Management Roundtable Presents

Product Development and the Supply Chain: Ensuring Quality, Controlling Costs

An important, timely 2-day conference on how to manage the risk, reliability and cost-effectiveness of your supply chain as you design and develop new products

- ▲ Reduce design complexity for increased speed and reduced cost
- ▲ Control the quality and availability of outsourced components; design for flexibility and interchangeability have contingency plans in place
- ▲ Implement a comprehensive supplier performance measurement process
- ▲ Extend best practices, Lean, Six Sigma and other quality initiatives to your supply base
- ▲ Develop and deploy effective supplier risk assessments

March 4 – 6, 2002 Renaissance Dallas Hotel Dallas, Texas

VP Operations and Logistics, Delphi Automotive Systems

Mark C. Lorenz

Industry Keynotes:



EVP WW Operations, Sun Microsystems, Inc.



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f your livelihood depends on getting high-quality products in the hands of customers swiftly and profitably, you can ill afford an unreliable supply chain. Supply chains are tough to control even in the best of times – how do you manage the unpredictability, increased risk, and cost hurdles of today?

- ▲ How do you mitigate supplier/customer risk and quickly qualify new suppliers?
- ▲ How do you design in flexibility to give you more options?
- ▲ How do you reduce design complexity and reuse technologies/modules across product families?
- ▲ How do you make sure your supply base adheres to the same quality standards and practices as you?
- ▲ How do you keep inventory to a minimum and improve cash flow yet have parts available when needed?

To provide you with proven strategies from industry leaders who have answered these questions, Management Roundtable will be holding its fourth annual Product Development and the Supply Chain Conference on March 4 – 6, 2002 in Dallas, Texas. The theme is Ensuring Quality, Controlling Costs.

By participating, you will learn how Sun Microsystems' massive A&Q (Availability and Quality) program boosts its efforts as a mission-critical supplier of systems and services, how Delphi Automotive simultaneously improves product quality and company cash flow by extending Lean principles throughout the enterprise, how Texas Instruments uses a comprehensive supplier performance measurement process for better, faster qualifying decisions, how Pitney Bowes reuses technologies and links incentive systems to product profitability, how IBM reduces complexity and simplifies part number management, and more.

Two "shirtsleeve" pre-conference work-shops offer the opportunity to create a comprehensive cost/quality action plan – the first workshop teaches Value Stream Mapping, a technique based on the Toyota Production System for creating high performance from the whole value stream. The other will delve into the integration of Lean and Six Sigma throughout the supply chain.

Overall, this event will give you a set of strategies, tools, methods, metrics and solid examples to help you proactively rethink and protect one of the most critical variables in product development – your supply chain.

Agenda at a Glance

DAY ONE M	onday, March 4, 2002				
Pre-Conference Workshops					
7:00 – 8:00	Registration and Continental Breakfast				
8:00 – 12:00	Value Stream Mapping for the Supply Chain: Seeing Waste & Doing Something About It				
12:00 – 1:00	Lunch/Exhibits				
1:00 – 5:00	Attacking Waste and Variability in the Supply Chain: Lean Six Sigma Process				
DAY TWO Tu	iesday, March 5, 2002				
7:00 – 8:00	Continental Breakfast and Registration				
8:00 – 9:30	Opening Keynote				
9:30 – 12:00	Case Studies				
12:00 – 1:30	Luncheon				
1:30 – 3:30	Case Studies				
3:30 - 4:00	Refreshment Break/Exhibits				
4:00 – 5:15	Keynote: Marissa Peterson, EVP Worldwide Operations, Sun Microsystems, Inc.				
5:15 – 6:30	Networking Reception				
DAY THREE	Wednesday, March 6, 2002				
7:30 – 8:30	Continental Breakfast				
8:30 - 9:45	Keynote: Mark C. Lorenz, VP Operations & Logistics, Delphi Automotive Systems				
9:45 – 10:00	Refreshment Break				
10:00 – 12:00	Case Studies				
12:00 – 1:00	Lunch				
1:00 – 3:00	Case Studies				
3:00 - 3:30	Wrap-up				

Who Should Attend

This conference will be of most value to Directors, VPs and managers of:

- ▲ Engineering
- ▲ Product Development
- Supply Chain Management
- Supplier Development
- Quality
- ▲ Operations
- ▲ Procurement
- ▲ Sourcing

Team members and partnering organizations are highly encouraged to attend together to obtain maximum benefit. Special team rates are available – see page 7 for details.

