Sent: Thursday, January 12, 2017 11:21 AM
To: meprfi <meprfi@nist.gov>
Subject: MEP Competitive Awards Program RFI Responses

To Whom It May Concern,
Please see below Merrill Technologies Group responses to the 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 to 2 years), mid-term (3 to 5 years) and/or long-term (more than 5 years)?
We believe that the main issues/problems facing small U.S. manufacturers will be possible loss of business to foreign suppliers, a need to better manage our own supply chains to reduce cost, improve quality and delivery, allow flexibility, understand our place in our customers' supply chains, gain ability to share status and other information with downstream customers, and increased capability to address cybersecurity concerns.
(2) What advanced manufacturing technologies are and/or 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 to 2 years), mid-term (3 to 5 years) and/or long-term (more than 5 years)?
Supply chain management software, awareness of supply chain dynamics and risks, use of tracking technology such as GPS and RFID. Longer term strategic selection of their own suppliers and customers, redesign of their own supply chains.
(a) What would be the appropriate Manufacturing Readiness Level [6] or Technology Readiness Level [7] for those technologies in order for small U.S. manufacturers to consider adoption?
During demonstration phase, partners would work directly with technology providers to test/prototype training materials and guideline documents and templates, and software tools. This would be TRL/MRL 4. As development matures, a broader rollout would be appropriate at higher TRL/MRL values, with continuous improvement activities remaining at TRL/MRL 4.
(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?
This needs to be determined, but could be developed by a partnership of OEMs and logistics providers with MEPs and community colleges.
(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?
Multiple delivery pathways for different targets: university executive programs for managers and MEP staff, MEP training for key personnel in supplier organizations, community college curricula for pipeline of employees.
(3) What technologies and/or business models are important to small U.S. manufacturers as they choose and participate in any particular supply chain?
This should be determined by a study involving university supply chain centers and their OEMs along with MEP representatives. But some technologies likely to be needed include supplier evaluation (cost, quality reliability), supply chain visibility, cybersecurity and sustainability metrics.

(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?
To be determined by a study. Could be opportunity for new business segment catering to supply chain management for second and third tier suppliers.
(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?
It is important to engage all stakeholders in planning, including university academic supply chain centers and affiliated industry members.

Best Regards,

[redacted]

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TECHNOLOGIES GROUP