



FAQs



Next Generation Manufacturing Study

1. What is the Next Generation Manufacturing Study?

The Next Generation Manufacturing Study is a one of the most comprehensive efforts ever undertaken to assess the strategic priorities and implementation progress of manufacturers in California and across the nation. The study identifies performance benchmarks and establishes a baseline to measure future progress. The resulting Next Generation Manufacturing “scorecard” provides a gap analysis between where we *are* today and where we *need to be* to win today and the decade ahead. The future of America’s manufacturing industry hinges on its ability to execute Next Generation Manufacturing strategies.

2. What is Next Generation Manufacturing?

Next Generation Manufacturing refers to a framework of strategies that will drive manufacturing growth and profitability in the 21st century. They are: customer-focused innovation, advanced talent management, systemic continuous improvement, global engagement, extended enterprise management and sustainable product and processes. To remain competitive now and in the future, manufacturers need to achieve world-class performance in a select few of these attributes and parity with key competitors in all others.

The attributes of Next Generation Manufacturing were developed by manufacturers, industry thought leaders and Manufacturing Extension Partnership (MEP) centers, and reflect the best practices and performance strategies of world-class companies.

3. Who conducted the study?

The Next Generation Manufacturing Study is part of a national research effort coordinated by the [American Small Manufacturers Coalition](#) (ASMC) in partnership with other MEP centers across the nation. The study was conducted by the Manufacturing Performance Institute (MPI), a global research firm and thought leader on manufacturing performance, management and customer value.

4. What are the key challenges facing manufacturers?

Manufacturing is changing and in profound ways. Fierce competition, global markets, changing workforce demographics and the need to manage complex supplier networks are just a few of the challenges facing today’s manufacturers.

Recent history shows that the world-class performance benchmarks of today will be the standard performance expectations of tomorrow. To succeed, manufacturers must adapt to the fast-changing realities of the global economy and make the transition to Next Generation Manufacturing.



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5. Why is Next Generation Manufacturing important to California?

California has a \$200 Billion industrial economy that employs 1.5 Million in Manufacturing and supports thousands of jobs in related industries such as logistics, transportation and business services. Manufacturing offers higher wages and benefits than found in most other industry sectors, with jobs ranging from highly skilled production workers to scientists to engineers. U.S. manufacturers are responsible for more than 70% of all business R&D. Manufactured goods represent two-thirds of U.S. exports, which represent a significant growth opportunity for the nation's manufacturers.

California contributes 12.6% of the U.S. Manufacturing GDP, higher than any other state, with Texas being second at 9.1%. Holding this large share of the U.S. industrial economy makes California manufacturing essential not only to the welfare of its own people and government, but also to the United States as a whole.

6. What can manufacturers do to reach these benchmarks?

First and foremost, make a serious commitment to invest in change and transformation. Implementing change on this scale requires a fundamental shift in thinking on the part of company owners, management and employees. Manufacturers should seek out public and private resources for assistance, network and share best practices with other firms and empower employees to be active partners company's success.

A key first step in any manufacturing improvement initiative is to benchmark and compare performance; the study provides these benchmarks.

7. What are some private and public resources available to help manufacturers make the transition to Next Generation Manufacturing?

Some resources include:

- California Manufacturing Technology Consulting
- Biocom
- Procurement Technical Assistance Centers (PTACs)
- Small Business Development Centers (SBDCs)
- Los Angeles Economic Development Corporation
- Kern County Economic Development Corporation
- San Bernardino Economic Development Corporation
- San Diego Economic Development Corporations

8. How many manufacturers participated in the study?

More than 2,500 U.S. manufacturers, including manufacturers in California, responded to the web-based study questionnaire.



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9. What will be done with the study results?

Study results will be widely disseminated to manufacturers, business leaders, elected officials, policymakers, the media and general public.

The study results provide a wealth of valuable data. Manufacturers can see how they rank against world-class performance benchmarks and target improvements where needed. Knowing where the critical needs are, policymakers can strengthen and improve programs and services supporting manufacturers.

For example, a low score on global engagement may indicate to policymakers actions are needed to help manufacturers sell into overseas markets.

10. Is Next Generation Manufacturing appropriate for small as well as large companies?

Absolutely, though small manufacturers lag larger firms in the implementation of next generation strategies. The study found that one third of small manufacturers (less than \$10 million in revenue) surveyed were not at or near world-class in *any* of the next generation strategies. Given the escalating realities of 21st century hyper-competition, small manufacturers will need to significantly ramp up their next generation performance capabilities.

11. How does the global recession impact Next Generation Manufacturing?

Many manufacturers are using Next Generation Manufacturing strategies to survive the recession and lay the groundwork for recovery. For example, lean manufacturing remains a dominant strategy to improve efficiency and reduce costs in all facets of the business enterprise.

While recession challenges the resiliency of American manufacturers, the impending recovery will test their preparedness to win in a rapidly growing, highly competitive, global economy. U.S. manufacturers face a real possibility of surviving the downturn but losing the economic future – if competitors elsewhere in the world are better positioned to capture the next decade's dynamic market growth.

As in past recessions, forward-looking companies will use the downtime to improve their operations and plan for growth.

12. Where can I go to get more information on the study?

www.cmtc.com