



AUBURN HILLS, SEPTEMBER 6, 2017

Partner of choice for Robotics and Intelligent Motion™

ABB Innovation & Technology Day

Sami Atiya, President Robotics and Motion Division



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:

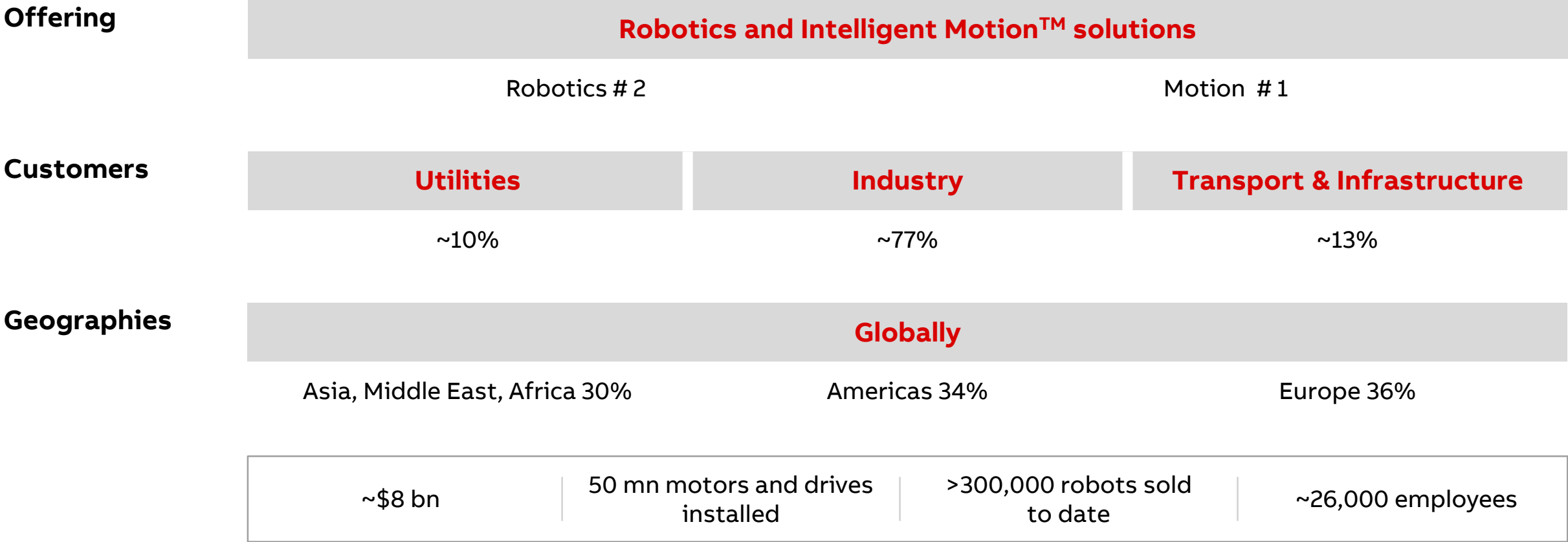
- business risks associated with the with the volatile global economic environment and political conditions
- costs associated with compliance activities
- market acceptance of new products and services
- changes in governmental regulations and currency exchange rates, and,
- such other factors as may 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/>

