



**Workforce**

# The Rebirth of Manufacturing Jobs

*Glenn Marshall*

In the future, economic and ecological survivability will require businesses and the government to be actively engaged in advancing lean and green principles and best business practices. To meet these challenges the public and private sectors' lean and green advocates are coming together to formulate the next generation of values, principles, initiatives, businesses, and jobs.

Industry will need to retool themselves to become lean\$green enterprises. This will require them to focus on the elimination of waste by minimizing the consumption of resources (human and natural capital) to effectively maximize the creation of value for customers, stakeholders, and communities. Human capital pertains to business practices relating to labor and the community and the region in which a corporation conducts its business. Natural capital refers to sustainable environmental practices; a company endeavors to benefit the natural order as much as possible or at the least do no harm and curtail the environmental impact.

To accomplish this transformation, businesses, with the help of government and other learning organizations, are adopting and deploying proven programs. For example, communities of practice (CoP), business excellence groups, and regional consortia can yield sustainable, growing economic opportunities. In turn, more high-paying lean\$green jobs will be created.

## Why the Need for Consortia?

To sustain and grow the economy, we must all first determine how to breathe new life into manufacturing. Michael Porter, Bishop William Lawrence University Professor at the Harvard Business School, shares his

# Requires a New Way of Thinking and Collaborating

insight on fostering global economic growth and sustainability through the establishment of industry clusters, also referred to as a consortia or consortiums. "The enduring competitive advantage in the global economy lies increasingly in local things — knowledge, relationships, motivation — that distant rivals cannot match," according to Porter. He continues to explain, "Productivity, not exports or natural resources, determine the productivity of any state or nation. Recognizing this, governments should strive to create an environment that supports rising productivity."

A region must continually retool and upgrade itself to become more productive and thus sustainable. Businesses must move to higher levels of skills and technology to continually improve the quality of their products and services. Otherwise, it will always be vulnerable to being beaten by other locations in the country and in the world that have lower wages. The most prosperous companies and regions are successful because they create higher-value products and get higher prices per unit of output.

Porter outlines the benefits of this approach: "Clusters affect competition in three broad ways: first, by increasing the productivity of companies based in the area; second, by driving the direction and pace of innovation, which underpins future productivity growth, and third, by stimulating the formation of new businesses, which expand and strengthen the cluster itself."

A consortium is made up of businesses located in the same geographical region that rely on an active set of relationships among themselves for individual efficiency and competitiveness. These groups can be made up of a diverse team of players like buyers, suppliers, educational institu-

tions, government agencies, and even competitors.

Consortium members participate in resolving problems related to the lack of a trained work force, regulations, an infrastructure for growing, access to needed resources, and other issues. Figure 1 shows a regional consortium with its learning network of partners.

Consortiums will engage their local communities, government agencies, universities, Manufacturing Extension Partnerships (MEP), EPA National Center for Environmental Innovation, and other agencies and organizations. These partners can help provide access to training, specialized pools of talent, technology, capital, and a critical mass of local suppliers and customers. Consortiums with

## The Way Forward

Governments — local, regional, and national — have a critical role to play in the new lean\$green economy. They should strive to help create a framework, infrastructure, and environment supporting rising productivity. They must focus on ensuring the supply of high-quality inputs such as educated citizens and physical infrastructure, and enable increased collaboration between public and private sector partners.

These learning networks of industry professionals and consortiums already exist and are being expanded and leveraged by the Association for Manufacturing Excellence

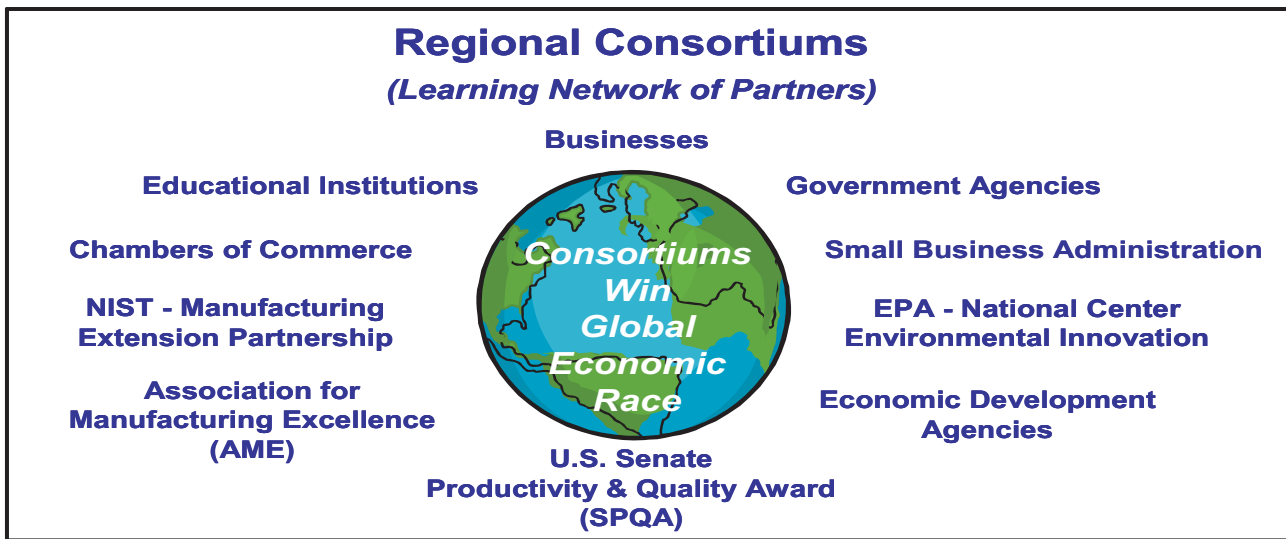


Figure 1. Regional consortium model.

their partners will help industry and regions to develop the resources to produce quality products and services.

Consortiums have been successfully established in many regions of the United States and Canada. In Virginia, for example, the Virginia Business Excellence Consortium (VBEC) with help from Virginia's Philpott Manufacturing Extension Partnership (VPMEP) centers and 11 companies launched a consortium which now has over 30 members in the Southeast region of Virginia. The overarching purpose for VBEC is to increase competitiveness through sharing best practices, networking, leveraging resources, and supporting each other in implementing business improvements. As VBEC grows and matures, the plan is to build on the lessons learned and best practices to replicate the same model in four other regions of the Commonwealth of Virginia under the umbrella of a statewide Virginia Business Excellence Consortium System.

(AME). This coalition of businesses and partners must collectively focus on developing the resources and build an infrastructure with the help of government to produce quality products and services at constantly-accelerating speed to win the global economic race. This new way of thinking and collaborating will lead to the "Rebirth of Manufacturing Jobs."

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### Resources:

- *Rebirth of American Industry* by William H. Waddell and Norman Bodek
- *Leading the Lean Enterprise Transformation* by George Koenigsaecker
- *Compression: Meeting the Challenges of Sustainability Through Vigorous Learning Enterprises* by Robert W. Hall
- *The Competitive Advantage of Nations* by Michael Porter