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**Manufacturing Council**

Letter from the Council

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**The Future of Manufacturing**

The Lehigh Valley celebrated Manufacturing Day on October 2nd and throughout the entire month of October. On October 7th, I was privileged to participate in a panel discussion at the Lehigh Valley Business Manufacturing Symposium where the theme was “The Future of Manufacturing” and the biggest changes manufacturers will face in the years ahead. A major transformation is coming to the manufacturing sector and we must be ready.

The Internet of Things (IOT) will enable companies of all sizes to have a view of operations that are moving through their supply chains globally. It will radically improve visibility in the entire manufacturing process to a point where sensors will monitor your manufacturing process and become an element in “smart manufacturing” which will enable real time decision making to optimize workflow and staffing.

Cloud-based technologies will level the playing field in the years ahead. The OEM’s will expect or require the entire supply chain to have cloud computing capacities in place.

Additive manufacturing (3-D Printing) will be used extensively to produce spare and obsolete parts. Markets that rely on centralized production are expected to greatly benefit from this technology because of the ability to reduce costs and quicken the barriers to entry. Now we are seeing products built in printers go from plastic resins to metal based materials and this opens up a wide variety of new possibilities.

Next Generation Robotics will play a major part in changing manufacturing workflow and the workforce in the years ahead. The programming and human interfaces will be radically improved and workers will be safe working side by side to these real-time adaptive machines.

If manufacturing companies hope to be ready for the transformational changes, the cornerstone of their business models must be innovation, agility,

collaboration, and the capability to cope with competitors who are global, digitally driven and innovative.