Robotics and Motion division

Overview



Robotics and Motion

Robotics

Shaping the workplace of the future

Motion

“Moving” the industrial world



Creating customer value with our unique technologies

ROBOTICS

Multimove extreme precision control



3D integrated vision inspections



Digitally enabled paint atomizer



MOTION

Stainless steel encapsulated motor



Industry-specific drive for water



World efficiency record in 44MW motor



Customer value, incl. quality, resource efficiency, speed

Our focus sectors

A >\$100 bn market for ABB expected to grow ~3% p.a.¹

NOT EXHAUSTIVE

Utilities



Wind



Water & waste water

Industry



Refinery & chemicals



Food & beverage



Logistics



Plastics & rubber

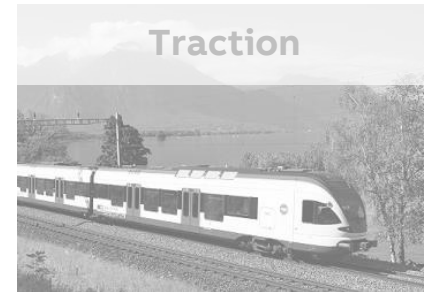


Automotive



Electronics

Transport & Infrastructure



Traction



HVAC²

We address the main trends in our markets

Socioeconomic trends

Demographics and shortage of skilled workers

Energy efficiency and water scarcity

Individualization and convenience

Environmental regulations and state influence

Technology trends



Flexible automation and increasing complexity

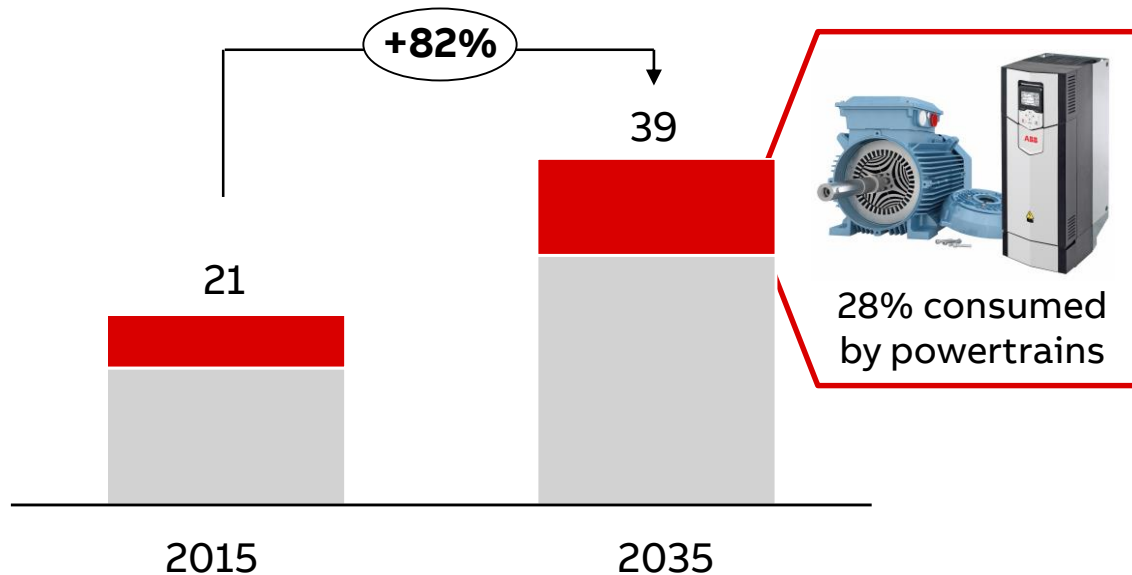
IoT / digitalization

Artificial Intelligence

ABB Intelligent Motion™ solutions drive global energy efficiency

Electricity demand will double

Electricity demand in TWh



Well positioned to capture value



50 mn installed base and 5 mn new devices every year



Last year saved ~510 TWh of electricity...



