

- Learn about the best approaches for reusing data and processes
- Assess the payoffs from model-driven systems engineering
- Share the latest scorecard on requirements management across the full product lifecycle
- Learn about the tradeoffs encountered when implementing frameworks to transform simulation
- Understand the processes, the people, and the technology required to optimize the extended supply chain

Transforming PLM Into a Dynamic Infrastructure for Business Decisions

Reconciling Detailed Data and Optimizing Processes for the Extended Enterprise Across the Full Product Lifecycle

September 22 & 23, 2009
Detroit, Michigan

www.cpd-associates.com



About PLM Road Map™ 2009

PLM Road Map™ 2009 is a strategic conference focusing on the transformation of the enterprise infrastructure to serve a new value proposition involving the detailed reconciliation of data and processes across global product development functions. Join leading analysts from CPDA and key industry players as they share their experiences in making technology work by driving efforts up front early in design and in continuously incorporating cross-disciplinary knowledge and feedback.

PLM Road Map™ 2009 will challenge attendees to shift their current thinking to a new level in a series of presentations focusing on the global transformation of product development and innovation processes. Gain insight into what impacts you and your organization from our keynote speakers including: Dan Kussman, Boston Scientific; John L. Givens, Jr., GM Powertrain; Glenn Mercer, IMVP; Dr. Walden C. Rhines, Mentor Graphics; Dr. Hossein Nivi, Pendaran, Inc.; Roger Herdy, Qualis Corporation; and Chuck Grindstaff, Siemens PLM Software.

Conference at a Glance

TUESDAY A.M.	Plenary: Addressing the Detail & Complexity of Multiple Domains	
TUESDAY P.M.	Simulation-Based Design: Embedding Simulation across the Entire Product Lifecycle	Supporting Effective Collaboration across Mechanical, Electrical, & Software Development
TUESDAY EVENING	Eye on Technology Exhibition & Welcome Reception	
WEDNESDAY A.M.	Transforming PLM to Flexibly Reconcile Massive Detail across Diverse Functional Disciplines	Design Approaches to Address the Increase in Product Complexity & Variation
WEDNESDAY P.M.	Plenary: The Future of PLM	

At PLM Road Map™ 2009 find out what is really important in PLM today

- ▶ Take part in discussions that will help you to make a quantum leap in your current thinking about product development.
- ▶ Hear about the key elements for transforming a business system from a technology push to a market pull.
- ▶ Discover the cultural changes involved in implementing and sustaining knowledge-driven development.
- ▶ Understand how the challenge of transforming design impacts all aspects of an organization – from people and process to technology.
- ▶ Hear how leading users and developers are confronting the challenges of simulation lifecycle management as an integral part of the design process.



Plenary Session: Tuesday, September 22 — MORNING

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.



The Paradigm Shift for Vehicle EE Design with Model-Driven Development

Dr. Walden C. Rhines

Chairman & CEO, Mentor Graphics

Growth in electronics and software content in modern vehicles has reached critical mass. Escalating complexity calls for a paradigm shift with the adoption of a systems approach to designing, verifying, and integrating electronic and software components in a networked multi-domain environment, ensuring high-performance designs and containing costs and schedules. Dr. Walden C. Rhines will discuss a new model-driven development methodology that supports today's emerging design requirements.



Outlook for the North American Automotive Industry

Glenn Mercer

Automotive Consultant & Senior Director, IMVP

Only by understanding the historical roots of our current challenges can we build a future for the North American automotive industry that does not fall back into the boom-and-bust cycle of the past. Drawing on a quarter-century of expertise in the automotive industry, Glenn Mercer will provide a unique, in-depth view of the outlook for the automotive industry in these difficult times.



A Paradigm Shift in Process Information Flow at NASA

Roger Herdy

Program Manager & Director for Strategic Business Development, Qualis Corporation

Planning for space logistics campaigns is paramount for success, and more often than not the central approach employed by most organizations heralds back to Gantt and PERT charts. For the next era of human space exploration, new tools must surpass these established methods. Roger Herdy will describe advantages the new Vdot™ tool offers to NASA and the entire aerospace industry.



Transforming the Business System and Culture to Knowledge-Driven Development

Daniel Kussman

Knowledge Driven Product Development Program Lead, Boston Scientific

Several elements are needed to successfully transform a business system from a technology push to a market pull. Dan Kussman will discuss how to set a vision to gain a strategic competitive advantage, and how to achieve it; how to drive cultural change top-down, bottom-up, or mid-management outward, and the challenges associated with each approach; and the challenges of developing and implementing a PLM strategy in a matrix organization.

