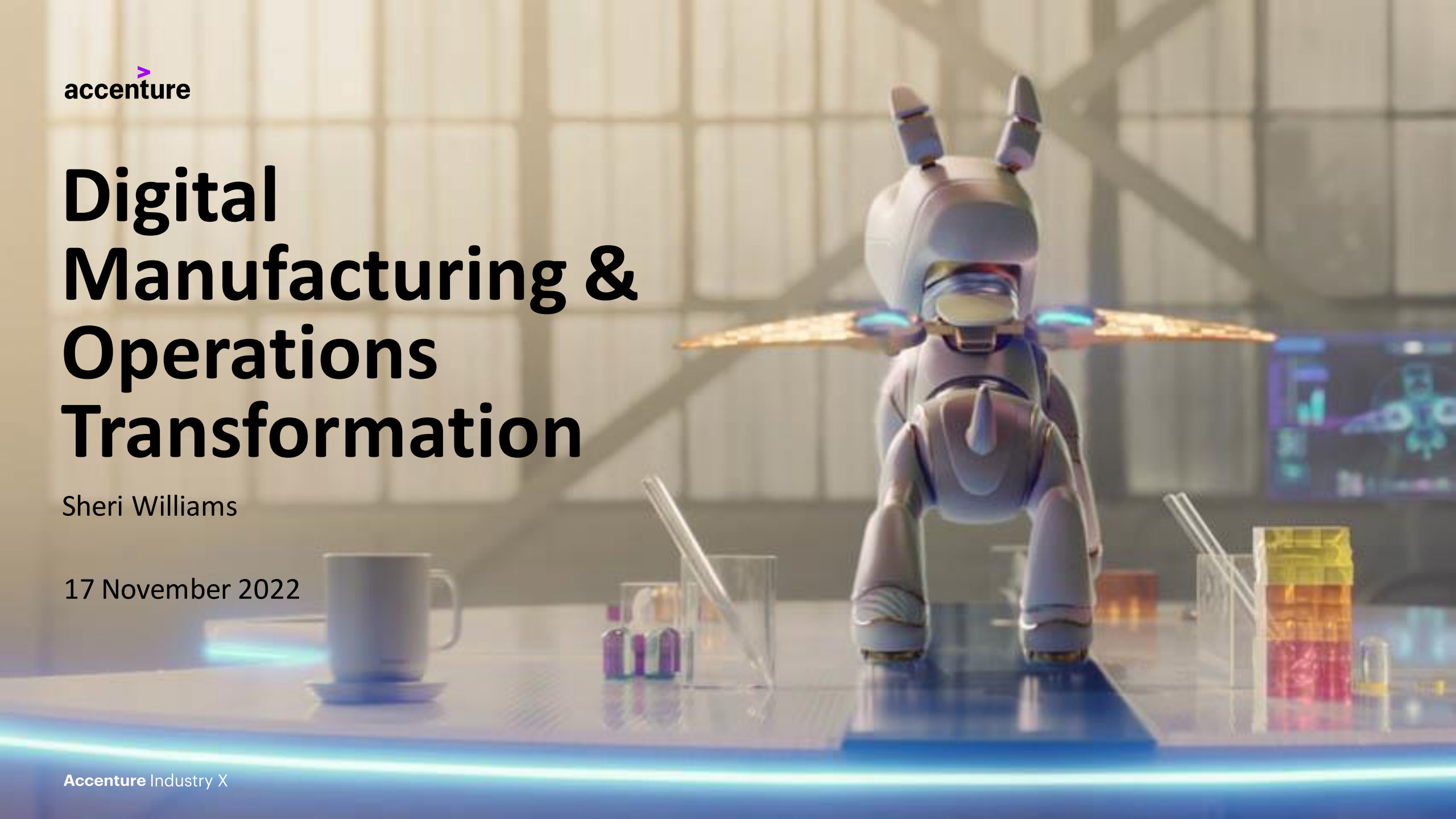




# Digital Manufacturing & Operations Transformation

Sheri Williams

17 November 2022



# The next digital frontier has arrived

# Embracing digital at scale offers significant opportunity...

## 5-15% EBITDA improvements

### And critical benefits to drive competitive advantage



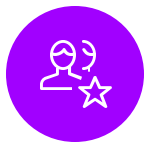
Increased quality, speed and efficiency in product development



