

Creativity and the Role of the Leader

- [Teresa Amabile](#)
- [Mukti Khaire](#)

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CREATIVITY AND THE ROLE OF THE LEADER

◆ **BLOG:** [Join the conversation](#) with Teresa Amabile about the challenges of managing creativity.

Creativity has always been at the heart of business, but until now it hasn't been at the top of the management agenda. By definition the ability to create something novel and appropriate, creativity is essential to the entrepreneurship that gets new businesses started and that sustains the best companies after they have reached global scale. But perhaps because creativity was considered unmanageable—too elusive and intangible to pin down—or because concentrating on it produced a less immediate payoff than improving execution, it hasn't been the focus of most managers' attention.

Creativity has, however, long been a focus of academics in fields ranging from anthropology to neuroscience, and has enticed management scholars as well. Therefore, a substantial body of work on creativity has been available to any businessperson inclined to step back from the fray of daily management and engage in its questions. And that's suddenly very fortunate, because what used to be an intellectual interest for some thoughtful executives has now become an urgent concern for many. The shift to a more innovation-driven economy has been abrupt. Today, execution capabilities are widely shared and the life cycles of new offerings are short. As competition turns into a game of who can generate the best and greatest number of ideas, creativity scholars are being asked pointed questions about their research. What does it mean? How relevant is it? Does it offer guidance on the decisions that leaders in creativity-dependent businesses have to make?

To help make the connections between theory and practice, we recently convened a two-day colloquium at Harvard Business School, inviting business leaders from companies whose success depends on creativity—such as design consultancy IDEO, technology innovator E Ink, internet giant Google, and pharmaceutical leader Novartis. At the gathering, leading scholars presented their newest and most important research. In all, we brought together nearly 100 people who were deeply concerned with the workings of creativity in organizations and let the sparks fly.

Over those two days, we saw a new agenda for business leadership begin to take shape. At first, we heard skepticism that creativity should be managed at all. Intuit cofounder Scott Cook, for example, wondered whether management was “a net positive or a net negative” for creativity. “If there is a bottleneck in organizational creativity,” he asked, “might it be at the top of the bottle?” By the colloquium's end, however, most attendees agreed that there *is* a role for management in the creative process; it is just different from what the traditional work of management might suggest. The leadership imperatives we discussed, which we share in this article, reflect a viewpoint we came to hold in common: One doesn't manage creativity. One manages *for* creativity.

Drawing on the Right Minds

The first priority of leadership is to engage the right people, at the right times, to the right degree in creative work. That engagement starts when the leader recasts the role of employees. Rather than simply roll up their sleeves and execute top-down strategy, employees must contribute imagination. As Cook put it, “Traditional management prioritizes projects and assigns people to them. But increasingly, managers are not the source of the idea.”

Tap ideas from all ranks.

Cook told the story of an eye-opening analysis of innovations at Google: Its founders tracked the progress of ideas that they had backed versus ideas that had been executed in the ranks without support from above, and discovered a higher success rate in the latter category. Similarly, it was noted that Philip Rosedale, the founder and chairman of Linden Lab, the fast-growing company that manages Second Life, claims to give most workers enormous autonomy, and says the greatest successes come from workers’ own initiatives.

Research by Israel Drori, a professor at the College of Management in Israel, and Benson Honig, a professor at Wilfrid Laurier University in Canada, highlights the hazards of not distributing creative responsibilities across the organization. They observed an internet start-up offering a new, sophisticated form of computer graphics from its inception in 1996 until its collapse, seven years later. While the venture enjoyed initial success, it was ultimately unsustainable because it depended too much on the genius of its award-winning artist-founder—and took organizational creativity for granted.

Encourage and enable collaboration.

As leaders look beyond the top ranks for creative direction, they must combat what Diego Rodriguez, a partner at IDEO and the leader of its Palo Alto, California, office, calls the “lone inventor myth.” Though past breakthroughs sometimes have come from a single genius, the reality today is that most innovations draw on many contributions. “Consider the examples of InnoCentive, of Mozilla, of Wikipedia,” Rodriguez said. “All are contexts that bring in lots of contributors. And the fundamental structure of such networked organizations is not centralized and top-down. People don’t do what they do because someone told them to do it. Contributing to an interdependent network is its own reward.” Rodriguez argued forcefully that, even in today’s highly networked world, organizations fail to take full advantage of internet technologies to tap into the creativity of many smart people working on the same problem. (For Scott Cook’s thinking about tapping the input of people outside the organization, see “The Contribution Revolution,” Reprint R0810C.)

