

The Why behind DEI

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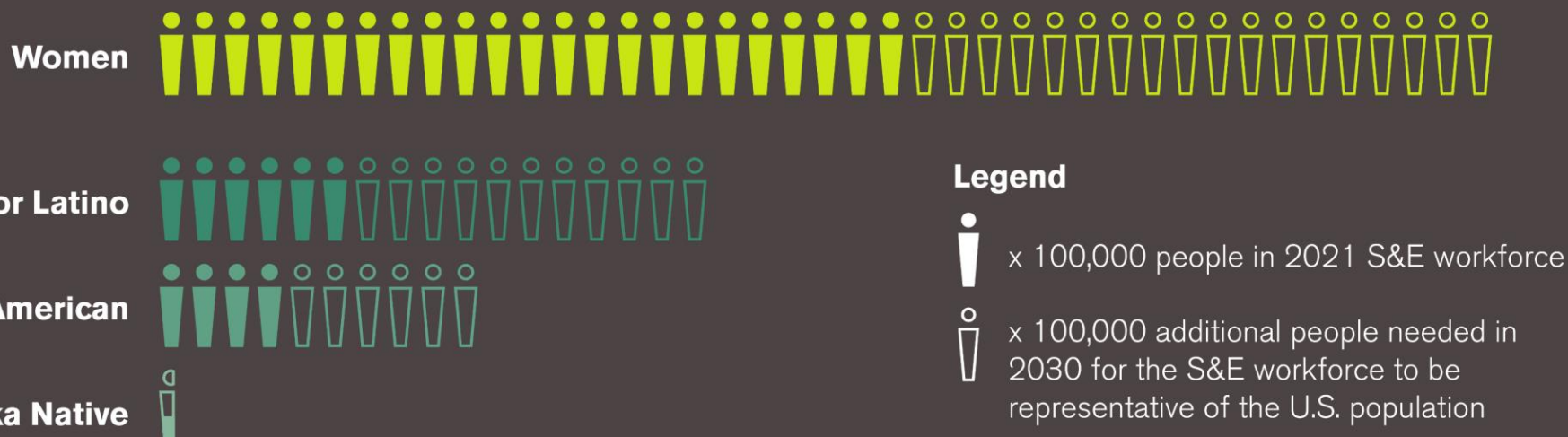
Advanced Manufacturing National Program Office, NIST

An interagency team building partnerships with U.S. industry and academia





Missing Millions: Faster Progress in Increasing Diversity Needed to Reduce Significant Talent Gap

