



Workforce 2020

ABB United States

August 2018



Common workforce challenges

Affecting ABB, our customers and other industrial and technology companies

- **Internal**

- An aging workforce
- New skill set needs

- **External**

- Low unemployment
- Rising cost of college
- Limited interest in working in manufacturing, amongst students and their parents
- Career and workforce training that lacks real world learning opportunities
- A pipeline of talent that primarily comes from other employers
- An educational environment focused on preparing students for college vs. a career

The state of U.S. manufacturing, healthcare and information technology

Manufacturing

- Demand for skilled workers is growing, but companies can't find people with these skills.
- As a result, nearly 2 million jobs will go unfilled over the next decade due to this skills gap.
- Companies are also facing a lack of demand for these jobs amongst workers with skills.
- In fact, while we perceive manufacturing as the backbone of a strong economy, few parents want their children to work in this industry and it is the last career choice for people between the ages of 19 and 33

Healthcare

- According to the ANA, there will be far more RN jobs available through 2022 than any other profession, at more than 100,000 per year.
- With more than 500,000 seasoned RNs anticipated to retire by 2022, the BLS projects the need to produce 1.1 million new RNs for expansion and replacement of retirees, and avoid a nursing shortage.
- In every state, nursing job growth is projected at 11 percent or more annually through 2022.

Information Technology

- According to the BLS, STEM related occupations are projected to grow to more than 9 million between 2012 and 2022 (1 million more than 2012)
- Overall, STEM occupations are projected to grow faster than the average for all occupations and generally pay more
- BLS projects overall STEM employment to grow about 13 percent between 2012 and 2022
- 7 out of the top 10 STEM related jobs, with largest growth opportunities, are IT related

Focused and simplified solutions

- According to the latest figures from the U.S. BLS, approximately 68% of high school students attend college, while over 30% don't and likely graduate without job skills. And of the 68% that do go to college, 40% don't finish.
- Our local and regional employers want and need these individuals to be their pipeline of talent.
- By partnering with K-12 and higher education and business and industry, we need to support them by investing in state of the art, advanced workforce development solutions and facilities targeted primarily at high school students, along with teachers, counselors, administrators AND parents.
- The solutions should focus on your current and future skill set needs and as part of the high school curriculum, could include increased testing and certification programs, concurrent credit and industrial apprenticeship / internship programs.
- These solutions will also position each student to graduate with two key things for their future ... a career plan and a skill set.



ABB Workforce 2020 – Overview

Objective

- To be globally competitive, our future state operations need to be highly automated and connected
- This work will require a much different set of skills and abilities compared to today's operations
- Therefore, the objective of ABB's Workforce 2020 initiative is to explore partnerships with the communities in which we operate to work together to **transform our workforce by creating a pipeline of technically skilled talent** for our future state operations

Deliverables

- By establishing this long-term talent pipeline, we will be able to ...
 - Address our local aging workforce and the changing / evolving skill sets and processes
 - Expose students earlier to advanced manufacturing careers while also providing hands-on training in state-of-the-art environments, including apprenticeships and work-based learning
 - Locally support our ABB brand awareness strategy
 - Reinforce our support and investment in advanced automation and education and training
 - Build a model that can be replicated in other communities where we operate
 - Ensure our business is successful

Recent actions

ABB Support

- As a result of our workforce development objectives, along with those of the communities in which we operate, ABB is considering what our role could be in helping to transform our local educational systems while achieving our workforce development objectives
- These efforts would also align with ABB's global support of advanced automation and our challenge to countries like the United States to rethink education and training to prepare people for the jobs of tomorrow

ABB and The Economist launch Automation Readiness Index, global ranking for robotics and Artificial Intelligence, challenging countries like the United States to rethink education and training to prepare people for the jobs of tomorrow

ABB invests €100 million in global innovation and training campus focused on machine and factory automation and the development of the factory of the future. The state-of-the-art innovation and training campus will be built in Austria, by 2020





The Future of Work

ABB