Reduced working capital



Upskilled, engaged workers



Improved customer service



Improved resilience and agility, particularly in times of crisis



Sustainability and waste reduction

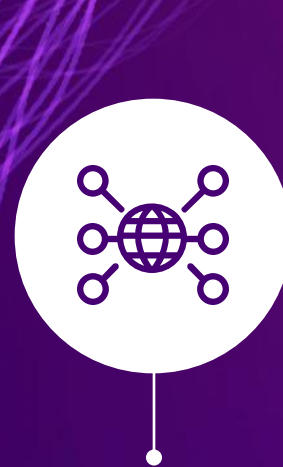
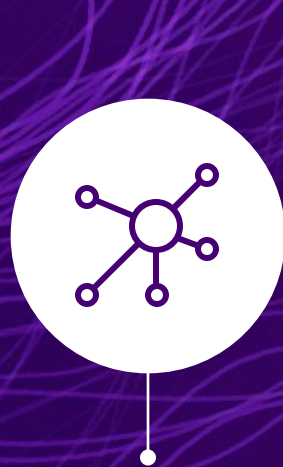
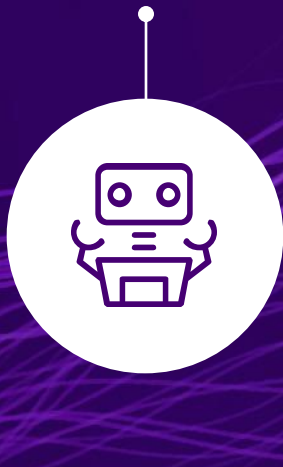


# ... and opens up a new set of questions you must ask yourself

How can we use **autonomous and remote technology** to mitigate inflationary costs and labor challenges while modernizing our operations?

How can **simulations** give our people and our business a competitive advantage?

How can we make **sustainability** a transformation objective that drives deep and lasting progress?



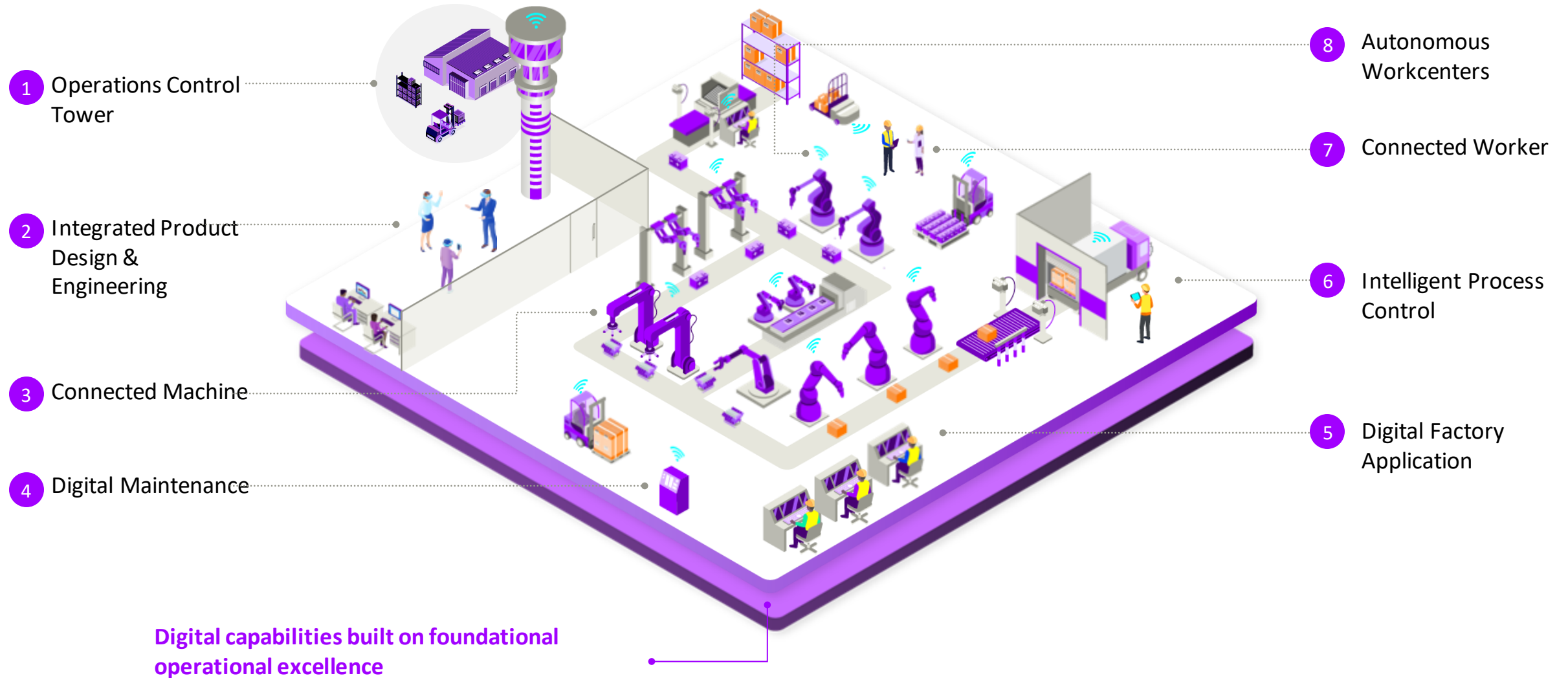
How can we build **speed, agility, and resiliency** in our new operations to better manage macro-economic and political volatility?

