

Business Case for Diversity Manufacturing

Section 1

OVERVIEW

The manufacturing industry encompasses the manufacture of food products, chemicals, pharmaceuticals, petroleum and coal products, electronics, motor vehicles, textiles, apparel, plastics, paper, machinery, and more. The chief products manufactured in Olmsted County are dairy products, electronics, and printed materials.

The manufacturing industry employs a significant portion of the workforce [see chart].

Manufacturing Employees (2009)

	Employees	Percent of jobs
National	15,887,145	11.2%
Minnesota	387,126	14.2%
Olmsted County	7,844	10.3%

Source: U.S. Census Bureau

Although the share of GDP attributable to manufacturing declined from 21% in 1980 to 13% in 2008, the industry has enjoyed steady growth—over 300% in that same period (UN data, reported by curiouscat.com).

In 2007, 22% of the world's manufactured goods were produced in the United States, and manufacturing accounted for 60% of all exports from the U.S. in 2008,¹ making the United States the world's third largest exporter after China and Germany.²

U.S. manufacturers face heavy competition from other nations with lower costs, but innovation, productivity, and efficiency make the U.S. competitive in global markets.

Section 2

MARKETPLACE

The marketplace for manufacturing is international, relying heavily on importing and exporting. 43% of manufacturing jobs in the U.S. are linked to exports (International Trade Association, 2008). Exports accounted for 12.7% of U.S. GDP in 2008, the highest level in almost a century, and despite slow job growth in other industries between 2003 and 2008, export-related jobs actually increased by nearly 3 million during this period.³

The ability to compete in global markets is key to success in the manufacturing industry. Emerging economies like India and Brazil present opportunities for new customers, as people who previously had no disposable income are finding they now have money to spend.

The new global customer base also presents the challenge of adapting products to consumers whose needs and tastes are different from traditional U.S. customers. Companies that are able to understand the needs of these potential customers and adapt their products to those needs will have an advantage in marketing their products overseas. An ethnically diverse workforce can help businesses secure this advantage.

Emerging economies around the globe also means that new populations of skilled workers are developing in countries where labor costs are significantly cheaper. This trend presents a dual threat to U.S. manufacturing: cheaper goods competing with U.S. products in the global market, and U.S. manufacturing jobs lost as companies move factories overseas to take advantage of lower costs.

Section 3

WORKPLACE

The Baby Boom generation of skilled workers began retiring in 2011. In addition to general workforce shortages predicted by this major demographic shift coupled with lower birth rates, manufacturers will face additional challenges in finding employees with the education and skills necessary for manufacturing jobs.

The American education system is geared toward preparing students for liberal arts colleges rather than technical degrees or vocational education. In 2009, nearly 30% of workers with science and engineering degrees were age 50 and older.⁵ American youth also have a negative view of the manufacturing sector, perceiving the industry as merely unskilled, repetitive labor. These factors will contribute toward shortages in the manufacturing labor force.

Currently, the only source of new skilled workers is from immigration. The result is a projected need for 10 million new skilled workers by 2020.⁴

Section 4

THREATS & OPPORTUNITIES

Threats

- Demographic shift creating workforce crisis
- Poor image of manufacturing jobs among young people
- Education system does not promote technical and vocational education
- Technological advances require greater skills from manufacturing workers
- High costs of employment in the U.S. lead to outsourcing

Opportunities

- New market economies around the globe create new customers
- Increased education in developing nations creates new workers

Sources

¹ “Manufacturing and the US Economy,” by Sherle Schwenninger and Samuel Sherraden, New America Foundation, July 2009

² CIA World Factbook, 2010

³ “Exports Support American Jobs,” U.S. Department of Commerce, International Trade Administration

⁴ “Keeping America Competitive,” a report from the National Association of Manufacturers

⁵ “Addressing America’s Perception of Manufacturing,” Society of Manufacturing Engineers, August 7, 2009