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2004 and Save \$100  
...see page 8

# Improving R&D Productivity

## How to Link Resource Management to Portfolio Process

March 29-31, 2004 / Atlanta, GA

An exclusive two-day conference focused on aligning your limited product development resources with portfolio demands — for maximum ROI.  
**Get more value from R&D; contribute more directly to corporate revenue**

### Learn to:

**ASSESS** your true resource capacity—both what you have now and what you'll need later on

**ALIGN** limited resources with strategic objectives to ensure priority project(s) focus

**ALLOCATE** the *right* resources to the *right* project at the *right* time—leverage functional expertise across the organization

### Plus industry presentations from:

**Texas Instruments ■ Honeywell ■ Motorola ■ IMS Health  
■ Eli Lilly & Company ■ The Dow Chemical Company  
and more...**

### Featuring Keynote Presentations by:



**Michael S. Allen**

*Director, Strategic Decisions Group and author of Business Portfolio Management on successful strategies to measure, forecast and drive R&D productivity*



**Jeff Elton**

*Principal, McKinsey & Company on the value of managing resource allocation as a core business process*

### You're faced with the challenge of doing more with the same pool of resources

If you're like most product developers, you've got too many priority projects in the pipeline and too few resources to execute them well. Struggling with increased pressure to improve productivity and create innovative new products, you need to be able to get an accurate assessment of your resource capacity – what resources do you have available now? What will you need in the future? Should you prepare to make new hires, retrain or opt to outsource?

Today, resource capacity management is a key focus area - most companies are dealing with a dynamically shifting set of resources and constraints and recognize the growing importance of finding a method to better manage resources across their portfolio of new product development initiatives. If you can't achieve a balance between your limited resources and portfolio demands, you're surely setting yourself up to face significant resource gaps, project delays and ultimately, lost revenue.

The purpose of **Improving R&D Productivity: How to Link Resource Management with Portfolio Process** is to introduce you to the latest approaches, tools and thinking on how to:

- get more from the resources you already have - make smarter resource allocation decisions
- integrate resource management with portfolio planning and decision-making
- balance your portfolio of projects with your available resources for increased throughput and productivity

This exclusive program brings together leading experts and advanced practitioners to explore practical and innovative approaches to dynamically assess, track, and deploy limited resources – you'll learn about the people, processes and tools that have helped them achieve *more* with *less*!

March 29-31, 2004 / Atlanta, GA

## Improving R&D Productivity

### How to Link Resource Management to Portfolio Process

#### Who Should Attend

**Vice Presidents, Directors and Managers of:**

- R&D
- Engineering
- Product Development
- Capacity Management/Planning
- Process Management
- Functional Managers
- Senior Program Managers

#### About 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.

**“Knowledgeable speakers, case studies with practical examples of portfolio management design and implementation and an opportunity for networking; what more could you ask of a Management Roundtable event?”**

Steve Schmid, DSM Desotech

## Summary of Benefits

### You will learn:

- How to assess your true resource capacity and map it to your project priorities
- How to dynamically allocate and reallocate scarce resources
- How to close resource gaps and deal effectively with bottlenecks
- About methods for getting the most ROI from limited resources
- How to balance resources with strategic goals – link resource availability and portfolio priorities
- Strategies to leverage functional expertise to ensure that the *right* people are assigned to the *right* projects at the *right* time
- How best practices for pipeline management can dramatically improve capacity utilization
- About the critical need to integrate resource management with business objectives and portfolio management
- How to *communicate* and *use* project priority status lists and keep them up-to-date
- What information systems can provide more visibility into how your projects are being resourced
- How to determine what key data are needed and for what levels
- Proven methods to align your portfolio of projects with available resources for maximum productivity
- How to manage the impact of portfolio shifts on resource management
- How to assess, acquire and deploy the right resources in a resource constrained environment
- How to measure and assess the impact of resource demand and capacity constraints on execution success