How can we maximize the power of **data, AI**, and use **intelligence** to fuel our future?

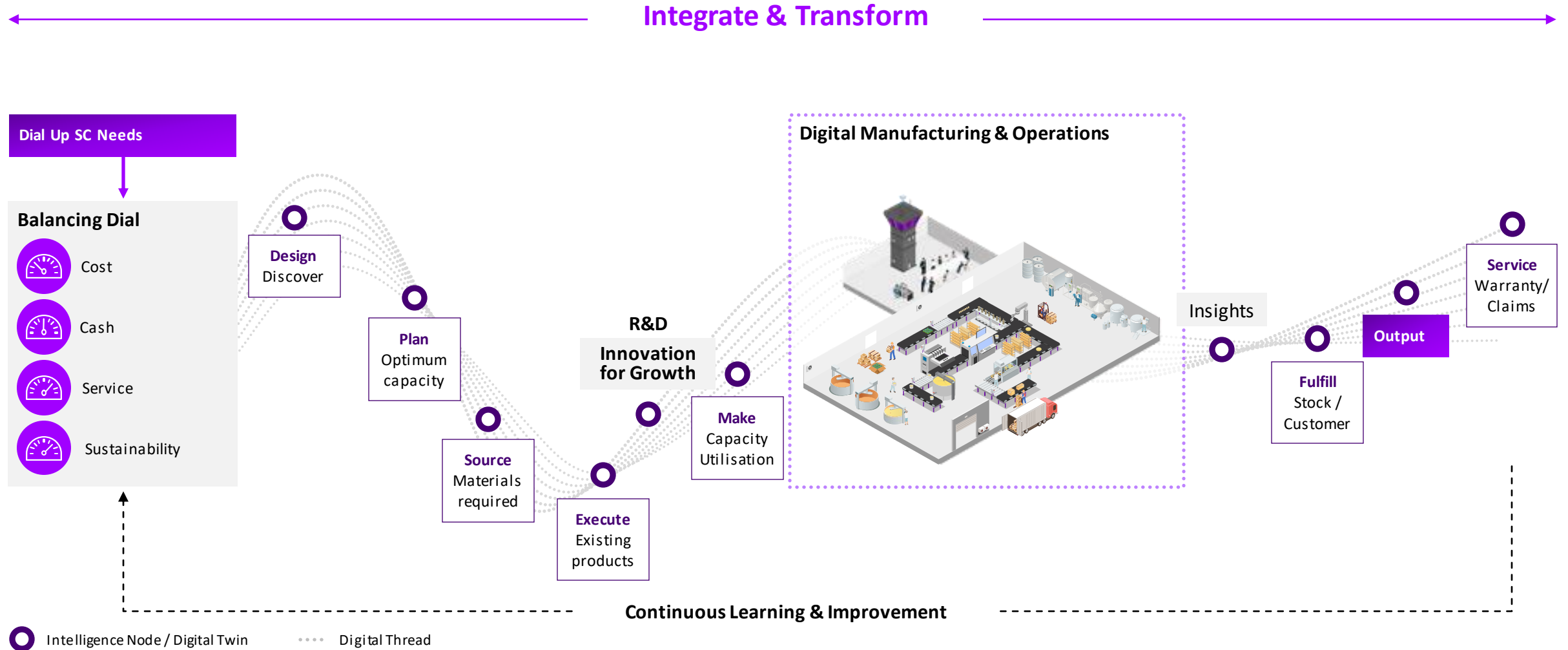
How do we inject **new talent** into organizations while promoting more **modern ways of working**?

