

American Manufacturing: The Next Generation

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The Great Recession has waged on in this country for several years and while many signs are pointing to recovery, the bounce back has remained slow and uneven among various industries and regions. It may be a surprise to some of you that the industry that is leading much of this recovery is manufacturing. Does this come as a surprise to you? Did you think that manufacturing was part of America's past – lost to cheaper foreign markets like China or Mexico?

It is true that manufacturing has a rich history in America. The industrial revolution of the 1800s created a boom in industrial companies that established this country as the manufacturing giant of the world well into the late twentieth century. Huge corporations like U.S. Steel, General Motors and Westinghouse built large factories in small towns and large cities alike to produce the goods that consumers were eager to purchase. Many of the factory workers were blue collar employees who had hard physical jobs and most skills were developed on-the-job. Most of those employees would remain employed at a company for their entire working careers.

Certainly, times have changed for manufacturing businesses and workers. What has not changed is the importance of manufacturing to the U.S. economy. According to the U.S. Bureau of Economic Analysis, the manufacturing sector produces \$1.6 trillion of value each year for our economy, or 11.2 percent of our GDP. The U.S. Bureau of Statistics reports that nearly 9 percent of the country's workforce, or 12 million Americans, are directly employed in the manufacturing field. Today's leading manufacturing companies are a key source of innovation for new products and services that lead to more jobs and taxable revenue. A series of studies by the Manufacturing Performance Institute and the American Small Manufacturers Coalition have been tracking these successful businesses, that they have labeled, *Next Generation Manufacturing*.

According to the definition, Next Generation Manufacturers are companies who have focused energy and resources in all or most of these six strategies:

1. **Customer-focused innovation:** develop, make and market new products that meet customer needs
2. **Engaged people/human capital acquisition:** recruit, hire, develop and retain the best people
3. **Superior processes/improvement focus:** continuous improvement and productivity
4. **Supply-chain management and collaboration:** increase response time and reduce delivery cost
5. **Sustainability:** waste and energy-use reduction
6. **Global Engagement:** exporting and importing

The National Institute of Standards and Technology under the Department of Commerce has managed the Manufacturing Extension Partnership (MEP) program for more than twenty years to engage with U.S. manufacturers to help them develop and implement these strategies. With over 1,300 technical experts – located in every state – the MEP program is looking to put more manufacturers on the path of the Next Generation Manufacturing strategies to strengthen our national manufacturing economy. In 2011, MEP centers served 33,838 manufacturers nationwide. Company surveys during this time reported that projects with MEP centers resulted in \$8.2 billion in increased and retained sales, \$1.3 billion in cost savings and more than 60,000 new and retained jobs.