

Nurturing and Executing Innovation

A Thought Leadership Roundtable on Digital Strategies



Nurturing and Executing Innovation

Thought Leadership Roundtable on Digital Strategies

An executive roundtable series of the Center for Digital Strategies at the Tuck School of Business

The Thought Leadership Roundtable on Digital Strategies recently met for an all-day discussion about the challenges of innovation. The group of senior executives represented a wide variety of industries and included a select group of business school professors (see participant list). Together they debated various aspects of the innovation challenge, including generating ideas, selecting the best, and the pitfalls between a great idea and fruition. A central topic was the roles of innovation leaders, senior executives, R&D groups, partners, customers, and even competitors and external experts. Chris Trimble, a professor at Tuck and co-author of Ten Rules for Strategic Innovators—from Idea to Execution, a recently published book from Harvard Business School Press, moderated the discussion. Key points are summarized below, followed by a summary of the conversation.

Key Insights Discussed in this Article:

•	Multiple constituencies have a role in the ideation process
•	Employees with direct interaction with customers are often most productive in generating ideas
•	Ideation efforts can be chaotic, but should be bounded by a few general guidelines4 To sustain interest in ideation, there must be a demonstrated commitment to follow through on the best ideas.
•	When giving permanent innovation groups (like R&D) their charter, executives must navigate a fine line between immediate business relevance and long-term transformation
•	There is an art to listening to customers
•	While many companies now proclaim the virtue of an "open innovation" model, there are many pitfalls associated with innovating with partners7 Protecting intellectual property is difficult, and today's partners can easily become tomorrow's competitors.

1

- Managing for creativity should progressively give way to managing for efficiency the further from ideation into the product development process you get9
 When product development processes are inefficient, they are squeezed out by the demands of the existing business.

Innovation Begins with Ideas

In any great innovation story, the idea is Chapter 1. There is no better place to begin.

The participants had plenty of ideas about ideas. In fact, though only one of three of the roundtable sessions explicitly focused on idea generation, the group kept returning to the topic. Ideas are fun. Brainstorming sessions are a common experience. And idea generation looks much the same no matter where you are. By contrast, innovation execution is hard work. It is far from routine. And it varies by function and by industry. Thus, the conversation gravitated to ideas. If the light bulb is the idea icon, innovation conversationalists are the moths that can't help but swarm around it.

Ideas can come from anyone. Thus, winning the idea game may be primarily about keeping your ears open. Hasbro maintains several idea channels—employees, consumers, partners, even inventors. As Hasbro's Duncan Billing put it, "The first step is getting the best ideas possible. And to get the best, you have to be very open minded about where the ideas come from."

Finding Inspiration in the Workforce

Ideas can come from anywhere, but there are specific techniques to consider depending on whether you are working with employees, customers, or outside partners. We start by examining best practices for drawing ideas from employees of all stripes.

All employees are idea sources. Although IBM nominates Distinguished Engineers, a group deemed most likely to see new possibilities at the cutting edge, it goes out of its way to inculcate the belief that innovation is everyone's responsibility. IBM has gone so far as to create ThinkPlace, an online forum for collecting ideas from any of its 350,000 employees—and nearly 10% of them are active users.

Front-line service industry employees are particularly productive. On Carlson's cruise lines, front-line employees produce spontaneous *micro-innovations* to meet unexpected customer needs. At Bechtel, the innovations are hardly micro. Every high-dollar industrial construction project is unique, and radical new approaches, invented when the need arises, are often required to get the job done.

Best Practices for Ideation

Employees do not necessarily spontaneously produce ideas. A few specific techniques can help catalyze the idea hunt.

Combine multiple perspectives. Forget your illusions about brilliant but lonely inventors. The most productive ideation efforts will reach across multiple perspectives. It may be important to include employees of multiple age groups in an ideation effort, for example. Cisco's Brad Boston related how the Army CIO, LTG Steven Boutelle, recognizes the wide variations in degree of tech savvy by differentiating *digital natives*, those who grew up with technology, from *digital immigrants*, those who had to adapt to it. In fact, it is often unexpected

combinations of ideas that lead to the most promising insights. At 3M, a married couple—one in IT and one in R&D—has proven an unusually productive source of ideas. Might there be more systematic ways to create such connections?