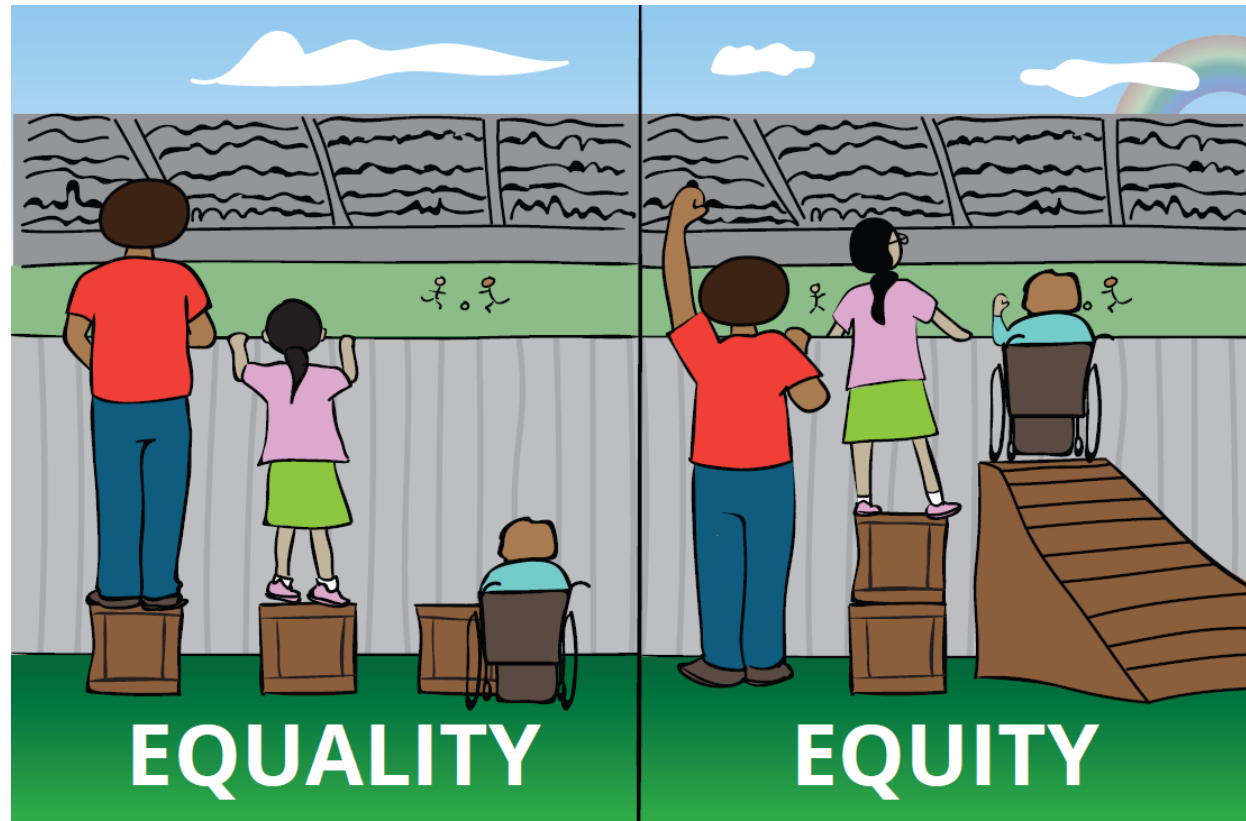


While the number of people from under-represented groups in the S&E workforce has grown over the past decade, much faster increases will be needed for the S&E workforce to be representative of the U.S. population in 2030. To achieve that goal, the NSB estimates that the number of women must nearly double, Hispanic or Latinos must triple, Black or African Americans must more than double, and the number of American Indian or Alaska Native S&E workers needs to quadruple (from 15,000 to 60,000). The NSB estimates that the number of Native Hawaiian or Other Pacific Islanders will be slightly overrepresented in the S&E workforce in 2030.

These estimates are based on projections from the U.S. Census and Bureau of Labor Statistics, together with data from the 2021 Women, Minorities, and Persons with Disabilities in Science and Engineering report published by the National Center for Science and Engineering Statistics and assume that participation of these groups in the S&E workforce increases at current rates.

DEI Discussion

- **D – Diversity** – all the ways people differ (age, sex, race, sexual orientation, socioeconomic status, religion, and more)
- **E – Equity** – distributing resources based on needs to correct imbalances
- **I – Inclusion** – the act of welcoming, supporting, and valuing all individuals



Manufacturing Jobs in April (in thousands)



April BLS data 2022

80,000 hours!!!

