



# Project Management Innovations



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## Competencies For Radical Innovation Programs

*By Greg Githens, PMP, Catalyst Management Consulting*

Many organizations are complacent and churn out predictable and uninspiring products that are susceptible to leapfrogging by competitors. Periodically these firms create programs to create and commercialize radical innovation. But, radical innovations do not happen just by decree or by individual heroics. A team effort is needed. This article discusses competencies of program managers for radical innovations. The primary audiences are:

- Individuals who are taking on the challenge of leading a radical innovation effort. I want to improve the reader's understanding of the different approaches of radical innovation, compared to incremental product development. Soft skills and traits like leadership and courage create the differences that often determine success.
- Executives or process managers who want to sharpen their insight on creating better new product development performance through launching radical innovation projects. I hope to sharpen the understanding of how organizations undermine their competitive capabilities by focusing on tools and ignoring the soft skills.

### **Radical Innovations: Not Business-As-Usual Program Management!**

Radical products (or breakthrough) are those involved in creating the first generation of an entirely new product or process. They break new ground for the entire organization and set the stage for organization growth. Radical innovations are likely to lead to significant projects and competitive advantage, but they also bring with them risks. Resolving uncertainty is a key to good program management of radical innovation projects, as discussed in the side article, "Uncertainty: What is It? How to You Manage It?"

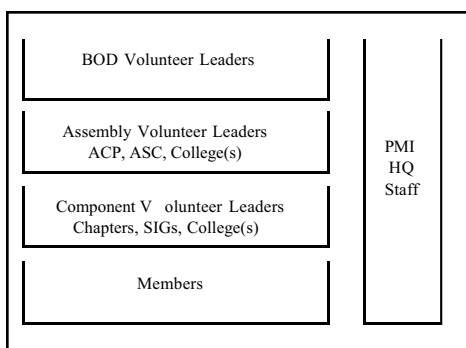
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# Letter From The NPDSIG Chair

By Kurian Jacob, PMP, NPDSIG Chair

Be a volunteer leader. PMI sponsors two leadership meetings each year, designed to train, create networking opportunities, and facilitate common component interests and needs. With sponsorship by my employer, Motorola, I attended the meeting held this year in Costa Mesa, California, from March 6-9. A second meeting is held coincident with the PMI annual Seminars & Symposium.

Who attends the leadership meetings? PMI is governed by a Board of Directors (BoD), which sponsors the components of PMI, viz. Assembly of Chapter Presidents (ACP), the Assembly of SIG Chairs (ASC), and the College. All leaders of the components, assemblies are volunteer leaders, and so also the BoD and the numerous committees sanctioned by the BoD. The assemblies and committees receive funding from PMI, approved by the BoD. Attendance at the leadership meeting is the volunteer leaders of the components, assemblies, BoD, PMI staff, and committee volunteers. Leaders are financially sponsored by their components or employers, or in the case of the assembly leaders, BoD, and PMI staff, by PMI funds. The April 2002 issue of *PMI Today*® has a special section devoted to volunteerism, the opportunities, responsibilities, and recognition of PMI volunteer leaders.



So what's the big deal with the leadership meeting? Well, it is the volunteer leader, all the way from the components, assemblies, and BoD, who determine the future direction of PMI. Curt Raschke, PMP, our past Chair, was an active participant as a member of the ASC board and accomplished the completion (a first for the ASC) of the joint services project. This project brings together several similar sized SIGs, by using a single outsourcing firm, AmeriNet, to share in the costs of administrative services such as welcome letters and newsletters publications, and to help deliver additional services to our constituents. At the ASC meeting, they recognized Curt for his milestone accomplishment, and the NPDSIG is also grateful for his volunteer leadership.

The meeting is packed with sessions to understand the workings of PMI, the support and services provided by PMI to members, and the use of tools and available capabilities. Larry Johnson presented on the topic of change and how project managers can lead and manage change, as the kick-off keynote address. Additionally, there are sessions on relevant topics on leading, motivating, and similar leadership topics. A major portion of a day is spent in the assembly meeting and, in my case, the ASC meeting.

The changes to the annual PMI Seminars & Symposium, and the structure of the assemblies are two important issues presented by committees sponsored by the BoD. Both are likely to be approved by the BoD at their meeting in June. The annual and familiar Seminars & Symposium is to be redesigned to become three regional conferences each year in North America, Europe, and Latin America. The first redesigned conference will be in North America in 2003, with the others fully implemented by 2005. Rather than having tracks such as the always-popular NPD track, sponsored and administered by

the NPDSIG, going forward, all tracks will be developed within areas of focus (AOF), with one and a half hour presentations and about 80 to 100 presentations. Although all the details have not been worked out, this change is inevitable. SIGs and college(s) will have opportunities to volunteer to the committees and to also endorse presentations for their membership. As more details of this major change are finalized, I am sure you will hear about it in greater detail through PMI publications, such as *PMI Today*®.

Consider volunteering to your chapters and SIGs, and feel free to contact any of your board members. I am proud of the volunteer board members, past and present, who have dedicated their time and energy to the members of this SIG, and in these turbulent times helped us achieve the second lowest attrition rate in 2001 (beat out by 0.2% to another SIG), light years away from other SIGs, some with 50 to 70% attrition rates. This is a testament to the volunteers of the SIG.

On a personal note, I was downsized by my employer, with the closing of an entire division on the last working day of the quarter in March. Although this did cause me a brief period of denial, dismay, and grief, I now feel up to the challenge of restarting a new chapter of my life and career. I will share my experiences with you, as related to NPD, project management, and general business. I have also created a new discussion group at <http://groups.yahoo.com/group/PMINPDSIGPros> for downsized NPDSIG members to network, share ideas, tips, contacts, and generally help lift each other up. I invite anyone to join.

## NPDSIG Who's Who

### **Dick Bahn, Vice-Chair Finance & Administration**

Dick Bahn is co-founder and President of Trs Systems, a manufacturer of wireless temperature and humidity sensors for use in commercial buildings. Dick has been involved in new product development for over 32 years at all levels of engineering, marketing, and executive management. During this span, he has been a core team member in the development of over 50 new product platforms and numerous product extensions. Dick was a founding member of the local NPDSIG chapter in Minnesota and has served as its chair for the past two years. As an avid supporter of youth athletic participation, he has been a volunteer coach for numerous youth athletic teams in baseball, hockey, basketball, and softball and a member of the National Youth Sports Coaches Association. With four grandsons, Dick is about to launch his second coaching career. Dick lives in Loretto, MN and his latest hobby is documenting his family's genealogy.

### **Kenneth Delcol, PMP, Appointed Director**

Ken Delcol earned a Bachelors of Applied Science in Electrical Engineering from the University of Windsor in 1981 and an MBA from McMaster University in 1994. He became a PMI PMP in 1995 and a Product Development & Management Association (PMDA) NPDP in 1999. Ken obtained systems engineer experience in both control and mechanical systems at Ontario Hydro's Bruce and Darlington Nuclear Generating Stations. He moved to Ontario Hydro's Integration Control Facilities Group to run energy management software projects. Ken joined AT&T Canada, System's Group and was responsible for the delivery of the Equal Ease of Access and the Software Define Network projects. He is currently Director, Product Development at MDS SCIEX, responsible for the development of new instrumentation projects and the development of capabilities for joint business partners.

### **Mark Hynnek, PMP, PMI 2001-2002 Track Co-Chair, SIG Member**

Mark Hynnek is a Project Management Specialist in the 3M Company, Human Resources Learning Center where he helps manage the corporate project management and teamwork curriculum, facilitates team project planning workshops, consults in project management, portfolio management, QFD, and new product commercialization. Mark has over 30 years multi-functional new product development and commercialization experience. This includes 20 years project management experience, working with over 300 new product development teams and personally leading several new product commercialization projects.

