



PLM ROAD MAP™ 2009 - CONFERENCE TRACKS - SHORT DESCRIPTIONS

TUESDAY, SEPTEMBER 22, 2009

MORNING

PLENARY SESSION: ADDRESSING THE DETAIL & COMPLEXITY OF MULTIPLE DOMAINS

The need to address the global transformation of product development and innovation processes has reached a new level. PLM Road Map™ 2009 opens with Dr. Walden C. Rhines discussing a new model-driven development methodology that will support today's emerging design requirements. Glenn Mercer will then offer incisive commentary on the transformation of the North American automotive industry. Roger Herdy will assess the impact of the Vdot™ tool on process flow at NASA. Daniel Kussman will then look at what is needed to successfully transform a business system from a technology push to a market pull.

AFTERNOON - BREAK-OUT TRACKS

SIMULATION-BASED DESIGN: EMBEDDING SIMULATION ACROSS THE ENTIRE PRODUCT LIFECYCLE

Leading edge users now drive design with up-front simulation, while simultaneously capturing and reusing CAE best practices and processes. The potential payoff of the integration of simulation across engineering functions and multiple sites is enormous, but the obstacles and complexity dramatically escalate the challenge. Design/simulation frameworks provide the basis to integrate simulation into the product development process. The frameworks enable collaboration. Learn more from end users who will discuss their experiences, and their plans to extend simulation across the entire product lifecycle. Top strategists for the leading vendors will discuss their responses to the need to enable simulation and virtual validation across the full product lifecycle.

SUPPORTING EFFECTIVE COLLABORATION ACROSS MECHANICAL, ELECTRICAL, & SOFTWARE DEVELOPMENT

Design decisions for mechatronics require tight coordination between multi-disciplinary design and engineering activities. Designers and software developers need support across multiple levels. The tools must map requirements to features; map features to logical functions; map functions to behavioral models, physical ECUs, and software components. The tools must also link functions with signals that map to component interface ports and physical network messages. The system must also manage versions, variations, and configurations of each of these objects, and their relationships, to support a total product line concept. Leading practitioners and architects from PLM vendor companies will share their insights and ideas about how best to support effective collaboration across mechanical, electrical, and software development teams.



WEDNESDAY, SEPTEMBER 23, 2009

MORNING - BREAK-OUT TRACKS

TRANSFORMING PLM TO FLEXIBLY RECONCILE MASSIVE DETAIL ACROSS DIVERSE FUNCTIONAL DISCIPLINES

Over a dozen years ago, PLM safely targeted a high level framework to phase and coordinate the major disciplines directly involved in product development. Today, leading edge users are driving PLM to coordinate close collaboration across very different design environments involving deep levels of detail. Software, embedded controls, and mechanical development present particularly intense challenges. Requirements management provides a framework to translate all design decisions and changes to a common source – the functional representation of the needs of the customer. New forms of model-driven processes are beginning to support the integration of requirements, customer functions, and product architectures in high-level systems models. Learn from our experts how to transform PLM to flexibly reconcile massive detail across diverse functional disciplines.

DESIGN APPROACHES TO ADDRESS THE INCREASE IN PRODUCT COMPLEXITY & VARIATION

The approach to design within the overall product development process has for the most part evolved in step with traditional engineering thinking and has been closely tied to conventional improvements and enhancements in engineering tools. Today, however, leaders in product modeling are exploring new approaches, tools, and processes to deal with the increase in product complexity and variation. In this session, learn from leading edge users how they are building upon and expanding existing technology to better solve challenging problems within engineering and downstream disciplines.

AFTERNOON

PLENARY SESSION: THE FUTURE OF PLM

PLM Road Map™ 2009 closes with Dr. Hossein Nivi addressing how companies must incorporate a uniquely coherent and systematic approach to determine their own transformation. Chuck Grindstaff will discuss a lean operations framework that comprehends the people, processes, and technology that underpin operational performance. Finally, John Givens will share details about a strategy that is transforming the process of engineering from a dependence on physical evaluations to a reliance on engineering design and analysis.