How to work with **ecosystem partners** in a true **partnership** model to drive better results?

# Making the factory of the future, the factory of today

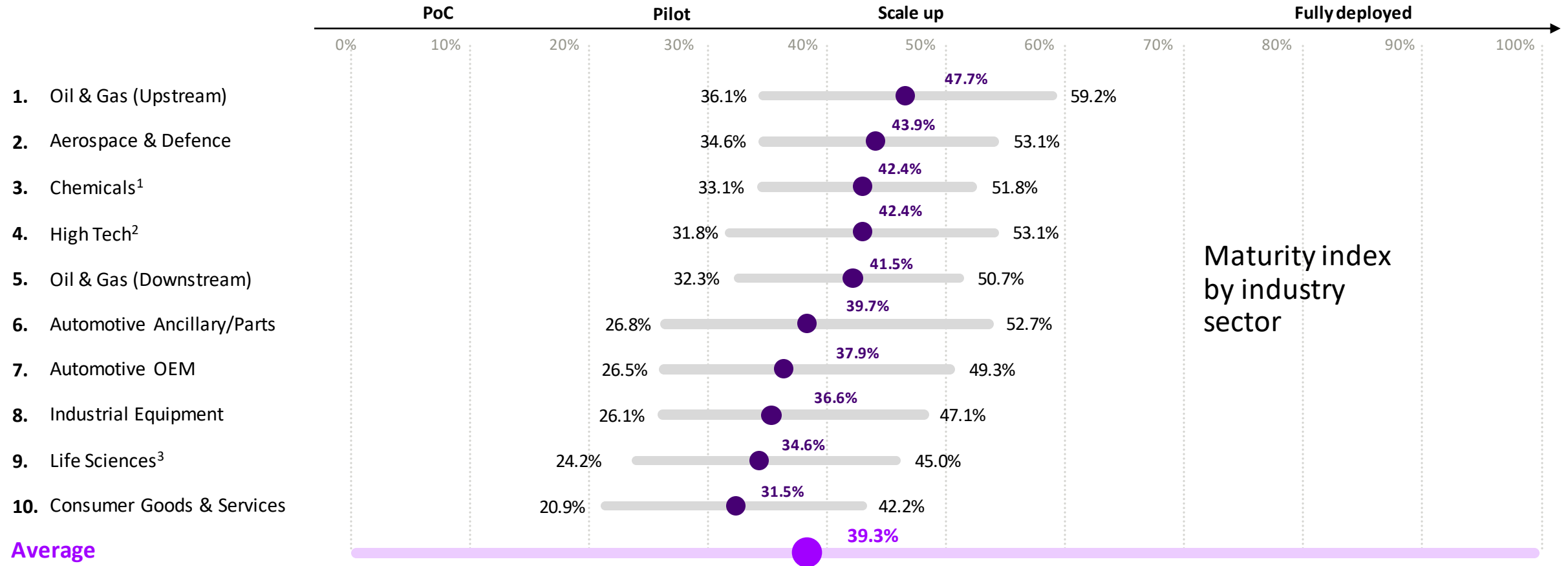


# The next frontier links together product data and organizations with an end-to-end digital process



# Yet, digital maturity is lagging

Despite all the possibilities, our research shows that many of the leading firms find themselves in a pilot paralysis.



