

## TCS PLM Reference Model Can Add Value across All PLM Solution Lifecycle Domains

By Dick Slansky

### Keywords

Design/Build Processes, Product Development, Business Models, End-to-End Lifecycle, Use Cases, Best Practices, Product Data Management (PDM)

### Summary

Assessing and implementing a PLM solution set strategy can be a complex and daunting task for companies of all sizes. The process of evaluating, selecting, and implementing solutions that range from product design and testing to manufacturing processes often represents a complex exercise in

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Ideally, a company should define its business model and design/build lifecycle process and then develop an appropriate PLM solution strategy and architecture. However, small- and mid-sized companies may lack adequate resources to do so. PLM suppliers can often provide PLM selection strategies and can help customers through the assessment and selection process, but aren't always able to bring a non-partial and objective third-party perspective to the process. To speed implementation and help ensure a robust solution, a PLM implementation team needs in-depth understanding and experience on the product development process and PLM capabilities as well as access to best practices.

This is where a PLM consulting company with experience working with leading PLM solution providers could provide assistance. Tata Consultancy Services (TCS), for example, designed its PLM Reference Model to generate value by bringing business processes, functional capabilities and IT systems together. The Reference Model also functions as a tool to help



companies through the challenging process of evaluating, selecting, and implementing a PLM solution.

### **TCS PLM Process Reference Model Covers All Domains of the Product Lifecycle**

A significant number of companies today lack the internal resources and expertise required to develop a comprehensive PLM architecture based on design/build processes and company business models. Typically, a company will need much more than just a high-level view that enables them to map product development, manufacturing, and production processes to a dizzying array of PLM solutions. The TCS PLM Process Reference Model offers companies a comprehensive set of process maps that allow users to define business, engineering, and manufacturing processes that include use cases, best practices, and functional requirements.

The TCS PLM Reference model is a framework and body of knowledge consisting of structured representation of product lifecycle processes along with business use cases, best practices, and KPIs that are interlinked with the organization's functional capability and IT enablement. TCS designed the PLM Reference Model to enable manufacturers to develop a process model that defines their business model with business rules, best practices, and actual metrics derived from process maps and use cases. Additionally, use cases can be developed for business functions, engineering and manufacturing functional areas, and specific system and solution functions that map to PLM solutions applications.

According to the company, this reference model approach allows companies that need to move to a PLM solution to develop an architecture that defines a product design IT support framework and establishes the model for a single source product data management (PDM) platform for all product, process, and production information.

In the current product development environment, a comprehensive PLM solution set represents an end-to-end product lifecycle process that begins with concept and innovation and progresses through the detail design, manufacturing process, supply chain, production operations, and product support and maintenance domains of this lifecycle. In today's highly competitive business environment, all manufacturers - from small local companies to the largest global enterprises - must go through this exercise

of defining and implementing a PLM solution architecture for an end-to-end product development lifecycle process.

## **Conclusion**

In today's complex product development and manufacturing process environment, manufacturers and companies need all the help they can get when it comes to selecting and implementing a PLM solution. With the TCS PLM Reference Model, users now have a tool that gives them the capability to capture and define business and manufacturing processes and map these to a PLM solution set that meets requirements and can help manufacturers get their products to market faster, more efficiently, and at less cost.

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