Tuesday, September 22 — Afternoon

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

- What lessons can be learned from companies that have relied on simulation to drive product development times down and to dramatically boost design quality?
- How do leading users integrate simulation with design, test, and manufacturing?
- What are the critical issues users confront as they leverage the major payoffs of virtual validation across the full product lifecycle?
- Which strategies deliver design/simulation frameworks that meet user needs?

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 from the leading vendors will discuss their responses to the need to enable simulation and virtual validation across the full product lifecycle.

Tuesday, September 22 — Afternoon

SUPPORTING EFFECTIVE COLLABORATION ACROSS MECHANICAL, ELECTRICAL, & SOFTWARE DEVELOPMENT TEAMS

- How do you effectively address the critical cultural and process challenges in mechatronics to fully coordinate mechanical, electrical, and software development efforts?
- What are the three major strategic challenges that must be addressed to establish a successful program in mechatronics, and how can they be handled?
- How can effective management of system definition and change optimization avoid unnecessary and expensive alterations resulting from broken communication, omissions in requirements, or a lack of synchronization for design decisions?
- How is GM Powertrain transforming its development process for mechatronics with simulation and the integration of mechanical and controls engineering?

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; and 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 solution vendor companies will share their insights and ideas about how best to support effective collaboration across mechanical, electrical, and software development teams.

FOR EXPANDED INFORMATION & CONFERENCE UPDATES VISIT: https://cpd-associates.com?content=include_conference09.cfm

Wednesday, September 23 — Morning

TRANSFORMING PLM TO FLEXIBLY RECONCILE MASSIVE DETAIL ACROSS DIVERSE FUNCTIONAL DISCIPLINES

- What are the cultural challenges associated with people and processes in applying requirements management to support integration across diverse disciplines?
- How can model-driven systems development be optimally applied across multiple system lifecycles?
- How can models be fully integrated into the lifecycle coverage of PLM with change, configuration, and version control?
- What are the hurdles confronting change traceability across diverse 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.

Wednesday, September 23 — Morning

DESIGN APPROACHES TO ADDRESS THE INCREASE IN PRODUCT COMPLEXITY & VARIATION

- How can new methodologies in design optimization provide radical and non-intuitive design solutions?
- How can better use of technology improve the blending of conceptual design with detailed engineering design?
- What new approaches can designers employ to first capture their company's product knowledge and then leverage it in new designs?
- How can users exploit the evolution of new tools to bolster downstream interaction with product designs that foster better quality and improved productivity in manufacturing?

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.

Plenary Session: Wednesday, September 23 — AFTERNOON

The Future for PLM

PLM Road Map™ 2009 closes with Dr. Hossein Nivi addressing how companies must incorporate a uniquely coherent and systemic approach to determine their own transformation. Chuck Grindstaff will discuss a lean operations framework that considers the people, processes, and technology that underpin operational performance. Finally, John L. Givens, Jr. 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.



Flight Simulator for Lean

Dr. Hossein Nivi

Founder & CEO, Pendaran, Inc.

Success is something we need to create for ourselves. In order to be successful companies must incorporate a uniquely coherent and systemic approach for their own transformation. The primary issue confronted runs much deeper than the tools to use or even the processes. Dr. Hossein Nivi will share his insight on the concept of gaining “accelerated experience” by building a realistic simulator to advance learning for you and for your organization.



An Operational Framework for Continuous Improvement

Charles C. “Chuck” Grindstaff

Executive Vice President, Products & Chief Technology Officer, Siemens PLM Software

In today’s business environment, the principles of lean operations could not be more important. Organizations face intense competition, cost pressures, and rapidly changing market dynamics. To cope with these challenges and turn them into actionable initiatives, an overall framework must define, prioritize, and track the progress of the enterprise. Chuck Grindstaff will discuss a lean operational framework that considers the people, processes, and technology elements that underpin operational performance.



Transformation of an Engineering Process — Road to Lab to Math at GM Powertrain

John L. Givens, Jr.