... and prevented 410 mn tons of CO₂ emissions

Electrical powertrains drive competitive advantage

Our technology could help our customer’s profitability by +100 bps

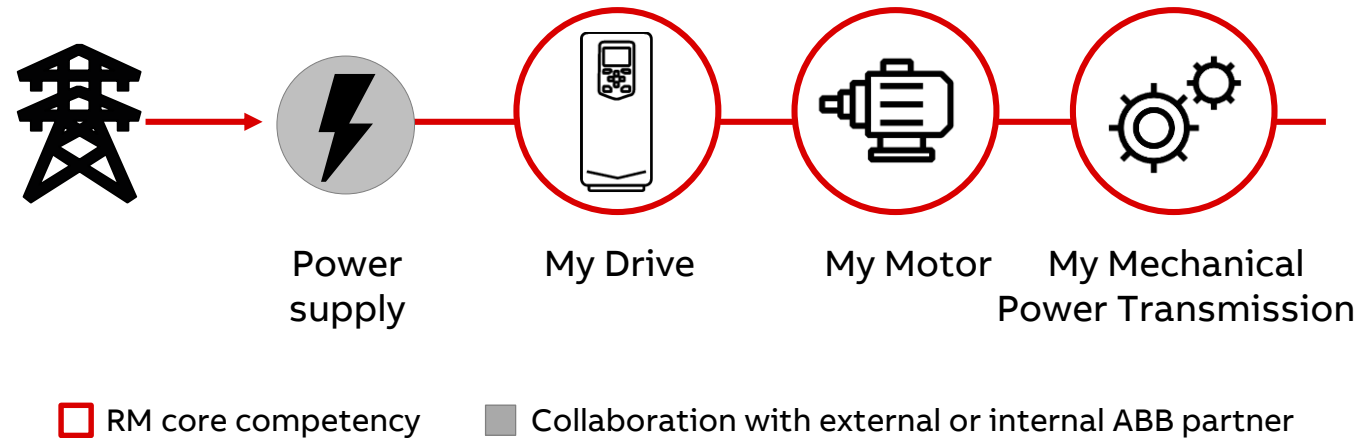
ESTIMATES

	% P&L powertrain electricity cost	% P&L impact ¹ from ABB technologies
Cement	14	+210 bps
Steel	12	+180 bps
Paper	8	+130 bps
Chemicals	8	+120 bps

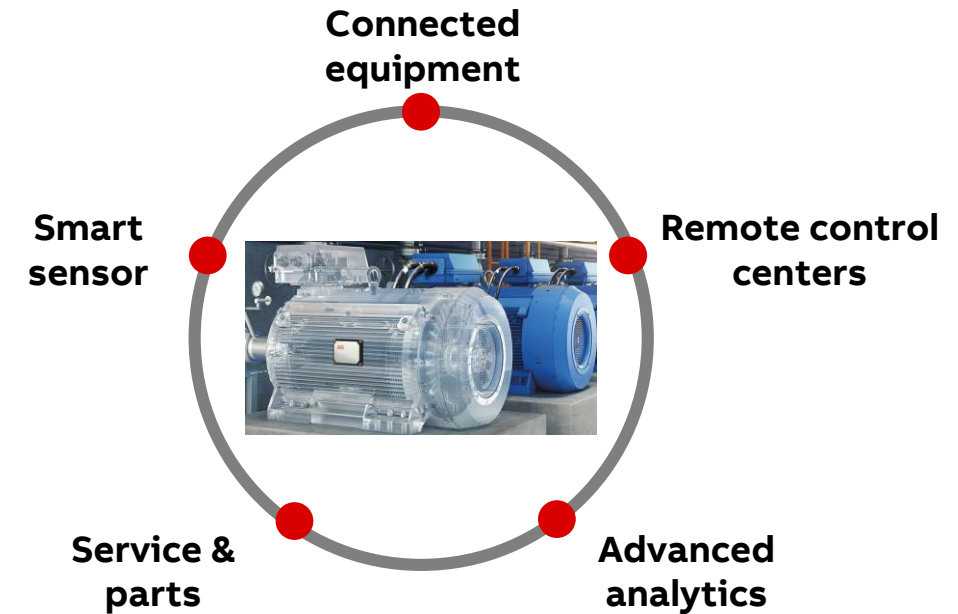


Driving customer value through Intelligent Motion™ solutions

Power train scope



Enabling our partners to capture value with ABB Ability™



Improving Overall Equipment Effectiveness (OEE) – safety, uptime, speed and yield

What is Robotics?

It is much more than just hardware...

Muscles...



Motion from actuators
and motors

Senses...



Sensors and vision
systems

Brains...



Controllers, applications,
and software

Hands...