Focus the effort. In brainstorming sessions, completely free-form interactions can occasionally be productive, but providing *some* focus can provide better results. Nancy DeLapp described how IBM assigns time horizons to different innovation forums. The logic is that discussions about process improvement (time horizon of less than 1 year) are not easily mixed with discussions about breakthrough technology ideas (5+ years). Focusing on existing products and technologies can be surprisingly effective. It is easy to overlook the near-at-hand when trying to innovate. As Michigan's Professor Gautam Ahuja noted, the television industry looked like it was in an inexorable decline, and now it has been rejuvenated with flat screens and better resolutions. 3M has long recognized that new ideas are often simple twists on existing ones. Kirby Spike was involved in one such effort: "I have a pool table at home. I don't like to brush the table. A lint roller would work really well, but a lint roller's handle is on the end. I added to our idea database a thought that it would be ideal for pool tables if the handle was moved to the top. And now we have the product."

There must be a balance of energy between generating ideas and actually doing something with them. Otherwise, the idea generation effort loses credibility. Once solicited, accumulations of ideas must be organized, presented in friendly ways, and examined for quality and utility. As Nancy Delapp described, IBM has recognized that it must create incentives for managers to dedicate the necessary time to evaluating submissions to ThinkPlace. And even once ideas are validated, they do not just automatically spread from source to all points within a company where they can be usefully applied, as Cisco's Barry Burns observed.

Developing Ideas from Designated Innovation Teams

Sure, any employee can come up with an idea, but for some it should be a full time obsession.

Ideas can come from anywhere, but someone must be fully empowered and fully accountable. Hasbro now focuses more specific resources on finding the best ideas for improving the way they approach each customer segment. These people are immersed in the latest trends, understand the strategic plan, and are always oriented to long-term consumer needs. Similarly, at Eastman Chemical, a newly appointed VP of Innovation has a full time responsibility of studying customer and market trends, identifying unmet needs in the "white spaces" between Eastman's business units, and aligning the R&D efforts. Cisco's "scary smart" Distinguished Engineers play a similar role, and have regular wide-open debates about technology trends and opportunities. At IBM, the Distinguished Engineers are measured against each other, creating a competition for greatest business impact. Assigning special innovation roles is straightforward, but finding a way to hold them accountable is tricky. Carlson Companies' Jeff Balagna, pointed out that though assigning accountability and measuring performance can be powerful, creativity is hardly a predictable process—far from the six-sigma zone.

To keep R&D productive, align them with immediate business demands. IBM creates direct ties between R&D and services lines, with the service lines responsible for defining specific business challenges for R&D to solve. Cisco goes a step further: it has no central R&D. This is in part the legacy of an aggressive acquisition history, and in part by design. Aligning R&D with a specific business unit keeps Cisco's engineers focused on immediate business problems. The downside to the decentralized approach is repetition. Boston illustrated: "We had several groups building new power supplies, custom for each of their products. But we are not specialists in power supplies. That is not where our competitive advantage lies. So why are we wasting all this time in reinventing something when someone else is much better at it?" According to Burns, one step in reducing this repetition would be creating a more robust parts database.

An opposing view: To keep R&D innovative, free it from immediate business demands. 3M's CEO succession has resulted in a much greater growth orientation, and a much greater interest in allowing R&D to focus on longer-term, less defined problems. The result is a rejuvenated R&D staff.

Stoke competitive fires with stories of competitors—real or imagined. At IBM, Sam Palmisano is known for energizing innovation by returning from travels with observations about competitors and their advances. When actual competition isn't scary enough, Cisco's John Chambers has a different technique. According to Boston, "Whenever it looks like we are too dominant or too complacent, Chambers invents competitors. He will make us come up with a way to beat a scary hypothetical foe. He has a healthy paranoia."

Finding Inspiration from Customers

Looking only to employees for ideas is unlikely to be productive. Customers have a great deal to offer as well.

