The Skills Gap in U.S. Manufacturing 2015 and Beyond

Overwhelming Support: U.S. public opinions on the manufacturing industry

Report highlights
Citations

Public perception of manufacturing


Skills gap in U.S. manufacturing


Short URLs for Twitter

Public perception: bit.ly/1pz5iz0
Skills gap: bit.ly/1DUe6c6
The 2015 Manufacturing Institute and Deloitte Skills Gap study confirmed there is still a significant shortage of talent in U.S. Manufacturing and is only projected to grow over the next decade.

84% of executives agree there is a talent shortage in U.S. manufacturing and...

SIX out of TEN open skilled production positions are unfilled due to talent shortage.

It takes 90+ days to recruit highly skilled workers.

- Skilled production workers: 70 days
- Engineers, researchers, scientists: 94 days
- Other areas: 48 days

Even when 80% of manufacturing companies are willing to pay more than the market rates in workforce areas reeling under talent crisis.
The skills gap is widening

Over the next decade nearly **3 ½ Million** manufacturing jobs need to be filled

The skills gap will likely result in **2 Million** of those jobs going unfilled

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**2.7 Million**

baby boomer retirements

**700K**

manufacturing jobs from economic expansion

**Only 1.4 Million**

jobs are likely to be filled

leading to **2 Million**

manufacturing jobs unfilled due to the skills gap

**3.4 Million**

manufacturing jobs needed over the next decade

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**The implications are significant**

Every job in manufacturing **creates another 2.5 new jobs** in local goods and services

For every $1 invested in manufacturing, another $1.37 in additional value is created in other sectors

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By 2025 the skills gap will grow to **2 million**

In 2011, **600K** jobs were unfilled due to the skills gap

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The **retirement** of baby boomers, **strength of the economy** and **attractiveness of the industry** are ranked among leading factors impacting the talent shortage.

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Sources include: Bureau of Labor Statistics (BLS) and Deloitte analysis
1 Milken Institute and Economic Planning Institute.
2 The U.S. Department of Commerce, Bureau of Economic Analysis.
Talent shortage significantly impacts manufacturers

The Skill gap negatively influences operations, company growth and the bottom line in a variety of ways.

82% of executives believe the skills gap will impact their ability to meet customer demand.

Executives also agree it will impact their ability to:

- 78% implement new technologies and increase productivity
- 69% provide effective customer service
- 62% innovate and develop new products
- 48% expand internationally

The implications are significant

Between 2004 and 2012, U.S. manufacturing industry lost $9 billion to $25 billion per year of output because of open positions that went unfilled.1

1 Bureau of Labor Statistics and Deloitte Analysis

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Closing the gap: attracting and developing talent is essential

Adding to the complexity is finding workers with the skills required to meet today’s advanced manufacturing requirements. A holistic approach is needed in order close the gap and remain competitive.

Start by developing and retaining current workforce:

The most effective skilled production workforce development strategies cited by executives

- 94% Internal employee training and development
- 72% Involvement with local schools and community colleges
- 64% External training and certification programs
- 49% Creation of new veteran hiring programs

Then employ methods to attract and develop the right people:

Find: Employ advanced analytics to enhance candidate screening practices

Develop: Invest in internal training programs and external partnerships that build critical skills

- Dream It. Do It.™ | Skills Certification System | STEP

Target: Develop integrated recruiting and communications approach with the target in mind

Grow: Change the public’s perception in order to grow the overall pool of interest

- Manufacturing Day | Manufacturing Institute and Deloitte Public Perception Study

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Americans value a strong manufacturing sector

The 5th Manufacturing Institute and Deloitte Public Perception study confirms Americans remain steadfast in their support of manufacturing and also uncovers opportunities to strengthen interest, support, and engagement in the U.S. manufacturing industry.

90% of Americans believe manufacturing is very important to economic prosperity

Manufacturing is ranked among the most important domestic industries for helping maintain a strong national economy

Americans believe the industry can compete globally

<table>
<thead>
<tr>
<th>Competitive advantages identified by respondents</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Technology use and availability</td>
<td>73%</td>
</tr>
<tr>
<td>Research and development capabilities</td>
<td>72%</td>
</tr>
<tr>
<td>Energy availability</td>
<td>69%</td>
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</tbody>
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If given an opportunity to create 1,000 new jobs in their community, manufacturing tops the list

#1 Manufacturing Facility
2. Technology development center
3. Energy production facility
4. Healthcare facility
5. Retail center
6. Communications hub
7. Financial institution

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Yet Americans are reluctant to choose careers in manufacturing

While more than half of respondents believe manufacturing jobs are interesting and rewarding, negative perceptions toward manufacturing still exist and need to be addressed.

<table>
<thead>
<tr>
<th>Only 1 out of 3</th>
<th>Only... 1/2</th>
<th>Only... 1/3</th>
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<tbody>
<tr>
<td>Parents would encourage their children to pursue a career in manufacturing</td>
<td>Of Americans believe manufacturing jobs to be <strong>interesting and rewarding</strong></td>
<td>Agree that manufacturing jobs are increasingly available and accessible</td>
</tr>
</tbody>
</table>

**WHY?**

- 66% worried about job security and stability
- 53% worried about unfavorable perception of the industry

53% believe school systems provide exposure to manufacturing skills

30% believe school systems encourage students to pursue manufacturing careers

**Reasons for not encouraging child or younger generation**

- Three out of four Believe manufacturing jobs are the first to be moved to other countries

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Americans agree action and investment is necessary to drive manufacturing competitiveness and when the industry engages, perceptions change.

**82%** agree U.S. healthcare costs need to decrease

**80%** agree U.S. needs a comprehensive energy policy

**78%** agree U.S. education system needs reform

**82% of Americans** believe the U.S. should further invest in the manufacturing industry

Americans indicate targeted programs would increase interest in manufacturing careers

- **72%** Internships, work study or apprenticeship
- **68%** Certification or degree programs for manufacturing skills training
- **61%** On campus recruiting by manufacturing firms
- **52%** Tours of advanced manufacturing facilities for students

*Industry familiarity increases positive perception*

- Those familiar with manufacturing are **2X as likely** to encourage a child to pursue manufacturing
- Ranked manufacturing **3rd as career choice** out of 7 key industries versus 5th overall

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