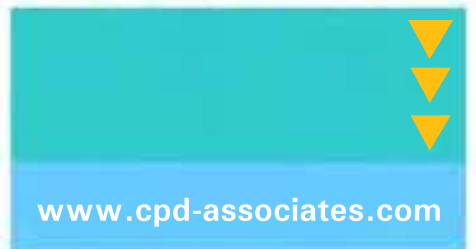
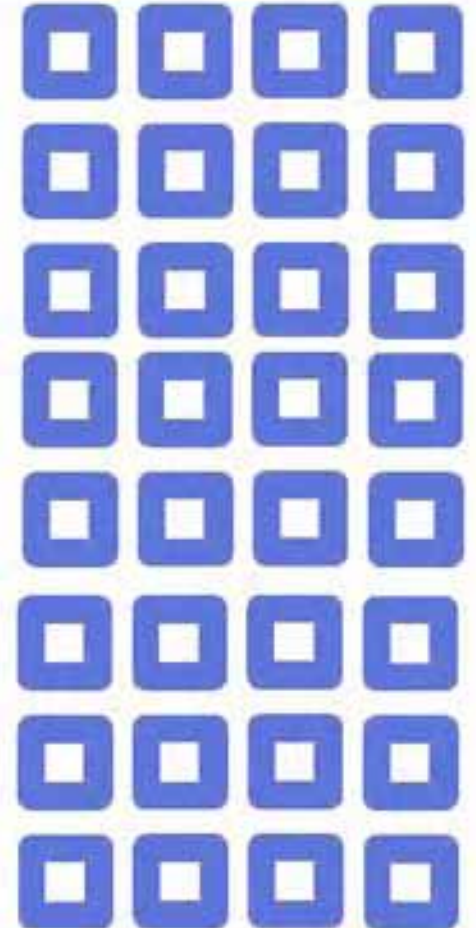
Director of Engineering Math & Release Processes, GM Powertrain

GM Powertrain has adopted a strategy that is transforming the process of engineering from a dependence on physical evaluations to a reliance on engineering design and analysis, based on physical principles backed by physical confirmation. John L. Givens, Jr. will show how adopting the Road to Lab to Math strategy leads to higher quality design, reduces structural cost, cuts the reliance on physical test, and improves product development time.

Who Should Attend?



Business Process Modeling Professionals
CAD Strategy Executives
Chief Engineers
Design and Simulation Experts
Engineering Executives
Engineering IT Executives
Engineering Process Development Managers
Planning Managers
Process Designers
Product Management Executives
Procurement Managers
Product Portfolio Managers
Systems Engineers



Why Should You Attend?

It's about **TRUST**

Do you want to find out what others in the industry are discussing and what topics are top-of-mind? At PLM Road Map™ 2009 you will find a wealth of experience from CPDA's group of **trusted** advisors.

It's about **RELEVANCE**

Do you feel that you must be the only person experiencing a specific set of challenges? At PLM Road Map™ 2009 you will share ideas and experiences that are **relevant** now.

It's about **NETWORKING**

How often do you have the opportunity to spend quality time with a large group of like-minded colleagues? At PLM Road Map™ 2009 you will make valuable additions to your **network**, people you will be able to call on in years to come.

It's about **CHOICES**

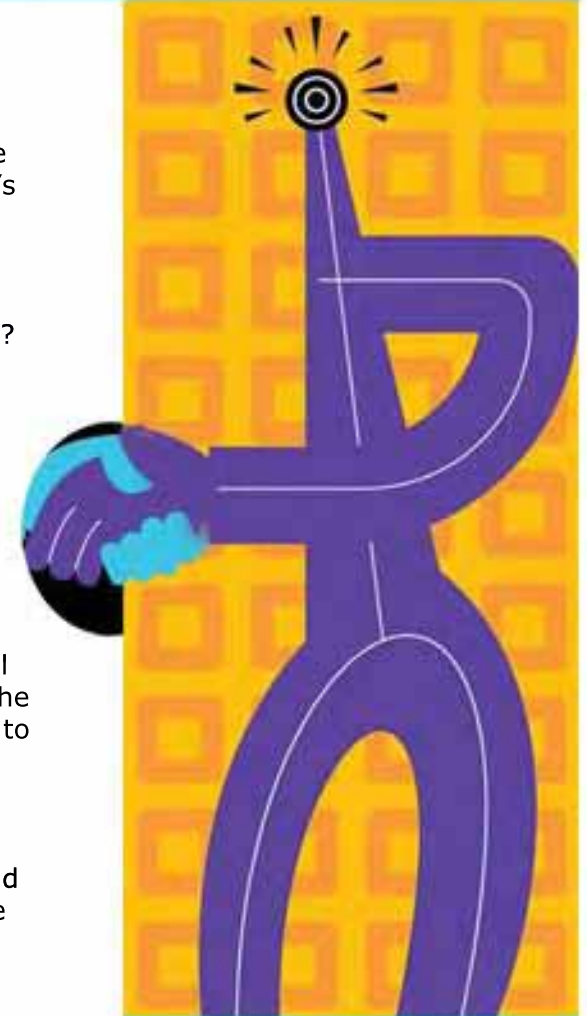
With the increased pressure to make your decisions count how do you keep up with all the new products that are coming to market? At PLM Road Map™ 2009 you will have the opportunity to find out what is available now and what will be available going forward to enable you to make **informed choices**.