## Agenda At-A-Glance

### Monday, March 29 - PRE-CONFERENCE WORKSHOPS

- 8:00-Noon     **A. Aligning Allocating and Acquiring the Right Skills for a Resource Limited Environment** - Instructor: Wayne Mackey, Product Development Consulting, Inc.
- B. Strategic Tools for R&D Project Selection and Structure** - Instructors: Ximena Leroux & Brian Meeker, Deloitte
- Noon-1:00     Lunch
- 1:00-5:00     **C. Improving Portfolio and Pipeline Throughput with Dynamic Resource Allocation** - Instructors: Mark Deck & Vineet Dalal, PRTM
- D. Probabilistic Resource Accounting: Generating High Confidence Staffing Plans for the Uncertain World of R&D** - Instructor: Mark Durrenberger, Oak Associates

### Tuesday, March 30 - CONFERENCE DAY ONE

- 8:00-8:15     **Welcoming Remarks** - Management Roundtable
- 8:15-9:30     **KEYNOTE** - Michael S. Allen, SDG
- 9:30-10:30    **Case Study: Aventis** - Lewis Lee, Aventis
- 10:30-10:45   Refreshment Break
- 10:45-11:45   **Case Study: Eli Lilly** - Paul R. Bunch, Eli Lilly & Co.
- 11:45-1:00    Lunch
- 1:00-2:00     **Featured Presentation: Key Pipeline Practices Drive Effective Capacity Management** - Bradford L. Goldense, Goldense Group, Inc.
- 2:00-3:00     **Case Study** - TBA
- 3:00-3:15     Refreshment Break
- 3:15-4:15     **Case Study: Dow Chemical** - Paul D. Ries, The Dow Chemical Company
- 4:15-5:15     **Featured Presentation: Managing the Impact of Portfolio Shifts on Resource Management** - Peter Dierauer, Honeywell
- 5:15-5:30     **Closing Remarks** - Management Roundtable
- 5:30            Networking Reception

### Wednesday, March 31 - CONFERENCE DAY TWO

- 8:00-9:00     **KEYNOTE** - Jeff Elton, McKinsey & Company
- 9:15-10:15    **Case Study: Texas Instruments** - Emery Powell, TI
- 10:15-10:45   Refreshment Break
- 10:45-Noon    Roundtable Discussions
- Noon-1:00     Lunch
- 1:00-2:00     **Case Study: Motorola** - Bill Branan, Motorola
- 2:00-3:00     **Case Study: IMS Health** - Clinton J. Wolfe & Susan B. Royer, IMS Health
- 3:00            **Conference Wrap-Up**

# Keynote Presentations

## Key Strategies to Drive R&D Capacity and Productivity



**Michael S. Allen**  
Director  
Strategic Decisions Group

R&D productivity means productively working on the right projects - those that create shareholder value. To work on the right projects, a company requires a strategy to create shareholder value and an R&D portfolio that supports that strategy. In an era of limited resources, simply eliminating low-value white elephant projects is not enough. The best R&D portfolio management practices focus on explicit consideration of project alternatives to meet corporate strategic needs. The key in examining R&D project alternatives is to examine alternative technical and product goals for the projects, acceleration or delay of projects, and resource alternatives.

An overall portfolio strategy, coupled with an effective management system, drives R&D capacity, resource development, resource allocation, and capability development. Effective R&D portfolio management yields proper project priorities, and helps determine the resources required to accomplish each project as well as overall R&D resource requirements. This enables the R&D manager to identify and remove cross-project bottlenecks by reallocating resources or changing resource levels to meet future R&D requirements. Using these methods can typically increase R&D productivity by 30 percent. This presentation will specifically address how to:

- measure and forecast R&D productivity
- account for uncertainties in both technical & commercial success of R&D projects
- relate R&D expenditures to the creation of shareholder value
- clearly align resources with strategy, identify gaps and fill them

Michael Allen, director, Strategic Decisions Group, specializes in developing and managing R&D and corporate strategies. He is the author of *Business Portfolio Management*, published in 2000 by John Wiley & Sons. Mr. Allen is a leader in effectively applying the techniques of strategy development to create new business and R&D strategies for his clients.

