Facing the generational skill gap in manufacturing

Can technology bridge the gap?

The cause

Evolution of jobs in manufacturing

Post-war boom

Manual labor

Manual jobs require vocational skills and on-the-job training through apprenticeships.

Construction boom · Highways · Consumer spending

Information age

Automated processes

Industrial engineers and IT technicians are in high demand as production lines become automated.

Robotics · High tech components · e-Commerce · Imports

New economy

Customer-centric

Jobs require problem-solving, innovative thinking, and STEM skills to meet global pressures.

Service · Supply chain visibility · Innovation

1940 2020

10,000 baby boomers are eligible to retire every day.

Defining the gap

Market expectations: A heavy burden to be supported by today's overstretched workforce

Yesterday's golden age

- in 1950, **30% of all US jobs** were in manufacturing.[1]

Today's skilled worker shortage

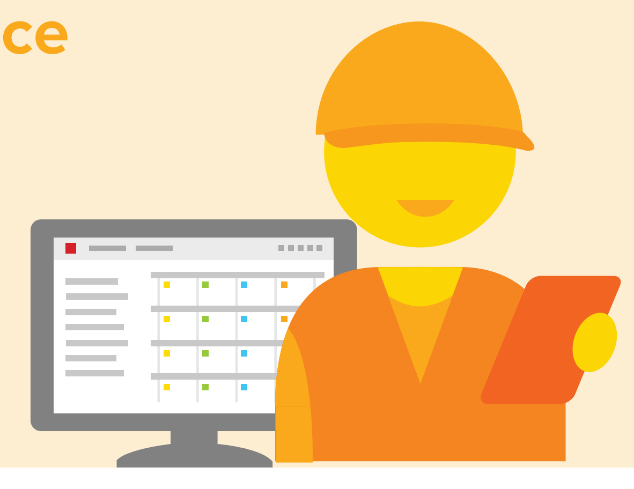
- U.S. manufacturing employs more than 12 million workers or **9% of the workforce**.[2]

- Shortage of applicants with a background in Science, Technology, Engineering and Math (STEM) is most acute for manufacturing[3] leaving **up to 600,000 skilled jobs unfilled each year**[4]
- **52% of teenagers** say they have no interest in a manufacturing career.[5]

- **59% of industrial manufacturing CEOs** are worried about the availability of key skills.[6]

Tomorrow's collaborative workforce

- Manufacturing rebounds with an agile, innovative workforce comfortable with advanced IT solutions
- According to Deloitte, by 2025 **millennials will comprise 75% of the workforce**, yet **65% of millennials say they feel unqualified** to take on a leadership role. Who will lead the journey? [3]



Global Recruiting

By 2020 the global workforce will contain 38-40 million **fewer** skilled workers (with college or postgraduate degrees) than employers will **need**, forcing manufacturers to recruit worldwide.[7]

> "To understand the skills gap, we have to understand how the public understands manufacturing.... They see it as a dark, dirty, dangerous industry." [8]

How technology spans skill gap AND generation gap

Modern ERP solutions reinforce the traditional best practices, plus meet expectations of millennial generation users

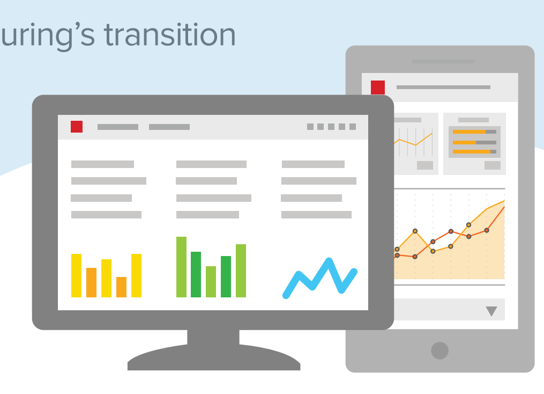
Senior managers

Age 40+

- School of hard knocks
- Highly experienced with knowledge to pass on
- Reluctant to change, less patient with new technology

Modern technology

Allows both generations to meet in the middle and support manufacturing's transition



Modern ERP

Helps baby boomers

- Share tribal knowledge with new recruits through the use of collaborative tools
- Learn to use and adopt new applications by providing intuitive, modern interfaces

Helps millenials

- Get up to speed quickly on best practices
- Easily obtain critical historical data for reference and training

MIllennial workers

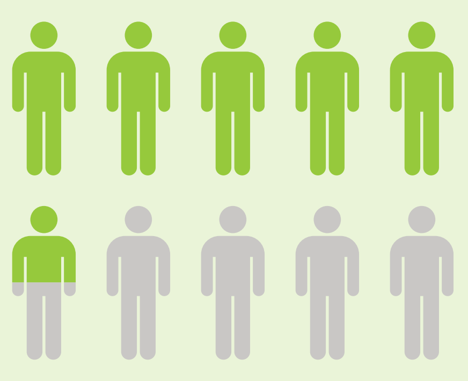
Age 20-30

- College educated
- Less experienced, impatient with old-school processes
- Comfortable with technology

Employees 18-35 years old are twice as likely to leave a company when they are frustrated with the usability of software[9]

Bright future

Modern technology helps recruit and retain new workers, propelling manufacturing to a new era of innovation



Technology engagement is increasing

55% of a company's employees use ERP; **63%** use ERP when deployed in the cloud. (unlike in the past when only select super users were granted access)[9]

Workforce is going mobile

54% of plant supervisors receive information in real-time through mobile devices.[10]

Optimism is growing

71% of manufacturing CEOs say they are optimistic about the future.[11]

Preparing for the future

Federal initiatives plan to prepare 100,000 new STEM teachers to train the next generation of engineers and technicians[12]

infor™

Generational Gap research and infographic sponsored by Infor, provider of modern ERP software solutions for the manufacturing industry.

To learn more, download "*Ten things you should know about the Manufacturing Skills Gap*"

Download now ›

---

[1] MIT news
[2] National Association of Manufacturers
[3] Deloitte, "Leaders at all levels"
[4] Deloitte
[5] Economic Public Institute
[6] PwC CEO survey
[7] McKinsey & Company
[8] US NEWS
[9] Mint Jutras: Bridging the Generational Skill gap
[10] LNS Research
[11] PwC: Manufacturing Barometer
[12] whitehouse.gov

INFDTP1799501-en-US-0917-1