One of Mark's most recent work endeavors included helping develop the project management training module for 3M Six Sigma training. Mark was instrumental in the development and teaching of the first PMP exam preparation class offered by the Minnesota chapter of PMI, NPDSIG Track co-chair in 2001-02, founding member of the Minnesota chapter of PDMA, founding member and past chair of the 3000 member 3M Project Management Specific Interest Group (PMSIG). His last major out-of-work project, was general contracting and building his own home in St. Paul. Mark's most recent project of interest, along with his wife of 34 years, is raising their five year old granddaughter - definitely over budget, out of spec and demanding time.

### **Kimberly Johnson, PMP, NPDP, PMI NPDSIG Vice-Chair Communications 2001-2002, National PDMA Director-at-Large**

Kim Johnson's role at 3M is a Corporate Project Consultant within the 3M Learning Center where her main priorities are consulting to the business units on their commercialization and project planning/management processes. Other activities include teamwork and creativity and innovation consulting, as well as account management for outside trainers within the project management/teamwork curriculum. Kim has experience within the new product development realm at 3M over the past 20 years. Her initial role started in the human factors engineering/ergonomics area and then migrated into project management and new product development commercialization. More recently over the past five years, she has moved to the front end of the product life cycle consulting in the area typically known as the "fuzzy front end."

Activities outside of 3M involve leadership positions within both PMI and PDMA, at both the local and national level. Kim was the first woman to ever hold the position of President for the Minnesota Chapter of PMI. Other organizations that she affiliates with are the American Creativity Association, where she serves on the national board. She also is on the 2002 Planning Committee for the Innovation Network, and is a member of the Minnesota Facilitators' Network.

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# Leadership Ruminations

## A Review Of The ROI Of Human Capital

By Jac Fitz-Enz, published by AMACOM, New York, 2000  
ISBN 0-8144-0574-6

Reviewed by Michael Ayers

**Rating: 9** (The Official Ayers Rating Scale goes from 1-10. Anything lower than 6 is thrown out. This produces a net five-point scale from 6-10.)

If you've been awake at some point in the last several years, then you must have heard one or both of these comments: "People are an organization's most important asset." "Things have changed, and now it's information rather than equipment that offers a competitive advantage." Perhaps you heard them about **your** own organization. Perhaps you even said them **yourself**.

Jac Fitz-Enz sets out to make the case for both of these comments. He does so in two interesting and complementary fashions. On one hand he offers an array of formulae which should appeal even to the truly quantoid among us. He points out that "sales per employee" is misleading when you have a high percentage of people **other** than ordinary full-time employees (FTEs). He offers accessible schemes for calculating instead such metrics as Human Capital Revenue Factor: take the total revenue and divide it by the number of full-time **and** part-time **and** contingent labor hours. He suggests that this is better than "sales per employee," but still too simple.

On the other hand, Fitz-Enz offers a much more humanistic and value-based case. Yes, you can quantify the ROI, but even if you couldn't, you should **still** treat people as valuable assets. Why? "I believe that the companies that learn how to turn on the

information- and intelligence-gathering capability that lies dormant in most employees, will dominate the future. And the ROI of human capital in those firms will be astronomical. They will be able to produce much more per person. They will be opening new product lines faster, creating new markets while competitors are reworking old ones, and continually improving life for customers and employees. When that is achieved, management will truly be leveraging the potential of its human capital."

He suggests that we can learn from the most effective companies. They engage in the practices of planning, staffing, compensation, benefits, and development. They also add a sixth which differentiates the best from the rest: retention. It isn't that most companies do a **bad** job of managing retention, he writes. They don't do any job **at all**. Is retention really all that important? you might ask. Shouldn't we look to increased use of "contract" workers or "temporary" workers for flexibility? He quotes Jeffrey Pfeffer, an outspoken Stanford professor, describing the contradiction between a staff which offers "competitive advantage" and a staff with a larger contingent component:

*"If competitive success is achieved through people – if the workforce is, indeed, an increasingly important source of competitive advantage – then it is important to build a workforce that has the ability to achieve competitive success and that cannot be readily duplicated by others. Somewhat ironically, the recent trend toward using temporary help, part-timers, and contract workers, particularly when such workers are used in the core activities, flies in the face of the changing basis of competitive success."*

Then Fitz-Enz then offers his comments on this contradiction: "Logically, he has a point. However, no matter its logic and validity, economics will rule, as it always does. So long as executives don't know how to measure the economic value of people, they will continue to treat them as an expense, not as a value-generating force, and to believe that they are saving money by using a large percentage of contingent workers."

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### NPD ToolBook And Tool Conference

In April, Wiley and Sons will publish the *PDMA ToolBook of New Product Development*. Most major booksellers are already taking orders. Chapters include topics on the fuzzy front end, customer perceived value, capturing employee ideas, process modeling, decision gates, lead users, and universal design. The NPDSIG's Greg Githens, PMP, is the author of chapter 8, Team Based Risk Management.

## **Project Leadership Workplace Simulation Workshop**

*By Michael Wold, PMP*

Ever wonder how good you really are at managing a project?

Ever want to try a new way managing a project team, but were afraid of the potential embarrassment if things went off track?

Ever wonder what it would be like to manage a project from start to finish?

Ever want to hone your project leadership skills in a safe, but intensely realistic environment?

Well... the Project Leadership Workplace Simulation (3M Course #4276) might be just the thing for you. The Project Leadership Workplace Simulation is an intense learning experience in which 21 weeks of leading a simulated team and managing a simulated project are compressed into two days. Participants use the project simulator to manage the technical (planning, controlling and monitoring) dimensions and lead the human side of a product development project from start to finish.

This workshop provides an opportunity for you to apply your hard-earned experience and the skills developed in your previous training classes. You will be part of a team of four or five participants acting as one project

manager. You will be immersed in a realistic environment with real-life people, a real-life company, and real-life events. In no time you will be totally involved in using your skills in making decisions and managing results in this unique learning environment. The learning comes from doing: making mistakes, experiencing successes, and repetition. The project unfolds differently for each team, depending upon the decisions they make and upon random unplanned events. Success in the workshop, as on the job, is gained by integrating good management principles with the proven leadership skills you know work, but are uncomfortable using on-the-job.

### **Letter To The Editor**

This letter was written in response to Gerald Katz' article, *The One "Right" Way To Gather The Voice Of the Customer*, which appeared in the December 2001 issue of *PM Innovations*.

Dear Mr. Katz,

I would like to thank you for your informative article on VOC in the most recent NPDSIG quarterly. Your comparative treatment of VOC methodologies is insightful and well-written.

However, your first point, that there is no one right way to do VOC was "strengthened" by a comparison between the major religions, Christianity, Judaism, and Islam. Your basic point, that they have similar foundational ethical and moral teachings is well-received. However, the insertion of your personal opinion that there is no "one true religion," is both unobjective and offensive. Your argument could have used the commonality of moral teachings and made its point sufficiently.

To be brief, Jesus of Nazareth, who lived from approximately 3 B.C. to 30 A.D., as well as his followers, taught that He was God. He allowed Himself to be worshiped and equated Himself with God. While this is well and good for Christians, it certainly doesn't make Jews or Muslims very happy. The bottom line is that not everybody can be correct because of Jesus' own words. Either Jesus is God or He was a liar or worse. And, if He is God, Jews and Muslims are in great error.

If you claim a common ethical foundation, your point is well taken. However, as stated, your illustration is weak and detracts from your overall point about VOC, on which we agree. In addition, the post-modern assumption that there is no objective truth (especially in religion) offends many people, of which I am one.