"I found the conference to be very worthwhile. I was impressed with the quality of the speakers and the usefulness of the information they presented. The Management Roundtable team clearly paid attention to detail and helped make the most of the two days we were here. Great Job!"

— Tom McClesky, Manufacturing Engineer, Adec

"The conference provides an excellent opportunity to learn about the latest advances in the supply chain management arena – to interface with professionals and experts — and to identify organizations and processes to benchmark."

Tanvir Arfi, Director of Strategic Sourcing,
 Cessna Aircraft

Highlighted Case Studies

Optimizing Common Components for Increased Speed and Profitability

Denis Stemmle, Principal Fellow, Advanced Concepts and Technology Group, Pitney Bowes Corporation

Over the past four years, the Pitney Bowes New Product Development team has initiated process changes that resulted in dramatic improvements in product performance and time-to-market. Two initiatives that led to these improvements include carefully planned reuse of technologies and modules across families of products, and linking leadership team incentive systems to product profitability.

This presentation will address key strategies for designing products with appropriate levels of common components and modules to increase time-to-market, optimize the investment and reduce manufacturing costs.

Key take-aways:

- ▲ Overview of the various types of reuse: technology, documentation, modules, components, software & design teams
- ▲ How to break down the barriers to reuse
- ▲ Methods for linking reuse with incentive systems
- ▲ The pros and cons of common modules
- ▲ Benefits of partnering with suppliers in design and sourcing

Measuring Supplier Performance

Jerry Swan, Strategic Supplier Process Manager, Texas Instruments

Texas Instruments (TI) selects and retains suppliers based on their ability to provide TI with a sustained competitive advantage in CETRAQ: Cost, Environmental Responsibility, Technology, Responsiveness, Assurance of Supply and Quality. The CETRAQ methodology gives TI's Worldwide Procurement & Logistics organization a consistent framework to communicate with, and manage, its suppliers. CETRAQ provides a complete list of performance requirements, measures supplier performance to those requirements, and guides continuous improvement programs between suppliers and internal TI teams. CETRAQ attributes are recognized within TI as critical supplier performance characteristics that must be managed effectively for TI to be successful. This case study will examine how the Capital Equipment Procurement group at TI applied the CETRAQ concepts to develop and implement a comprehensive supplier performance measurement process.

Key take-aways:

- ▲ How to design and implement an effective supplier performance management process
- ▲ Planning for continuous improvement in results and process flexibility
- ▲ TI Capital Equipment Procurement process examples

The IBM Common Building Block Initiative

James E. Dickerson, Director of Hardware Common Tools & IPD Process Management, IBM

Improvement in production/procurement operational efficiency starts with reducing product complexity. The objective of product complexity reduction is to lower the cost of development, manufacturing, sales, order fulfillment, service and warranty of hardware products. These objectives can be accomplished at a high level by reducing the number of models and features. They can also be accomplished by reducing the number of total part numbers, increasing the number of preferred part numbers and increasing the number of common part numbers, or reuse, between the models and features. Product complexity reduction has a direct benefit in manufacturing and distribution costs.

Common parts are key to product complexity reduction, but far greater efficiencies in manufacturing, inventory and order fulfillment are realized by designing common assemblies, common FRUs, and common fabricator units that can be shipped to fulfillment centers and distributors to be customized quickly as orders come in. This presentation will focus on IBM's efforts in the area of part number management - demonstrating IBM's processes, management system, tools and metrics.

Keynote Presentations

Rearchitecting the Supply Chain for Speed, Quality and Cost Reduction

Marissa Peterson, EVP Worldwide Operations, Sun Microsystems, Inc.