A study by Victor Seidel of the University of Oxford’s Saïd Business School identified one practice that leaders would do well to promote: the use of “coordination totems” in the conceptualization of new products. Seidel looked at the problem of how to achieve collaboration on radical innovations; when no obvious antecedent exists, it’s difficult for a vision to be shared. His analysis of six award-winning products (from three quite different industries) showed how

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product development teams used not only prototypes but also metaphors, analogies, and stories to coordinate their thinking.

Robert Sutton, a professor at Stanford University's School of Engineering, noted that most companies have hierarchical structures, and differences in status among people impede the exchange of ideas. How to remedy that? Sutton couldn't resist pointing out the huge inequalities in salaries at today's firms and suggested that if the field were more level, more people might speak up and be listened to. He urged leaders to define "superstars" in their organizations as those who help others succeed. Wryly, he recalled seeing powerful people hold forth in meetings even though others in the room had much better ideas for solving problems. It should be management's mission, he suggested, to "figure out how to get people to shut up at the right time."

Open the organization to diverse perspectives.

Frans Johansson, author of *The Medici Effect*, described his finding—based on interviews with people doing highly creative work in many fields—that innovation is more likely when people of different disciplines, backgrounds, and areas of expertise share their thinking. Sometimes the complexity of a problem demands diversity; for example, it took a team of mathematicians, medical doctors, neuroscientists, and computer scientists at Brown University's brain science program to create a system in which a monkey could move a computer cursor with only its thoughts. Other times, the application of one field's methods or habits of mind to another field's problem produces the breakthrough.

Even within the mind of an individual, diversity enhances creativity, according to a study by Jeffrey Sanchez-Burks, a professor at the University of Michigan, his Michigan colleague Fiona Lee, and Chi-Ying Cheng of Columbia University. Their research focuses on people who have multiple social identities, such as people who are both Asian and American, or who are both women and engineers. Social identities often have distinct knowledge associated with them, and to the extent an individual is comfortable integrating multiple identities, his or her knowledge sets can combine productively. Indeed, through two experiments, these researchers found that people with higher levels of "identity integration" display higher levels of creativity when problems require that they draw on their different realms of knowledge. (One experiment asked Asian Americans to invent new forms of Asian American fusion cuisine, and the other asked female engineers to imagine new features for a cell phone for women.) This research sparked a great deal of personal interest and has implications for management. If managers cause people to suppress parts of their identity, they limit a potentially valuable source of creativity. If managers can encourage identity integration—think of female engineers working in an environment where they don't feel they have to dress like men—people may be more innovative.

Managers can also enhance diversity by looking outside the organization for sources of creativity. Collaboration need not be bounded by the walls of the firm, as Rodriguez noted, pointing again to networked organizations such as Wikipedia. Many, in fact, see the recent phenomenon of open-source development as the future of innovation.

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For those who may worry that open-source innovation is still unproven and relevant only in software, Peter Meyer, an economist with the U.S. Bureau of Labor Statistics, put the matter in perspective. He analyzed the invention of the airplane, which, by today's definition, could easily be termed an open-source innovation. In the years before the commercial potential of aviation was recognized, the Wright brothers were just two of many enthusiasts who shared their discoveries and ideas freely and frequently in the manner of avid hobbyists. These "tinkerers," as Meyer characterized them, were motivated not by the desire to get rich but by the technical challenges and romance of the quest for human flight.

The openness of the network, Meyer showed, greatly assisted the development of the airplane; the Wright brothers participated actively in it from 1900 through 1902. However, as the Wrights realized how important their breakthroughs were likely to be in creating viable commercial and military aircraft, they focused on securing patents and finding ways to make money from their inventions. Collaborators became potential competitors, and secrecy the new norm among them. The dual implications of this research are intriguing. Open-source innovation, with its ability to tap the passion and ingenuity of tinkerers, offers enormous potential for creative output, and new industries with proprietary or secret technology can arise from it. But open-source processes may work only in certain kinds of endeavors or for limited windows of time.