Sincerely,

*Sean Tanner, PMP*

## A Review Of The Working Life

By Joanne B. Ciulla, published by Three Rivers Press, New York, 2000, ISBN 0-609-80737-4

*Reviewed by Michael Ayers*

**Rating: 9** (*The Official Ayers Rating Scale goes from 1-10. Anything lower than 6 is thrown out. This produces a net five-point scale from 6-10.*)

This book carries an interesting subtitle: The promise and betrayal of modern work. Ahhh, another paradox, another both/and. In this work, Ciulla references a panoramic survey of the history of work. She describes ancient times and village life, the Middle Ages and craft guilds, the Industrial Revolution, and onward to the late 20<sup>th</sup> century and downsizing. Most of the attention, however, falls onto the contemporary work scene. What about the *Promise? The Betrayal?*

In the introduction, Ciulla writes, “Under the old school of scientific management, the alienated worker did what he or she was told, got paid, and went home. The work may have been boring, the wages low, but at least everyone knew where he or she stood. Today the transaction is not as honest.” Why not as honest? Because when we engage in today’s work, largely ‘knowledge work,’ we pay not so much a physical toll as an emotional toll.

In the course of building her case, Ciulla includes chapters dedicated to: why people work (contrasted with leisure), how we define work, whether we work to live or live to work, and the notion of work as profession. She points out that the contemporary Western work ethic is a combination of three ideas. The concept of work has included the first two for millennia: a principle of fairness and social obligation to provide for oneself

coupled with the idea that one should perform one’s work to the best of his or her abilities. “The third idea, distinctive to Luther and Calvin,” she writes, “is that work itself has moral and spiritual value and everyone is called by God to some kind of work in life. In this view, work is good no matter how menial and regardless of pay.” This sets up the promise of work, and the potential for the betrayal.

She describes the promise this way: “The great advantage of a strong corporate culture was that it was an all-inclusive, self-regulating social system. The disadvantages included the fact that it could be oppressive and resistant to change. But perhaps the greatest downside to it was that employees became increasingly dependent on work to fill needs e.g., for friendship that they might otherwise have filled outside of work. Hence, if you lost your job, you lost much more than your work and income.” The promise concentrated on the one-stop shopping idea: get all of your needs met at work. Who needs a separate religious community or a recreational community or a fraternal organization when you have work and its employee clubs and its prayer meetings and its recreational opportunities?

Ciulla then goes on to describe the betrayal this way: “Luther’s and Calvin’s work ethic pales next to this work ethic of fear. Unlike the Protestant work ethic, the work ethic of fear does not hold out hope of salvation, but only offer the opportunity to work more. The marketplace is fickle and far more demanding than any single boss. Nowadays when people are laid off, employers tell them, ‘Sorry, it’s the economy’ or ‘We can’t compete unless we move the plant overseas.’ Frustrated unemployed workers don’t always know who to blame or who to yell at. They can’t blame managers or politicians, because nobody can control the global economy. Unemployed workers often

blame themselves or harbor an unfocused rage. Their lives have been turned upside down, often for the sake of making the company more competitive in some yet-to-be-defined future.”

The employer somehow seems to expect loyalty and commitment and “bringing your whole self to work.” But if the interest of the faceless stock analysts or shareholders requires moving a factory from Detroit to Mexico or St. Paul to Brazil well, what can you expect, who can you blame? Of course, the betrayal becomes just that much more insidious if the employees also own shares, either directly through some sort of actual employee purchase plan or indirectly through a retirement scheme. “We’re sorry,” say the executives, “but we have to sacrifice your job in the present for the sake of your retirement in the future. You understand, don’t you?”

Under the influence of Luther and Calvin, many people have come to believe that work should have meaning. That consideration opens a whole new set of complexities. Ciulla writes: “For some, meaningful work is interesting and satisfying; for others it is work that contributes to society. Still others want work that gives meaning to the lives. To explore the nature of meaningful work and the desire for meaningful work, we must first confront the mother of all philosophic questions: What is the meaning of life?” Most employers have not studied philosophy; most do not have the background, much less the interest, to discuss “the meaning of life.”

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# NPDP Certification Training

Sponsored by the Chicago Chapter of PDMA

## Registration

**Date:** Thursday, May 16

**Times:** 8:30 a.m. - 4:30 p.m.

**Location:** BP Amoco campus,  
Naperville, Illinois

**Instructors:** Jerry Groen and  
Eugene Kania

**Cost:**  
\$300 for PDMA members and \$400  
for non-members.

This fee includes materials students  
will need to prepare for the NPDP  
exam.

**To register:**  
Contact Deepa Desai at PDMA  
headquarters at (800) 232-5241,  
deepa\_desai\_pdma@ahint.com.

Are you considering taking the New Product Development Professional (NPDP) certification examination in June?

Are you new to the field of product development and want to learn the fundamentals to get the most out of your career?

Are you a current practitioner who wants to brush up on your skills and meet other professionals with similar interests and challenges?

If you answered **yes** to any of these questions, we have a learning opportunity you don't want to miss.

On May 16, the Chicago Chapter of the Product Development & Management Association (PDMA) will be holding basic training on the fundamentals of new product development.

For further information on these training events, contact Eric Heinekamp, PDMA Chicago Chapter President, at (312) 732-5205, eric\_j\_heinekamp@bankone.com.

### NPDP Examination - June 8

The Chicago Chapter of the PDMA will host a site for the mid-year New Product Development Professional certification examination. The examination will be given at the University of Illinois Chicago.

Applications to take the NPDP test are due in to the PDMA no later than May 1. For more information about certification, check the Product Development & Management Web site, [www.pdma.org](http://www.pdma.org) or call PDMA at (800) 232-5241.

## E-Luminations: A Monthly Review Of The Best Of Syndicated Columnist Dale Dauten

*Submitted by Wayne A. Lindholm*

What got me thinking about “worst cases” was talking with the ebullient Professor Rosabeth Moss Kanter of the Harvard Business School. As part of her study of major corporate projects, she came to this conclusion:

*“In every one there came a point when the leaders started to lose faith, when they were exhausted and said, ‘This is harder work than I thought.’”*

It led her to what I think of as Kanter’s Law: “Every undertaking looks like a failure in the middle.”

I’ve often written BEWARE THE MIDDLE; however, the danger I was pointing out is the failure to be exceptional; the insidious mediocrity of, say, offering “Competitive wages and benefits,” which is how the average company (that thinks it isn’t) attracts average employees (who think they aren’t).

But Kanter’s Law explains why it is so difficult to escape the ordinary. A project that starts with a rush of creativity soon becomes a grind. The more innovative the plan, the more surprises it produces and the more likely it is to be over budget and behind schedule.

Then, if you soldier on, once you’ve made your way through the barbed wire, you come to the land mines. Should success start to appear likely, opponents go on the attack. Is there a safe passage through the middle? Kanter gave me an example from her consulting work:

Admiral Rickover, speaking about the building of the first nuclear submarine, said, “One of the most wonderful things that happened in our Nautilus program was that everybody knew we would fail -- so they let us completely alone so we were able to do the job.” In corporate life, where no one is “left completely alone;” when the word gets out that a project may actually succeed, all the people who dismissed it as a waste of time suddenly find the time to intercede.

A bank manager was “planning to create wonderful new programs as part of new culture, all timed to moving the headquarters to a new building.” She helped run a “kick off” meeting for all the managers involved. “The plans were presented and the response was tremendous, everyone was very high. Then I get up and said, ‘Now we’re going to do worst-case scenarios. I want you to break into groups and come up with lists of everything that could go wrong.’ I could see the mood in the room fall, but they did the assignment, and when we assembled the output of all the groups, we had a very complete list -- it even included the outbreak of nuclear war. We took that list and started answering the question ‘What would we do if...?’”

A few weeks later, the bankers learned the State had decided to put a toxic waste dump next to their planned site, meaning that the new building would have to go elsewhere. This shattered their schedule, but not their plans -- after all, they were expecting something awful to happen, just not this particular awful.