Ms. Peterson will provide a rare glimpse of how the leading provider of systems, software and services for network computing is rearchitecting its supply chain for dramatically improved product delivery and lower cost of doing business. She will provide a blueprint for how to progress your enterprise and supply chain management systems into e-SCM, encompassing entities both within and outside your four walls. In parallel with initiatives to cut costs and time out of the supply chain, she will touch upon the massive A&Q (Availability and Quality) efforts Sun is undertaking to truly be a mission and even life-critical supplier of systems and services. She will share examples of real results to-date, learnings, and future implications as Sun continues this journey. These initiatives have already proven to be instrumental in Sun's efforts to continue market share growth, while optimizing supply chain inventory levels during both periods of aggressive industry growth and demand downturn.



Marissa Peterson, EVP of WW Operations at Sun Microsystems, is responsible for setting strategy and holds accountability for materials & supply chain management, manufacturing, operations, engineering and logistics. She is on the Board of Trustees for Kettering University and

the Industry Advisory Council for Stanford University's Graduate Schools of Business and Engineering. Marissa's former positions at Sun include VP of WW

Logistics and Customer Quality and Director of Manufacturing. Prior to joining Sun, she worked as a management consultant for Booz, Allen and Hamilton, and in various marketing, financial and engineering positions with Saturn Corporation and various GM divisions. She holds a Bachelors of Science from Kettering University and an MBA from Harvard University.



Mark C. Lorenz, Vice President, Operations & Logistics, Delphi Automotive Systems

Mark Lorenz will discuss how Delphi Automotive Systems has increased speed and improved quality throughout the value stream. He will explain how Delphi has been able to eliminate waste --not only within the four walls of its manufacturing plants, but also throughout its entire enterprise --extending lean practices throughout the supply chain. Delphi's lean, small lot production strategy has enabled the company to focus on a fewer number of parts at a time, ensuring that its products are always of the highest possible quality, while keeping inventory to a minimum and improving cash flow. Lorenz will elaborate on the tools Delphi has utilized to implement its lean initiatives, including the Delphi Manufacturing System, manufacturing system design, value stream mapping, and other innovative measures, such as the creation of a lean logistics network.



Mark C. Lorenz is Vice President of Delphi Automotive Systems in charge of Operations & Logistics and a member of the Delphi Strategy Board, the company's top policy-making group. He also serves as executive champion for Delphi's production control and logistics task team. Prior positions



Pre-Conference Workshops, Monday, March 4

A. Value Stream Mapping for the Supply Chain: Seeing Waste and Doing Something About It

Instructor: Ed Constantine, Chairman, Simpler Consulting, Inc.

Profitable growth is not an accident. It happens to companies that do a good job of developing the right products and also deliver these products with Lean high-performance value streams. As awareness of the Toyota Production System has increased in North America during the past 15 years, hundreds of companies have pursued Lean conversions inside their own walls. Value Stream Mapping has been a powerful tool in helping these companies identify and eliminate waste.

Most companies struggle with how to create high performance from the whole value stream. This broader value stream starts at the raw materials and ends with the end customer. It involves multiple businesses. Ultimately, it's the performance of this total value stream that is the end-customer's chief concern.

The majority of the workshop will be spent in small-group activities and will discuss specific case study examples. Participants in this workshop will learn:

- ▲ Lean principles and the structure of Value Stream Mapping
- ▲ How to use Value Stream Mapping to identify waste in your supply chain
- ▲ How to create action plans to eliminate supply chain waste



Ed Constantine is an MIT graduate. As an Operations Manager at Jake Brake in the late 1980's, Ed learned Toyota Production System from the Shingijutsu Group (former members of Toyota's Autonomous Study Group — originators of TPS in Japan). Ed was key to Jake Brake's successful export

of products to Japanese customers, helping Jake Brake become one of Mitsubishi's zero defects suppliers. As Plant Manager and Operations VP at HON, Ed led four plants to Lean successes in the office furniture industry.

B. Attacking Waste and Variability in the Supply Chain: Lean Six Sigma Process

Instructor: J. Cooper Crouse, Vice President, George Group

A recently published survey showed that the top two management challenges for industrial and consumer products manufacturers were (1) increasing flexibility and speed and (2) reducing costs in their businesses.

This interactive workshop will demonstrate the power of integrating the improvement approaches and solutions of Lean and Six Sigma to create a fast, flexible and cost-effective supply chain. Participants will engage in the process for identifying and prioritizing sources of customer dissatisfaction, internal waste and process variability in the simulated supply chain. Improvement teams will then focus on the highest return areas and utilize Lean and/or Six Sigma tools to remove capacity, time and variability bottlenecks in the process. In the end, a new supply chain emerges that is faster, more efficient and more effective than before. This is a fast paced, hands-on simulation led by experienced Lean Six Sigma Master Black Belts.



