

# MANUFACTURING IN MOTION: TRANSFORMING FOR A NEW INDUSTRIAL ERA

Technological advancements are transforming the manufacturing sector and ushering in a new industrial era. A survey of over 500 manufacturing executives explores their changing strategies, shifts in talent needs and what the most innovative and tech-forward companies do differently.

Developed by  
**The Economist** Intelligence Unit

## Implementing a transformation strategy

“We are beginning to embrace the Fourth Industrial Revolution to competitively capture new business opportunities.”

**Paul Bakus, President, Nestlé Corporate Affairs**

**63%** of manufacturers have implemented transformation initiatives



Nearly **1 in 5** are developing a transformation strategy



Most common strategic initiatives:



**Increasing operational efficiency**  
**58%**



**Creating new products and services**  
**54%**

**3 in 4** manufacturers who have implemented transformation initiatives have seen benefits

Manufacturers who have implemented transformation initiatives have seen benefits



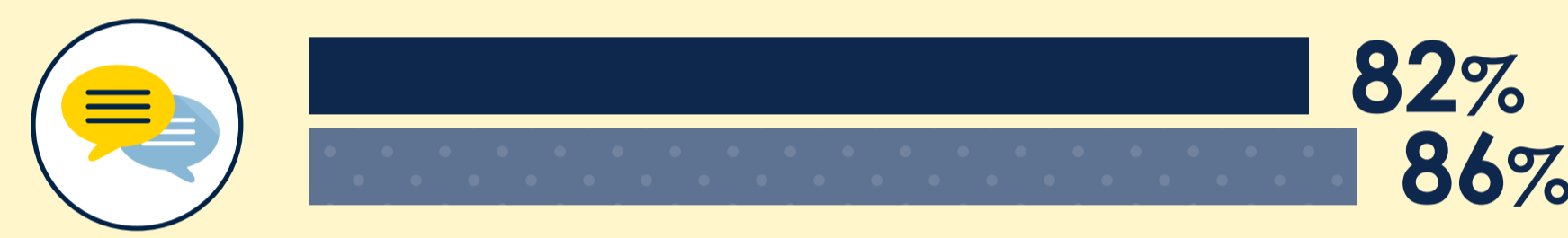
Manufacturers expect further improvements:

■ Currently ■ In three years

**Increased revenues**



**Collaboration and communication**



**48%** of manufacturers expect industrial transformation to enhance productivity



**42%** expect to benefit from more efficient logistics



## Investing in talent

“We are seeing an effort across community colleges throughout the country to build industry partnerships and think creatively about making the adaptable skills needed in manufacturing today.”

**Lee Wellington, Founding Executive Director, Urban Manufacturing Alliance**

More than **1 in 3** manufacturers say difficulties recruiting/retaining employees with the right skills is their greatest challenge