Considering Kanter’s Law and “worst case” scenarios, I’ve been scaring myself with the story no one ever expects, the one thing worse than failure, the story of the endless middle...

*“What’s the worst that can happen?”*

*“We fail.”*

*“No. The worst that can happen is that we half succeed, forever.”*

2001 by King Features Syndicate, Inc.

“Multi-project management works best in organizations that have a good process and structure in place to manage individual projects well FIRST. Otherwise, tying multiple projects together can slow everyone down, especially if project objectives as well as component interfaces, designs, and base technologies are changing frequently and unpredictably.”

Michael Cusumano, MIT School of Management  
Author of *Thinking Beyond Lean: How Multi-project Management Is Transforming Product Development at Toyota and Other Companies*

## The Best of “Kate & Dale Talk Jobs”

By Kate Wendleton and Dale Dauten

### Strangers with resumés

**Dear Kate & Dale,**

Here’s my take on applying for jobs. If the ad says, “please forward resumé to Tiffany (or Staci or Crystal)” it means “I’ll like, you know, decide if, you know, you’re qualified and throw your resumé away if, you know, it contains any words with, you know, more than five letters in it.” And when it says, “provide salary requirements” it means “we have no idea what this position is worth -- we’re giving it to the low bidder.” Sound bitter? You bet. Despite a master’s degree and 20 years experience, I am unemployed with no legitimate prospects.

*Jennifer*

**Dale:** The job market has a way of inspiring bitterness, Jennifer, but there’s hope if you want it. After all, bitterness is unfinished wisdom.

**Kate:** We often hear that job ads list too many requirements or don’t provide enough information (such as a contact person), or managers deflect job applicants and hide behind Tiffany or Crystal or whomever. These are all the result of over-application for jobs -- job hunters applying for positions that they really don’t fit.

**Dale:** When that happens, it isn’t that job hunters are trying to deceive a company into hiring them; it’s that they read an ad and think “I could do that,” and then think “What have I got to lose by sending a resumé?” Most of these people are right, they probably **could** do the job. But companies want to hire people who have **proof** that they can do the job, usually by having done it. Managers take a chance on unqualified friends/relatives, not on strangers with resumés.

**Kate:** Which takes us to the first way to cut down on job ad frustration: If you don’t fit 80 to 90 percent of the requirements listed, don’t bother to apply. Instead, turn your attention to jobs you really fit and are fit for. When you do, understand that most of the people you’d want as a manager are too busy to sort through resumés; so, yes, an assistant might be deciding on your fate, at least for initial screening.

**Dale:** If you like, picture that initial screening being done by a young woman chewing gum and talking to her boyfriend on the phone while she glances at your resumé. Or envision a weary HR veteran taking a stack of applications home to sort while watching “Weakest Link.” Either way, you can move past bitterness and start to understand how to craft your resumé.

**Kate:** You make it simple and make yourself a logical choice for the “keep” pile. Our approach at the Five O’Clock Club is to use two columns in the cover letter, with listed requirements in Column A and your “fit” in Column B. Make it easier to include you than exclude you.

**Dale:** Which brings us to your other issue, the “state salary history” dilemma. The usual assumption is that this is a result of an employer wanting the cheapest employee possible, like holding a reverse auction. I’m sure that happens, but the usual reason is that employers are trying to streamline hiring. They don’t want to interview people two or three times, debate their decision, then discover that the person they’ve chosen is making 30 percent more than their budget will allow them to pay.

**Kate:** On the other hand, prior salaries can be too low, whereupon the company assumes that you aren’t really in their league. So the wise job hunter tries to preclude being screened out by saying something like, “I would be glad to discuss salary requirements upon mutual interest.” If they are insistent, you can provide a range.

**Dale:** The point is that people doing hiring are trying to make their jobs easier, and job hunters who get hired quickly, and with little frustration and bitterness, are the ones that make themselves easy to hire.

*2001 by King Features Syndicate, Inc.*

# ProjectMagic® Product Development Methodology

	<b>Stage 1 – Idea Capture</b>	<b>Gate 1 – Idea Screen</b>	<b>Stage 2 – Idea Definition</b>	<b>Gate 2 – Development Start</b>
<b>Objective</b>	<p>Identify and capture ideas having potential to make significant contribution to Gross Margin.</p>	<p>Screen new ideas identified in Idea Capture Stage.</p>	<p>Define Solution</p> <ul style="list-style-type: none"> <li>What is idea?</li> <li>What is value to customer? To consumer?</li> <li>What is value to EAC ?</li> <li>What resources will be required to develop and sell idea?</li> <li>What plan will be used to accomplish the necessary</li> </ul>	<p>Determine which possible solutions to move to Stage 3 for Development</p>
<b>Actions</b>	<p><b>Generate ideas:</b></p> <ul style="list-style-type: none"> <li>Hear the voice of the consumer.</li> <li>Brainstorm with sales staff</li> <li>Solicit contributions from technical, marketing, and sales staff</li> <li>Cull consumer complaint files for systematic unresolved problems</li> </ul> <p><b>Evaluate ideas for linkage with:</b></p> <ul style="list-style-type: none"> <li>Known consumer needs</li> <li>EAC technical competencies</li> <li>EAC business strategy</li> </ul>	<p><b>Screen for:</b></p> <ul style="list-style-type: none"> <li>Value to customer</li> <li>Value to EAC (Gross Margin)</li> <li>Resources required to commercialize</li> <li>Sustainability under actual market conditions</li> </ul> <p><b>Determine merit of idea with qualitative assessment of:</b></p> <ul style="list-style-type: none"> <li>Idea consistent with EAC strategic aims?</li> <li>Fit with: <ul style="list-style-type: none"> <li>EAC technical competencies</li> <li>Technology, operations</li> <li>Marketing competence and infrastructure</li> <li>EAC technical and marketing resources</li> </ul> </li> <li>Link to customer need?</li> <li>Customer recognition of need and high value?</li> <li>High margins and sustainable competitive distinction in marketplace?</li> <li>EAC poised to participate in this business?</li> <li>If not, can EAC get poised for reasonable exposure to risk?</li> </ul>	<p>Information gathering and assessment</p>	<ul style="list-style-type: none"> <li>Evaluate idea and commit resources to develop it <ul style="list-style-type: none"> <li>Value to customer</li> <li>Value to EAC (Gross Margin)</li> <li>Resources required to commercialize</li> </ul> </li> <li>Sustainability under actual market conditions</li> </ul>
<b>Deliverable</b>	<ul style="list-style-type: none"> <li>Refer ideas that are clearly of a Technical Service nature to appropriate Technical Service Group.</li> <li>Refer ideas having merit, but are clearly long-term in nature, to others.</li> </ul>	<ul style="list-style-type: none"> <li>Accept idea as-submitted</li> <li>Select Stage 1 Team Leader (and Team, if needed)</li> <li>Assist securing Stage 1 resources</li> <li>Negotiate Stage 1 Deliverables and schedule with Team Leader</li> <li>Reject idea with request that it be redefined and resubmitted with prescribed changes</li> <li>Reject idea outright for lack of merit</li> </ul>	<ul style="list-style-type: none"> <li>Solution Definition</li> <li>Customer Value Assessment</li> <li>Technical Feasibility Assessment</li> <li>Application Assessment</li> <li>Process Feasibility Assessment</li> <li>Market Assessment – Size and Competitive Advantage</li> <li>Margin Estimates</li> </ul>	<ul style="list-style-type: none"> <li>Approve for immediate development in Stage 3</li> <li>Help secure human and dollar resources</li> <li>Team leadership</li> <li>Multi-functional team</li> <li>Negotiate Stage 3 Deliverables (balancing speed-to-market against exposure-to-risk) and schedule with Team Leader</li> <li>Approve but place in “hold” due to lack of resources</li> <li>Refer ideas having merit, but are clearly long-term in nature, to others.</li> <li>Reserve final ruling on idea until submitter(s) gathers further information</li> <li>Kill idea for lack of merit</li> </ul>

