MANAGEMENT ROUNDTABLE'S ELEVENTH ANNUAL CONFERENCE ON

Product Development Metrics:

Assess, Predict and Foster Innovation

Receive important new insights from the foremost experts:

NOVEMBER 6-8, 2006 ■ CHICAGO



Dr. Scott Edgett, co-founder of the Product Development Institute and co-author of Winning at New Products, on using metrics to guide the "Innovation Diamond."



Bradford L. Goldense. Founder & CEO, Goldense Group Inc., on key trends and important changes in business strategies and tactics as innovation emerges as a management science.



Dr. Liisa Valikangas. Managing Director, Woodside Institute, on measures that steer the future and make innovation a corporate-wide capability.



Wayne Mackey, Principal, Product Development Consulting, Inc., on metrics for external partnerships and outsourcing.

Forward-looking metrics to assess new product opportunities, predict the value of your innovation pipeline, and ensure a culture of innovation both internally and with external partners.

Real-world how-to's from:

MERCK • CISCO SYSTEMS WHIRLPOOL = CARGILL = **ACCESS BUSINESS GROUP** ANGIODYNAMICS **TELLABS** and more

Featuring:

The Second Annual Product **Development and R&D MVP** Awards (see page 14)



Product Development Metrics: Assess, Predict and Foster Innovation

NOVEMBER 6-8, 2006 CHICAGO

Why this conference is important — metrics for the "Innovation Imperative"



ith innovation at the top of the corporate agenda, the heat is on product development to deliver. CEOs are not just looking at current return on R&D investment, they now want to predict and ensure future ROI.

They want to change the game and hit their numbers.

Yet the very same metrics required for revenue goals may actually inhibit the risk-taking necessary for breakthrough innovation. Jeff Immelt (GE's CEO), for one, has worried that GE's "famous obsession with bottom-line results — and tendency to get rid of those who don't meet them — [would] make some execs shy away from taking risks that could revolutionize the company." (Business Week)

For every company today, deciding what to measure is complicated. How do you assess the intangible value of new ideas and technologies, the pros and cons of "going outside" for innovation, and/or the amount of resources to allocate for potential blockbusters?

And the biggest questions of all:

How do you strike a balance between managing by metrics and managing for innovation?

How do you balance the structure necessary for today with the openness to succeed in the future?

To answer these pivotal questions, Management Roundtable has assembled a top-notch faculty of industry leaders for its **Eleventh Annual Conference on Product Development Metrics**, to be held **November 6-8, 2006** in **Chicago**. The theme is **Assess, Predict and Foster Innovation**; the purpose is to explore realistic measures to ensure ROI while creating a culture where innovation and risk-taking can thrive.

6 KEY DELIVERABLES

- Frameworks to make innovation a corporate-wide capability beyond R&D.
- Measurement systems geared toward assessing future potential (not past performance), including metrics to guide the 'Innovation Diamond' and techniques to align performance metrics with predictive metrics.
- Real-time resource management approaches to achieve future business objectives.
- Metrics that are a prognosticator of future success; a system for analyzing future product development efforts that can be applied effectively in small companies as well as large.
- Metrics to assess core versus non-core-competencies to inform make-buy-partner-outsource decisions, to aid in design partner scouting and selection, and to manage ongoing partnerships.
- Financial measures and indicators to guide portfolio management and investment.

Table of Contents

Why This Conference 2
Key Deliverables
Who Should Attend
Distinguished Faculty3
Conference Agenda 4
Key Benefits5
Keynotes6-7
Case Studies 8-9
Pre-Conference Workshops 10-12
Special Features
About Management Roundtable13
Past Participants14
MVP Awards14
Registration

One of the difficulties you have with R&D and the fuzzy aspects of the business that surround innovation is that you're building for a future that's uncertain.

Rob Enderle Principal Enderle Group

Who Should Attend

This conference is highly recommended for anyone charged with boosting innovation and return on R&D investment. It will be especially valuable to VPs, Directors and Managers of:

- Product Development
- R&D
- Technology Development
- Process Improvement
- Advanced Concept Development
- Innovation
- New Business Development
- Strategy
- Finance

To jumpstart implementation and facilitate organizational alignment, it is suggested that at least two members of your organization attend together, ideally at both the senior and project management level. Special rates are offered for groups (see page 15)

Distinguished Faculty

Keynote Speakers

- Dr. Scott J. Edgett, CEO & Co-founder, Product Development Institute
- Bradford L. Goldense, Founder & CEO, Goldense Group Inc.
- Wayne Mackey, Principal, Product Development Consulting, Inc.
- Dr. Liisa Valikangas, Managing Director, Woodside Institute