## Why Good Decisions Fail to Deliver Results



**Jeff Elton, PhD**  
Principal  
McKinsey & Company

Allocating scarce talent and sufficient resources to your most important initiatives has always been one of the most significant challenges of R&D portfolio management. Resource allocations and reallocations can be viewed as the implementation of portfolio decisions. They enable the right skills to be engaged in the right work and collaborative problem solving. In short, the failure of many well designed product development and portfolio management processes can be attributed to an inability to match deployed resources to agreed upon priorities.

This presentation will examine resource allocation as a core business process that is subject to performance expectations. Through industry examples, Mr. Elton will highlight an approach that will identify the most critical performance cells (e.g., management decision boards, project teams), their contributions to performance, the critical decisions they make, and approaches to resource allocation in different operating environments that successfully align allocation of talent to priorities.

Jeff Elton, Ph.D. is a principal in McKinsey & Company's Boston Office. Dr. Elton focuses on technology-intensive industries, including biotechnology, pharmaceuticals, health and bioinformatics and medical devices. He is a leader of the Firm's Product Development and Pharmaceutical and Medical Products Practices.

**“Consistent quality of speakers and material. Kept my attention for the full two days.”**

Tim Erickson, Honeywell

**“I must get back to the office to implement before my head explodes due to all the good ideas”**

Brian Thorogood, Algonquin Automotive



# Conference Program

## CASESTUDY

### A Framework for Integrating Resource Management with Critical Decision Making Processes in NPD

**Paul R. Bunch, Ph.D.**

*Manager of Capacity Planning and Management, Eli Lilly & Company*

In NPD, the resources required to complete priority projects often far exceed available resources. Yet, Resource Management is typically viewed as an operational process in which functional groups decide how to apply their resources to optimize the portfolio output *given* the portfolio selected from Portfolio Management and *given* functional budgets. This approach separates what an organization intends to work on from the resources required to complete the work. This presentation will examine:

- A framework for describing resource management in NPD
- How to integrate resource management with Portfolio Management and Business Planning
- Critical capabilities, tools, and processes required for integration

## FEATURED PRESENTATION

### Key Pipeline Practices Drive Effective Capacity Management

**Bradford L. Goldense,**

*President, Goldense Group Inc.*

The techniques, touch points, and management steering approaches that companies use for pipeline management have a larger impact on profit and loss than the systems and tools used to manage detailed capacity and scheduling. Learn how seven practical best pipeline practices researched by GGI in its biennial surveys of North American manufacturers and high tech companies, improve capacity utilization.

## FEATURED PRESENTATION

### Managing the Impact of Portfolio Shifts on Resource Management

**Peter Dierauer,**

*Emerging Technology Leader, Sensing & Control, Honeywell*

In situations where major portfolio shifts are necessary, such as moving a business from a harvesting to a growth mode, the link between resource management and portfolio management is essential. This presentation will cover an example of a drastic portfolio shift, its impact on a review of resource allocation management, and a review of portfolio and resource management tools used.

## CASESTUDY

### Improving NPD Execution - Resource Capacity Planning & Management

**C. Emery Powell,**

*NPD Manager, Texas Instruments*

A primary cause of time to market delays for new product development (NPD) is inadequate management of resource capacity versus demand. Management is driven to increase NPD throughput, release as many new products as possible, and capture revenue. A typical response: rapidly feed new products into the pipeline, exceed throughput capacity and create a clogged pipeline. So how can we manage NPD capacity 3, 6, or 12 months out? How can we assess the impact of the resource demand and our capacity constraints on execution success? This presentation will review the findings of recent pilot efforts using enterprise and portfolio level tools at Texas Instruments, the implementation difficulties, and the preliminary improvement gains.

## CASESTUDY

### Dynamically Optimizing Global Resources

**Bill Branam,**

*Director of Strategy, Global Subscriber Products Division Commercial, Government, and Industrial Solutions Sector, Motorola, Inc.*

In our global, constantly changing environment, it is difficult to efficiently manage resources and projects across shifting priorities, timelines, multiple locations and business units. The use of common processes and tools in early and late stages of project selection and development enable an objective framework to ensure the portfolio of projects aligns with business strategy and resource availability. This presentation will discuss the types of processes and tools that facilitate this alignment.