Intelligent tools,
accessories, and grippers

...combined with domain expertise and applications know-how for customer value

ABB's leading offering portfolio

Unmatched products portfolio



Domain expertise to provide unique solutions and applications



Engineering and systems for a superior customer value proposition



From robots to robotics

ABB Robotics provide customer value along the life cycle

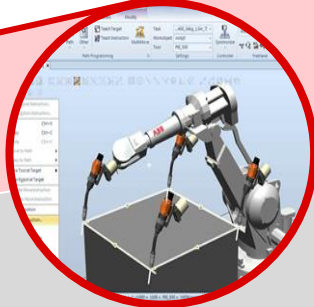
**Customer
asset lifecycle**

Plan / design

Build

Operate

**Our enhanced
digital value
proposition**



RobotStudio®

**Our “traditional”
value proposition**



**Unique
portfolio**



RobotWare



**Customer
service**

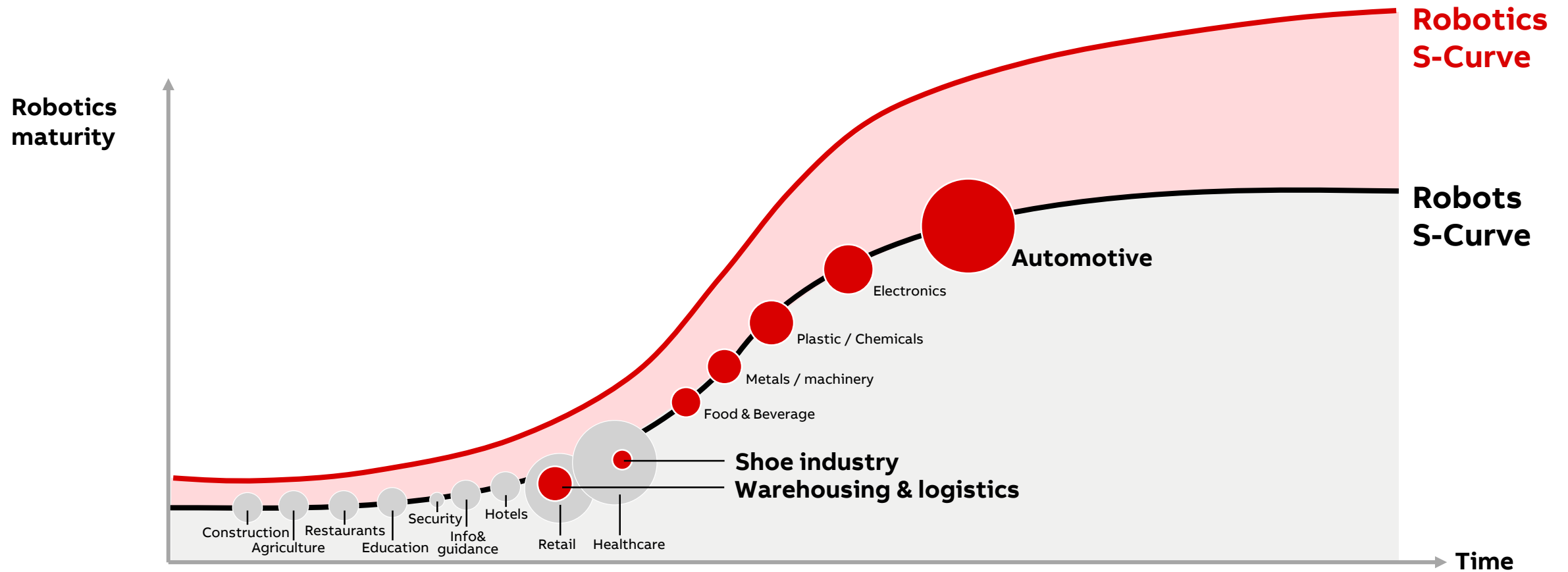
**Our customer
relationship**

Planning partner

Product, solutions, systems partner

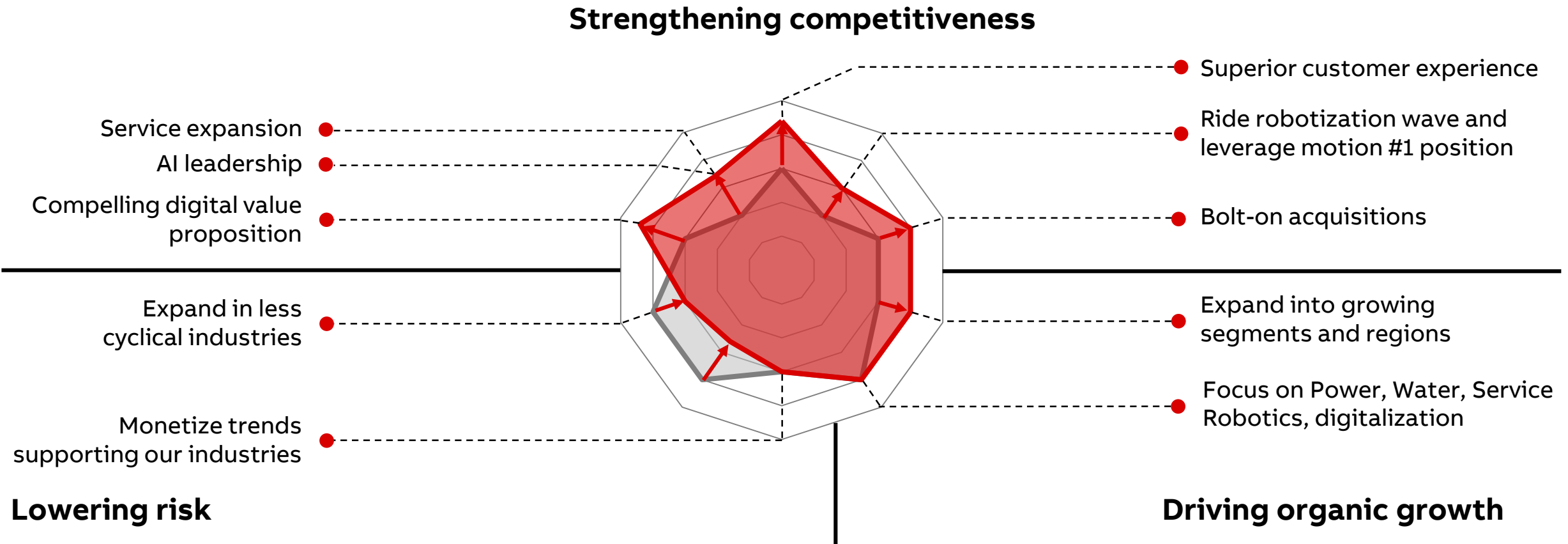
Operations partner