Case Study Presenters

- Chris Bardeggia, Director, Global Robust Product Design,
 Whirlpool
- Peter DeVilbiss, Director, R&D Portfolio Management, Merck
- Patrice M. Gausselin, Senior Research Scientist, Product Development R&D, Research & Development, Access Business Group
- Simon Hayes, Senior Director, Strategic Alliances, Cisco Systems
- **Guy M. Merritt**, Director of ONT Engineering, **Tellabs**
- Larry Micek, Business Development Manager, Cargill
- Raj Khoshoo, Vice President of Strategic Initiatives, UGS
 Corporation
- Dan Recinella, VP Product Development, Angiodynamics

Preliminary Agenda

MANAGEMENT ROUNDTABLE'S ELEVENTH ANNUAL CONFERENCE ON

Product Development Metrics:

Assess, Predict and Foster Innovation
NOVEMBER 6-8, 2006 ■ CHICAGO

MONDAY,	NOVEMB	ER 6,	2006
PRE-CONI	FERENCE	WORK	SHOPS

7:00 – 8:00	Registration and Continental Breakfast
8:00 – 12:00	A. Metrics for Launching Innovation Michael Docherty, Venture2
8:00 – 5:00	B. Proactive & Predictive Metrics , <i>Bradford L. Goldense, GGI</i>
12:00 - 1:00	Luncheon
1:00 – 5:00	C. Metrics 101: Best Practices and a Framework for Success, Wayne Mackey, PDC Inc.

TUESDAY, NOVEMBER 7, 2006 CONFERENCE DAY ONE

7:00 – 8:00	Registration and Continental Breakfast
8:00 - 8:15	Welcome, Management Roundtable
8:15 – 9:30	KEYNOTE: Metrics for Driving Future Performance: The
	Innovation Diamond,
	Dr. Scott J. Edgett, CEO & Co-founder,
	Product Development Institute

Metrics for Predicting the Winners — Determining Portfolio Value

9:30 – 10:30	CASE STUDY: Identification of R&D Metrics to Measure Organizational Efficiency, Effectiveness and Value Contribution; Patrice M. Gausselin, Sr. Research Scientist, Product Development R&D, Access Business Group
10:30 - 11:00	Break
11:00 – 12:00	CASE STUDY: Product Development Metrics: A Small Company Point of View; Dan Recinella, VP Product Development, Angiodynamics
12:00 - 1:00	Luncheon
1:00 – 2:15	KEYNOTE: Metrics for Innovation — Building Corporate-Wide and Future-Focused Capability, Dr. Liisa Valikangas, Managing Director, Woodside Institute

Metrics to Manage & Measure the Innovation Pipeline

2:15 - 3:15	CASE STUDY: The 20 Keys to
	Robust Product Design; Chris
	Bardeggia, Director of Global Robust
	Product Design, Whirlpool Corporation

3:15 – 3:45	Break
3:45 – 5:00	KEYNOTE: The Impact of Innovation on Strategy, Tactics and Metrics, Bradford L. Goldense, President, GGI
5:00 – 5:15	Day One Closing Remarks, Management Roundtable
5:30 - 6:45	GALA MVP AWARDS CEREMONY & RECEPTION

WEDNESDAY, NOVEMBER 8, 2006 CONFERENCE DAY TWO

7.00 0.00	Continental Breakfast
7:00 – 8:00	Continental breaklast

0.00 0.15

Metrics for Managing Internal and External Partners

8:00 – 9:15	Outsourcing Metrics, Wayne Mackey, Principal, PDC, Inc.
9:15 – 10:15	CASE STUDY: Outsourcing: Measuring What You Intend to Achieve; Peter DeVilbiss, Director, R&D Portfolio Management, Merck
10:15 - 10:45	Break
10:45 – 11:45	FEATURED PRESENTATION: How Product Lifecycle Management Enables Next Practices in Distributed Product Development; Raj Khoshoo, Vice President of Strategic Initiatives, UGS Corporation
11:45 – 12:45	Lunch

Strategic and Financial Metrics

12:45 – 1:45	CASE STUDY: Calculating ROI for Open Innovation; Simon Hayes, Senior Director, Strategic Alliances, Cisco Systems
1:45 – 2:45	CASE STUDY: Portfolio Metrics Used in a Tactical Environment; Guy M. Merritt, Director of ONT Engineering, Tellabs
2:45 - 3:45	CASE STUDY: Simple Frameworks and Metrics for New Product and New Business Development; Larry Micek, Business Development Manager, Cargill, Inc.
3.45 - 4.00	Conference Wrap-up. Management