<sup>1</sup> including Petrochemicals; <sup>2</sup> Consumer/Enterprise Technology including components; <sup>3</sup> Pharma., Medical/Bio Tech.

Source: Accenture Industry X Mastery Global Report. Base: All Respondents (n=600)

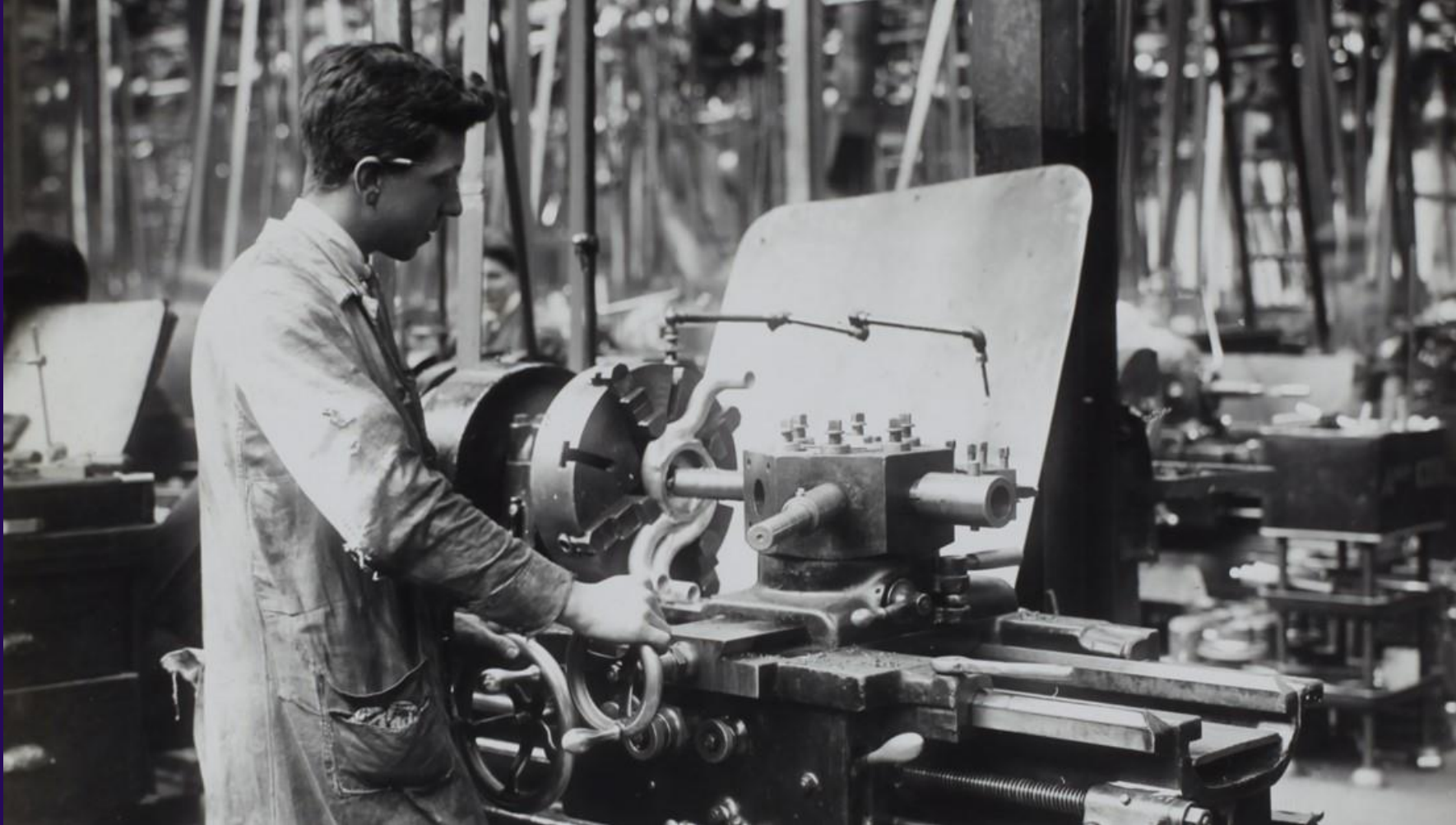




**You can only scale with  
the right talent -  
and that requires a leap  
