

Introduction to Product Lifecycle Management (PLM) Module 1

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PLM: Definition

“Product Lifecycle Management (PLM) is an integrated, information-driven approach comprised on people, processes/practices, and technology to all aspects of a product’s life, from its design through manufacture, deployment and maintenance – culminating in the product’s removal from service and final disposal. By trading product information for wasted time, energy, and material across the entire organization and into the supply chain, PLM drives the next generation of lean thinking.”

Michael Grieves, *Product Lifecycle Management: Driving the Next Generation of Lean Thinking* (New York: McGraw-Hill, 2006), 39.

Product Lifecycle Management

- Newest wave in productivity
- Expands lean thinking

Michael Grieves, *Product Lifecycle Management: Driving the Next Generation of Lean Thinking* (New York: McGraw-Hill, 2006), 1-5.

PLM Foundation

- Information
 - Digitizing
 - Sharing
 - Moving bits instead of atoms

Michael Grieves, *Product Lifecycle Management: Driving the Next Generation of Lean Thinking* (New York: McGraw-Hill, 2006), 6-12.

PLM Components

- Components
 - People
 - Processes/practices
 - Technology

Michael Grieves, *Product Lifecycle Management: Driving the Next Generation of Lean Thinking* (New York: McGraw-Hill, 2006), 129-157.

PLM Integration

- Internal organization integration
- External organizational integration
 - Partners
 - Suppliers

Michael Grieves, *Product Lifecycle Management: Driving the Next Generation of Lean Thinking* (New York: McGraw-Hill, 2006), 40-93.

PLM Lifecycle Model



Michael Grieves, *Product Lifecycle Management: Driving the Next Generation of Lean Thinking* (New York: McGraw-Hill, 2006), 40-45.

Mileta Tomovic, PLM Curriculum, Society of Manufacturing Engineers Grant Presentation, Purdue, May, 2006.

PLM Benefits: IT Value

- Efficiencies
 - Time
 - Energy
 - Materials
- Innovation
 - Product
 - Processes
- Revenue

Michael Grieves, *Product Lifecycle Management: Driving the Next Generation of Lean Thinking* (New York: McGraw-Hill, 2006), 121-125.

PLM

Application of Systems Thinking

- Systems Thinking
 - Understanding the whole by understanding the linkages between the component parts

Wikipedia: The Free Encyclopedia, http://en.wikipedia.org/wiki/Systems_thinking

References

- Michael Grieves, *Product Lifecycle Management: Driving the Next Generation of Lean Thinking*, New York: McGraw-Hill, 2006.
- Mileta Tomovic, *PLM Curriculum, Society of Manufacturing Engineers Grant Presentation*, Purdue University, May, 2006.
- WikipediA: The Free Encyclopedia, http://en.wikipedia.org/wiki/Systems_thinking

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