Increasing adoption of robotic solutions



Shifting Robotics and Motion's Center of Gravity

Helping customers solve their problems and drive differentiation in their markets



What we stand for

Partner of choice in....

Robotics and Intelligent Motion™ solutions

We enable customers to lead in safety, productivity and energy efficiency.



What you will see today

Robotics factory tour



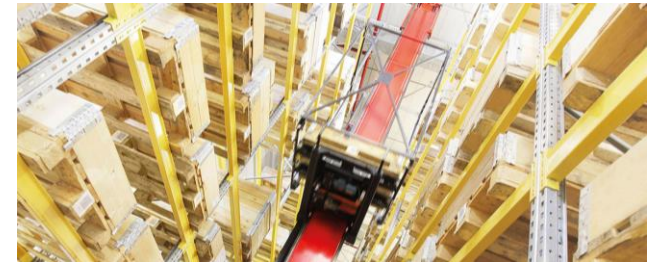
Two examples of ABB's automotive solutions:
Flexible Axle Assembly and ABB FlexWasher



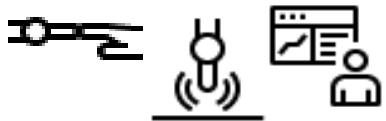
Robotics solutions



New industries and applications:
RobotStudio®, SafeMove2, and logistics automation



Hands-on lunch with ABB robots



Experience robotics innovation and technologies:
eight interactive demo-cells and displays



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