## CASESTUDY

### Evolving Processes & Tool-sets to Drive Resource Allocation and Portfolio Management Decisions

**Clinton J. Wolfe,**

*Global Program Manager, Global Production & Development IMS Health*  
&

**Susan B. Royer,**

*Resource and Knowledge Management Director Product Development, IMS Health*

This presentation will examine IMS Health's evolution of Resource and Knowledge Management processes and supporting tool-sets within Product Development. The presenters will discuss their maturation from tracking simple inventories of skill sets and current projects assigned to forecasting/assigning resource allocations across 1-24 months, and tracking resources across multiple projects. They will address the critical interdependencies between resource management and portfolio, project and finance management and resource management.

Check our website for new program updates:  
[www.ManagementRoundtable.com](http://www.ManagementRoundtable.com)

## Half-Day Morning Workshops

8:00am-12:00am

### **A** Aligning, Allocating and Acquiring the Right Skills for a Resource Limited Environment

Instructor:

**Wayne Mackey,**

Product Development Consulting, Inc.

How can you, as a leader, set the best portfolio of projects for your company's future if you don't have a clear picture of how those projects will be resourced? To rapidly make the transition from a company constantly in "skills panic" to one of "skills advantage," you need the right focus and tools to diversify your specialists within a lean staffing environment. Defining your portfolio's "skills demand" – the skills required to meet your needs now, in one year and in 3 years, is a pivotal first step. Once the demand is set, you must objectively inventory your employees' skills and set a clear training, job experience and partnering course to get the ones you need.

In this highly interactive workshop, participants will learn about and use a proven skills tool to:

1. Sort out the "critical few" skills needed for your future
2. Develop a set of simple Excel-based "skills matrixes" for major job functions
3. Distribute the matrixes and combine the returned data simply and efficiently
4. Use the combined data to define group training needs, individual development actions and outside hiring and partnering requirements

Wayne Mackey's expertise is grounded in over twenty years of hands-on management of large engineering, manufacturing, and procurement organizations. His management consulting is focused on product/service development, collaborative design, metrics, supply chain management and business strategy implementation.

### **B** Strategic Tools for R&D Project Selection and Structure

Instructors:

**Ximena Leroux & Brian Meeker,**

Deloitte

Two of the largest R&D challenges are to design the best R&D organizational structure and to select which projects to fund. This workshop will introduce you to *Strategic Flexibility*, a new framework for project selection and portfolio design, that applies the insights of Real Options Theory and makes them practically applicable, recognizing the need to manage limited resources and maintain the flexibility to refine the research strategy through time. In addition, you will examine how to build R&D Centers of Excellence. Beyond an operational decision, creating Centers of Excellence requires a review of the organizations' overall business and research strategies, as well as an analysis of what operational structure will support these strategies.

By participating in this workshop, you will learn:

- How to apply the *Strategic Flexibility* framework to your project selection and portfolio design process
- Different strategies and frameworks for organizing R&D efforts and creating R&D Centers of Excellence
- How to align R&D processes and tools to your operational R&D structure

Brian Meeker is a Manager at Deloitte, where he focuses on new product development, collaborative product commerce, and supply chain optimization.

Ximena Leroux is a Senior Consultant at Deloitte. Her work has focused on research and new product development strategies.

Both are members of Deloitte's Product Innovation and Lifecycle Management practice.