<b>Stage 3 – Development</b>	<b>Gate 3 – Test Market Start</b>	<b>Stage 4 – Test Market</b>	<b>Gate 4 – Commercialization Start</b>	<b>Stage 5 – Commercialize</b>
<p>Deliver fully developed and tested new solution</p> <p>Scope of development work in Stage 3 includes:</p> <ul style="list-style-type: none"> <li>• Technical Development</li> <li>• Solution Verification</li> <li>• Market Development</li> <li>• Production Development</li> </ul> <p>Design, produce (pilot-scale), and application-test proposed new solution</p> <ul style="list-style-type: none"> <li>• Develop complete plans for Sales and Production, including quality assurance and distribution.</li> <li>• Refine risk assessments (patent, environmental, health, safety)</li> <li>• Prepare capital appropriations requests for capital expenditures</li> </ul>	<p>Determine if solution has sufficient merit and readiness to merit test marketing</p> <p>Evaluate Stage 3 Deliverables based upon same four criteria as for Gate 1:</p> <ul style="list-style-type: none"> <li>• Value to customer</li> <li>• Value to EAC (Gross Margin)</li> <li>• Resources required to commercialize</li> <li>• Sustainability under actual market conditions</li> </ul>	<p>Test Market Plan consists essentially of:</p> <ul style="list-style-type: none"> <li>• Selective Customer Testing</li> <li>• Technical Validation</li> <li>• Production Validation</li> <li>• Market Validation</li> <li>• Definition of Capital Needs</li> </ul> <ul style="list-style-type: none"> <li>• Conduct customer validation trials using pilot-plant or short-run, full-scale production material</li> <li>• Expand list of target accounts and refine strategy for Commercial Start</li> <li>• Fully justify capital equipment. Obtain authorization. Resolve all specification, quality, and environmental issues.</li> <li>• Technical validation</li> <li>• Validate Economic Analysis (including portfolio analysis)</li> <li>• Validate market and prepare final Commercial Launch and Market Plans</li> <li>• Validate manufacturing and capital costs</li> <li>• Closure or Continue Test Market</li> <li>• Pricing strategy</li> </ul>	<p><b>Evaluate:</b></p> <ul style="list-style-type: none"> <li>• Ramp-up of revenue vs. projection</li> <li>• Margins vs. projection</li> <li>• Market penetration vs. projection</li> <li>• Opportunities for spin-off customer solutions or cross-fertilization of other business units</li> <li>• Production capacity tracking demand</li> </ul> <ul style="list-style-type: none"> <li>• Approve solution for commercialization in Stage 5 and help secure necessary human and dollar resources</li> <li>• Designate Commercialization Team</li> <li>• Assure After-Action Review (AAR) is conducted, if there is reason to believe that project results in significant new learnings</li> <li>• Place solution in "hold" if solution appears viable, but resources are insufficient</li> <li>• Reserve final ruling on solution until submitter(s) gathers further information</li> <li>• Kill solution if documented progress toward previously defined performance criteria is unacceptable</li> </ul>	<ul style="list-style-type: none"> <li>• To launch the product commercially</li> <li>• Complete Commercialization Plan</li> <li>• Take new solution to market</li> <li>• Integrate it into current product/solution mix</li> </ul> <p><b>Launch product:</b></p> <ul style="list-style-type: none"> <li>• Generate forecast sales volume, revenue, and margin contribution</li> <li>• Successful launch is one where market acceptance is achieved, company financial goals are met, and new customer solution is absorbed into existing product /solution / solution mix with minimal disruption</li> </ul>
<ul style="list-style-type: none"> <li>• Solution Definition Review and Verification</li> <li>• Pilot Production Samples</li> <li>• Final Applications Test Results</li> <li>• Draft Solution Specifications</li> <li>• Test Market Plan (for Stage 4)</li> <li>• Production Cost Analysis</li> <li>• Value Assessment Review and Verification (Including Portfolio Analysis)</li> </ul>	<p>Approve idea for immediate test marketing in Stage 4</p> <ul style="list-style-type: none"> <li>• Help secure human and dollar resources</li> <li>• Team composition</li> <li>• Negotiate Stage 4 Deliverables (balancing speed-to-market against exposure-to-risk) and schedule with Team Leader</li> <li>• Place solution in "hold" if solution appears viable, but resources are insufficient</li> <li>• Reserve final ruling on solution pending specified additional information</li> <li>• Kill solution</li> </ul>	<p>Validate marketability of new solution with carefully selected group of customers</p>	<ul style="list-style-type: none"> <li>• Determine if solution has sufficient merit and readiness that it can be confidently commercialized: <ul style="list-style-type: none"> <li>◦ Value to customer</li> <li>◦ Value to EAC (Gross Margin)</li> <li>◦ Resources required to commercialize</li> </ul> </li> <li>• Sustainability under actual market conditions</li> </ul>	<ul style="list-style-type: none"> <li>• Sustainable sales at projected volume and Gross Margin</li> <li>• Integrate new solution into existing product/solution/solution mix with net positive impact</li> <li>• Document passage of these milestones with routinely available sales reports</li> </ul>

## The Working Life

*continued from page 6*

In fact, Ciulla asserts that management generally does not seem to have much appreciation for history or philosophy or thinking at all.

Commenting on the successive waves of silver bullets (TQM, reengineering, seven habits), she writes, "The problem with management fads is that they are often uncritical and ahistorical. As a result, management theorists discover the same things about work over and over and are equally delighted every time they do so." And the consultants find a ready and gullible

market for their re-packaged and re-labeled common sense.

Ciulla offers hints at her own idea for a solution to the promise/betrayal conundrum. Expecting the employers to provide ever more services will ultimately fail. "Prayer meetings at work are not the solution to employees' needs for something more. They are a symptom of the problem. The real problem is that their work zaps them of the energy, the time and perhaps even the will to take part in meaningful activities and communities outside of work. [Employers] need to rethink the structure of the workplace and give employees more

time and flexibility to lead good lives outside of work without fear of losing promotions, bonuses, or jobs."

So, the employers have a critical role to play. Ciulla goes on, however, to write, "But employers are not the only ones to blame. Many employees have gotten lazy and willingly let their employers take responsibility for parts of their lives." Employees also have a critical role to play.

The burden rests squarely on the employer. The burden rests squarely on the employee. Ahhh , another paradox, another both/and.

### **PMI Europe's Premier Project Management Event To Be Staged In Cannes**

This year, the French Riviera will play host to the 5<sup>th</sup> PMI Europe Conference hosted by the France-Sud chapter of PMI. The conference celebrating best practices and the latest developments in project management will be held at the Noga Hilton, Cannes, Cote d'Azur, France on June 19-20. The event will run under the theme of the "**Project Management Festival**" and will offer a top conference program presented by world class speakers together with workshops, product presentations, and a number of social networking events.

World famous adventurer and balloonist Dr. Bertrand Piccard, will open the plenary conference session on the first day. Recognized as an inspirational speaker, Piccard will draw upon his extraordinary experiences as the first person to successfully manage circumnavigating the globe non-stop in a hot air balloon. He was recently awarded the Legion D'Honneur, one of the highest decorations awarded in France.

The panel of keynote speakers include Colin Turner, Europe's foremost teacher for business success, Dominique Cerutti, IBM Europe Executive Manager, and also Jeremy Mills, executive producer for the groundbreaking TV show "Castaway 2000."

