# Next-Generation Manufacturing

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By RACHEL LEISEMANN IMMEL, Associate Editor, *Industrial Maintenance & Plant Operation* (*IMPO*)

According to the 2011 Next Generation Manufacturing Study, now is a critical time for small American manufacturers. The economic downturn has been difficult, especially for small manufacturers, that may struggle to keep pace with larger competition on a global playing field. Small manufacturers (less than $10 million in revenues) need to assess whether they have the strategies in place to capture competitive advantages, and the ability to put those strategies into practice to be successful in a global marketplace.

The 2011 Next Generation Manufacturing (NGM) Study provides small manufacturers a path to follow to achieve success in the next generation, offering strategies to surpass the competition, best practices to support those strategies and performance goals to measure their progress.

“The results of the study reinforce how critical it is for U.S. leaders to put, and keep in place, existing support resources for small manufacturers as they assess whether they have the work force, business systems, equipment and strategies in place to successfully compete in the future,” says Carrie Hines, Executive Director of American Small Manufacturers Coalition (ASMC). “Small businesses that don’t have deep pockets like some larger corporations can really benefit from added resources that help them compete in today’s economy.”

The economic downturn is just one challenge that small manufacturers face, but the strategies and trends that the NGM study unveiled can help them be successful. The

NGM study, conducted by the Manufacturing Performance Institute (MPI) and the ASMC, focused on awareness, best practices and achievements related to six key strategies — innovation, human capital, process improvement, supply chain management, sustainability and global engagement.

“We find that most manufacturers are recognizing the importance of these manufacturing strategies, but there are some challenges along the way,” MPI CEO John Brandt says. “One of the things we found is that, in fact, there is going to be a next generation of manufacturing leaders.”

A generation of U.S. manufacturing leaders is about to retire. The study found that a majority of U.S. manufacturers anticipate a change in leadership within the next five years. 30 percent are planning to have a new leader, and 29 percent said that a change is possible. This an increase over those reporting a probable succession change in the 2009 NGM study, likely due to aging baby boomers who are approaching retirement age.

“We’ve got a lot of firms reporting that they don’t have the talent — or even the talent-development programs — to grow leadership going forward,” Brandt says, citing a retiring workforce and the skills gap. “A very small percentage of manufacturers are ready to move forward into the next generation.”

Mary Isbister, president of Wisconsin-based metal fabricator GenMet Corp., says that “a good business leader realizes the companies with the best players win.”

“There’s absolutely a dearth of manufacturing talent available today,” she says, adding that “manufacturing isn’t a glamorous profession for a lot of folks these days.”

Isbister stresses, because there’s no overflow of manufacturing professionals, that it is critical to keep the talent that a company has attracted actively engaged, and make a commitment to long-term employment. “Only with that talent,” Isbister says, “and it’s all the way through the organization — only with that talent are you going to be able to continue to compete.”

The NGM study strategizes that manufacturers should “secure a competitive performance advantage by having superior systems in place to recruit, hire, develop and retain talent.” It adds that key elements to accomplishing this are having a specific plan in mind and functional involvement in human-capital management. Half of all manufacturers said that they understand the importance of this, while 15 percent of manufacturers have no strategy at all to get, and retain, quality employees.

Brandt says, “We find a significant execution gap.”

“One of the important things to recognize about these strategies is that, in order for them to be truly sustainable, they have to become how you do business,” Isbister says. “They can’t remain just strategies that you’re constantly trying to adapt to or adopt. They have to actually become how you do business.”

The NGM study also discovered that small manufacturers, when compared to large manufacturers ($100 million or more revenues), have trouble implementing next-generation strategies. But manufacturers, both small and large, are seeking support from outside organizations.

“The message there is that manufacturers in a collaborative, new-age economy are not looking to do everything themselves,” says Brandt.

A majority of manufacturers reported that their organizations have been positively impacted by industry associations, state manufacturing associations and consulting firms. Manufacturers in the NGM study said that they had sought support services for everything from research and development (52 percent) to regulatory and compliance issues (67 percent).

While small manufacturers are reaching outside their own walls, few are going far enough. Only 25 percent of manufacturers reported that they are near, or are, a world-class global player. 32 percent of manufacturers said they have no strategy in place to become engaged in the global marketplace.

“Global engagement is key,” say Isbister. “A lot of small manufacturers don’t recognize how important it is to understand how to be able to participate globally. As a contract manufacturer, many of my customers are exporters outside of the U.S., and if I don’t understand how that process works, I will not continue to be part of their supply chain.”

To survive in the next generation of manufacturing, small manufacturers need to be able to compete. They will need to have the ability to secure business advantages by having people, partnerships and systems in place that are capable of engaging in global markets.

“I’m a huge advocate of next-generation manufacturing,” Isbister says. “I believe that if organizations can not only adopt these strategies, but also truly make them how they do business, they will allow the United States to reemerge as the manufacturing powerhouse it has been through history.”

*The full 2011 Next Generation Manufacturing Study can be found at* www.smallmanufacturers.org *[1].*

*What’s your take? Let me know via* rachel.immel@advantagemedia.com *[2] or please feel free to comment below!*

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