forward**



# We must solve the labor challenge



## Today's Landscape

**639,000**

U.S. Manufacturers  
(IBIS World)

**900,000**

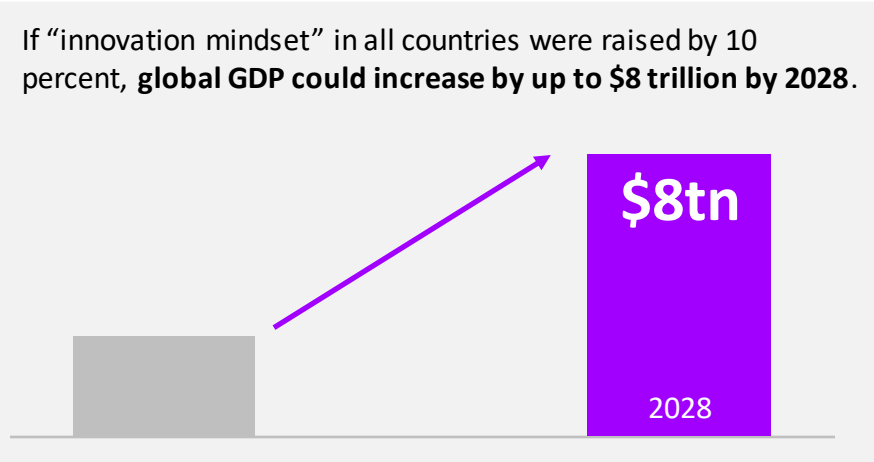
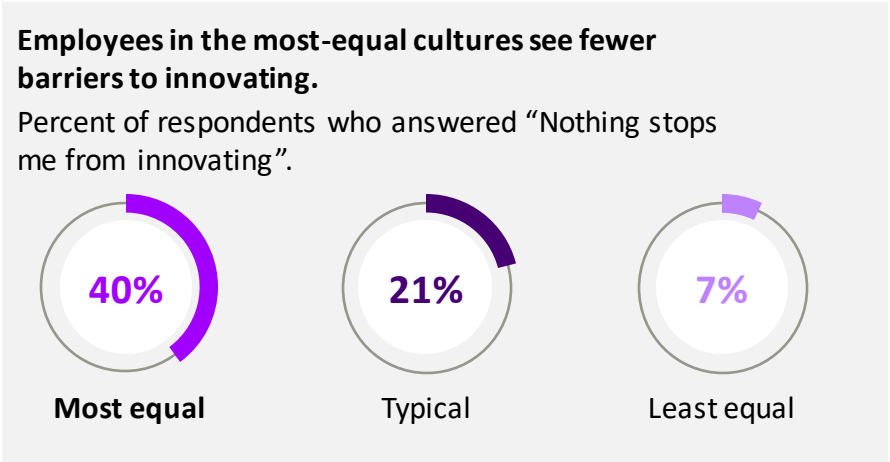
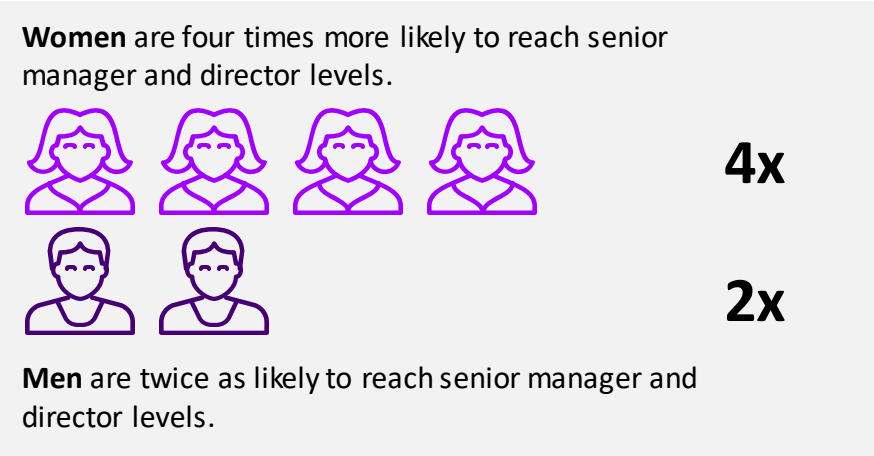
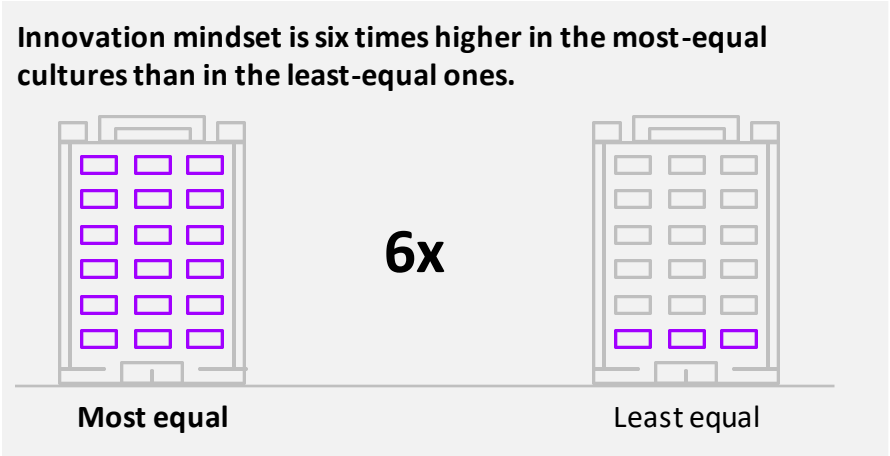
Open manufacturing jobs  
(Bureau of Labor Statistics)

