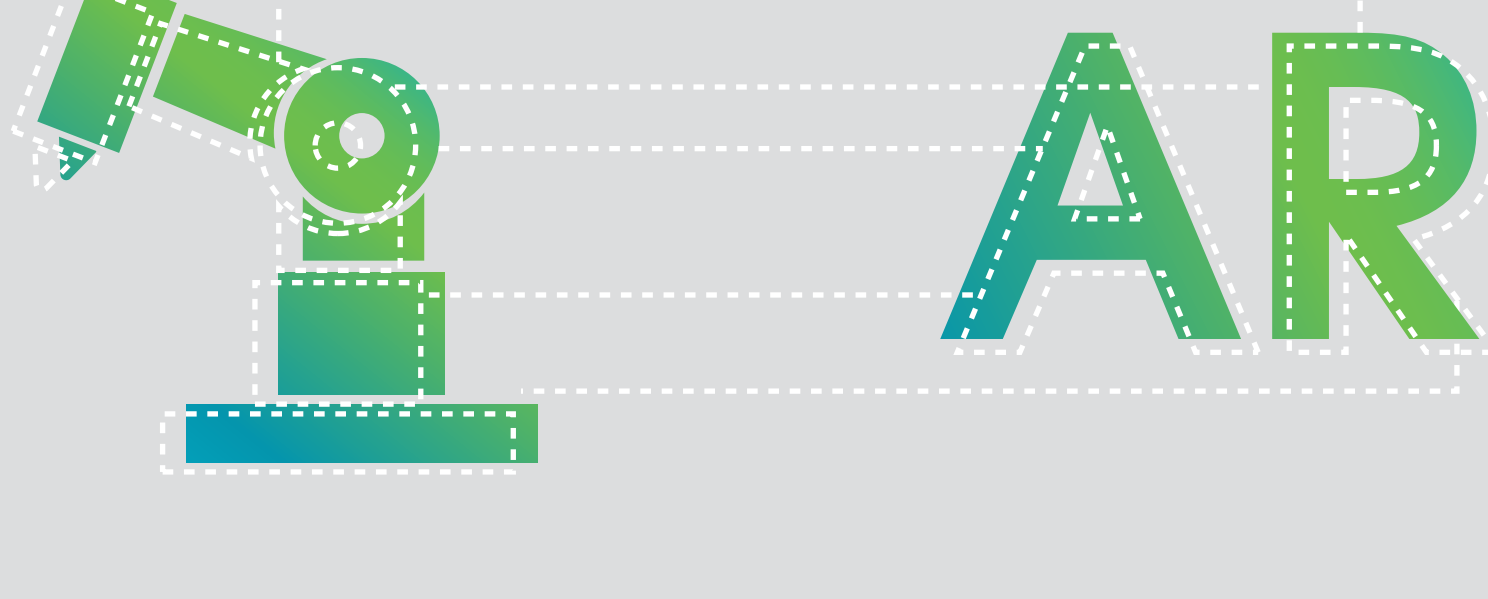
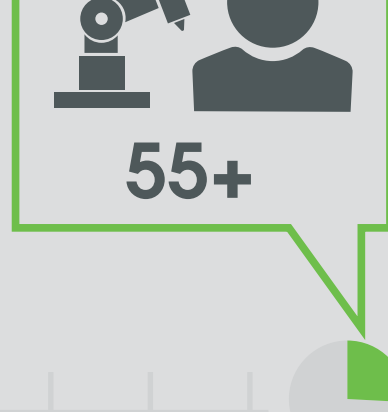


Bridging the Skills Gap in Manufacturing with

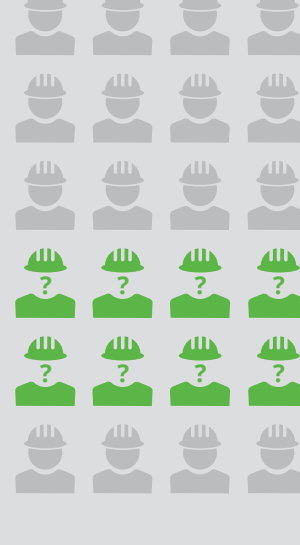


By 2022,

more than 26% of manufacturing workers will be older than 55.¹



Over the next decade manufacturers need to fill nearly 3.5 million jobs, but **2 million** of them are expected to go unfilled.²



Digital solutions like **augmented reality** are providing manufacturers with a smarter, more capable workforce, enabling them to **meet customer demand** faster and at a **lesser cost**. In fact, more than 76% of companies using AR for manufacturing are already measuring real ROI.³

The top four reasons manufacturers should invest in



1. INCREASE MANUFACTURING THROUGHPUT & FLEXIBILITY

AR makes factory workers more productive so manufacturers can meet better customer demand:

70%

INCREASED EFFICIENCY⁴

- Less time wasted interpreting assembly instructions
- A more agile workforce increases production flexibility
- Faster assembly, machine setup, and change over times