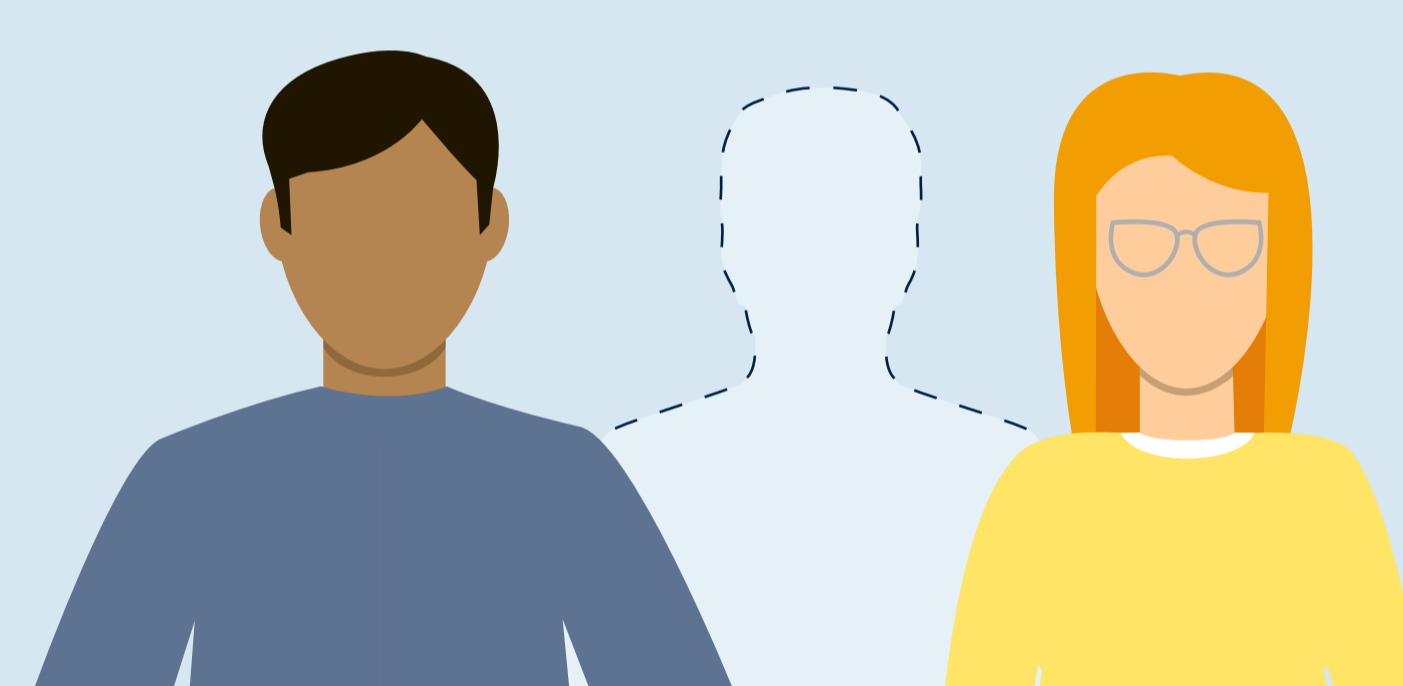


Largest talent hurdles in three years:

**42%** expect difficulty recruiting new employees with the prerequisites for on-the-job training



**38%** say there will be a lack of candidates who are interested in working in manufacturing



Most effective methods to develop skills:

**Reskill current employees**



**Collaborate with industry partners**



**Support job rotation**



**Collaborate with educational institutions**



Approximately

**7 in 10** manufacturers say workers will lack the basic technical skills needed for retraining in the next three years

Manufacturers say workers will lack the basic technical skills needed for retraining in the next three years



## Innovating for success

“There is great appeal in the modern, more entrepreneurial, higher tech manufacturing.”

**Mark Muro, Senior Fellow, Metropolitan Policy Program, Brookings Institution**

The EIU classifies leaders as the **1 in 5** manufacturers who rate their organizations as “well above average” in innovation and adopting advanced technologies



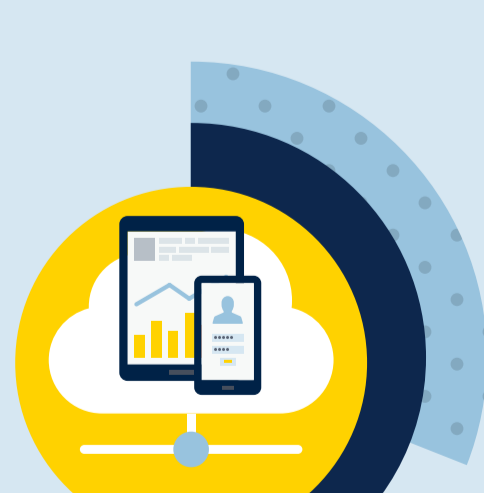
**69%** of manufacturers agree that in three years leading-edge technologies will provide an advantage over competitors in low-wage countries



Leading-edge technologies adding value over the next three years:

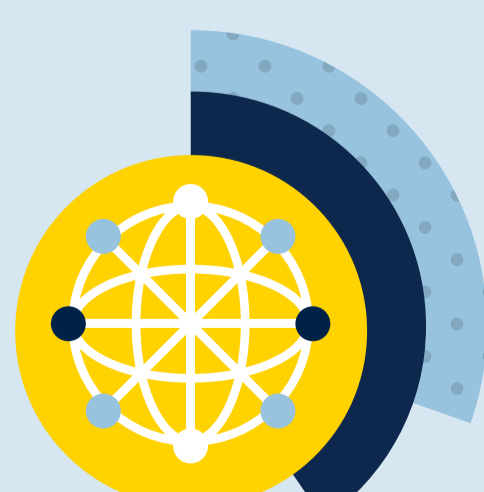
**Cloud and mobile technology**

■ Leaders 41%  
■ Others 31%



**Internet of Things**

■ Leaders 39%  
■ Others 29%



**Big data and/or computing advancements**

■ Leaders 39%  
■ Others 26%



The impact of new technologies varies across industries within manufacturing:

**Advanced manufacturing methods**

■ Machinery 50%  
■ Overall 37%



**Cloud and mobile technology**

■ Computers and electronics 45%  
■ Overall 33%



**Biotech and materials science**

■ Chemical products 39%  
■ Overall 19%