For complete details visit the PMI Europe Web site: <http://www.pmieurope2002.com/>

# A Summary Of The Product Development and Management Association 2001 Annual Conference



*Summarized by Dianne Krizan, R&D Director of Innovation, General Mills*

At last year's PDMA Annual Conference in October, the keynote speech by Tom Kelley, founder of IDEO and author of *The Art of Innovation*, was a highlight. Tom gave an engaging talk that allowed audience members to vote on which topics they wanted him to bring to life. The group vote was to have Tom focus on "Innovation Begins with an Eye" and "Think Verbs, Not Nouns."

In order to be innovative, you must learn away from your desk. Tom shared his five-step process for innovation:

1. Understand relevant situations and technologies.
2. Observe users of existing products.
3. Visualize innovation opportunities.
4. Evaluate/refine with user testing and prototype iterations.
5. Implement via engineering, design and manufacturing.

To emphasize his point of "Innovation Begins with an Eye," Tom highlighted step #2, the **observation step**. Tom believes that empathic observation sparks creativity.

Listening to what customers say and inferring what they think is standard market research practice. What is more powerful is watching customers actual do an activity and then infer what they are feeling. Market research using empathic observation is also called "ethnography." Tom gave an example of watching fathers take their kids fishing and observing that they lacked expertise. An all-in-one kid's fishing kit was created from that insight.

To "Think Verbs, Not Nouns" is to design experiences for your customers. Tom highly recommended the book *The Experience Economy* by B. Joseph Pine, et al. The book espouses thinking about new products in terms of a Maslow-type hierarchy that starts with commodities at the base, moves up to products, then services, and lastly to experience. We've all heard about the decline of durable goods to becoming commodities, and the rise of the service economy. "The Experience Economy" believes that the next step is to provide customers with experience, not just service. Tom brought this concept to life through the example of a birthday cake. We used to make birthday cake with flour, sugar, eggs, and butter (**commodities**).

Then cake mix was invented (**product**) which lowered the risk of getting a great tasting cake, reduced time, and effort, and increased the price we pay for the convenience. Next step is to go to a bakery (**service**) for less risk, time, and effort at an even higher price. At the top of the pyramid is Discovery Zone or Chuck E. Cheese, where we pay top dollar for a complete birthday experience - and the cake is included.

Tom suggested mapping out your customer's complete journey in order to identify opportunities beyond the product. Where does their experience start and end with your product or service? For example, work he did with Amtrak went beyond redesigning interiors (the original request) to improving other aspects of the travel experience.

PDMA's Annual Conference always provides great learning opportunities. This year's conference will be held in Orlando, Florida on October 12-16. Visit the PDMA Web site for complete details: [www.pdma.org/](http://www.pdma.org/)

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## Who's Who *continued from page 3*

Internally within 3M, Kim was a founding member of the 3M Project Management Special Interest Group (PMSIG), 3M's version of an internal PMI. She also serves on the Steering Committee of the 3M Product Design and Development Chapter.

Outside of 3M and all her professional organizations, she is happily married to her husband, a New Business Development Manager within 3M (fancy that!) and is a new, first time mother, with the arrival of her daughter, Leigh Hoai Thuong Boettner-Johnson, last November from Vietnam. This is truly both a research and development project as well as a business venture!

### **Mukesh Patel, B.A., PMP, Masters Cert PM, NPDSIG 2001-2002 Vice-Chair Membership**

Mukesh Patel is a Project Manager at MDS Sciex. MDS Sciex is a world leader in research and development of mass spectrometry. Mukesh manages development projects that require quick time to market. Mukesh is also the project management software tools champion. He manages the time management and project management softwares. His help has been instrumental in implementing Project Management methodology and tools at MDS Sciex. He has led the timesheet and project management implementation projects. Mukesh is also fully contracted out to his wife to raise his two boys.

## Radical Innovations

*continued from page 1*

Radical innovation projects are different from incremental innovations and call for a development of new competencies. Many program managers fail to recognize the ways that the nature of the innovation program shifts the leadership roles. The checklist in Exhibit 1 provides a sanity check for program managers on radical innovation projects. You might also want to review my July and October 1999 articles in *PDMA Visions* (see [www.pdma.org](http://www.pdma.org)), where I described a four-level framework for program scheduling. In particular, I recommend that you review the “strategic scheduling” framework for ideas on front-loading project planning with a measured risk identification and response planning approach.

### Competencies for Radical Innovations

**Competencies** are personal characteristics and can include motives, traits, aptitude, knowledge and skills. For any given job, competencies define what superior performers do more often and more completely to achieve superior results.

Dr. Owen Gadekin of the Defense Systems Management College is a leading authority on program management competencies. He has researched the competencies of superior program managers and developed a ranked list of 27 competencies of effective innovators. (Gadekin’s work focuses on advanced technology defense acquisition, so I asked several respected NPD practitioners to validate his findings. They confirmed that the principles listed below are also appropriate for the commercial NPD environments that are typical of most NPDSIG members.) Here the highest-ranked eight factors of program managers. Good program managers:

- 1. Are strongly committed to the results of the project** - Passion is essential for overcoming the risks of radical innovation. Peter Block has an interesting definition of commitment, “a personal investment in the face of uncertain outcomes.”
- 2. Have a long term and big picture perspective** - Good program managers have a holistic and strategic perspective. They understand strategic risk, tolerate ambiguity, and use multiple lenses for decision framing.
- 3. Are systematic and innovative thinkers** - They see the components and interfaces and have a future orientation toward time. Here is what Bill Crandall of Hewlett Packard recommends, “Start with the end in mind. Understand what things are going to be like when you’re done changing the process. Roll the clock forward, pull the roof off of the building, and describe what’s going on inside. How is it different? What does it look/sound/feel like? What’s better about this new way of doing things?” Good program managers understand that failures usually occur at interfaces. They work to optimize the total system.
- 4. Find and empower the best people** - Radical innovation programs are at a cutting edge of one or more disciplines. Not only is a cross-functional team essential, but the team must have people who truly understand their subject matter area and are oriented toward creativity. The job of the program manager is to create a process for effective communication, collaboration, and decision making.

*Continued on page 15*

### Exhibit 1

#### A Checklist for the Radical Innovation Program Manager

- ✓ **Program Manager Authority** - Have I explicitly discussed the boundaries of my authority with the project sponsor and other senior managers? Do I have this recorded in the project charter? Have I discussed the authority with members and potential members of the project team?
- ✓ **Strategic Direction** - Have I placed more intensive focus on upfront planning, to include an integrated look at financial models, technical architecture, production needs, resource needs, and the role of suppliers? Has our strategy included frequent test points and “off ramps” to modify the product vision and strategy as new information is accumulated?
- ✓ **Coalition Building** - Have I identified the stakeholders? Have I considered their needs, and their perceptions of risk?
- ✓ **Sufficient Resources** - Have I clearly established the program’s resource requirements?
- ✓ **Team Leadership** - Have I developed a program team communications strategy that facilitates more frequent and intensive face-to-face communications, including co-locating if possible? Have I created a process to keep problem solving at a low level, and provide escalation for the significant issues?
- ✓ **Simplicity** - Can I clearly state the product concept and customer value proposition in a few words and have I shared it with others? Have we reduced our use of automated tools to an essential and minimal use? Have we isolated technical risk to a handful of critical elements?

5. **Are selectively involved in project issues** - These good program managers realize that they cannot know it all nor do it all. One of the easiest ways to identify a superior program manager is to identify their style of escalation. They look for points of leverage. They do not try to solve problems that individuals can handle themselves.
6. **Focus heavily on external stakeholders** - They listen to the voice of the customer, the voice of the supplier, and the voice of technology. Ignoring any of these voices may be a crucial mistake.
7. **Thrive on relationships and influence** - These leaders practice politics (in the positive sense); they work to influence others.
8. **Proactively gather info and insist on results** - Most all studies of drivers of NPD success point to front loading effort in the project towards issue anticipation. They realize that the first 10-15% of the project is where the seeds of success and failure are sewn. They are curious and ask good questions.

