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ABB Robotics & Discrete Automation

Business overview

Robotics & Discrete Automation provides flexible manufacturing and smart machines for our customers and partners. The following provides an overview of the business, laying out the future direction of our market and strategy.

Robotics & Discrete Automation market overview and key trends

Our addressable market is approximately \$75 bn and projected to grow at 6% CAGR. Market growth is estimated at ~2x GDP across the economic cycle. Four mega-trends are leading to rapid changes, especially in manufacturing and logistics:

- **Individualized consumer** – Product variants are proliferating, product lifecycles are becoming shorter and consumers are requesting more and more personalized products, delivered instantly.
- **Labor shortage** – An aging population is leading to a shrinking workforce, including a shortage of skilled employees. Additionally, there is a decreasing willingness to perform “dull, dirty and dangerous” jobs.
- **Digitalization** – Industry 4.0, machine learning and artificial intelligence, as well as ubiquitous, high-speed communication like 5G, are enabling new technical solutions that improve operations.
- **Uncertainty** – Trade conflicts, political uncertainty, natural disasters and pandemics reduce predictability and require flexibility of processes and operational assets.

Robotics and Discrete Automation offers solutions that increase productivity and afford the highest levels of flexibility, while improving output quality and making operations simpler. New technology applications (e.g. flexible manufacturing, machine-centric robotics, collaborative robots) and new customer segments (e.g. electric vehicle manufacturing, logistics robotization) where adoption is accelerating, have the potential for double digit market growth, which we are well positioned to capture.

Driving profitable growth above market and at attractive margins

We plan to grow above market and realize attractive margins within our 13–17% target margin corridor over the medium term by innovating for customer value and driving profitability through concrete performance measures.

Strongly positioned to benefit from market dynamics

The combination of robotics and machine automation has put us in a strong position to deliver value creating solutions to our customers globally:

- **Broadest portfolio amongst our peers** – As the only player with both a strong robotics and automation portfolio in-house, we are in an ideal position to provide our customers with flexible automation solutions from individual machines to whole plants. We have a balanced portfolio of products, cells and solutions, systems and services. Integrated solutions like machine-centric robotics and digital services open new high growth applications.
- **Innovation strength** – We are investing ~\$170 mn per year in R&D to maintain our technology leadership. We are expanding our portfolio of products (e.g. track systems), solutions (e.g. machine-centric robotics), cells and systems (e.g. flexible manufacturing systems). We focus especially on our software and digital portfolio. We already monitor ~9000 installed robots remotely and are constantly adding new digital services on ABB Ability™. We have established incubators to accelerate the developments in artificial intelligence, digital factory automation, collaborative robotics and healthcare.
- **A true global player** – We are very well positioned to serve our customers globally. We have local sales, service and application engineers in all relevant markets, and we produce robots in Sweden, China and the USA. With six R&D centers in Europe, Asia and the USA, we can tap into talent pools across the globe and do research close to all key markets.
- **Applied domain expertise** – Deep domain know-how is the base for the development of value creating solutions to serve our customers. Through the alignment of our organization with customer segments, we are best positioned to serve their specific needs.

Driving innovation in existing and new customer segments, new solutions

Based on already well established positions in our markets, we plan to outgrow the market along three drivers: accelerating in existing segments (e.g. automotive OEMs), driving new automation solutions (e.g. machine-centric robotics and flexible manufacturing concepts) and leveraging our existing expertise in new segments (e.g. logistics and healthcare). Each of our business lines has clear strategic priorities according to the characteristics and opportunities of their customer segments.

Driving profitability

We have three key levers to improve profitability and support getting into our target margin corridor, independent of growth:

- **Cost measures** – We continue to execute cost measures including factory productivity improvements, ABB-OS savings such as footprint optimization, reducing management layers and closing non-profitable units.
- **Mix and value pricing** – We drive a balanced mix of products, systems and services, with a strong focus on modular and scalable solutions. Value-add solutions enable us to differentiate in the market and realize value pricing.
- **Quality and execution** – We continue to strengthen quality and ensure smooth project execution to ensure customer experience of the highest standard.

We measure performance with key KPI's which are selectively embedded in the scorecards of our business lines and platforms.

We continue to invest through the cycle, where it matters to support growth. This includes balanced investment in R&D, sales and CAPEX, in accordance with our view of the long-term growth opportunity.

With our strong position in key markets and our focus on innovation, we expect that we will deliver above-market growth. At the same time, our initiatives to improve profitability should enable us to operate within our target operational EBITA margin corridor of 13–17 % over the medium term.