83% enjoy their work
79% job stability

97% highly motivated
97% job satisfaction
96% recommend company

45% highly motivated
30% job satisfaction
25% recommend company

Healthy teams arrive **engaged**

Diverse teams ask **better questions**

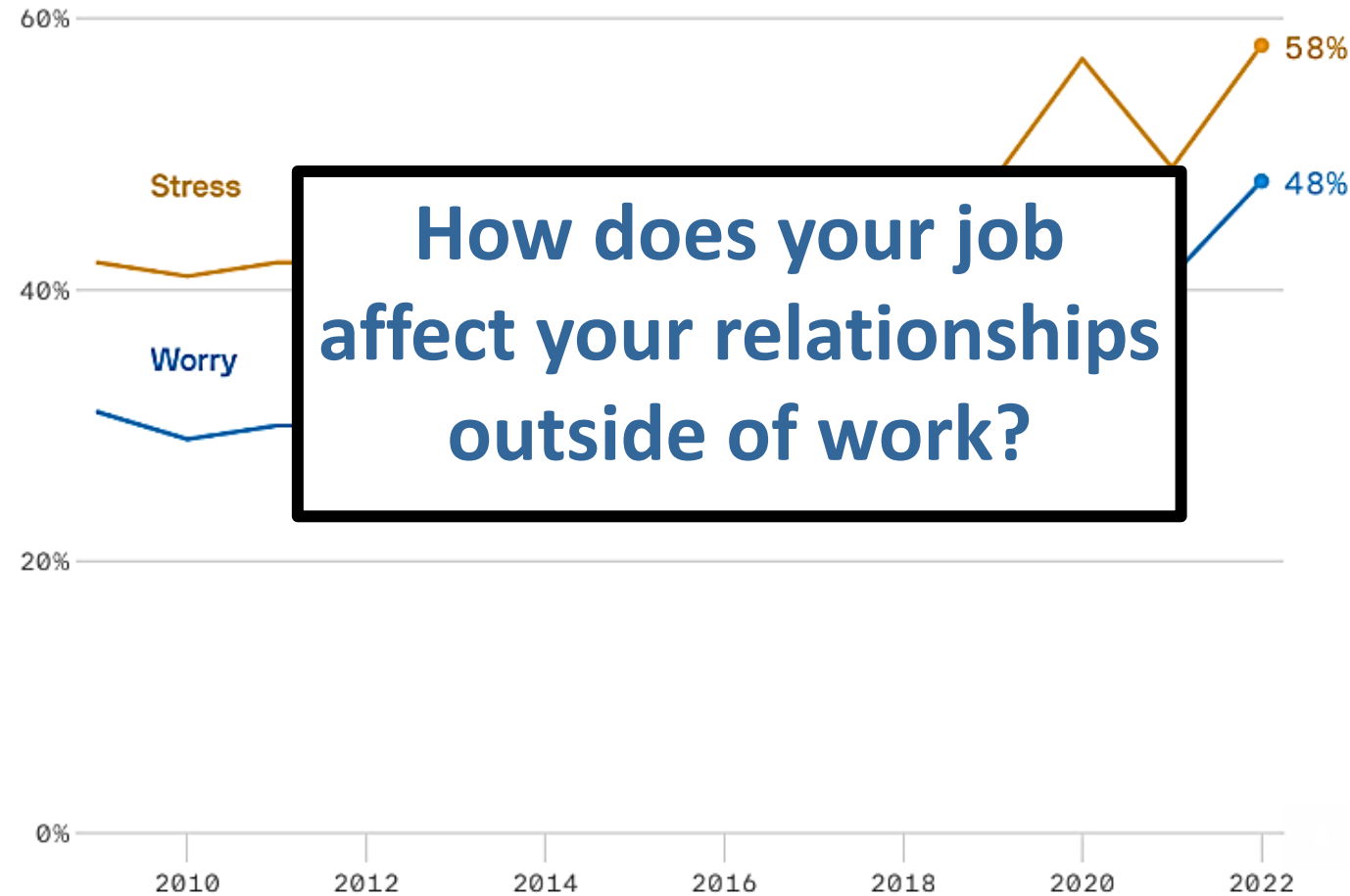
Inclusive teams find **better solutions**



Support Work-Life Alignment

Percentage of U.S. employees who say they experienced ____ during "a lot" of the previous day

Daily survey of at least 500 U.S. employees; Annual average, 2009 to 2022 (As of Q1)



Data: Gallup. Chart: Simran Parwani/Axios

Promote Worker Well-being

- 23% profit increase in business units with engaged workers
 - Absenteeism, retention, accidents, customer loyalty
1. Recognition as part of company culture
 2. Create mentoring programs
 3. Enable continuous learning