Bringing Process to Bear—Carefully

Can creativity scale? That question was posed by Kim Scott, who had good reason to ask: She works at Google, where she is director of online sales and operations for AdSense, DoubleClick, and YouTube. She believes that creativity within an organization depends on vibrant, ongoing collaboration and free idea flow—which tend to dry up as a business adds people and projects. A former entrepreneur (Scott was involved in three start-ups before joining Google), she hates the fact that more layers of management often lead to more bureaucracy—and the end of entrepreneurial spirit, risk taking, and learning from mistakes. At the same time, she recognizes that it is not reasonable to have organizations so flat that managers are saddled with dozens of direct reports. "How do you get *lift* out of adding layers," she asked, "instead of *weight*?" One solution she offered is greater investment in infrastructure, whether high-tech or low-tech, that makes collaboration easier.

The classic response to increased scale in an operation is increased reliance on process—a standardization and continuous improvement of "the way we do it." Many at the colloquium, however, rejected the notion that creativity could be so straitjacketed. "If there is one device that has destroyed more innovation than any other, it is Six Sigma," stated Mark Fishman, MD, president of the Novartis Institutes for BioMedical Research. Bob Sutton echoed the sentiment, citing research showing that when organizations focus on process improvements too much, it hampers innovation over the long term. "The poster child here is Kodak, which kept making the process of manufacturing and distributing chemical-based film more efficient instead of devoting attention to making the shift to digital photography," he said. "In other words, it kept getting better and better at doing the wrong thing." For Kim Scott, the problem comes when an emphasis on efficiency causes managers to try to avoid duplication of effort. "In creative work," she noted, "you need to have people approaching a problem from different angles."

Map the phases of creative work.

Process management, Mark Fishman explained, is appropriate in some phases of creative work but not others. The leader's job is to map out the stages of innovation and recognize the different processes, skill sets, and technology support that each requires. For instance, efficiency-minded management "has no place in the discovery phase," he said. While recognizing that pharmaceutical firms desire predictable output from their R&D operations, he reminded the group of a remark by Nobel laureate Peter Medawar: "To predict an idea is to have an idea." Because it's impossible to know in advance what the next big breakthrough will be, "you must accept that the discovery phase in pharmaceutical innovation is inherently muddleheaded." Worst of all, models like Six Sigma are geared toward reducing variability and achieving greater conformance to a desirable norm. But in the fuzzy initial stages of innovation, Fishman said, "you want people to work at the ends of the Gaussian distribution. Efficient models make good sense for the middle and end stages of the innovation process, when the game has moved from discovery to control and reliability." He offered three pieces of advice for leaders in creative settings: Know where you are in the game. Appreciate the different creative types among your people—and realize that some are better at certain phases than others. And be very tolerant of the subversive. Creative work must, like Mark Twain's character Huck Finn, avoid all "sivilizing" influences.

Manage the commercialization handoff.

Few people have equal capabilities in idea generation and idea commercialization; that's why large corporations normally separate the two functions. The consensus is that, eventually, an innovation reaches a point where it will be best served by people who know how to take it to market. Unfortunately, since the passion for an idea is highest among its originators, projects often lose steam at the handoff. Management's job is to limit the loss of momentum with adroit timing and handling of the transition.

In entrepreneurial settings, idea originators are often forced to engage in commercial activity well beyond their comfort zones. Bob Litan, VP of research and policy at the Kauffman Foundation, which supports American entrepreneurship, noted how great a barrier that constitutes for many inventors. He described a program in which Kauffman links postdoctoral scientists to commercializers, rather than trying to teach inventors to spot market opportunities for their discoveries. Nonetheless, many inventors do successfully grow their businesses (think Google). These opposing models highlight the tension that always exists in the management of creatives: whether to round out their individual skill sets or allow them to run with their unique strengths and then balance them with complementary resources.

Provide paths through the bureaucracy.

Colloquium participants were of one mind on the subject of bureaucracy: It stifles creativity. Clay Christensen, a professor at Harvard Business School, offered a useful analogy for understanding why. He likened the life of an idea in a large corporate setting to that of a bill going before the U.S. Congress. The idea is reshaped at various points along the way to suit the agendas of the people whose support is required in order for it to be funded. "You're not into it

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two weeks before you hear from sales or finance or engineering that they will block it unless you change it to fit their needs,” he said. “These powerful constituencies inside the company collectively beat things into a shape that more closely conforms to the existing business model rather than to the opportunity in the market.” What’s the solution? Christensen advised managers to recognize what that process does to ideas and deliberately decide to contain it.