Cooper Crouse is a Vice President with George Group. He has led consulting engagements in many industries including pet food, pharmaceutical research, avionics, telecommunications equipment and information storage and retrieval. Crouse's joint client-consultant team efforts have attacked

waste and variability in manufacturing and support processes and employed performance improvement tools of Kaizen, 5s, Pull Systems, Poka Yoke, Six Sigma, Simulation, cycle time compression and supply chain design. Crouse is a 1986 graduate of the US Naval Academy and earned his MBA from Indiana University in 1993.



About the Management Roundtable (MRT) The Management Roundtable is the leading knowledge and networking resource for product developers. Practitioner-oriented and unbiased, our focus is on providing actionable information about new innovations, processes, tools, and technologies that enable faster time-to-market, increased profitability, and overall competitive advantage. Founded in 1980, Management Roundtable publishes the PEER-award winning Product Development Best Practices Report, offers an online database of PD Best Practices, hosts a variety of specialized conferences and workshops, and conducts customized research, onsite training and expert referrals.

Registration Form

The Renaissance Dallas Hotel Dallas, Texas March 4 – 6, 2002

Please reserve a seat at <i>Produ</i>	uct Developmen:	t and the Sup	oply Chain:
Ensuring Quality, Controlling	Costs for:		

 2 day conference (March 5 - 6, 2002) Pre-conference Workshops (March 4, 2002) A (am) Value Stream Mapping for the Supply Chain, Simpler Consulting, Inc B (pm) Attacking Waste and Variability in the Supply Chain: Lean Six Sigma Process, George Group 						
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Program Fees

EARLY BIRD DISCOUNT: Register Early and Save \$300!

Registration:	Save \$300 Before 12/15	Save \$100 Before 1/15	After 1/15
☐ 2 day conference	\$1295	\$1495	\$1595
☐ 2 day conference & 1 half-day workshop	\$1790	\$1990	\$2090
2 day conference & half-day workshops	\$2285	\$2485	\$2585
☐ 1 half-day workshop (stand alone)	\$695	\$695	\$695
☐ 2 half-day workshops (stand alone)	\$1295	\$1295	\$1295

Registration Code: WEB DOWNLOAD

Program Information

Dates: Conference begins at 8:00am on March 5th and concludes at 3:30pm on March 6th. Optional pre-conference workshops are offered on March 4th, 8:00am - 5:00 pm.

Location and Accomodations: Please contact the hotel directly to make room reservations and mention the Management Roundtable program for a reduced rate. Hotel accommodations are limited; reserve your room early.

Renaissance Dallas Hotel 2222 Stemons Freeway Dallas, TX 75207 214.631.2222

Team Discount: Groups of 3 or more may deduct \$100/person on the 2-day conference. Groups of 6 or more, please call for special pricing.

No-Risk Guarantee: Your satisfaction is 100% guaranteed – money back or credit!

Program Fees: Fees include program materials, luncheons, reception, continental breakfasts, refreshment breaks, 3-month subscription to the Product Development Best Practices Report and a complimentary one-year subscription to the Sloan Management Review.

4 Ways to Register:

Phone

781.891.8080/800.338.2223

Fax

781.398.1889

Onlina

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Mail

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Product Development and the Supply Chain: Ensuring Quality, Controlling Costs

March 4 -6, 2002 Renaissance Dallas Hotel Dallas, Texas

> Maintain and Protect Quality

Mitigate Supplier Risk

Reduce Costs

Boost Spee<u>d</u>

to Market

Featuring:

- ▲ Nuts-and-bolts implementation case studies from advanced practitioners from IBM, Texas Instruments, Pitney Bowes and more
- ▲ Two industry keynotes: **Delphi Automotive Systems** and **Sun Microsystems**
- ▲ Pre-conference workshops offering realistic, hands-on approaches to successfully implement Value Stream Mapping and Lean Sigma practices throughout your supply chain – learn to streamline processes, eliminate redundancies and mistakes