

PLM – What is it?

PLM is still not a very clear and exact concept due to several reasons. First of all lifecycle in relation to products is understood in many ways. Secondly many PLM software producers create confusion around the acronym by boosting a PLM definition limited to item, BOM and document (CAD and 3D-model) management and related change and status management. This can be understood from a historical perspective because PLM in many ways tries to grow out of the product data management framework. In some cases, the actual definition of a product can also be vague especially in companies producing tangibles, software and services and even more comprehensive solutions.

In many companies it is still very common to make a division between products (meaning tangibles) and services. The division is even highlighted with supporting organizational structures, even though tangibles and services with software are delivered together. Is it not obvious that tangibles, services and software should be managed with a common PLM framework? Naturally lifecycle phases etc. can depend on the type of the product in question.

PLM is a holistic business concept including not only items, documents and BOM's, but also analysis results, test specifications and results, environmental component information, product requirements, change orders, manufacturing procedures, product performance information, component suppliers, and so on. I divide the definition of PLM to four interconnected entities

1. Product Lifecycle definition
 - Lifecycle phases as well as the characteristics and criteria of the phases
2. Product definition lifecycle management (i.e. the evolution of product definition and related information) including the following:
 - Product design
 1. Items and BOM's
 2. Drawings and design documents
 3. Version information
 4. Supplier items
 5. Modularity and configuration information (configuration rules)
 - External Product documentation
 1. Product descriptions
 2. Product marketing materials, manuals etc.
3. Individual Product unit lifecycle management
 - Product realization
 1. Product unit items, BOM (as manufactured)
 2. Serial numbers and sourcing information

3. environmental data and refurbishing and recycling information, raw materials and component lot data
 4. Product unit set-up information
 - Product maintenance
 1. Set-up information
 2. Component changes and maintenance activities
 3. version upgrades
 4. Localizations
4. Product related business management
- Product portfolio management (idea, development and market portfolios)
 - Product profitability management
 1. Cost and revenue allocation
 2. Product performance follow-up

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For more information on the subject – check: www.plm-info.com