Roundtable

Key Benefits

By participating, you will learn new and proven approaches to:

- Determine the right number of new product concepts to feed the innovation pipeline
- 2 Identify and implement proactive and predictive metrics
- Measure the value-add of the R&D function
- Accurately assess the value of new product concepts
- Assess future potential (versus current or past performance)
- Successfully adapt internal metrics for external relationships
- Assess what activities are core and non-core within the business
- 8 Identify opportunities early and measure the impact on growth of ongoing businesses
- Develop metrics that drive innovation and overall R&D performance
- Connect performance metrics with predictive metrics; provide targets for "real time" resource management
- Determine whether and when it makes economic sense to outsource or not
- 12 Apply metrics at the selection stage versus the performing stage of the partnership
- Measure different kinds of co-innovation partnerships
- Track progress towards qualitative (versus quantitative) goals
- 15 Analyze ROI for symmetrical vs. asymmetrical partnerships
- Give senior executives a real-time view into co-innovation progress
- 7 Use metrics to better predict success and choose which projects to invest in

66 Product developers will need to become the creativity and innovation thought-leaders and will have the responsibility to increase competencies and capabilities in their companies.

Bradford L. Goldense Founder & CEO Goldense Group Inc.

Metrics for Driving Future Performance: The Innovation Diamond



Dr. Scott J. EdgettCEO & Co-Founder
Product Development Institute

Leading organizations are integrating their innovation strategy, portfolio management process and new product development process into one seamless program for innovation. The goal is to effectively blend strategy with tactics. Easier said than done in an increasingly competitive and time sensitive environment! Effective metrics have become a critical tool to help guide the organization and its future.

In this keynote presentation, Dr. Scott Edgett presents how leading companies are using metrics to guide the Innovation Diamond to ensure that the organization is planning effectively for the future.

Topics include:

- metrics that provide information to help the organization steer for the future
- linking strategic innovation planning with roadmaps and performance
- portfolio and pipeline alignment
- metrics critical to managing the innovation pipeline

Dr. Scott J. Edgett is CEO and co-founder of the Product Development Institute, Ontario, Canada. An internationally recognized expert in the field of new product development and portfolio management, Scott has consulted with numerous companies including ABB, Alcan, American Express, Barclays Bank, Clorox, Delta Airlines, Dianippon Ink & Chemical, Diageo, Dofasco, Domtar, DowElanco, Gennum, Hallmark, Hollister, Hydro-Quebec, ICI, ITT, Kelloggs, Kennametal, Life Technologies, Manulife Financial, Masterfoods, The Mutual Group, Nova Chemicals, PECO Energy, Pennzoil-Quaker Oil, Pepsico, Roche, Rohm & Haas, The Royal Bank of Canada, R.W. Johnson Pharmaceutical, State Farm, Sun Life Assurance, Toray, U.S. Filter, Warner Lambert, W.R. Grace and Xerox. He has published more than 60 articles and papers, including the "Best Practices" series. He has also co-authored six books. His latest are entitled "Lean, Rapid and Profitable New Product Development" and "Portfolio Management for New Products" 2nd Edition.

Metrics for Innovation — Building Corporate-Wide and Future-Focused Capability



Dr. Liisa ValikangasManaging Director
Woodside Institute

Most management metrics are operational rather than strategic, backward-looking rather than anticipatory, and internally rather than externally focused. In this talk, Dr. Liisa Valikangas discusses a framework for a set of measures or indicators that can help top management to (a) anticipate the need for innovation; (b) assess their company's underlying innovation capability; and (c) track the success of innovation efforts over time. Such a framework will contribute to making innovation a corporate-wide capability beyond R&D and open up visions for measurement systems that are geared toward assessing future potential, not past performance.

Dr. Liisa Välikangas is Managing Director and Research Director of the Woodside Institute—a non-profit professional research organization dedicated to advancing innovative management practice and organizational resiliency in organizations of public interest. She founded the professional research group Woodside Institute with Dr. Gary Hamel in 2002. Previously, she was the Director of Research at Strategos, an international consulting company. Her research on innovation, strategy and organizing has resulted in a number of publications and has been presented to various executive audiences. For the past fifteen years, Dr. Välikangas has been a researcher and consultant both in academia and in the business world. She is currently a Visiting Associate Professor at London Business School.

"A wonderful program that provides a kick start for people who are not using lots of metrics, and also provides good networking for veterans."

Seshu Seshasai, Textron Fastening Systems

The Growing Impact of Innovation on Strategy, Tactics and Metrics



Bradford L. GoldensePresident
Goldense Group, Inc.

