How Competitive is U.S. Manufacturing?

R. Nat Natarajan
College of Business Administration
Tennessee Technological University
Cookeville, TN 38505 - USA
RNAT@tntech.edu

Global Manufacturing Research Group Annual Meeting
July 7-9, 2004   Istanbul, Turkey

© Dr. Nat Natarajan, 2004
Manufacturing in the Spotlight

• A Czar for manufacturing

• Job losses in manufacturing

• “Saving manufacturing”

• Reports and studies on manufacturing
  ✧ DOC, NAM/MAPI, Report of the President

© Dr. Nat Natarajan, 2004
Manufacturing Competitiveness – Then

• Similar issues and concerns in the 1980s

• Similar studies

• “Made in America” - MIT study

• Causes of problems were diagnosed to be primarily managerial not governmental
Transformation in Manufacturing

- Performance improvement systems:
  - Lean, ISO/QS, Baldrige, Shingo

- Information and communication technologies

- Policies of the federal government in the U.S.
  - MEP, CRADA . . .

- Global developments:
  - Reduction of trade barriers
  - NAFTA
  - Emergence of China as the “Workshop of the World”
Manufacturing Competitiveness – Now

- Acceleration in productivity
- Causes of problems were diagnosed to be primarily governmental
- Leonard study
- President’s Six-Point Plan
Implications Of Studies

- Declining significance of payroll costs
- Drivers of location decisions in manufacturing
  - Access to markets, time-based competition
- Outflow of FDI to developed and low wage countries
- What will be “Made in America”? 

© Dr. Nat Natarajan, 2004
Competitiveness Challenges

• Small manufacturing enterprises
  ✷ Lower productivity
  ✷ Lack of business planning
  ✷ Supply chain positioning

• R&D and the Innovation Ecosystem
  ✷ R&D and manufacturing linkages
  ✷ Lopsided distribution of R&D
  ✷ Replication in other countries

• Skills gap
  ✷ Innovation Ecosystem
  ✷ Manufacturing

© Dr. Nat Natarajan, 2004