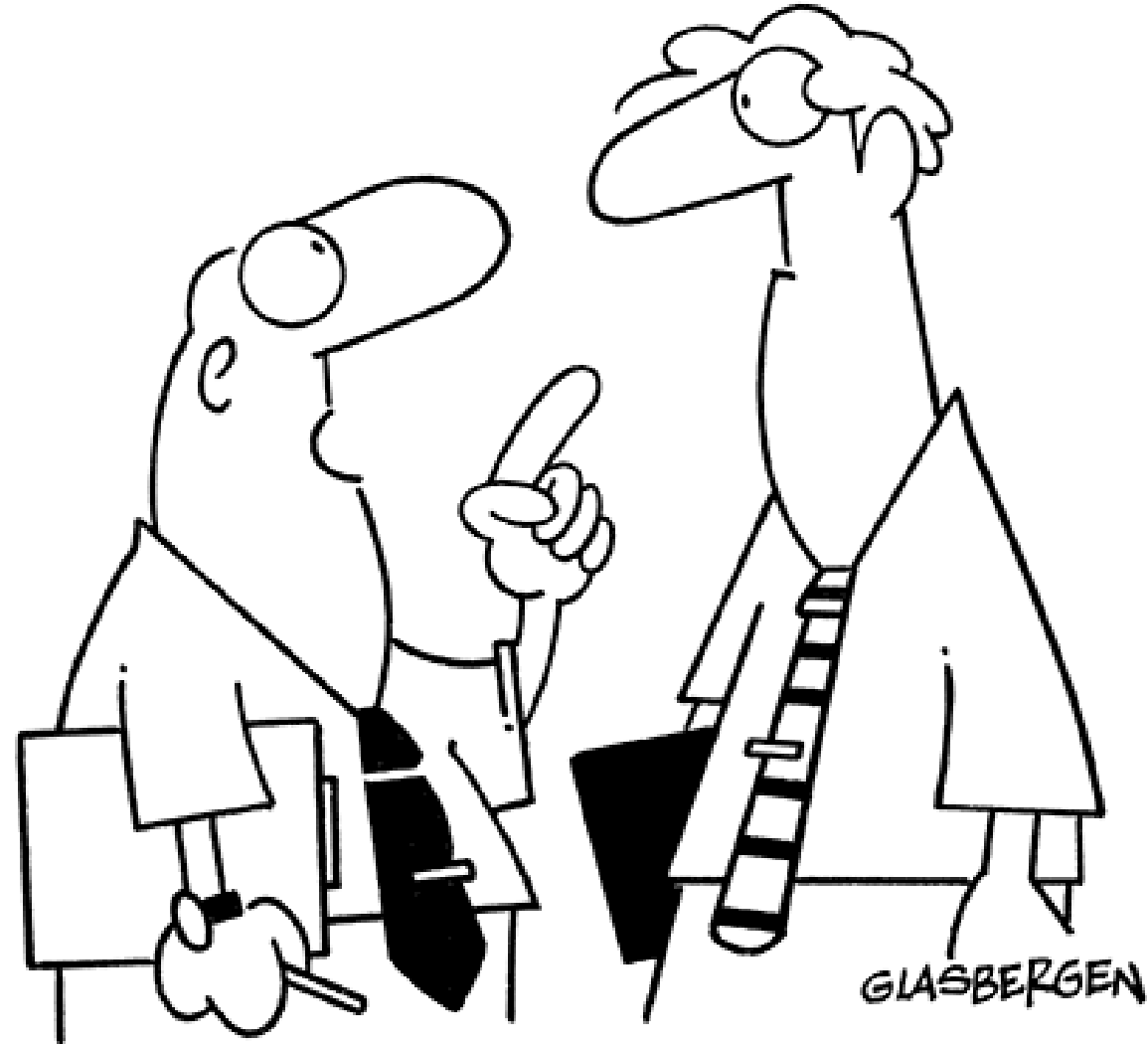


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“We need to focus on diversity. I want you to hire more people who look different, but think just like me.”