Innovation has been on the rise as a subject of management attention in western companies since the early 1990s. A decade and a half later, innovation is now poised to rapidly pervade management thinking and measurement science. Stockholders are looking to buy companies that can innovate. Analysts are more favorable to companies that demonstrate innovation. Executives are asking their companies to become more innovative. Employees are more focused on the creative content of their work products. The demand for innovation has now reached critical mass. Suppliers and vendors of creativity and innovation tools and techniques have shifted into second gear to reap the benefits of this growing market.

In the next five years, the ability to direct and manage innovation will evolve from a black art into the infant stages of a burgeoning management science across western industries. All business functions will be affected as the demands on industry increase. Unlike the last twenty years of execution improvement where transaction processing functions led and R&D followed, product developers will need to become the creativity and innovation thought leaders and will have the responsibility to increase competencies and capabilities in their companies. This keynote address will highlight the trends, the resultant changes in business strategies and tactics, and will identify the initial measurement areas and metrics that are likely to be central to innovation as a management science.

Brad Goldense is President of Goldense Group, Inc. [GGI], a nineteen-year old consulting and education firm concentrating in advanced business and technology management practices for line management functions. Mr. Goldense has consulted to over 150 of the Fortune 1000 and has worked on productivity improvement and automation projects in over 400 manufacturing locations.

Design Partnership & Outsourcing Metrics — An Industry-Wide View



Wayne MackeyPrincipal, Product Development
Consulting, Inc.

The best practices in design partnerships and outsourcing won't help you or your company unless you can objectively assess and manage them effectively. The first step is determining and applying the right metrics. This keynote address draws upon the results of three landmark design partnership/outsourcing industry studies with senior executives at over 37 leading companies defining their current state of engineering partnerships and outsourcing. The purpose of those studies was to gain deep insights about the metrics, management, obstacles, approaches and best practices in design partnerships and alliances. A summary of the key metrics insights from those studies will be presented, including:

- Set-up: Objective measures that aid design partner scouting and selection
- Execution: Metrics to effectively manage a performing design partnership
- Enablers: Functional roles and responsibilities in governance of the partnership

Specific distinctions will be addressed in:

- Metrics applied at the selection stage versus the performing stage of the partnership
- Each company's individual metrics versus joint partnership metrics
- Traditional project metrics versus those used in a design partnership

Specific take-aways from this presentation include:

- Understanding of the current "state of the industry" in design partnership/outsourcing metrics
- Examples of design partnership/outsourcing metrics and how they have been successfully applied by leading companies

Wayne Mackey's expertise is grounded in over twenty years of hands-on leadership of large engineering, manufacturing, and procurement organizations. His management consulting is focused on product/service development, and he is especially effective in collaborative design, metrics, portfolio management and business strategy implementation. He is co-author of the new book "The Value Innovation Portfolio."

Identification of R&D Metrics to Measure Organizational Efficiency, Effectiveness and Value Contribution

Patrice M. Gausselin, Senior Research Scientist, Product Development R&D, Research & Development, **Access Business Group**

Organizational metrics have been a focal point for Access Business Group for several years, yet real metrics to affect organizational outputs have been elusive. Historical measures such as percent new & improved product revenue and staff work hour expenditures provided "unconnected" numbers which provided little direction on how to improve organizational outputs that added value to business objectives. Through analysis of organizational understandings and relationships, both within and outside the company, the company has re-evaluated its current metrics and identified where they lacked relevance or clear understanding. Historical metrics have been good indicators of the performance outputs but unfortunately provided no effective means to change the future. The result of this work connects performance metrics with predictive metrics to provide targets for "real time" resource management aligned with future business objectives.

Product Development Metrics: The Small Company Point of View

Dan Recinella, VP Product Development, **Angiodynamics**

The saying goes that all politics are local. The same goes for Product Development metrics. For a small company fighting against large competitors, picking the right projects is critical for survival. The problem with most metrics is their retrospective nature, which for a small company can be "a day late and a dollar short." In an attempt to determine predictive metrics for Angiodynamics, a number of developed and marketed products were analyzed to determine if conventional metrics were predictors of success. The analysis was taken further to investigate whether other metrics more descriptive of the company were a better prognosticator of future success. From this analysis a system for analyzing future product development efforts was created.