## Competencies for Incremental Innovation

To better understand the implications of radical innovation, let me briefly describe the management style commonly used for technical projects and incremental innovations.

A couple of years ago I met “Lynn” who had two decades of experience managing capital construction projects for a large paper company. In his previous position, he used administrative skills and techniques to deliver results. It had served him well. In his new assignment, he provided project management process leadership to the company’s R&D function. However, the R&D scientists and engineers perceived his approach as bureaucratic and they paid little attention to Lynn.

There is a lesson here: Practices that are effective for an incremental innovation may not work for a development project. Excessive attention to detail and efficiency orientation may be a fatal flaw for radical innovation projects.

Gadekin’s aforementioned research also suggests possibly-surprising findings that provide insight on managing radical innovation programs. The best project managers rank the following as *much less important* than the eight items introduced in this article:

- **Technical expertise** - I often get asked, “Does the NPD program manager need to be a technical expert?” My short answer is no, but I do have some caveats. The NPD program manager has to know enough to be able to understand the crux of the issue. Too, they need to be able to recognize when important progress is being made or people are having a discussion of technology that could best be done off line.
- **Attention to detail** - Again this is a matter of perspective. There is simply too much information to be able to assimilate and act upon, so the good program manager uses the team mechanisms and a strong sense of delegation and empowerment to focus on the appropriate level of detail.

- **Efficiency orientation** - Radical innovations emphasize creating customer value with typically little interest in minimizing development expenses.

The presence of any of these three factors by the program manager may be a red flag for radical innovation success.

## Implications of Mismatch of Competencies and Strategies

Operations try to minimize disruptions, and product innovation is a necessary evil; thus, firms develop processes to efficiently “grind it out” and migrate to incremental innovation strategies. The primary competencies for program managers of incremental innovations are coordination and compliance with processes. These processes, coupled with weak critical program managers, become a sort of wet concrete that preserves the status quo. Program manager competencies suitable for incremental innovations may actually undermine radical innovations!

*Continued on page 16*

## Uncertainty: What is it? How do you manage it?

*Uncertainty (literally, without certainty) implies a lack of predictability of structure and of information. The very nature of product innovation is uncertainty; thus, program management’s focus is on uncertainty reduction.*

Decision framing is the part of the decision making process that helps the decision maker determine the crux of the situation. The best managers of development programs actively address and manage uncertainty. They keep the focus on “known” and “unknown” by asking questions like, “What do we know? How good is what we know? What don’t we know? How much have we progressed in evaluating what we don’t know?”

Check out the book, *Radical Innovation*. The authors identified four types of uncertainty in product development projects: **organizational uncertainty, resource uncertainty, technical uncertainty, and market uncertainty**. Radical innovations are particularly noteworthy for the indeterminate nature of the uncertainty.

## Radical Innovations

*continued from page 15*

The traditional organization assumes many logical reasons for ignoring radical innovation. One of the reasons is results-oriented, bottom line, tough-talking managers. They focus on certainty, quantitative metrics, and operating efficiencies, they end up avoiding risks and getting leapfrogged by competitors. They reward those who think and behave like them, and often ignore program managers who have radical innovation competencies. Radical innovation capabilities atrophy and thus organizations strategic capability is degraded. For example, I recently heard a senior project manager say, "I see the value of the soft skills program management, but I'm not going to use them unless I see my peers using them as well. I'll continue being a good engineer." This program manager was referring to the peer pressure exerted by the tools-focused engineering culture he worked in. It is not surprising that this company often comes up with very good technical ideas, but most of them languish "on the bench," and the company is not regarded as an industry leader.

### Building Competencies

People do what is measured, and one of the best ways to create good program management is the performance evaluation. Rewarding for the traditional criteria "meeting the objectives of time, cost, and specifications" is not likely to encourage people to secure the competencies needed for radical innovation. Ken Delcol, PMP, of MDS-Sciex has an excellent approach to fostering program manager competencies suitable for radical innovations. Ken evaluates NPD program managers through seven performance success factors (see Exhibit 2). MDS Sciex's match well to the eight competencies that I described above.

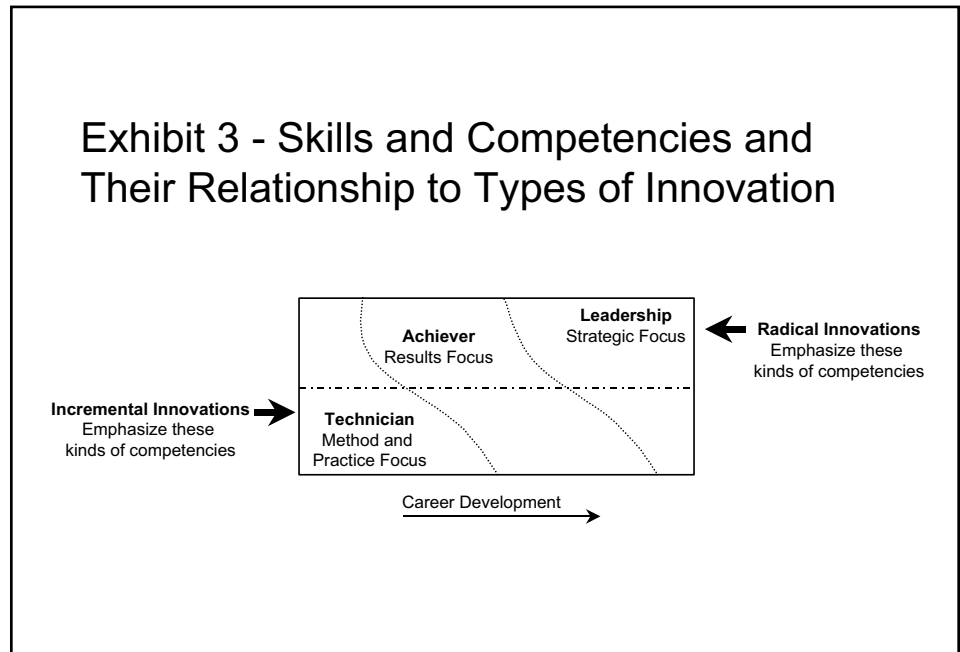
Building competencies is a maturation process. Exhibit 3 illustrates a progression from the task skills needed for incremental innovation to the competencies needed for radical innovations. Early in a person's career they practice as a technician, working from simple tools and tips that have an internally consistent logic. As they master the technician stage, they move into the achiever stage where they recognize the importance of achieving external goals. When the entirety of their experience is with incremental innovations, they stay with the "tools that work" (which are the ones that they learned in the technician stage).

*Continued on page 17*

### Exhibit 2

#### MDS-Sciex Performance Success Factors

- ✓ **Leadership** - Communicates clear vision, creates high morale
- ✓ **Produce Results** - Delivers to schedule, complete package, copes with changes
- ✓ **Innovation** - Creative, tolerates ambiguity, sees possibilities
- ✓ **Team Work** - Integrates diverse ideas, shares information
- ✓ **Planning and Organization** - Awareness of the big picture
- ✓ **Problem Solving** - Manages internal and external expertise
- ✓ **Knowledge** - Develops internal and external network with peers to extract and use pertinent developments



## The Enemy is Mediocrity

Unfortunately, many people's careers plateau because there is seldom an opportunity to stretch and learn new skills and competencies. Those that do grow through the achiever stage reach the strategist stage where they learn that there are multiple strategies to work through differences.

In this article, I described eight competencies (and red flags) that can help you recognize the people who are best suited to leading radical innovation projects. Notice the "soft stuff" intangibles: passion, big-picture thinking, tolerance for ambiguity, empowering people, courage, influencing, creativity, and integrative thinking.