Strategies to address DEIA

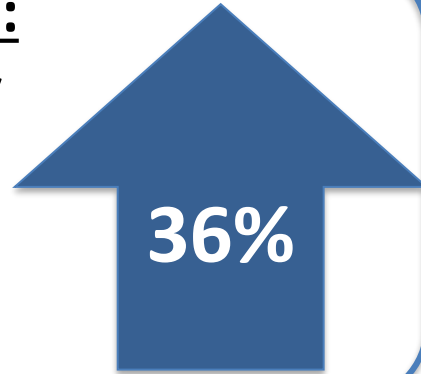
- **Intentionality** – meet them where they are
- **Data** – use demographics to identify gaps and set goals
- **Executive buy-in** – engage early and often
- **DEIA Roles** – map your organization and roles

73%
of organizations
haven't set
DEI goals

Business and Workplace Case

Top vs Bottom ¼:

Ethnic and culturally diverse companies outperformed in profitability by 36%



Mckinsey, 2020

70% more likely to capture new markets

HBR, 2013

- Women make up 30% of manufacturing workforce
- Less diversity in senior roles
- Opportunities for neural-diverse or justice-served employees



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Inclusion Increases Innovation

- Inclusive workplaces are:
 - 2x as likely to meet or exceed financial targets
 - 3x as likely to be high performing
 - 6x as likely to be innovative and agile
 - 8x more likely to achieve better business outcomes

2018, Deloitte D&I Revolution



Inclusion Builds Trust

- 1) Authenticity
- 2) Job secure – less stress
- 3) Involvement in the workplace
- 4) Feeling respected and valued
- 5) Influence on decision making

First Round Capital:
63% better performance with a least
1 woman founder at VCs



WHY DON'T WE HAVE ANY
FRESH IDEAS AROUND HERE?



TOM
FISH
BURNE

Building the Brand

- Word of mouth and media impact job and product awareness
- Employee-customer relationship can be key success
- Marketplace activities and community involvement

