

# Environmental Drivers of Product Lifecycle Management (PLM)

## Module 2

**Cynthia L. Tomovic, Ph.D.**  
**Purdue University**

*Discovery Park Center for Advanced Manufacturing*  
*The Product Lifecycle Management Center of Excellence*



# External PLM Drivers

- External Drivers
  - Scale – companies have gotten larger
  - Complexity – variation in products have increased
  - Cycle time – manufacturing timeframe has decreased due to competition for first to market
  - Information technology – digital information is mobile and price of technology has decreased
  - Globalization – worldwide manufacturing arena and markets
  - Regulation – increasing scope of governmental regulations worldwide

Michael Grieves, *Product Lifecycle Management: Driving the Next Generation of Lean Thinking* (New York: McGraw-Hill, 2006), 95-109.

# Internal PLM Drivers

- Internal Drivers
  - Productivity – quest for increased productivity
  - Innovation – product and process
  - Collaboration – within and between organizations
  - Quality – meeting specifications and standard of usage
  - Return on investment – ratio of input to output

# Impact of Information Technology

# Information Technology

- Leading cause of transformation in business
- Geographical barriers less relevant
- Cultural barriers lowered through information
- Boosting productivity
- Data sharing
- Video- teleconferencing

B. Delong, "Globalization means we share jobs as well as good," Financial Times, August 27, 2003.

# Impact of Globalization

# Global Business Environment

- Network of international linkages
- Highly competitive
- Interdependent global economy

T. Morrison, W. Conaway, and J. Bouress, *Dun & Bradstreet's Guide to Doing Business Around the World* (Upper Saddle River, NJ: Prentice Hall, 1997).

# Partnerships - Alliances

- Outsourcing
- Offshoring

<http://en.wikipedia.org/wiki/Outsourcing>

Friedman, Thomas, *The World is Flat: A Brief History of the 21<sup>st</sup> Century* (New York: Farrar, Straus and Giroux, 2006), 136-150.

# References

- B. DeLong, "Globalization means we share jobs as well as good," *Financial Times*, August 27, 2003.. P. 13.
- Friedman, Thomas, *The World is Flat: A Brief History of the 21<sup>st</sup> Century*, New York: Farrar, Straus and Giroux, 2006, 136-150.
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- WikipediA: The Free Encyclopedia, <http://en.wikipedia.org/wiki/outsourcing>
- Bernard. Wysocki, Jr., "Global Reach: Cross-Border Alliances Become Favorite Way to Crack New Markets," *Wall Street Journal*, March 26, 1990, A1, A4.

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