

## **Product Lifecycle Management: An Information-Driven Approach to Globalization**

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Globalization of business is forcing leaders/managers to grapple with complex issues as they seek to implement effective global business strategies. Faced with unprecedented levels of foreign competition at home and abroad, organizations must find and nurture top notch talent if they are to gain and sustain a competitive edge. In today's age of digital connectivity, firms pay little attention to national borders as they search for talent. Leading/managing and integrating a global workforce, however, can be particularly challenging when working cross borders, cultures, and time zones. Issues concerning global workforce integration are addressed as participants consider opportunities and challenges of Product Lifecycle Management (PLM), an information-driven business approach to conducting global business.

The lowering of trade and political barriers and the exponential technical advances of the digital revolution has made it possible to do business instantaneously with billions of other people across the world. Globalization is driven by increasing scalability, complexity, quality of products and services, decreasing cycle times, decreasing costs, increasing revenue streams, regulatory changes, trade organizations, and individuals who have created innovative startups all over the world (but especially in India and China) who can compete--and win--not just for low-wage manufacturing and information labor but, increasingly, as desktop freelancers, compete for the highest-end research and design work. The hypercompetitive global arena of the twenty-first century mandates that managers develop the knowledge and skills necessary to design and implement global strategies, to conduct effective cross-national interactions and to lead and manage daily operations on foreign soil. The purpose of these modules is to help participants gain leadership knowledge and "people skills," the soft side of management, required to work effectively in today's global environment.

### Module Descriptions:

In module one, *Introduction to PLM*, Product Lifecycle Management is introduced as "an integrated, information-driven approach comprised of 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" (Grieves, 2006). In module two, internal and external *Environmental Drivers of PLM* are considered.

Since there are many parallels between Product Lifecycle Management and Information Technology (IT), modules three through seven explore different facets of IT which are equally applicable to PLM. In module three, *Impact of IT on Global Business and Leaders*, IT is considered in relationship to globalization and leadership. In module four, *IT and Outsourcing* is addressed. In module five, *E-Business*, the increasing emphasis on technology in global business transactions is considered. In module six, *Impact of IT on Productivity*, the example of the impact of IT on productivity at Dell and Wal-Mart is considered in the context of supporting exponential growth of globalization. In module seven, *IT and Intellectual Property*, the often confusing issues related to IT and intellectual property are presented. In chapter eight, *IT and Government Control on Society*, the impact of the “cat being out of the bag” is considered as different governments struggle with freedom of speech and government control.

In modules nine through eleven, the context of where and how multinational corporations work cross culturally are considered. In chapter nine, *Multinational Corporations – Trade Blocks*, multinational corporations are considered in light of the United States dominance being over and that the world is being dominated by emerging and dynamic powerful economic trading blocks. In chapter ten, *Understanding the Role of Culture in Global Business*, culture is introduced as a framework in which to better understand the underpinnings of working across borders. In chapter eleven, *Impact of IT on Cultural Diffusion*, the issues of whether IT supports cultural convergence versus divergence is debated. In chapters twelve and thirteen, *Working Across Culture – China*, and *Working Across Culture – India*, issues related to working in China and India are presented. In chapters fourteen and fifteen, *Working Across National Regulations - United States and Regulations*, and *Working Across National Regulations - Ireland*, the impact of regulations on business operations are addressed via examples presented in the United States, and Ireland.

In modules fourteen through twenty, current pilot studies of various PLM topics are presented. In module sixteen, *PLM in Support of Green Manufacturing* is considered. In module seventeen, *Visionary Leadership in Support of Product Lifecycle Management*, is presented. In module eighteen, *PLM Impact on Cross Cultural Virtual Teams*, cross cultural issues related to working in a virtual team environment are discussed. In module nineteen, *PLM Competency Model*, PLM is discussed in terms of driving curriculum changes in higher education as colleges and universities educate tomorrow’s workforce. Finally, in module twenty, *Measuring the Impact of PLM*, PLM is discussed in terms of its impact on waste reduction and the reallocation of captured resources in support of new revenue streams.

Collectively, these modules present issues related to PLM and working in a global environment. The intersection between high tech and the need to become culturally savvy when working in a global environment is explored. I would like to thank the many students who have joined me in this endeavor as we identified and prepared modules of interest and importance in order to support the study of PLM in a Global Environment.