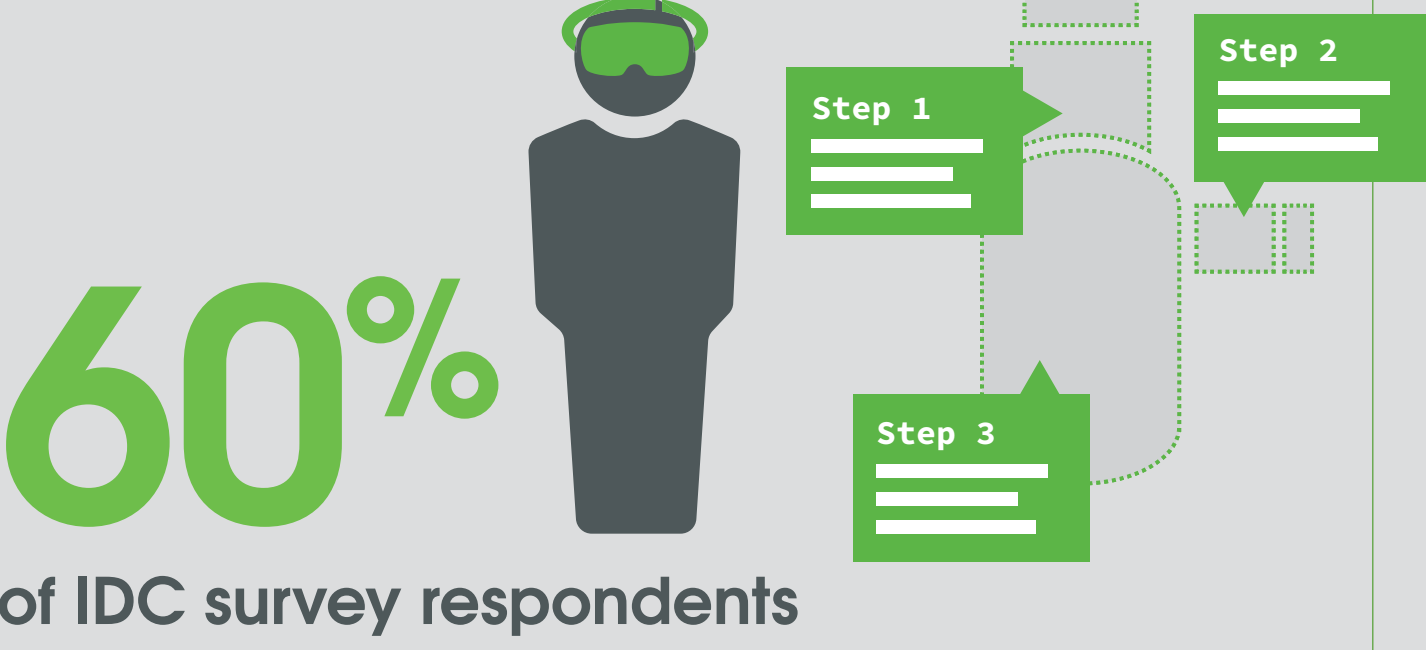
PTC customer BAE reduced battery assembly time by

50%

2. IMPROVE NEW TECHNICIAN SKILL ADOPTION

Technicians trained with AR comprehend information faster:

- Overlays with step-by-step instructions show workers instead of tell them
- AR makes new workers effective almost immediately



60%

of IDC survey respondents accelerated the time between training and operations with AR³

3. LOWER COST OF OPERATIONS

AR reduces costs associated with training, human errors, and high technician turnover rates:

- Reduce training expenses like travel, printed materials, and on-site expertise
- Minimize prolonged equipment downtime
- Fewer assembly errors mean less defects, rework, and scrap



42% of IDC survey respondents are using AR to avoid manufacturing mistakes

4. BRIDGE SKILLS GAP AND IMPROVE TRAINING



AR helps manufacturers streamline recruiting to build the next generation workforce:

BAE REDUCED TRAINING TIME BY

50%

- AR can help to increase job satisfaction and retain existing workers
- More effective recruitment of "Digital natives"
- Easier adoption of instructions by younger workforce

Learn more about how manufacturers are using industrial AR to improve workforce productivity, efficiency, and customer satisfaction.

1. How Augmented Reality Drives Real-World Gains in Services, Training, Sales and Marketing, and Manufacturing
 https://www.ptc.com/en/resources/ar/report/how-augmented-reality-drives-real-world-gains
 2. Deloitte, http://www.themanufacturinginstitute.org/~media/827DBC76533942679A15EF7067A704CD.ashx) *report from 2015
 3. How Augmented Reality Drives Real-World Gains in Services, Training, Sales and Marketing, and Manufacturing
 https://www.ptc.com/en/resources/ar/report/how-augmented-reality-drives-real-world-gains
 4. How Augmented Reality Drives Real-World Gains in Services, Training, Sales and Marketing, and Manufacturing
 https://www.ptc.com/en/resources/ar/report/how-augmented-reality-drives-real-world-gains