Kim Scott added that the manager must act as a shepherd—an analogy also used by Christy Jones, founder of Extend Fertility. Both believe that executives must protect those doing creative work from a hostile environment and clear paths for them around obstacles. In fact, Scott warned the managers in the room that, by creating the necessary new structures to support cross-unit collaboration, they might unwittingly create other forms of bureaucracy. Introduce any set of mandated protocols and checkpoints, she warned, “and Dilbert has entered the room.” Other executives and researchers emphasized the need to create a culture in which creativity can thrive, repeatedly returning to the image of a gardener who prepares the creative soil and nurtures the seedlings of ideas.

Create a filtering mechanism.

Not surprisingly, some push-back occurred. It all sounds very nice, someone pointed out, but gardens do have weeds; managers must not only water and fertilize, but also kill off the stuff that holds no potential. For every idea with real commercial promise, there are dozens that aren’t worth pursuing. At what point and by whom should that determination be made?

One school of thought says that the people closest to the idea are best equipped to make the call—but only if their personal commitment to its success, and the professional ramifications, can be severed. Pharmaceutical giant Merck tries to accomplish this by offering “kill fees.” As reported by *BusinessWeek*, Merck’s R&D chief, Peter Kim, rewards stock options to “scientists who bail out on losing projects.” Without such incentives, it’s hard for people to throw in the towel. Indeed, Kim Scott admitted that “we set a goal at Google to cull a percentage of our projects this year, and it was a real challenge.”

In a spirited discussion of how ideas should be winnowed, Johansson suggested that the filters must be diverse. Unless the people sitting in judgment represent a variety of disciplines, functions, and viewpoints, they are unlikely to make wise decisions. Russ Wilcox, cofounder and CEO of E Ink, suggested that the filtering might even take place outside the organization. Perhaps the best way to tap the wisdom of the broader market is to give it the power to turn thumbs up or thumbs down on new commercial possibilities. That approach resonated with the company founders present. “The thrill of being an entrepreneur,” one said, “is that you get your ideas out in the real world, and they live or die there as opposed to in committee. That committee is death to creativity.” Bob Litan described two recent developments that allow for external vetting at an early stage: the increasing use of prediction markets, and the rise of business “accelerators” like Y Combinator and the Foundry, “which are essentially the *American Idol* approach to entrepreneurship.”

Fanning the Flames of Motivation

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Motivating people to perform at their peak is especially vital in creative work. An employee uninspired to wrap her mind around a problem is unlikely to come up with a novel solution. What spurs creativity, however, has long been a matter of debate.

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Provide intellectual challenge.

A convincing analysis was put forward by Henry Sauermann, then a doctoral candidate at Duke University (now at Georgia Tech), who presented new research done in collaboration with Duke professor Wesley Cohen. To discover the drivers of creative productivity, they looked at data on more than 11,000 R&D employees in manufacturing and service companies who had been routinely surveyed by the National Science Foundation. The surveys uncovered which workers were more intrinsically motivated—fired up, for example, by intellectual challenge or independence—and which were more extrinsically motivated, by such things as salary, benefits, and job security. The researchers looked at patents filed by each respondent as a reasonable proxy for innovative output. Their finding was clear: Early-stage researchers who were more motivated by intellectual challenge tended to be more productive. (Interestingly, this did not hold true among the group doing later-stage work.) A stronger desire for independence was also associated with somewhat higher productivity. It wasn't that extrinsic motives were unimportant; a person's greater emphasis on salary was also associated with greater productivity. The desire for intellectual challenge was, however, much more strongly linked to it.

Allow people to pursue their passions.

If the keys to creative output are indeed intellectual challenge and independence, management must find ways to provide them. In large part, that demands awareness of individuals' interests and skills. Scott Cook pointed out that some people are simply more revolutionary in their thinking than others and therefore more suited to radical projects. "You're most interested in fundamental paradigm changes," he observed, "and yet you tend to staff your new projects with the people who did very well working on version 15 of the last big thing. You're crazy if you think you're going to get a big shift out of the version 15 team."

When people are well matched to a project, granting them independence holds less risk. Ideally, creative workers would be able to set their own agendas, at least in part. The practice of letting researchers spend a significant percentage of their time on projects of their own choosing was famously employed by 3M in its high-growth era. Google's decision to do the same has yielded new offerings like Google Scholar. Fishman told us he encourages scientists at Novartis to spend a portion of their time working on drugs for "niche" diseases, where the intellectual rewards are often high. The screen for such projects consists of two questions—is it scientifically tractable, and does it meet an unmet medical need? Not "What is the market?" but "Is there a patient suffering who could be cured with today's knowledge?"

Be an appreciative audience.