Get close with customers. Lose sight of their needs, and your business will inevitably go astray. As 3M's Kirby Spike put it, "Customers clarify the most pressing problems that need to be solved." Sometimes the "customer" is a complex entity. Hasbro must listen both to its customers (think Wal-Mart or Target) and the consumers that actually use their products. They must also listen to the influencers of consumers, particularly parents. Of course, no customer is perfectly able to articulate their needs. Hasbro "listens" to kids, for example, by observing them in "fun labs." Good listening also means listening between the lines to understand the root problem the customer wants solved. A customer's articulation of what they want may not be the best solution.

Serve every customer's unique needs...if you can afford to. Carlson is moving toward more customized relationships with customers, working towards the ideal of one-to-one service. Beyond knowing each individual, they hope to customize their service to the purpose of each trip. Jeff Balagna of Carlson feels the need himself: "When I travel on business, I have a completely different set of needs than I do when I travel for pleasure with my family." The trade-off to such fine customization, of course, is lost opportunities for economies of scale. Cisco has learned just how tempting it is to serve or please every customer by customizing

products to each customer's exact requirements. But providing quality follow-on service quickly becomes cost prohibitive. Eastman has also seen interest from its customers in countless minor tweaks to its chemical formulations. Asking R&D to meet every such need, however, inevitably leads to a lack of focus on longer-term breakthroughs.

Find new ways to listen. The internet can allow access to customer feedback that is cheaper and more readily available than ever before. Blogs are one possible source, particularly useful when your customer is a specialized, tightly networked group. According to Doug Schwinn, Hasbro has created something "blog-like" for testing beta versions of online games, and for their most popular games, customers actually compete to give feedback and shape the products. Hasbro has expanded its web presence and the customer feedback received through this channel is invaluable.

Careful: Customers are sometimes wrong. Sometimes the customers most eager to give you feedback are far out of the mainstream. Hasbro experienced this with their popular online game, Magic: The Gathering. As Doug Schwinn of Hasbro explained, "We have to interpret the feedback carefully. We have two segments—casual players and pro players, who may actually be making a living through the game. We get plenty of suggestions on how to make the game tougher from our pros, so we have to constantly ask ourselves, 'Who is the real customer?'" Furthermore, particularly in the services industry, customers are sometimes so focused on a singular bad experience that they can talk about nothing else.

Not all customers are equal. Customer feedback can be confusing without a clear mapping of customer segments. Improving new media communications plans is now a foundational capability at media advertising firm OMD, and understanding how various messaging strategies impact 18-year-olds differently from their parents is crucial.

Listen especially to emerging customer segments. These 18-year-old mp3 users are likely the emerging segment that is most able to help OMD understand the future of online advertising. Tuck's Praveen Kopalle, an expert on new product development, shared new research that indicated that companies that identify and listen separately to an emerging customer segment are more likely to produce radical innovations. But it is not always so clear who the emerging customers are, or where to find them. Carlson's Jeff Balagna explained that this was the case for GE Medical Systems as it explored investments in digital imaging technology. Radiologists claimed to never want it. Nonetheless, the technology is now being widely adopted. Finding the voice of the emerging customer is also difficult for Hasbro. As Duncan Billing explained, most of Hasbro's current customers are most interested in concepts that "fit into its existing box." To ensure it hears the voice of the future, Cisco makes an effort to listen especially hard to customers it believes to be at the leading edge of technology, such as Google and Amazon in high-tech, and the Department of Defense in the public sector. Similarly, IBM creates forums for customer engagement on long-term technology trends. For example, they have had discussions with the insurance industry about how the industry could look once in-car monitoring systems are sophisticated enough to provide robust data on driving habits, and thus allow much more accurate risk assessments of individual customers. As Nancy DeLapp described, "If you brake lightly, if you don't speed, you should have a

different dialogue with your insurance provider. That will be possible if we can trap all of that data."

Exploring Possibilities with Outside Partners

Business partners can complement idea hunting through customers and employees, but doing so requires a delicate touch.