3M is a good example of a firm who regularly produces radical and incremental innovations. Their culture is an important contributor. "We 3M'ers are tough on ourselves: our own worst critics," says Kimberly Johnson. Kim has worked closely with many of the top NPD program managers at 3M. She validates the need for strong, big-picture people who are both good with technology and with people.

Exemplary performers differ very little from average ones, but the differences are enormously important. I believe that mediocrity is the enemy of innovation. It is wise to consider the words of one of the USA's greatest presidents, Theodore Roosevelt:

*"Far better it is to dare mighty things, to win glorious triumphs even though checkered by failure, than to rank with those poor spirits who neither enjoy nor suffer much because they live in that gray twilight that knows neither victory nor defeat."*

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## NDPSIG Contest Results From December 2001 *PM Innovations* And New Photo For This Month!

*By Kim Johnson, PMP, Vice-Chair Communications, PM Innovations Editor*

Well, with this past issue of *PM Innovations* I am sorry to report that we had no responses to the photo of the two individuals from the PMI 2001 Seminars & Symposium. Hopefully, it has nothing to do with attendance at the Symposium this past year or lack thereof.

Anyway, the two gentlemen pictured in the photo are, left to right respectively, Doug Bobbinger, a new product development consultant, and Mark Hynnek, 3M, and PMI 2001 New Product Development Track Co-Chair with Patrick Carluccio. Mark will be taking the lead this year as the new Track Chair for 2002, so keep that name in your databank in case we throw a trick question at you again next year using his smiling mugshot.



For this month's contest we have pictured for you the youngest ever NPDSIG member. The one hint I will give you is that she is a girl. If you can guess who her mother is from the NPDSIG membership, you get the new product development prize of the month. If you **also** state her first name, you will get an additional prize.

That's all for this time. Stay tuned for the next issue!

## The ROI of Human Capital *continued from page 4*

Fitz-Enz also points out that this kind of light-weight thinking about serious issues leads to increasing susceptibility to management panaceas. “Another fallacy about trends is perpetrated when people correctly discover a directionality in events but then assume that something else moving in parallel must be the cause or the effect. Mixing correlation with causality is the stuff of the naïve, of charlatans, and of demagogues. Politicians, religious fanatics, and consultants are masters at this.” Just because you read it in an airline magazine does not make it true!

Suppose that you accept his ideas. How can you move your organization forward? How can you leverage your human capital more effectively? Fitz-Enz proposes eleven principles near the end, recapping the arguments occurring throughout the book. For example:

**Principle 1:** People plus information drive the knowledge economy

**Principle 6:** Coincidence may look like correlation, but is often just coincidence

**Principle 10:** The key is to supervise, and the supervisor is the key

The support for principle 10 comes from his organization having done hundreds of “exit interviews” for large organizations. His conclusions match those we read in *First, Break All the*

*Rules:* If you have a retention problem, then you have a management problem. “The findings revealed that employees who responded most positively worked in the higher-performing organizations...opinions differed by work unit rather than by company. This implies that the local environment is more important than the corporate culture, structure, or policies. The point hidden in here is that the supervisor is the key.” Bottom-line? If you want to have get the most out of the people, then pay attention to the people who serve as supervisors and managers.

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## Components Speakers Clearinghouse

*By Maria Arzoumanian, PMI  
Worldwide Components Affairs  
Coordinator*

Nearly a year ago, PMI Headquarters created the Component Speakers Clearinghouse. Today it now houses nearly 220 speakers for Chapters, Specific Interest Groups and Colleges to select for their component events. PMI Headquarters invites you to add your name to the impressive listing of members who are offering to speak about specific topics at component activities.

As a potential speaker, you may choose to speak on industry-related topics, thus showing your support of the New Product Development SIG. By raising its notoriety of the NPD SIG and strengthening project management in the Component community, you also have the opportunity to develop and enhance your personal public presentation skills.

Up to five (5) Professional Development Units (PDUs) may be awarded towards recertification for speaking at a Component event.

In order to participate, individuals need to complete a Speakers Clearinghouse application form. This form can be found in three locations on the PMI Web site at [www.pmi.org/chapterinfo](http://www.pmi.org/chapterinfo), [www.pmi.org/siginfo](http://www.pmi.org/siginfo), [www.pmi.org/collegeinfo](http://www.pmi.org/collegeinfo). Potential speakers must provide complete contact information and two references who can provide information about the individuals' public speaking abilities. At least one reference must be a current PMI member. Individuals on the Clearinghouse listing will be asked to verify their contact information periodically. Given the non-profit nature of PMI's Component Organizations, participation in the Clearinghouse is limited to presenters who are willing to speak at Component events on a pro bono basis, with the exception of reasonable travel-related expenses.

The Clearinghouse is restricted in distribution to official representatives of PMI's Component Organizations and is not provided for use by the general PMI membership, corporate representatives or other parties. If you have any questions about this program, please contact PMI Headquarters Worldwide Component Affairs Coordinator, Maria Arzoumanian, at [coordinator@pmi.org](mailto:coordinator@pmi.org) or 610-356-4600, ext 1144.

## Earn PDUs For Supporting The NPDSIG!

The following table lists the Professional Development Units (PDUs) you can earn for supporting the NPD SIG. PDUs are necessary for recertification as a Project Management Professional. See PMI's website if you have questions on the PMP or on PDUs.

ACTIVITY	PDU VALUE
Speaker on a project management topic at a conference, symposium, or workshop	10 PDUs per activity
Speaker on a project management topic at a Chapter or similar meeting	5 PDUs per activity
Member or moderator of a project management panel discussion at a conference, symposium, or workshop	5 PDUs per activity
Participant in unique project with employer involving implementation of new tools/technology for project management	See Self-Directed Learning Activities Guide on <a href="#">Activities Reporting Form</a>
Author or co-author of an article about or related to project management that is published in a refereed journal (e.g. Project Management Journal)	20 PDUs per article (author) 15 PDUs per article (co-author)
Author or co-author of an article about or related to project management that is published in a non-refereed journal (e.g. PM Network)	10 PDUs per article (author) 5 PDUs per article (co-author)
Author or co-author of a project management textbook	20 PDUs per textbook.
Participant in individual and planned self-directed learning program	See Self-Directed Learning Activities Guide on <a href="#">Activities Reporting Form</a>
PMI PM Network Journal Quarterly Quiz	2 PDUs per Quiz
Organized personal research activity	See Self-Directed Learning Activities Guide on <a href="#">Activities Reporting Form</a>
Developer of content for seminar or other structured learning program.	10 PDUs per new program
<b><i>NPDSIG Specific PDUs</i></b>	
<b>Serving as an elected officer</b>	<b>10 PDUs per term</b>
<b>Appointed Officer</b>	<b>5 PDUs per term (if not in any other capacity such as Track Chair, or Newsletter Editor)</b>
<b>Track chair</b>	<b>10 PDUs per term</b>
<b>Track support</b>	<b>5 PDUs per term</b>
<b>Board Meeting attendance</b>	<b>0.5 PDU per attendance</b>
<b>Newsletter Editor</b>	<b>10 PDU per term (if officer, 5 additional PDU to the 10 as officer)</b>
<b>Author or co-author of an article about or related to project management that is published in the NPDDIG PM Innovations</b>	<b>5 PDUs per article (author) 2.5 PDUs per article (co-author)</b>
<b>Volunteer to lead Discussion Group or Special Project for the SIG</b>	<b>2.5 PDU per discussion Group or Project</b>
<b>Promote NPDSIG at local chapters with a presentation of the SIG as part of the topic under consideration</b>	<b>2 PDU</b>
<b>NPDSIG member presentation on PM topic related to NPD</b>	<b>5 PDU</b>

## NPDSIG 2002 Board of Directors

Here are your NPDSIG officers for 2002 and their e-mail addresses. As your representatives, they need and welcome your insight. They are a great way to start networking in the NPDSIG.

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