January 12, 2017

To Whom This May Concern:

I am pleased to provide this letter of support for the proposed research consortium being led by the Michigan State University Midland Research Center for Value Chain Creation, the Manufacturing Extension Partnership, and the Michigan Economic Development Corporation, which is designed to assist small and mid-sized businesses improve their manufacturing and supply chain capabilities.

Through the efforts of MRIVCC and Consortium organizations, American manufacturers are becoming increasingly aware of the importance of creating innovative and value-added supply chains that will help make their processes and products more efficient, cost-effective, and competitive in the global market. Unlike large manufacturers (OEMs) that have the financial resources to hire qualified supply chain managers, many small-to-medium-sized companies cannot hire managers with the level of expertise, training, and experience to understand customer requirements, evaluate their production processes, and develop the capabilities that would make them more competitive in the marketplace and landing supplier contracts with manufacturers. Needed skills include the ability and confidence to evaluate, upgrade, and measure their production processes to accurately calculate such things as return on investment, changes that would make them more efficient and competitive, and ways to position their company to better qualify them as OEM suppliers.

I am also pleased to provide the attached input to the Request for Information phase of the proposal effort by the research consortium by including our thoughts, expertise, and experiences that may assist in responding to the questions posed by NIST.

In summary, I cannot overemphasize the importance of this program to help U.S manufacturers provide gainful employment, innovate, and compete in the global economy. The proposed approach by the Consortium will help provide the information resources, tools, and education needed by small-to-medium-sized companies in the design, implementation, management, and transformation of value chain management systems that will help them achieve their strategic and operational goals. I strongly recommend that the MRIVCC-led Consortium proposal be very seriously considered for funding under the NIST initiative.

Please do not hesitate to contact me with questions or for further discussion. My contact information is Alicia@pipassion.com   . Thank you for the opportunity to provide my support.

Sincerely,

Attachment

Cities Rising Technologies (CRt) is happy to provide our thoughts, expertise, and experiences that may assist you in responding to the questions posed by NIST. CRt is an L3c social enterprise that provides services to public and private organizations in collecting and analyzing data to help organizations visualize how their efforts have contributed to the overall health and wellbeing of our communities. Our decision support systems are based on a set of metrics that focus on the core indicators of societal wellbeing. Our responses to the NIST questions reflect the types of services we provide.

Question 1:
All suppliers – big, small, first-tier, third-tier – in the supply chain need access to data and information resources, metrics and analytics, and training to better understand their place in the supply chain, the value they bring to their customers, and how to calculate return on investment in making their processes more efficient, cost-effective, and qualified to service OEMs and first-tier suppliers. Often, smaller suppliers do not have the resources to conduct these assessments. It is critical for suppliers to monetize the value of modifying their processes to meet customer requirements.

Question 2(a):
Unlike large manufacturers (OEMs) that have the financial resources to hire qualified supply chain managers, many small-to-medium-sized companies cannot hire managers with the level of expertise, training, and experience to understand customer requirements, evaluate their production processes, and develop the capabilities that would make them more competitive in landing contracts with manufacturers. Needed skills include the ability and confidence to evaluate, upgrade, and measure their production process to accurately calculate such things as return on investment, changes that would make them more competitive, and ways to position their company to better qualify them as OEM suppliers.

Question 2(b):
There is a lot of data and information resources that need to be accessible to supply chain managers. But, are they able to access the data in a usable form? The proposed Consortium program can help by providing the information access and delivery systems and toolsets to help small and medium suppliers fill data and analysis gaps (a) initially as a surrogate for having this expertise on staff and (b) ultimately as a means of becoming more proficient in their jobs. To be effective, supply-chain managers need:
- Access to accurate information and sophisticated analytical tools to -
- View and evaluate alternative planning scenarios to -
- Identify and understand problems, uncertainties, risks to -
- Evaluate and adjust to changing conditions, policies, management options to -
- Meet the requirements of multiple stakeholders, the public, regulators, program or business managers, customers, and so on -
- In a responsible, timely, and cost-effective manner.

Question 2(c):
Purpose-built information and decision support systems can be an effective way to bridge the gap in expertise, training, and experience found in lower-tier suppliers and deliver this to suppliers. DSS attributes include:
- Data and Information – datasets, metadata, information resources
- Analytical Tools – statistics, mathematics, spreadsheets, etc.
- Visualization Tools – videos, imagery, maps
- Models – conceptual, empirical

- Best Practices – impact assessment, engineering design, risk management
- Metrics – indicators, mathematical, regulatory requirements
- Expertise – links with organizations and individuals

Question 3:

It is incumbent on OEMs to clearly communicate to their prospective suppliers relevant contracting, quality, and regulatory requirements, recommended manufacturing technologies, process controls, and so on to give smaller suppliers a target to hit. OEMs can play a key role in developing and communicating these requirements as part of the DSS toolkit. Therefore, OEMs must consider and understand the needs of their suppliers. User needs analysis includes the following considerations:
- What questions should suppliers be asking to interrogate databases and analyze the data?
- What tools will help suppliers ask the right questions of their customers to understand and meet the requirements of those customers?
- What tools will help suppliers measure progress?

Question 4:

Measuring success in the process is best developed by working backward:
- Goal and outcome driven
- Measuring and tracking progress and success
- Metrics – methods of analysis used for conclusions or context
- Indicators – something that can be measured and tracked over time
- Data + Tools = Information
- Data to be collected or compiled