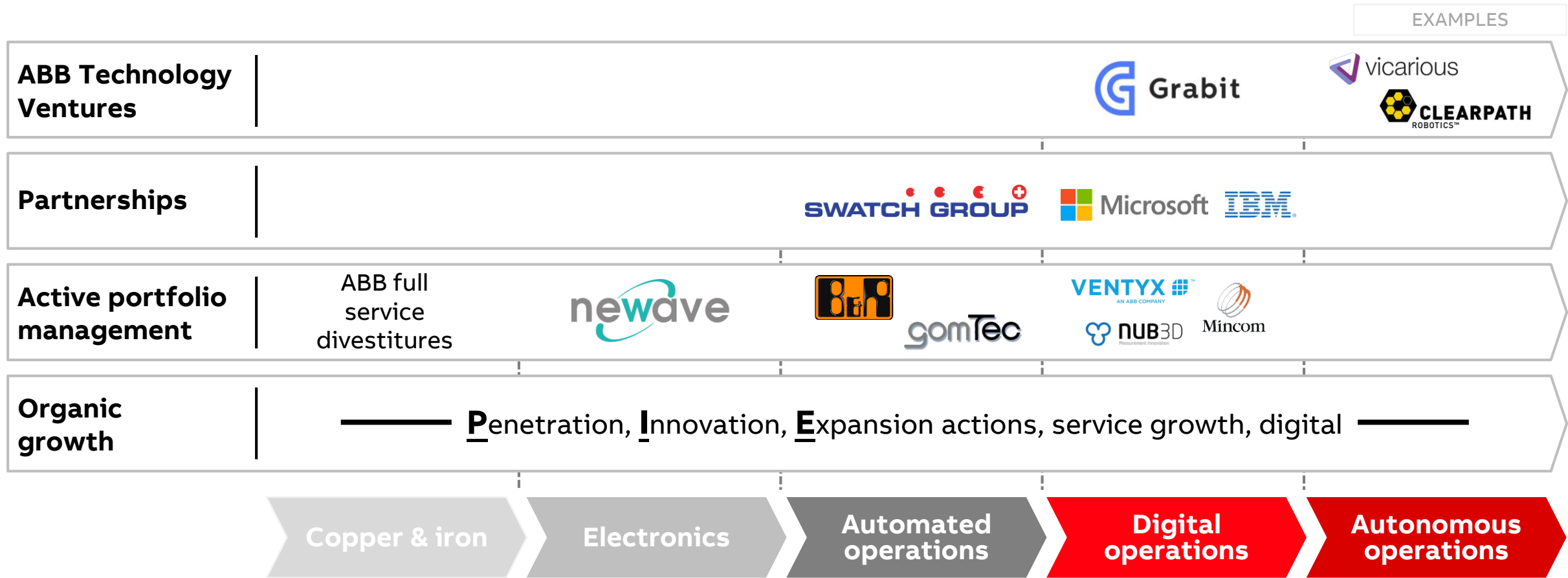
ABB innovation dynamics

Continuous innovation dynamics for Next Level customer value



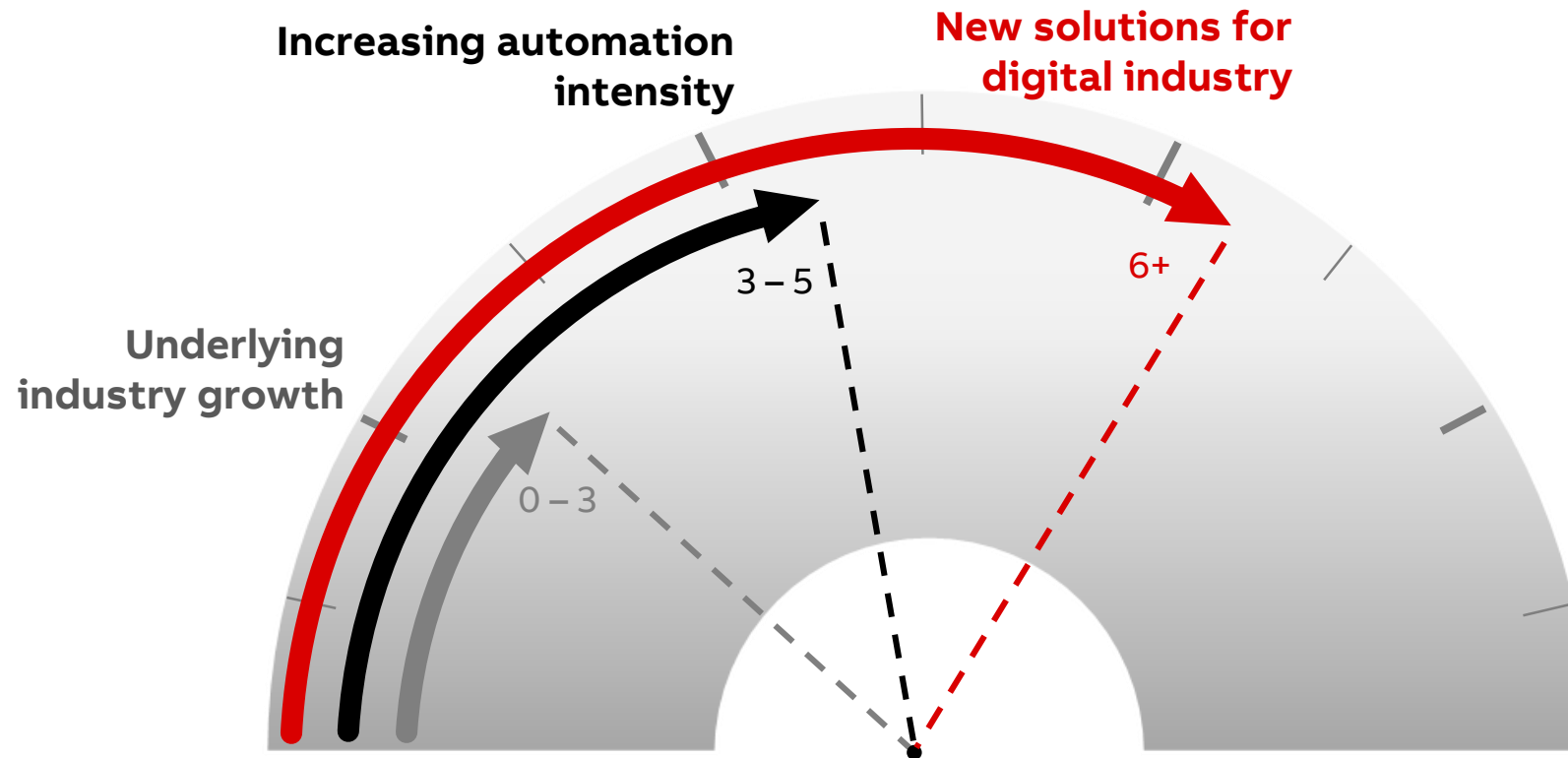
What to expect from ABB in industrial automation?

Targeted, disciplined combination of all means of growth



What to expect from ABB?

Unique growth dynamics



What to expect from ABB?

Improved quality of business

More automation: lower exposure to underlying industry cycles, secular tailwind

More recurring revenue: digital, services – leveraging large installed base

More high value-add solutions: attractive economics, less “copper and iron”

More stability: more base orders, less EPC¹

ABB's leadership in industrial automation

Well positioned

Next Level transformation – #2 in industrial automation today

Strong history of pioneering technology – well positioned for the future

Large installed base, strong domain and process expertise

Unique industrial automation portfolio

Competitive differentiation

Targeted solutions-oriented business model

Leading innovation

**Attractive economics,
good growth prospects**

ABB