It's about **TRANSFORMATION**

How do you go about developing a meaningful transformation framework? At PLM Road Map™ 2009 you will develop ideas on how to **transform** your enterprise infrastructure towards a new value proposition applicable to your own set of circumstances.

It's about **DRIVING CHANGE**

How do you make effective decisions in uncertain times? At PLM Road Map™ 2009 you will develop a clearer understanding of what is around the corner so that you can **drive change** today.



Previous Attendees Include:

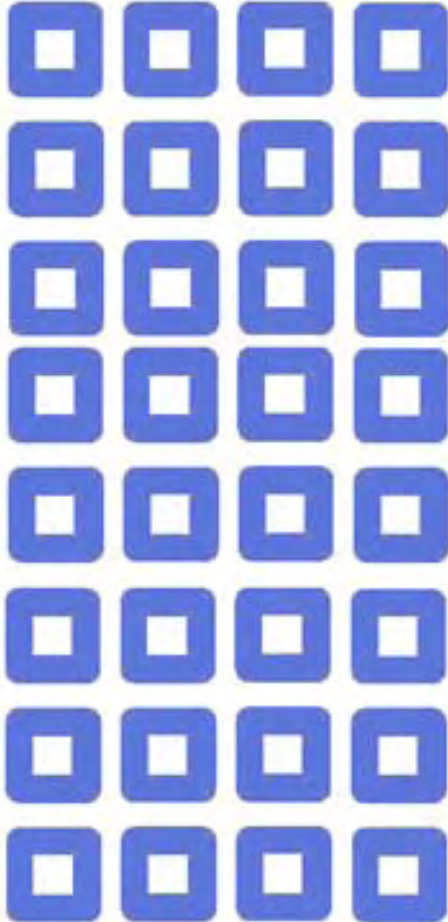
Adobe Systems
Airbus
ALPS Automotive, Inc.
Altair Engineering, Inc.
Amcort PET Packaging
AMD
American Axle
ANSYS, Inc.
ArvinMeritor
Autodesk
BAE Systems
BMW AG
Babcock & Wilcox
Bath Iron Works
Bell Helicopter
BF Goodrich
The Boeing Company
Bombardier Aerospace
Bridgestone Corporation
Caterpillar, Inc.
CD-adapco
Chrysler Group LLC
Comet Solutions, Inc.
Cooper Tire & Rubber
Cordis Corporation
Cummins Engine Co., Inc.
Dana Corporation
Dassault Systèmes
Deere & Company
Delphi Automotive Systems

Eaton Corporation
EDS
ESI Group
Exostar, LLC
Faurecia
Fisher & Paykel Appliances
Ford Motor Company
Freudenberg-NOK
Freescale Semiconductors
GE Aircraft Engines
GE Power Systems
General Dynamics
General Motors Corporation
The Goodyear Tire &
Rubber Co.
Gulfstream Aerospace
Corporation
Harley-Davidson, Inc.
Hayes-Lemmerz International
Hewlett-Packard Company
Hitachi, Ltd.
HMS Products Co.
Honda R&D Americas, Inc.
Honeywell International
IBM Corporation
Infosys Technologies Limited
Intel Corporation
Intier Automotive Interiors
International Automotive
Components

Johnson Controls, Inc.
Keane, Inc.
Kennametal Inc.
Kimberly-Clark
Kubotek USA
Lear Corporation
LG CNS
LMS North America
Lockheed Martin Corporation
Mentor Graphics
Merant, Inc.
Messier-Dowty
Methode Electronics, Inc.
Molex
Moog, Inc.
MSC Software Corporation
NASA
NCMS
Nike, Inc.
NIST
Oshkosh Truck Corporation
PSA Peugeot Citroen
Pentair Enclosures
Phoenix Integration
Pratt & Whitney
Procter & Gamble
PROSTEP Inc.
PTC
Raytheon Company
Right Hemisphere

