

Response to the RFI is voluntary and submissions should clearly indicate which RFI questions are being addressed by each comment. Comments will be accepted by e-mail only and must be sent [to meprfi@nist.gov](mailto:meprfi@nist.gov) with the subject line "MEP Competitive Awards Program RFI".

NIST is specifically interested in receiving input on one or more of the following questions:

1. What are the key problems and issues facing small U.S. manufacturers and their competitiveness and opportunities for growth in the near-term (1-2 years), mid-term (3-5 years) and/or long-term (>5 years)?

SCMEP Response:

- *The following issues are not time bounded:*

*The most significant issue facing small U.S. manufacturers is having a qualified workforce, and secondarily, having effective marketing and sales programs (most of these firms have a single or only a few customers, so creating additional demand for their goods and services is key to growth). Additionally, they face increasing pressure to obtain and maintain international certifications, and they always struggle with competitive pressure to reduce costs and achieve price competitiveness.*

- *mid-term (3-5 years) and/or long-term (>5 years)*

*The most significant mid and long term issues facing small U.S. manufacturers include innovation, robotics and automation and replacing an aging workforce.*

2. What advanced manufacturing technologies are/will be needed by small U.S. manufacturers for the companies to be competitive and grow in the global marketplace in the near-term (1-2 years), mid-term (3-5 years) and/or long-term (>5 years)?

SCMEP Response: *The following advanced manufacturing technologies are/will be needed by small U.S. manufacturers for the companies to be competitive and grow in the global marketplace in all future time periods:*

- *Development of Effective, Mature Supply Chain Strategies, which includes*
  - *Achieving Supply Chain Visibility*
  - *Achieving high rates of Supplier Collaboration*
  - *Creating and maintaining Reliable Processes throughout the Supply Chain*

- a. What would be the appropriate Manufacturing Readiness Level or Technology Readiness Level for those technologies in order for small U.S. manufacturers to consider adoption?

SCMEP Response:

*These firms must successfully implement advanced ERP or other appropriate IT systems (modern Supply Chain Control Tower technologies and methods) that include mature Demand Planning, Capacity Planning, Distribution Planning and Global Synchronous Execution capability.*

- b. What information will be required for small U.S. manufacturers to understand a technology or related group of technologies and the risks and opportunities associated with making or not making an investment in any given technology?

SCMEP Response:

*These firms must adopt and successfully use Total Cost of Ownership decision models to best understand the technologies, services, costs and other risks and opportunities associated with all investments, and their future impacts.*

- c. How is the information about advanced manufacturing technologies best delivered to small U.S. manufacturers and/or MEP Centers that support those small U.S. manufacturers?

SCMEP Response:

*The best approach would be to create and support the required skills and expertise within the MEP Centers or within MEP Center alliance members and partners to design, develop and deliver these advanced manufacturing technologies to small U.S. Manufacturers.*

3. What technologies and/or business models are important to small U.S. manufacturers as they choose and participate in any particular supply chain?

SCMEP Response:

*To be successful in the future, small U.S. manufacturers are going to have to adapt their processes to best create value as a collaborative member of an effective supply chain. This may require small manufacturers to be more entrepreneurial, and to strive to reduce the distance between themselves and those that directly derive benefits from their goods and services.*

4. What complementary business services, including information services, are and/or will be needed by small U.S. manufacturers and/or MEP Centers to take full advantage of advanced manufacturing technologies at the company or supply chain level?

SCMEP Response:

*To take full advantage of advanced manufacturing technologies, small U.S. manufacturers and MEP Centers must develop mature Information Technology capability.*

5. Are there any other critical issues that NIST MEP should consider in its strategic planning for future investments that are not covered by the first four questions?

SCMEP Response:

*The most significant emerging issue for future success is to fully understand and embrace the concepts and tools associated with Supply Chain Control Towers. This ability is critical to achieving Supply Chain Visibility, and that is the critical capability to fully leverage Analytics supporting Demand Management, Collaboration and true Value-Added supply chain processes in a Risk Appropriate environment.*