

## Greatly Exaggerated

By Terry Finefrock, CPIM

Many years ago, when I had yet to make a definitive choice regarding my career, I received the following counsel: Avoid the “smokestack” manufacturing sector. Trusted mentors advised that manufacturing faced an uncertain future and might well succumb to the Darwinian natural selection process of global competition and go the way of the dinosaurs.

After working more than 30 years in manufacturing and the supporting software and performance consulting sectors I am pleased to announce that the rumors regarding Manufacturing’s likely demise were greatly exaggerated. According to recent articles in news outlets such as *The Associated Press*, *The Washington Post*, and *WorldNews*, U.S. manufacturing is adapting quite well to the challenges of managing a successful enterprise in today’s dynamic global environment.

Press coverage also mentions that manufacturing employment is shrinking. This may lead some to believe that manufacturing is declining and consequently cause people considering a career in manufacturing to reconsider. Let’s separate fact from fiction by reviewing some statistics regarding manufacturing in the U.S. and explore the myth that manufacturing, as an industry, is declining.

### Productivity

The U.S. “leads the world in labor productivity,” according to a United Nations (U.N.) report released earlier this month. The report states that the U.S. “beats all 27 nations in the European Union, Japan, and Switzerland in the amount of wealth created per hour of work.” American workers work more hours and produce more product (wealth) per hour than their counterparts in Europe and almost all other rich nations.

The U.N. report links increased productivity in the U.S. with factors that include the revolution in information and communications technology, how we organize companies, the high level of competition within the United States, and the extension of trade abroad. The U.N. report also notes the huge gap in productivity and resulting wealth (standard of living) between rich and developing nations.

### Shrinking employment

The *Washington Post* article, “Biotech spurs U.S. manufacturing,” by Peter S. Goodman, describes the exodus of 400 low-tech, labor-intensive, hosiery manufacturing jobs to a developing nation and their replacement with 80 jobs provided by a biotech start-up venture in the same town and building. The article notes that even the new factory’s lowest-paid technician takes home a paycheck far larger than those received by previous workers. Although legislation is being considered to soften the perceived negative impact of factory closures, the article concludes that American manufacturing is, in many ways, stronger than ever.

The value of American manufacturing increased from \$1.3 trillion, in 1977, to an all-time record of \$3.5 trillion, in 2005. Although American population represents only 5 percent of world population, it produces almost 25

percent of globally manufactured product. *The Washington Post* article recognizes the impact of productivity, a reduction in manufacturing workers from 19 million in 1979 to 14 million, and the need for workers to acquire the new skills and training required to support the remaining higher technology jobs. Economists suggest that U.S. manufacturers, to be successful, should target high-value products that use America's technological advantages to offset the higher labor costs.

### **Change and information**

The only constants in my life have been change and competition. They make "situational awareness"—the ability to recognize changing circumstances and adapt quickly or become extinct—very valuable. The rate of change—driven by factors such as global interactions, exchange of ideas, the Internet, travel, and the consequent development of new information—continues to accelerate. Information purportedly doubles every four years, with digital information doubling every 60 minutes.

### **Win-win**

Developing countries need self-sustaining work. They have lower standards of living and, therefore, lower labor rates than the U.S. It's not all bad that American companies that cannot automate and reduce "touch" labor export those jobs to developing countries. This exporting of labor enables developing countries to improve their standard of living, become self-sustaining, and potentially reduce the amount of aid required from wealthier nations. Rather than resisting and obstructing natural economics with tariffs and legislation we might better focus on the adaptability and retraining of our existing workforce.

### **Education and training**

I was recently disappointed to learn that a local university offers only one elective course in manufacturing, called Supply Chain Management. This university enrolls 30,000 students, and its business school boasts a national ranking. I was advised that the minimal manufacturing-related course offerings are a direct response to the dwindling number of students interested in pursuing a career in manufacturing. I believe this illustrates the significant challenge facing manufacturing and APICS professionals today. We must develop our future leaders to sustain the vitality of our manufacturing sector.

### **APICS involvement**

APICS is dedicated to developing and providing information, education, innovation, advanced practices, and concepts to improve performance. APICS has developed standard terminology, a cadre of professionals, a centralized source of knowledge, and promoted practices and tools such as enterprise resources planning and business intelligence to identify and implement opportunities to improve and sustain our productivity. Our practices and tools enable the global expansion, organization, and productive integration of the actions of the customers and suppliers that make up our global businesses and supply chains. Our value—the ability to educate and train others in the use of these tools and practices—has never been greater.

A company for which I once worked had a slogan that I think is germane to these issues and one with which APICS is very much aligned: "People are our most important products." Let's collaborate and produce some terrific "products."

*Terry Finefrock, CPIM, may be contacted at [terry.finefrock@pima.gov](mailto:terry.finefrock@pima.gov).*