Tap into outside expertise. As Michigan's Professor Ahuja described, Eli Lilly has created a venture called InnoCentive, a web-based business through which they offer rewards for solving very specific, well-defined problems of interest to them. Interestingly, retirees are some of their biggest participants. Lilly has invested heavily in the legal/intellectual property regime for supporting the endeavor. Lego has a similar system for advancing their product designs, according to Carlson's Balagna. Bechtel has also found value in partnering with outsiders, even competitors, without much concern over intellectual property protection. Their expertise is buried in complex work processes, it is difficult to replicate anyway.

An opposing view: Avoid outside experts—the legal headaches will keep you tied up in knots for years. 3M exited an innovative pharma project when they discovered the complexities of developing good partnerships when complex intellectual property agreements are needed. An agonizing reality of Hasbro's business is that someone always claims to have invented something of theirs. Hasbro's Billing does not "even want to know how many disputes we have had over the years with inventors who said that something was their idea."

Opposing view continued: Avoid outside experts—it is too hard to differentiate partners from competitors. Companies are always looking for growth by expanding into adjacent markets. A comfortable partner today could be a direct competitor tomorrow. For example, Cisco has partnered with Intel on numerous occasions. According to Cisco's Burns, "We have taught them how to build a better routing device, but now Intel is interested in networking, and they can use that information to compete against us." Eastman keeps its cards close to the vest as well, believing that even letting partners know what you are working on encourages them to work on the same thing. Such concerns keep IBM on edge, and "non-disclosure agreements have become religion," according to Maria Azua. She continued, "Sure, open innovation can sometimes lift all boats in an industry, but we can't give everything away. We want to innovate for profit." Azua also explained that sometimes it is even better *not* to know what your partners or competitors are working on, because that can disrupt your own efforts to win a patent.

Selecting the Best Ideas

Congratulations, you just generated dozens of intriguing possibilities! Now what?

Ideas from anywhere, evaluations from experts. It is energizing to say that innovation is everyone's job, or that innovative ideas can come from anywhere. In fact, an alternative, creating an innovation skunk works, can send the undesirable message that innovation is a specialist function. That said, coming up with an idea is one thing, evaluating its potential is

quite another. Innovations are uncertain. In the end, the decision to invest or not invest is a judgment call, and the decision is best left to someone with great instincts shaped by years of experience. Hasbro's Billing explained: "Ultimately, we find that people with the most experience have the best judgment of what is going to work and what is not." Even when an innovation is highly scientific, it is generally those with business experience—not scientific depth—who make the best judgment calls, according to Eastman's Jerry Hale. Still, as OMD's David DeSocio pointed out, even executives with decades of experience can be wrong. Thus, it is best to hedge your bets by taking lots of small ones, and trying to learn from each.

An opposing view: Leverage the wisdom of crowds. IBM has experimented with systems for allowing innovations to be voted on. One benefit is that the system is transparent. Secretive selection processes can be demoralizing.

Criteria for Investment

Zeroing in on the most effective innovation agenda requires consideration of a variety of factors.

Ideas selected for investment should fit a company's long-term strategy. A great deal of innovation focus at Hasbro, for example, is on the "tween" segment (8- to 12-year-olds), a group that Hasbro lost to music, sports, and video games, but wants back. The exception is when strategies focus on defending the status quo. Such strategies are incompatible with innovation. You must be willing to break some eggs. As 3M's Kirby Spike offered, if you are not willing to cannibalize your own products, not only are you likely to risk losing out on the next product generation, you are likely to defeat your employees' motivation to innovate. Be ready to offend your partners too. As Cisco's Boston noted, Travelocity stumbled when it became engrossed with pleasing its channel partners. "While they argued over who owned what and which rules to play by, Expedia changed the whole marketplace."

Evaluate both risks and returns. What are the ramifications of failure? Lost capital? Lost customers? Costly lawsuits? As IBM's Azua explained, it is much easier to fix a software failure than a hardware failure, and impossible to reverse mistakes involving human safety. What about the risk of damaging a brand? Leveraging the power of a brand can radically increase the probability of a win. But as 3M's Spike commented, brands come with high expectations of quality, and brands are easily damaged. Cisco recognized the need to consider brand impact much more carefully when the company began producing products for individual desktops, such as IP telephones. Doing so dramatically multiplied the number of people who were likely to connect the quality of their daily work experience to Cisco's brand.