The 20 Keys to Robust Product Design

Chris Bardeggia, Director of Global Robust Product Design, **Whirlpool Corporation**

This presentation is designed to share Whirlpool Corporation's innovative and comprehensive approach for continuous improvement of its global product development process. Whirlpool's vision for product development is aligned and integrated with engineers' day-to-day activities through a project self-assessment methodology called the 20 Keys to Robust Product Design. It is an inclusive approach to understanding expectations and providing the appropriate roadmap, tools and learning to make change successfully.

Areas of focus for the presentation include:

- Defining the vision
- Setting expectations
- Aligning activities to objectives and the vision
- Increasing predictability of the product development process
- Driving effective product development methodologies
- Leveraging knowledge across an organization

Outsourcing: Measuring What You Intend to Achieve

Peter DeVilbiss, Director, R&D Portfolio Management, **Merck**

What drives a company's decision to source work externally? Is it a need to reduce bottom line costs, is it recognition that world class capabilities exist in many places around the globe and that access to these expanded capabilities is vital to competitiveness, or is it a combination of both? Answering these questions should drive how you proceed with evaluating your internal capabilities and costs, and how you measure progress over the long run.

Mr. DeVilbiss will examine this decision process from the pharmaceutical industry perspective and will share his insights and case examples of how to:

- Assess what activities are core and non-core within the business
- Develop metrics to assess the effectiveness and efficiency of internal activities
- Use analysis to understand what the potential opportunity costs are of limiting capacity to internal capabilities only
- Use a sourcing strategy to ensure that you remain linked to the cutting edge of science and technology
- Ensure that metrics systems are designed to measure the right results over the right time horizon

Calculating ROI for Open Innovation

Simon Hayes, Senior Director, Strategic Alliances, **Cisco Systems**

Open innovation can only be fully successful if it's based on solid business decisions resulting from solid business intelligence. How do you put in place the trust, transparency and common standards needed to track progress, make resource allocation and investment decisions and measure success when two or more parties are involved? Mr. Hayes will share Cisco's framework for measuring both shorter-term, operational performance as well as long-term profitability of its co-innovation portfolio.

Key Takeaways:

- The most appropriate metrics for different kinds of co-innovation partnerships
- Measuring and tracking progress towards qualitative goals
- Different approaches to ROI for symmetrical vs. asymmetrical partnerships
- Standards and systems to give executives real-time views into co-innovation progress

FEATURED PRESENTATION

How Product Lifecycle Management Enables *Next* Practices in Distributed Product Development

Raj Khoshoo, Vice President of Strategic Initiatives, **UGS Corporation**

Understand how global product development and design outsourcing require more from product lifecycle management. Hear firsthand the implications of distributed development to program management, quality, accountability, tools, security, practices/processes and interoperability. Several cases of collaborative development between Western companies and their Asian partners will be highlighted during this presentation including current best practices and a roadmap for next steps. Find out about metrics currently being used in global product development, how they may need to be tweaked and what new metrics should be considered. Ideas about improving performance will be suggested followed by an opportunity to ask questions and engage in discussion. You will leave this session with several general frameworks for the entire lifecycle of partner/supplier integration starting with supplier selection, collaboration through delivery.

Portfolio Metrics Used In A Tactical Environment

Guy M. Merritt, Director of ONT Engineering, Tellabs

Many times we think of portfolio metrics only for strategic uses, but this presentation will outline how portfolio metrics can be very insightful when used tactically. Guy Merritt will share how looking at an individual project may appear not to make good business but when viewed across the whole portfolio, the business need to launch the project can become apparent (or truly tell you the business investment is not justified). This presentation will show how early roadmap decisions and business cases can rapidly change — and how this can be illustrated by measuring portfolio metrics in real time. The key take-away will be a clear message of linking customer input throughout the development processes.

Simple Frameworks and Metrics for New Product and New Business Development — Industrial Market Case Studies

Larry Micek, Business Development Manager, Cargill

Mr. Micek will discuss case studies applying best practices to new business and new product development at Cargill. These case studies will focus on approaches to industrial markets. When referring to "Frameworks" in this presentation, he will be examining the structure of the project and partnership where applicable. Mr. Micek will not discuss management of early stages of product development commonly referred to as "ideation" or "concept development." Rather, he will emphasize the process for and examples of:

- Locating and selecting product or business development concepts.
- Conducting feasibility testing and later stage new business/product development.

Through case examples, he will define straightforward frameworks for business and product development, including strategic and financial objectives and metrics for these case examples. Both internally developed opportunities and partner-developed opportunities will be discussed.