**17,000**

Open manufacturing robotics jobs  
(Lightcast)

Source: ARM Institute

# Equality is a powerful multiplier of innovation



# Some of the dimensions we need to address:



Partners with the  
same mindset

Physical disabilities or limitations

Gender diversity

Cultural diversity

Age diversity

Educational diversity

Experience / skill diversity

Mental illnesses

Language barriers

Reading and Comprehension  
disorders such as Dyslexia

Social economic issues

Remote workers



# And the technology that enables inclusion, diversity, and equality



Partners with the  
same mindset



- Bionics
- Physical enablers
- Co-bots
- Innovative equipment design
- Real time multilingual translation tools
- Voice driven user experience
- Graphical programming and displays
- Cloud
- Digital threads and twins
- AVEVA data hub
- AR/VR
- AI/ML
- Metaverse
- Collaboration tools



# Upskilling / Reskilling is an opportunity, not a barrier



Partners with the  
same mindset

## Skilled Robotics Role Salary Averages



**61,000** Beginner

Robotics Technicians are focused on the day-to-day maintenance on the manufacturing floor.



**86,000** Intermediate

Robotic Specialists are the subject matter experts on robotic systems on the manufacturing floor and are responsible for proposing upgrades to the systems that can increase productivity.



**130,000** Advanced

The Robotics Integrator is the subject matter expert on automation and robotics.

Source: ARM Institute





# And brings in diverse perspectives to solve problems differently



Partners with the same mindset



Upskilled people



Cultural integration



Data scientists



## Solving problems in new ways



Environmental advocacy



Age diversity



People with disabilities





To allow us to  
transform our  
workforce, and  
build a world  
where everybody  
feels empowered  
to contribute