Take a portfolio approach. You don't have to revolutionize the industry with every innovation initiative. There should be a sensible balance of innovations that make you more competitive in today's business and those that can create entirely new market spaces. As Tuck's Professor Hans Brechbühl pointed out, "Process innovations have a role. If you

achieve operational excellence, efficiency rises, profitability rises, and you have more to invest in the innovations that really matter over the long term."

Move innovation forward like clockwork...if you can. It is always tempting to delay the decision to invest. Product developers often place higher value on perfection than on speed. Some companies overcome this natural tendency, as Professor Ahuja explained, by insisting that product launches follow a routine schedule. That may not be realistic in every industry. In Hasbro's creative world, it is necessary to respond to competitive threats quickly, but it is hard to predict when development teams will deliver the next big breakthrough. As Billing quipped, "It is hard to do breakthough innovation on a retailer's planogram schedule."

Do you have the skills to commercialize? Innovations frequently take you away from what you know. Before proceeding it is important to be realistic about what competencies you have vs. what competencies you need to acquire elsewhere. As Eastman's Hale related, when the company invented super glue, it struggled to develop packaging that would not be sealed shut by the glue itself. An internally focused commercialization effort was the likely culprit.

Does the innovation fit your business model? When an innovation fits within a company's existing business model, it can sail through the existing web of business processes without a hitch. But it is easy to assume that the new product fits when it really does not. Managers look at new ideas through the lens of the business model that they are most familiar with. As IBM's Maria Azua recounted, when IBM created an extremely small and capable disk drive, it focused heavily on the business model it knew well: using the disk drive in personal computers. It took Apple to see the potential of the newfangled disk drive as the core of their design for the iPod. Product innovation sometimes requires business model innovation in parallel. Business model innovation is a thorny organizational challenge, however, so it is tempting to share IBM's DeLapp's viewpoint that it is sensible to push first for innovation within the core business. But according to Hasbro's Billing, the returns on invested capital can be much greater when a new business model is in play.

Managing New Product Development

Many innovative new product ideas will fit well within an organization's existing business model. Efficient new product development engines keep companies ahead of direct competitors.

Building an efficient product development machine. Innovation, in all forms, finds itself in competition with business as usual. Product development efforts are cross-functional, and must compete for time and attention across much of the organization. When a product development process is inefficient, it risks getting squeezed out altogether. To achieve the necessary levels of efficiency, Hasbro has developed a rigorous worldwide product development process, coordinating manufacturing operations in Asia with offices in Europe and North America. Collaboration is crucial, so Hasbro creates teams early. While it is true that creativity and rigorous process do not mix well, most of the creativity in product development efforts is needed at the front end of the process. Behind that, efficient business machines are called for. As Doug Schwinn recalled, Hasbro tried allowing a more flexible

process to stimulate more creativity when a newly acquired company pushed for it, but it worked poorly, and there were sacrifices in quality. Meanwhile, 3M applies six-sigma methodologies to the new product development process just like every other core process. It has multiple "stages and gates," and as projects pass from gate to gate, the process becomes more disciplined: the need for efficiency trumps the need for additional creativity as the investment level ratchets up from stage to stage.

Achieve greater efficiency through knowledge sharing. Efficiency in developing new products is driven to an even higher level when there are effective mechanisms for sharing knowledge from one effort to the next. Hasbro, for example, is working on a digital asset database to prevent repetition. An alternative to codifying and storing knowledge in databases is building systems that connect people with questions to people with relevant past experiences. According to Carlson's Jeff Balagna, such a system proved invaluable in solving engineering challenges at Ford. Such systems are less than perfect however. As Bechtel's Geir Ramleth noted, "People that seek answers have more time than the ones that actually have solutions, because they are highly sought after. They are busy."