Pre-Conference Workshops

WORKSHOP A Morning Session, 8:00am - 12:00pm Metrics for Launching Innovation

Michael Docherty, CEO, Venture2

n spite of the tremendous progress that companies have made in optimizing both the 'fuzzy front end' and product development phase-gate processes, new product success rates have remained virtually unchanged over the last ten years. Why? One key reason is the lack of attention that has been paid to improving the planning, management and measurement of market launches, especially in the case of product/service innovation (beyond incremental product improvements).

Launching innovation into the market entails both risks and many unknowns — these market launches are, in reality, 'strategic experiments.' Yet many companies follow the same approaches they use for introducing incremental product extensions and improvements. Successful entrepreneurs take a unique approach to launching, evolving and optimizing their innovations in the market. This in-market experimentation and measurement can work for established firms as well, allowing companies to maximize their opportunities with innovation while minimizing risks and resources.

This workshop provides a framework and approach for general managers and senior product development executives to more effectively plan, manage and measure market launches for innovation. You'll come away with an understanding of how entrepreneurs and leading-edge companies optimize the market launch of innovation, and how you can apply these proven approaches in your own business.

Key Take-Aways:

- The fallacy of traditional approaches to the market launch of innovation
- A framework for rapid-business-prototyping and in-market experimentation
- Measurement tools for planning, learning and optimizing the market launch of innovation
- Integration of innovation launch metrics into core business measurements
- The use of non-traditional go-to-market strategies and distribution channels
- Five key pitfalls to avoid in launching innovation

Michael Docherty brings a senior practitioner's perspective to managing innovation, with over 24 years in general management, marketing and new product development. Mike is CEO of Venture2, Inc., an innovation consulting and new ventures firm that identifies and launches innovation-driven new products and businesses. Prior to Venture2, he was a VP/GM for Sunbeam Products (now Jarden) where his leadership and innovation efforts played a key role in the successful turnaround of the company. Before Sunbeam, Mike held leadership positions in marketing and planning for General Electric, Ford Motor Company and Rohm & Haas. Mike holds an MBA from Northwestern University's Kellogg School of Management and BSME degree from Drexel University.

66 Great agenda. Diverse crowd. Good for those new to the subject or those more seasoned. Significant opportunity to exchange ideas and get answers. One of the best conferences in 20 years of personal participation. 99

Russell St. John, Katun Corporation

WORKSHOP B

Full Day Session, 8:00am - 5:00pm

Proactive & Predictive R&D Metrics

Bradford L. Goldense, President, GGI

istorically, measurement has focused on "what has happened, after it has happened." Unfortunately, while these measures are both necessary and valuable, they are reactive in nature and there is little opportunity to leverage this information for the project currently at hand or recently completed. Therefore, the quest for predictive measures, those that help to foresee potential outcomes, continues to rise as companies search to identify and implement measures that can be used to adjust current courses of action to avoid less than desired outcomes and maximize the probability of achieving a desired outcome.

This seminar focuses on metrics that are used at the planning, definition, and early development stages of R&D. Mr. Goldense will outline the following key categories of metrics and their critical importance in driving NPD performance:

- Planning Metrics: Often elusive and intangible, planning metrics are used to set strategic priorities across the organization and all projects. Planning measures help to keep everyone focused on the big picture and the things that are generally most important to continuous success for a particular corporation.
- **Proactive Metrics:** These measures help to frame successful projects and their related functional activities to give companies a best chance of success before actually beginning detailed architectural and design on a project or product.
- Predictive Metrics: Assuming a more literal definition, predictive measures indicate that an activity has started and that there is initial data associated with a partially completed activity. This early data can be extrapolated to the anticipated end of a project and can be used to predict final outcomes.
- **Reactive Metrics:** Without a doubt the most used metrics in industry are reactive metrics those measures that account for what has already happened. This session will also examine how reactive measures over several business cycles can actually take on a more predictive power.

This seminar will lay out the management framework that categorizes Planning, Proactive, Predictive, and Reactive metrics by tying the transition points between these four categories to commonly accepted milestones of a product development process. Examples of metrics in each category will be discussed.

Bradford L. Goldense is President of Goldense Group, Inc. [GGI], a nineteen-year old consulting and education firm concentrating in advanced business and technology management practices for line management functions. Mr. Goldense has consulted to over 150 of the Fortune 1000 and has worked on productivity improvement and automation projects in over 400 manufacturing locations. Abbott Laboratories, Bayer, S.C. Johnson, Ford, General Motors, John Deere, Philips, United Technologies, Carrier, Molex, Monsanto, Bose, and Shure are among GGI's clients. Prior to founding GGI in 1986, Mr. Goldense held positions at Computer Sciences Corporation's Index Group, Price Waterhouse, Lester B. Knight & Associates, and Texas Instruments.