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The fact that creative workers are intrinsically motivated does not mean that managers' behavior makes no difference. A good leader can do much to challenge and inspire creative work in progress. Mark Addicks, chief marketing officer at General Mills, believes that people are highly attuned to management's engagement with and attitude toward a project. "The way in which a leader asks a question can move a team very positively," he noted. Russ Wilcox of E Ink agrees with this emphasis on the manager's role as appreciative audience. "The greatest inventions in our company," he said, "are always done to impress someone else." Shikhar Ghosh, CEO of software maker Verilytics, reminded the group that the leader's impact cuts both ways; the wrong managerial behaviors, or simply careless neglect, can be tremendously demotivating. In line with research findings reported earlier in HBR (see "Inner Work Life: Understanding the Subtext of Business Performance," by Teresa M. Amabile and Steven J. Kramer, May 2007), Ghosh argued that employees doing creative work are more motivated by managerial behavior, even seemingly little things like a sincere word of public recognition, than by monetary rewards.

Embrace the certainty of failure.

Arguably, the managerial reactions that speak loudest to creative workers are reactions to failure. Virtually everyone in the colloquium agreed that managers must decrease fear of failure and that the goal should be to experiment constantly, fail early and often, and learn as much as possible in the process.

Kim Scott observed that, ironically, the firms in Silicon Valley that have the hardest time managing creativity are the ones that have been most successful, because they develop an aversion to failure. How might that aversion develop? Research on firms in an emerging industry by Chad Navis of Emory University and Mary Ann Glynn, a professor at Boston College, suggests that there are particular periods of time when stakeholders become more sensitive to the prospect of failure. Navis and Glynn traced the first 15 years of the satellite radio industry through the stories of the only two U.S. companies in that sector—XM and Sirius. In the early years, both companies fought an uphill battle simply to establish the legitimacy of satellite radio. During that time, both firms focused on making progress toward a viable model, and their individual advantages went more or less unnoticed by outsiders. It was only after satellite radio became "real"—taken seriously by customers, analysts, advertisers, and other players—and the firms shifted their energies to competing against each other that every success or failure was put under the microscope by outsiders. Performance assessments shifted from the sector as a whole to the individual firms. Ironically, then, companies' success at establishing the economic viability of an activity can lead to increased scrutiny and therefore to the companies' increased sensitivity to failure—and desire to avoid it.

Fear of failure also seems to rise with the scale of a business. Not only do firms become more conservative as they grow, but fear also makes managers more likely to deny that failure has happened and more eager to erase all memory of it. Amy Edmondson, a professor at Harvard Business School, underscored what a lost opportunity that constitutes. Any business that experiments vigorously will experience failure—which, when it happens, should be mined to improve creative problem solving, team learning, and organizational performance.

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How can an organization capitalize on failure? Above all, Edmondson said, its management must create an environment of psychological safety, convincing people that they will not be humiliated, much less punished, if they speak up with ideas, questions, or concerns, or make mistakes. Beyond that, she cautioned against any broad-brush approach. “We need to think about failure in a more fine-grained way,” she said. Failures in organizations fall into three quite different types: unsuccessful trials, system breakdowns, and process deviations. All must be analyzed and dealt with, but the first category, which offers the richest potential for creative learning, involves overcoming deeply ingrained norms that stigmatize failure and thereby inhibit experimentation. (For more insight on learning from failure, see “Is Yours a Learning Organization?” by David A. Garvin, Amy C. Edmondson, and Francesca Gino, HBR March 2008.)

Provide the setting for “good work.”

The potential for passionate engagement in one’s work is highest when the work itself is seen as noble, said Howard Gardner, a professor at the Harvard Graduate School of Education who has conducted research on “good work” with professors Mihaly Csikszentmihalyi of Claremont Graduate University and William Damon of Stanford. They define the term as work that is excellent technically, meaningful and engaging to the worker, and carried out in an ethical way. While managers can do much to ensure the first two requirements in a workplace, the third is more problematic—and not because businesspeople are inherently unethical. Ethics usually are upheld best in areas where a type of work has evolved into a profession—when similarly educated people agree to a set of standards above and beyond their enterprise or personal agendas. But even where such “domain principles” are in place, rules tend to be bent in situations where market forces are dominant. Gardner voiced skepticism that any big business, however socially responsible, could make up for the fact that management in general does not constitute a profession. “But maybe at any given time there are certain prototype organizations with an exemplary ethical compass that others want to emulate,” he mused. “And perhaps that can set off a kind of contagion.”