Keep innovators involved...if you can. The visionary who first conceived of a new product can be a valuable member of the commercialization team. Unfortunately, as several participants agreed, once the creative moment passes, innovators are ready to move on to the next challenge. They rarely wish to be bothered with the mundane details of execution. That's a shame, because making an innovation work once is often child's play compared to the challenge of making it work repeatedly, reliably, and securely, as Hasbro discovered when rolling out new features for Magic: The Gathering. Cisco has experienced the same phenomenon. When Cisco launched a new video telephony product, it took eighteen months to move from demo to full launch. As Boston observed, it is always tempting to announce a new product too early.

Test the waters before diving in. New product launches can be breathtakingly costly, so it is sensible for most companies to run trials. For example, Eastman is increasingly setting up pilot plants to test manufacturability without disrupting the core business. TGI Fridays (a Carlson property) is currently testing a virtual dinner concept with live customers. Through a video link, diners at TGI Friday restaurants in different cities can eat together. Such early trials can generate critical warnings. In its luxury cruise line business, Carlson tried embedding RFID chips in room keys. The idea was to give service personnel information about any customer that was in the vicinity. A bartender, for example, might get the name, room number, and previous drink order of a customer who was approaching the bar. Carlson's Balagna described the outcome of the test: "We all thought it was a really cool idea until our customers were freaked out by how much 'Big Brother' knew."

Eat your own dog food. A popular strategy for testing new products is rolling them out internally first. Nancy DeLapp described the occasional employee reaction: "Every once in a while we get complaints from somebody whose productivity is disrupted by the beta test. I tell them that if they don't want to be doing these things they should go sit somewhere else in the company. This is what we do." In other words, the value of the lessons learned from testing products internally more than offsets the lost productivity. In an interesting twist to

the approach designed to more closely simulate real customer use, IBM sometimes enlists support from employee spouses.

Customer adoption is never automatic. Even innovations that fare well in testing may flounder in markets. It can take months or even years for customers to change their behavior, even when an innovation is plainly an improvement. For example, as Carlson's Balagna recalled, the airlines had to work extremely hard to get passengers to use check-in kiosks. "They had to literally have their service desk staff stand next to the kiosks and force people to use them," noted Cisco's Boston. Similarly, Eastman has demonstrated that cheap plastic bottles for beer have absolutely no effect on quality, but still it is a struggle to get customers to buy. To get its industrial customers to adopt new products, Eastman sometimes has to go so far as to invest in new *customer* equipment to demonstrate the superiority of their solutions in their customers' environments. And in Cisco's effort to get the government to adopt the space router concept, they have worked extensively with partners to educate the customer about potential benefits.

Building Breakthrough Businesses

Innovations that do NOT fit the existing business model—that is, they break industry rules—are challenging to commercialize, but can revolutionize industries and offer outsized returns. But commercializing such innovations within a typical product development engine is a mistake.

To build a new business model, create a separate organization. For a new venture within an established organization to have even a chance at success, it must be designed in a way that matches the new business model, not the existing one. Thus, when Bechtel launched an ISP, the only link to the existing business was at the board of directors' level. According to Tuck's Professor Eric Johnson, Chubb recently set up a new incubator, run by their CIO, to protect new business launches from a disciplined stage-gate product development process. Similarly, Cisco often grants substantial separation to new business units, holding back on reintegration until the business has largely proven itself.

There are a number of indicators of a distinct business model. There are several warning signs that a new business may not fit into the existing business. First, consider whether the new business is likely to under-perform on established performance metrics. If so, it is likely to struggle to get prioritized unless it stands alone, as IBM's Nancy DeLapp observed. Another indicator that a separate organization is advisable is a distinct operating rhythm. At first, Carlson viewed the cruise industry as just the hotel industry on water, but turned out to be mistaken. The sales cycle is much different, for example, because customers plan cruises much further in advance than hotel stays. That meant that Carlson's administrative infrastructure was at odds with the needs of the new business, as Balagna explained. Sales force conflicts over allocation of commissions, or sales force disharmony brought about by cannibalizing products are also reasons to build a separate unit, several participants agreed. Finally, a different cost structure suggests poor fit. As Michigan's Ahuja illustrated, when Toyota launched Lexus, they created a separate organization on the front end, while sharing back end operations. It is possible that separation on the back end would have been desirable

as well, as the differences between the product lines can begin to erode with such an arrangement. Tuck's Eric Johnson offered a similar example. When Dow Corning felt price pressures in its silicones business, it created a separate organization, Xiameter, that offered the same products at rock bottom prices, but with strict transaction rules and zero service. The business launch was a success, but the Dow Corning management team firmly believes it would have never worked inside the existing organization.