66 The Product Development and R&D Metrics conference provided the intellectual capitalist in all of us the opportunity to learn. ask, and network with a variety of corporations. This program was well worth it! 35

Chad Renbarger, The Patent & License Exchange

Pre-Conference Workshops

WORKSHOP C Afternoon Session, 1:00 - 5:00pm

Metrics 101: Best Practices and a Basic Framework for Success

Wayne Mackey, Principal, Product Development Consulting, Inc.

t seems that everyone has been talking about metrics for years, yet few companies are satisfied that their metrics are the best they can be. It's time to get back to basics. This pre-conference work session is designed for product development leaders who have more important endeavors to undertake than metrics, yet are keenly aware that implementing metrics correctly adds a necessary and useful tool to their professional toolbox. The session draws upon over fifteen years of research and experience in real-world product development metrics and incorporates an interactive component where the participants will generate a set of practical engineering metrics using a simple, proven method.

This workshop will walk you through the foundational elements of metrics (what they are and what they are not) and will outline metrics best practices as well as common mistakes. Case studies will be reviewed in the areas of measuring both hardware and service development and then proceed to more challenging metrics including measuring co-development, innovation and customer needs. Participants will then be facilitated through the process of systematically generating, evaluating and prioritizing a basic set of engineering metrics. Within those metrics, the group will specifically address distinctions between:

- Predictive versus results metrics
- Leadership-level versus project/performing organization metrics
- Culling the "critical few" versus scorching the earth with "massively many" metrics

Workshop Take-Aways:

- An understanding of best practices in engineering metrics
- Specific examples of metrics implemented by leading companies
- Hands-on experience generating a basic engineering metrics framework

Wayne Mackey's expertise is grounded in over twenty years of hands-on leadership of large engineering, manufacturing, and procurement organizations. His management consulting is focused on product/service development, and he is especially effective in collaborative design, metrics, portfolio management and business strategy implementation. He is co-author of the new book "The Value Innovation Portfolio."

Extremely
useful. The
one occasion
where you can
have a very
representative
sample of
what others
are doing or
thinking to
improve
their R&D
processes."

Marco Tivelli, Tenaris

Through measurement and refinement, people and companies can get better and better at innovation.

Carol Pletcher, Chief Innovation Officer, Cargill (as quoted in Business Week)

SPECIAL FEATURES

NUMEROUS NETWORKING AND IDEA-EXCHANGE OPPORTUNITIES WITH LEADING INDUSTRY EXPERTS AND PRACTITIONERS

IN-DEPTH PRE-CONFERENCE WORKSHOPS TO BUILD SKILLS AND COMPETENCIES

Three (3) pre-conference workshops are offered on Monday, November 6:

A. Metrics for Launching Innovation: Receive a framework and approach to plan, manage and measure market launches for innovation. *(half-day)*

- **B. Proactive & Predictive Metrics:** Learn about Planning, Proactive, Predictive, and Reactive metrics for different stages and types of R&D projects. (full day)
- **C. Metrics 101:** How to systematically generate, evaluate and prioritize a basic set of engineering metrics. (half-day)

GALA AWARDS CEREMONY & RECEPTION Second Annual MVP Product Development and R&D Award — Network (and celebrate) with industry leaders!

FREE "METRICS LEADING PRACTICE GUIDE"

Derived from MRT *FastTrack* research (www.fasttrack.roundtable.com), this downloadable PDF outlines six top practices and includes industry case examples. To receive your free copy (whether you attend the conference or not), email jackie@roundtable.com.

EARLY BIRD DISCOUNT

Reserve by August 31 and save \$200.

SPECIAL DISCOUNTS

- Teams of 3 or more may deduct \$100 per person from the conference fee. For teams of 6+, please call 781-891-8080 or 800-338-2223
- Members of Management Roundtable Fast Track and PMI NPD SIG may also deduct \$100 per person. Please call 781-891-8080 or 800-338-2223 to register.

100% NO-RISK SATISFACTION GUARANTEE

If for any reason you are not satisfied, let us know in writing and we will refund your entire conference fee.

About Management Roundtable



The Management Roundtable (MRT) is the foremost knowledge and networking resource for industry practitioners involved in product, service, technology, and business development. Practitioner-oriented

and unbiased, MRT's focus is on strategies and processes that enable speed, innovation, profitability, and overall competitive advantage. Through its highly regarded conferences and publications, MRT has helped companies achieve their objectives since 1980. Its newest membership offering, the Management Roundtable *FastTrack*, (http://fasttrack.roundtable.com) offers direct, year-round access to leading-practice insights via teleconference and online reports.