Rockwell Collins, Inc.
Sandia National Laboratories
Siemens AG
Simmetrix Inc.
Sopheon Corporation
Spatial Corporation
Swagelok
Tata Technologies Limited
Textron Inc.
The Timken Company
Toyota
TRW Automotive
U.S. Air Force
U.S. Army
U.S. Navy
VISTAGY
Visteon Corporation
Vought Aircraft
Whirlpool Corporation
Wipro Technologies
Xerox Corporation
Yazaki North America

Registration



Online: <https://cpd-associates.com?download=PLMRM09>

E-mail: events@cpd-associates.com

Call: 800-573-4756
251-433-7049 (outside USA)

Fax: Download fax registration form at: <http://cpd-associates.com/pdfs/PLMRM09.pdf>

Registration Fees

- Register by August 21st — take \$300 off your registration.
- Bring-a-Colleague Discount — take \$300 off each registration.*

Full Fare	One Discount	Two Discounts	Business Partners**
\$1495	\$1195	\$895	Free

*Bring-a-Colleague Discount applies to both attendees, who must register at the same time.

**Call 800-573-4756 to find out if you qualify for this partner benefit.

Team Registration

Manufacturing Teams: Take advantage of special pricing when you register five or more people from your team. Offer expires September 4th. Call 800-573-4756 for details.

Hotel and Venue Information

The Inn at St. John's, Plymouth, Michigan (12 miles north of the Detroit airport)

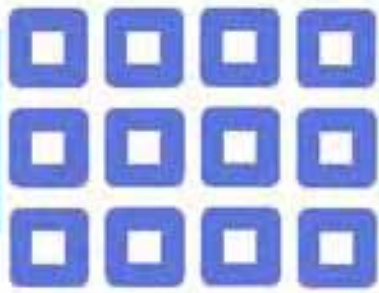
Tel: 734-414-0600

Group Rate: \$137

Reserve early — CPDA rate expires September 4th



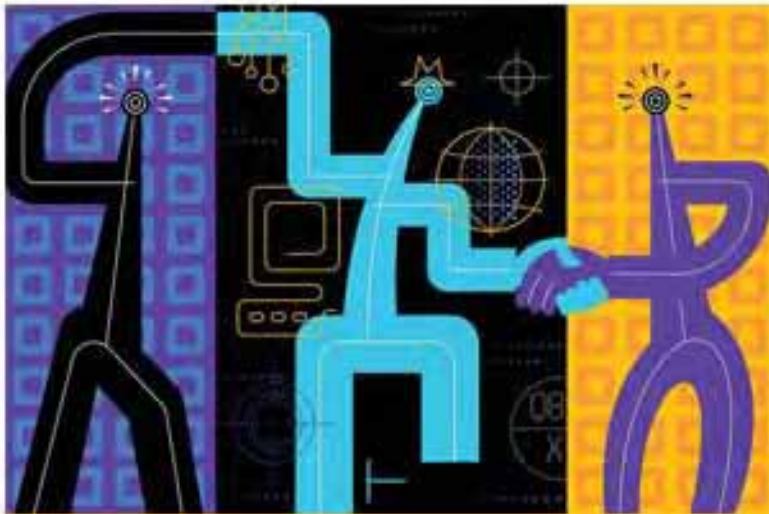
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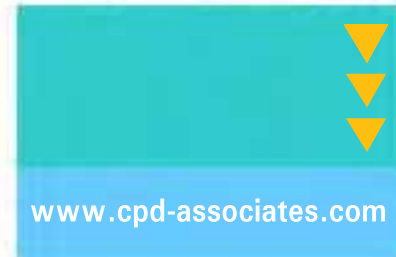
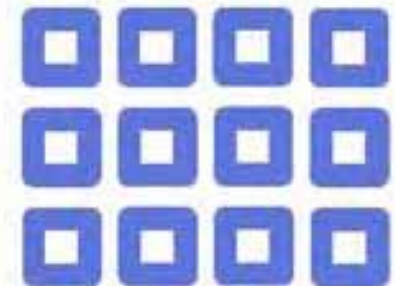
About Collaborative Product Development Associates

Collaborative Product Development Associates (CPDA) is a provider of critical analyses for PLM decisions. CPDA offers the latest in-depth, objective information for assessing technology and business goals. Coordinated by a group of experienced analysts, its collaborative research programs leverage the efforts of top software designers and leading-edge users. CPDA's differentiation is its deep and pragmatic approach to the market, and a hands-on understanding of the technology required to drive successful implementations.

CPDA's collaborative research programs include Design Creation and Validation, Design/Simulation Council, PLM Integration/Product Definition, and Product Value Management.



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