



Why is implementing Product Lifecycle Management (PLM) so difficult?

From when I started my career in Engineering to now, the ability to bring new quality products to market, is a necessity for Original Equipment Manufacturers (OEM). This maintains and enables the gain of market share in your respective industry. This is easier said than done, and has become even more difficult based on the complexity that new products have in terms of customer demands, technology advancements and quality expectations.

Just as Enterprise Resource Planning (ERP) software, is the backbone for a company's financials, order management and transactional activities, Product Lifecycle Management (PLM) software is the backbone for companies to manage, control and collaborate product information. However, just like implementing ERP software, implementing PLM software is difficult to implement successfully. Why is that?

The 4 main reasons PLM technology is difficult to implement are:

- 1. PLM System are expected to fit how we currently do our work** - Typically implementations of PLM start with a company doing a software evaluation. Evaluating PLM software is a key step in the journey, however, organizations typically base this evaluation on how the organization currently executes product development. The inherent challenge with this approach, is that the perspective of "what will work best" for your company may be missing. The PLM software selection process needs to incorporate the design of how product development should be executed going forward. In order to select the best PLM system for your company, you should start with a "Process" Review/Improvement approach. One that looks at all the product development processes, ones that are departmentally focused, such as CAD Data Management and those that are cross-functional in nature, such as Bill of Material Management. This will allow you to implement successful "Wins" in short order while keeping in mind the long term goal.
- 2. PLM and ERP are competing for the managing the same data** - Typically, ERP initiatives originate from the IT department, and PLM initiatives, originate from the Engineering department. Both with the best of intentions and both with the assumption of how and in which system product data will be managed. These assumptions if not validated, can create duplicate data and a struggle of product data ownership and how to best integrate the 2 enterprise systems for use within the organization. In order to avoid this potential problem, a technology and data architecture design should take place to agree on technology footprint and data ownership. This will ensure harmony versus collision between two key enterprise systems.
- 3. PLM, based on its origin, is typically siloed within the organization** - Typically PLM is introduced into the organization through the Engineering department. This can introduce a bias and a silo where Engineering uses the PLM system for its own use but the system is not integrated within the Enterprise's technology architecture and potentially data is duplicated from one system to the other, which carries an inherent risk of error. To ensure the PLM system is integrated within the whole system landscape and the needed integrations are created, so that no data redundancy occurs, is to develop an integration strategy that complements both the data and technology architecture design for the company.
- 4. PLM is only used for Engineering** - This is usually the initial thought process for the use of the PLM system. However to realize the value of a PLM system, it needs to be expanded from an Engineering system to an Enterprise System. This will only become a reality by creating the Enterprise Roadmap for PLM. One that includes its use within procurement, manufacturing, the extended supply chain and service.

Implementing a PLM system is not an easy task. By incorporating these 4 activities, your probability of success will be enhanced. From our experience, these activities are ones that need to be taking during the initial development of your PLM Strategy in order to expand PLM from an Engineering PLM system to an Enterprise PLM System.

Next Month: The Key Elements to implementing a Digital Transformation in your company?