Top 3 sources to influence perception of manufacturing

TV and news
22%

Friend/ relative
27%

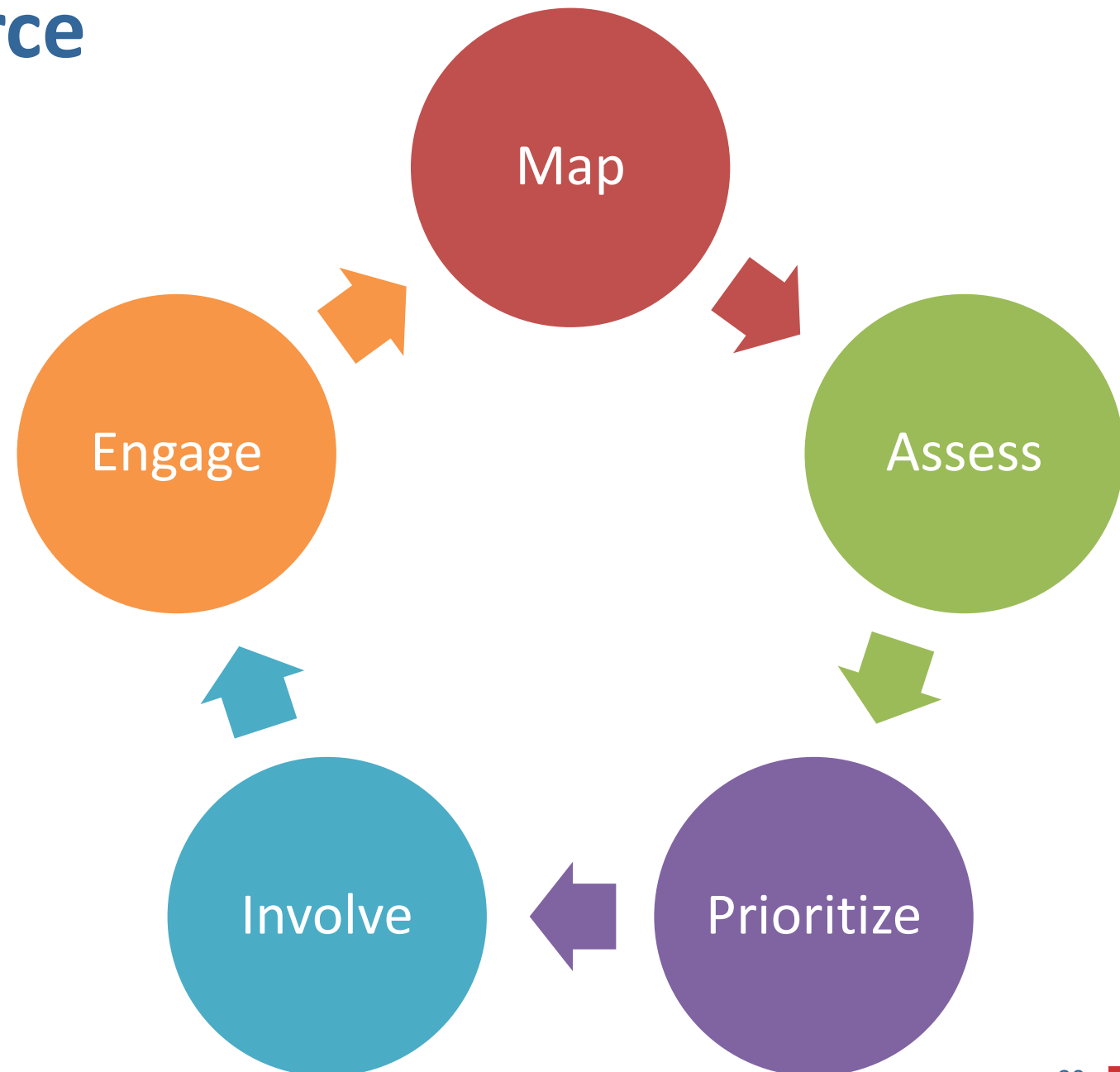
Social Media
33%

Opportunities to Take Action

- **Perception problem** – emphasize career opportunities and benefits
- **Promote awareness** – socialize high-tech nature and transferable skills
- **Develop local presence** – local outreach to community members
- **Leverage social media** – attract the younger workforce
- **Increase transparency** – facilitate career navigation and progression
- **Manager modification** – transform your internal culture

Strategies for DEI workforce

- Link efforts to company success
- Widen the Aperture
- Blind hire (phone call first)
- Blended learning
- Expand recruiting area
- Measure diversity demographics
- Offer internships
- Rewrite job listings
- Showcase your diversity
- Create a DEI statement
- Offer trainings
- Host discussions
- Diversify leadership
- Employee development plan
- Engage local teachers



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The Manufacturing Talent Pipeline Is Broken

Here Are 10 Ways To Fix It

PROBLEM

Manufacturing is dead last among career industry choices for 18-24-year olds.

WE NEED TO ATTRACT NEW TALENT

1. Raise awareness of manufacturing as a great career with competitive pay, benefits, and opportunities.
2. Find immersive ways (e.g. factory visits, camps, technology showcases) to show students that manufacturing can be an exciting STEM career.

PROBLEM

Manufacturing is 83% white and 74% male.

WE NEED TO MAKE OUR FACTORIES AS DIVERSE AS OUR COMMUNITIES.

3. Create innovative on-ramps for veterans, people with disabilities, people in disadvantaged communities, people of color, women, and the underemployed.
4. Increase benchmarking and training on Diversity & Inclusion to help create more equitable manufacturing workplaces.

PROBLEM

57% of manufacturing companies say they can't find the skilled workers they need to grow.

WE NEED TO INNOVATE TRAINING

5. Pioneer an innovative mix of college, training, and company programs that are industry-led, flexible, and stay ahead of the technology curve. Use what's already working. (e.g. Sector Partnerships)
6. Invest in more German-style apprenticeship, internship, and skills certification programs. Expand programs that are working.

PROBLEM

The vast majority of Americans say they won't encourage their children to pursue manufacturing careers because most don't believe these jobs are interesting, rewarding, clean, safe, stable, or secure.

WE NEED TO CELEBRATE MANUFACTURING AS A GREAT PLACE TO WORK

9. Encourage companies to build winning workplace cultures and pioneer ways to be great employers.
10. Provide forums and workshops to teach and share workplace culture best practices.



If we get this right...

Northeast Ohio can be the capital of manufacturing education in the U.S. We can finally close the skills gap and help our regional industry grow into a global leader. We can help thousands of people move from poverty to prosperity every year.