To increase the odds, find ways to allow the new business to leverage existing assets. A "distinct, but linked" new business unit can strike the right balance between "separate" and "able to leverage." Among Cisco's new business units, the ones that struggle tend to be the ones that fail to create strong links to Cisco's sales and service organizations, according to Cisco's Brad Boston. Striking the right balance is delicate. Hasbro's tweens business is largely separate, particularly in branding, product development, and planning. It is also evaluated on a different set of metrics, because it includes products with distinct revenue models. At the same time, the new unit has incorporated existing products, and is linked into several existing corporate services.

Insiders recreate what they know. Even when a new business opportunity is housed within a separate unit, there is danger that the new unit will operate just like the core business if it is staffed with inside people. Carlson learned this from their early years in the cruise business. Their initial thinking was "A cruise ship is a floating hotel, how hard can it be?" as Carlson's Jeff Balagna put it. Carlson later hired cruise industry veterans. IBM, recognizing this problem, populates new business units with plenty of outside talent. Still, they typically put an IBM veteran in charge, believing that it is crucial to have an established network and to "know how to get around."

Complex asset combinations are tricky. Occasionally, new businesses will need to leverage resources from two distinct business units within the parent company. Bechtel is trying to combine the expertise of its power group with that of its oil and gas group to develop new Integrated Gasification and Combined Cycle capability. Cisco is seeking to build a combined cable, telephone, and internet solution for consumers by combining resources from its Linksys and Scientific Atlanta acquisitions. Both of these are daunting challenges, though Bechtel's history working in highly matrixed organizational structures may give it a leg up.

Conclusion

Great leadership can overcome all. Sadly, there appears to be no magic formula for innovation execution, as Carlson's Jeff Balagna lamented. Not only that, given all of the complexities, it is rare to get the organizational formula correct the first time. That may not matter, with the right leader driving the innovation forward, at least according to Hasbro's Duncan Billing: "The really important thing in business, especially when it comes to innovation, is getting the right person in the right job. In my twenty-odd years of experience, I have experienced that time and time again. Right person, right job, miracles can happen and will happen. We have people in our organization who, despite all the challenges, can make innovation happen. We value them."

Participants in Thought Leadership Roundtable on Digital Strategies June 6, 2006

Gautam Ahuja Michael and Mary Kay Hallman

Faculty Fellow and Professor, Strategy Stephen M. Ross School of Business

The University of Michigan

Maria Azua VP, Technology and Innovation, DE, CIO Office

IBM

Jeffrey Balagna EVP, CIO & CTO

Carlson Companies, Inc.

Duncan Billing Chief Marketing Officer

Hasbro Incorporated

Brad Boston Senior VP & CIO

Cisco Systems, Inc.

Hans Brechbühl Executive Director

Center for Digital Strategies

Tuck School of Business, Dartmouth College

Barry Burns Technical Leader

Cisco Systems, Inc.

Nancy DeLapp VP, Global I/T Infrastructure Center of

Excellence

IBM

David DeSocio Chief Strategy Officer

OMD

Jerry Hale VP, eInformation Services & CIO

Eastman Chemical Company

M. Eric Johnson Professor of Operations Management

Director, Center for Digital Strategies

Tuck School of Business, Dartmouth College

Praveen K. Kopalle Associate Professor of Business Administration

Tuck School of Business, Dartmouth College

Nurturing and Executing Innovation

Thor Geir Ramleth Senior VP & CIO

Bechtel Group, Inc.

Douglas Schwinn Senior VP & CIO

Hasbro Incorporated

Kirby Spike CIO, Industrial Businesses

3M

Chris Trimble (moderator) Adjunct Associate Professor

Tuck School of Business, Dartmouth College