## Half-Day Afternoon Workshops 1:00pm-5:00pm

### **C** Improving Portfolio and Pipeline Throughput with Dynamic Resource Allocation

Instructors:

**Mark Deck & Vineet Dalal,**  
PRTM

Many companies have taken the first steps toward better resource management by getting a handle on resource assignments and by rationalizing aggregate resource demand and capacity. This improves throughput but still leaves opportunity to fine tune resource assignments and scheduling with resource demand at a more granular level. The ultimate goal for many would be the ability to dynamically allocate and reallocate resources to projects as schedules and priorities shift, without undue management overhead and without disrupting project progress. This workshop will explore practical ways to achieve this kind of dynamic resource allocation. Specific sub-topics include:

- Stages of maturity in resource management and requirements for each stage
- Getting a basic utilization management capability in place by managing assignments
- Aggregate supply/demand balancing or pipeline loading
- Dynamic supply/demand resource allocation
- Information/IT requirements and process/organization requirements for dynamic resource allocation

Mark Deck, *Atlantic Region Lead Director, PRTM Consulting, has over 20 years of consulting experience managing & developing new products. His expertise includes accelerating development and launch of major new products and establishing processes for setting strategy, balancing product portfolios and allocating resources.*

Vineet Dalal, *Principal, PRTM Consulting, has expertise in designing & implementing business and market entry strategies, technology development processes, and program & portfolio decision-making processes.*

### **D** Probabilistic Resource Accounting: Generating High Confidence Staffing Plans for the Uncertain World of R&D

Instructor:

**Mark Durrenberger,**  
Oak Associates

How full is your R+D pipeline? How thin are your resources spread? Can you account for work in progress? Can you say with any certainty what you'll need next quarter? Next month?

Planning for uncertainty in resource capacity and demand is often overlooked when developing staffing plans. Yet, attention to this uncertainty can pay off big when incorporated into your overall pipeline and portfolio management process.

In this workshop, you will examine resource planning from a probabilistic perspective. You will investigate the factors that influence resource capacity, apply proven techniques to assess likely resource demands and gain a better understanding of the uncertainty inherent in those demands.

At the end of this workshop, you will be able to:

- Identify the information you need to generate a robust resource plan
- Generate a realistic accounting of resource capacity
- Develop a probabilistic estimate of resource demands

Mark Durrenberger is a founding principal of Oak Associates, Inc., a project management consulting and training firm based in Maynard, Massachusetts. Mark has fifteen years of experience managing IT, high-technology new product development, and organizational change projects in large corporations and is a Project Management Professional (PMP) with the Project Management Institute (PMI).

# Registration Form

March 29-31, 2004 / Atlanta, GA

## Improving R&D Productivity

### How to Link Resource Management to Portfolio Process

#### Early Bird Discount!

Register by January 30, 2004 and Save \$100

...see 'fees' below

#### Please accept the following registration:

- Two-Day Conference** - March 30-31, 2004
- Optional Morning Workshop** - March 29  
Choose  A or  B
- Optional Afternoon Workshop** - March 29  
Choose  C or  D

Photocopy this form for additional registrants - please type or print clearly

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#### Fees:

	Before 01-30-04	After 01-30-04
2-Day Conference Only .....	\$1495	\$1595
2-Day Conference + 1 Half-Day Workshop .....	\$1990	\$2090
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1 Half-Day Workshop Only .....	\$695	\$695
2 Half-Day Workshops Only .....	\$1390	\$1390

#### Four Easy Ways to Register!



#### On-line Registration:

[www.ManagementRoundtable.com](http://www.ManagementRoundtable.com)



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Toll-Free: 1-800-338-2223 or  
781-891-8080 (9-5:30pm EST)

**Event Dates:** The conference will begin at 8:00 am (registration and continental breakfast at 7:00 am) on March 30, 2004 and will adjourn at 3:00 pm on March 31, 2004. Optional pre-conference workshops are offered on Monday, March 29th from 8:00 am – 5:00 pm. Please consult the conference agenda for specifics.

#### Location & Hotel Accommodations:

The conference will be held at the Grand Hyatt Atlanta, 3300 Peachtree Road, Atlanta, GA 30305. Please call 404-365-8100 directly for room reservations. Please mention Management Roundtable to receive a special rate (we have a limited block of rooms available through March 8, 2004).

#### Cancellations/Substitutions:

You may send a substitute attendee in your place at any time with no penalty (please inform us in advance, if possible). Cancellations made within 5 business days are subject to a \$200 administration fee or the full fee can be credited towards a future purchase. No-shows are liable for the full fee.