While Gardner did not name specific organizations, other attendees saw hopeful signs that such model organizations might emerge. Venture capitalist Randy Komisar, a partner at Kleiner Perkins, noted that his firm is now focusing part of its business on sustainability. And the report of an experiment in Peru generated considerable excitement. Peruvian economist Martin Valdivia and Yale economist Dean Karlan, working with a microfinance organization, bundled educational offerings with capital to enhance the commercial skills of the female entrepreneurs it funded. Using a randomized control trial, the researchers showed that the training made a substantial difference to the success of the ventures—and by extension, to the alleviation of poverty.

Pulling It Together

As the colloquium unfolded, most participants seemed to warm to the model of management that was emerging—perhaps because it sounded like just the kind of leadership we, wearing our creative worker hats, would appreciate having. One scholar, however, threw cold water on the proceedings by asking us to look at our model from the perspective of the leader. Theresa Lant of

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New York University asked, “Where is the glory in being a ‘facilitator’ as a manager? How do you get a management layer made up of real humans who aspire to that role and will do it?”

A possible answer was presented by Elizabeth Long Lingo of Vanderbilt University, who described her research (a joint project with professor Siobhán O’Mahony of the University of California, Davis) into the production of country music in Nashville. The music business requires the integration of many parties who are not part of the same firm (or even a team), including songwriters, publishers, artists, and label personnel. The person bringing it all together is the producer. He or she must exercise leadership in a highly ambiguous context, where there is no clear yardstick for how good the product is and there are no clear rules for who gets to control the output. The more effective producers create a shared purpose in these ambiguous circumstances while still letting others apply their distinctive expertise. For example, in the studio, producers may introduce “bad song” and “good song” samples to create a common aesthetic but still allow the space for experts to experiment with their own sound and forge their contribution to the project. These producers operate at the center of the storm without being the focus of attention and are proactive with a diverse group of experts without being overcontrolling. The glory comes from helping others realize their unique talents and reach a collective goal—a hit record.

Christy Jones noted that her business also depends on the cooperation of diverse players with various agendas to create value for her customers. “It takes inspiration first, and then someone to drive toward that vision with passion—shepherding it and cheerleading to keep it on top of others’ priorities,” she said.

Marrying Research to Practice

Not every issue relating to the management of creativity was resolved in our two-day colloquium. For example, as Fiona Murray of MIT’s Sloan School observed, the group never reached a consensus on the question of market-based incentives. Some saw their encroachment as a problem for creativity and urged managers to shield creative workers from their pressures. IDEO, by contrast, strives to bring market forces to bear on its work by using them as a point of inspiration and then continually exposing prototypes to real-world scrutiny. Other fascinating questions were scarcely touched on. Jing Zhou of Rice University’s Jones Graduate School of Management asked, “Are there cultural differences in managing creativity? Would the approaches that work in Western countries, such as the U.S., work as well in Eastern countries, like Korea?”

The group parted, however, with a sense that theory and practice would increasingly come together to advance the understanding of creativity in business. In that vein, participants had the fresh inspiration of a presentation by Jim March, professor emeritus at Stanford University. He pointed out that our understanding of how to manage creativity is impeded by the lack of a theory of novelty, and proposed the beginnings of one. Three conditions seemed to him to be necessary for novelty—slack, hubris, and optimism—which suggest mechanisms that organizations could employ. Slack in an organizational setting means sufficient time and resources for exploration. Increasing hubris means inspiring managers to take risks. Optimism

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takes hold when a vision of something truly different is made to seem more promising than the status quo.

March is unapologetically a scholar; he prefaced his remarks with the caveat that his theory “is possibly useful, even beautiful and just—but probably has more elements of beauty than usefulness.” But those of us listening thought it useful indeed. If research is to inform the practice of management, and if practical challenges are to guide research agendas, then we must have frameworks and theories—call them coordination totems if you will—to collaborate around. And we must continue the shared conversation.

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[Teresa Amabile](#) is Edsel Bryant Ford Professor of Business Administration at Harvard Business School. She researches what makes people creative, productive, happy, and motivated at work. The author of two books and over 100 scholarly papers, she holds a doctorate in psychology from Stanford University.

Mukti Khaire (mkhaire@hbs.edu) is an assistant professor at Harvard Business School. The authors gratefully acknowledge the participants in the colloquium “Creativity, Entrepreneurship, and Organizations of the Future,” whose contributions form the substance of this article.