

Corporation level PLM problems and some solutions as well

Large corporations are all but homogenous what comes to their ways to operate, processes and culture. Companies have evolved through organic growth, business acquisitions, strategic investments and expansion to new markets. In practice this means that a corporation usually consists of number of business areas, geographical areas (or sites) and product areas. Various business areas may even have different business models in use. One business area makes business by delivering large projects, while other BU's develop and manufacture appliances and software to be delivered as standalone or as part of larger turnkey system delivery projects and then there is a services business unit providing lifecycle services in order to maintain and support the delivered systems and appliances.

Evolution in large corporations is usually not uniform throughout the corporation; there are more developed units and less developed units, usually dependent on the history and tradition of the unit in question. Sometimes development work is initiated by corporate directives and sometimes by local or business unit management. In many cases the agenda and priorities of corporate level development unit is a bit different than the local or business unit specific priorities, driving the development of processes, systems, skills and capabilities to different directions.

The PLM process and system development is usually launched in this kind of business environment where the understanding of PLM related issues is not shared throughout the corporation and the maturity of product development and management processes, tools and methods is not common throughout the

corporation. The product and business portfolio of the company might be a set this and that, something old and something new. If a PLM development project is launched in this kind of situation with the vision statement saying that” the PLM system and the processes to be implemented are common throughout the company” the project is likely to fail.

In the following list there are couple of very typical pitfall scenarios which will emerge (I will guarantee it!) when PLM development is initiated without full and deep understanding of the portfolio of products, set of businesses and local flavors in the business set-up and the PLM related maturity of these dimensions.

1. PLM system is designed to match the needs of one business area, geographical area or product area. When other BU's or PA's will start implementing it – the developed set of tools and processes - they realize the fact that PLM does not support their business needs at all
2. PLM system is a lukewarm compromise between the needs of all PA, GA and BA's which does not meet full requirements of any of these dimensions
3. PLM system implementation project decides all business related issues (e.g. product lifecycle phases and the phase change criteria) or PLM system project is stuck and cannot move on due to undecided business issues
4. PLM system project realizes when migrating products into the system that the products the company produces are very different by nature and thus cannot be implemented to the system
5. PLM system project tries make a giant leap from very immature ground and will fail because there are too many issues undefined and the capabilities of the current processes and methods do not allow this kind of giant leap
6. The use of more complex business models such as solution business model is not possible due to mismatch understanding of a product on conceptual level and e.g. service products cannot be implemented into a PLM system
7. Comprehensive allocation of product cost and revenue is not possible in a uniform way across PA, BA or GA due to mismatch in the logic of product architecture

8. Product comparison / analysis is not possible in the portfolio level (lifecycle phases, products)

My suggestion to resolve or rather avoid the pitfall scenarios is to:

1. Evaluate your baseline thoroughly i.e. what is the real state of PLM maturity in each GA, BA, BU
 2. Create a vision of the future state of PLM in your corporation
 3. Evaluate the gap's between the PLM vision and the baseline
 4. Create a comprehensive PLM concept
 - Including a product information model definition covering all product areas
 5. Build the PLM maturity in your company to a more uniform level using the PLM concept creation project as tool
 6. Understand all business models used in the corporation
 7. Draw a road map for the entire PLM development path including the implementation of the new PLM concept, processes, ways to operate and system
- When all the above is done your are ready to launch a traditional PLM development program in a company producing different kinds of products in numerous sites

4 Corporation level PLM problems and some solutions as well

Copyright owned by Sirrus Capital Ltd. Helsinki Finland.

This work is subject to copyright. All rights are reserved, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilm or in any other way, and storage in data banks. Duplication of this publication or parts thereof is permitted only under the provisions of the Finnish Copyright Law.

In its current version, and permission for use must always be obtained from Sirrus Capital Ltd. Violations are liable to prosecution under the Finnish Copyright Law.

Product liability: The publisher cannot guarantee the accuracy of any information about dosage and application contained in this book. In every individual case the user must check such information by consulting the relevant literature.