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Second Annual Product Development and R&D MVP Awards

etween the off-shoring of R&D, baby boomers reaching retirement age, and fewer students pursuing engineering degrees, the US could face a serious shortage of talent in the years ahead. While government and educational programs are in place to address this critical issue, Management Roundtable strongly believes it's our responsibility too. After all, many of the best and brightest R&D and engineering professionals inspire and learn from each other through MRT programs.

From our perspective, we see several factors at play:

- Too few incentives for R&D and product development professionals
- Too much importance placed on short-term profitability, i.e. outsourcing R&D to low-cost labor
- Seniority not necessarily respectedtrue transfer of knowledge limited
- Pressure to innovate despite severe R&D budget constraints
- Cross-functional teamwork diluting individual contribution and worth

What can we do about it? Plenty!!! First, we can help demonstrate the value of R&D by providing quantitative and qualitative approaches used by others. We can examine financial measures and justifications. But most importantly, we can give credit where credit is due.

And since metrics are tied to rewards, where better than our Annual Metrics event to recognize the individuals who have demonstrated leadership and commitment to R&D and product development?

We therefore are proud to once again host the **Second Annual Product Development and R&D MVP Awards**to recognize those who have demonstrated leadership and contributed to the state-of-the-art. The awards are expressly for industry practitioners who have implemented new methods, improved processes, achieved results and then openly shared their knowledge with others. The winner may come from any industry, any level of the organization — not necessarily a superstar, but clearly a Most Valuable Player.

The finalists and overall winner are selected by Management Roundtable and an independent judging panel of product development experts, based on recommendations from peers. Their contribution will be acknowledged to their senior management and the national press to underscore the importance and value of R&D and product development. A Gala Awards Ceremony and Reception will be held Tuesday evening, November 7, 2006.

WAYS TO REGISTER:

CALL: 1.800.338.2223 or 781.891.8080

(weekdays, 9:00am-5:30pm EST)

FAX: 781.398.1889

WEB: www.ManagementRoundtable.com

MAIL: Product Development Metrics

c/o Management Roundtable

92 Crescent Street Waltham, MA 02453

Dates: November 6 – 8, 2006. Two-day conference registration and continental breakfast begin at 7:00 am on November 7, 2006 and the program adjourns at 4:00 pm on November 8, 2006. Optional pre-conference workshops are offered on Monday. November 6 from 8:00 am - 5:00 pm. Registration and continental breakfast begin at 7:00 am.

Fees: Fee includes two day program, program materials, luncheons, wine/beer-and-cheese reception, continental breakfasts, and refreshment breaks. **Workshop fees** include materials, breakfast, and luncheon.

Team Discounts: Teams of 3 or more may deduct \$100 per person from the conference fee. For teams of 6+, please call 781-891-8080 or 800-338-2223.

No-Risk Guarantee: Your satisfaction is 100% guaranteed — money-back or credit.

Venue and Accommodations:

The conference will be held at the: Wyndham Chicago, 633 North St. Clair Street, Chicago, IL 60611. Call **800-996-3426** directly and be sure to mention that you will be attending Management Roundtable's "Metrics Conference." A limited number of rooms are available at a special rate of \$209/night until October 13, 2006; please reserve early.

MANAGEMENT ROUNDTABLE'S ELEVENTH ANNUAL CONFERENCE ON

Product Development Metrics:

Assess, Predict and Foster

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Innovation NOVEMBER 6-8, 2006 • CHICAGO

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	-	After 8/31
2 day conference only	\$1695	\$1895
COMPLETE PACKAGE: (best deal) 2 day conference + 2 half-day workshops OR 1 full-day workshop	\$2685	\$2885
2 day conference + 1 half-day workshop 2 half-day workshops OR 1 full-day workshop only	\$2190 \$1390	\$2390 \$1390
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MANAGEMENT ROUNDTABLE'S ELEVENTH ANNUAL CONFERENCE ON

Product Development Metrics:

Assess, Predict and Foster Innovation

NOVEMBER 6-8, 2006 ■ CHICAGO

I have set up
three meetings
at work to share
this information—
it's tangible and
actionable.

Leslie Kulis, Armstrong World Industries

Learn

- How to determine the right number of new product concepts to feed your innovation pipeline
- How to assess your company's underlying innovation capability and track success over time
- About future-focused metrics how to identify and implement proactive and predictive metrics
- How to measure the value-add of your R&D function — strategies to determine the ROI
- Methods and approaches to accurately assess the value of new product concepts
- Best practices to effectively manage and measure engineering partnerships and outsourcing

Product Development Metrics

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