

Cover Story II

How to capture the essence of innovation

By David Smith and Craig Mindrum

The key to successful innovation is an internal network that actively involves people throughout the organization in the vibrancy of discovery and dialogue, and provides the means to distill the fruits of that dialogue into value-generating ideas.

Slowly but surely, the understanding of “innovation” among executives and management thinkers is growing in sophistication and nuance. Instead of descending into self-congratulatory management-speak, a number of studies have demystified the subject, suggesting something approaching a consensus about what innovation is, and the various flavors it comes in.

One critical question remains, however: Are organizations getting any better at actually generating innovations based on that understanding, and then using those innovations to drive high performance?

The answer is mixed, at best. If one defines innovation loosely as “new stuff,” certainly

there is cause for celebration: Each year, more than 600,000 patents are granted around the world, and more than 30,000 new consumer products are introduced in the United States alone. On the other hand, if innovation is “new stuff that creates shareholder value” (an informal definition that Accenture finds useful), the news is less upbeat. Only a small percentage of patents ever generate significant revenue; more than 90 percent of new consumer products fail.

Still, product innovation is only one piece of the overall puzzle, and maybe not even the most important one. In fact, it is *process and managerial innovations*—the hidden (and, frankly, less sexy) side of competitive differ-

Economies such as China and India are aggressively pursuing policies to move up the value chain by becoming genuine innovators.

entiation—that usually set companies apart. Consider the closely guarded algorithms behind Google’s search functions, or the latest materials that Intel believes will allow it to make faster and faster microprocessors at lower and lower cost.

But however innovation manifests itself, one thing is clear: The innovations that drive future value still need to come from somewhere or, more accurately, from *somebody*—those people who constitute any organization’s intellectual assets. And most organizations simply do not have the infrastructure in place to locate the fruits of ideas and experience among their own people and harvest those fruits as innovations.

Creating such an innovation network—a two-way flow of learning and ideation that is both abundant and relevant—is every bit as crucial to sustained high performance as an IT breakthrough or the launch of a game-changing new product. And because innovation begins with people, especially those with frontline responsibilities, the learning and knowledge management function within the contemporary organization is best positioned to make such an innovation network a reality.

The global context

The problem with most organizations’ approach to encouraging innovation is fairly easy to identify. On the one hand, many companies have bottlenecks in their innovation infrastructures that constrain their ability to locate good ideas or to convert those ideas into profitable products and services (see “Innovation unbound,” *Outlook*, January 2006). On the other hand, many organizations don’t have enough infrastructure in place to even create a bottleneck. Their problem isn’t that the pipes are clogged; their problem is that they have no pipes.

Whatever the problem, executives now realize that an innovation infra-

structure must be rebuilt on a global and more holistic basis. Recent Accenture research into what we call the “multi-polar world” has underscored the changing nature of global economic power and, thus, of innovation.

The collective economic dominance of the United States, Europe and Japan—the so-called triad economies—is giving way to a greater dispersal of economic power around the world as developing economies contribute an ever-increasing share of the world’s output, trade and investment. Along with more widely distributed economic power comes more widely distributed innovation power.

For some time, the triad powers have enjoyed the status of world leaders in innovation, especially in research and development. At the other end of the value chain, emerging economies traditionally have been viewed primarily as sources of low-cost labor and low-value implementation or execution activities. However, this arrangement is now shifting. Emerging economies such as India and China are aggressively pursuing policies to move up the value chain by becoming, among other things, genuine innovators rather than just imitators or executors of others’ ideas. (For a related article, see “Where will all the talent come from?” *Outlook*, January 2008).

This new map of innovation is characterized by geographically dispersed centers of creative activity, particularly in China and India but also in such places as the Czech Republic and Brazil. The remaking of the world of innovation is attracting the attention of developed-world multinationals, which are now rapidly diversifying the reach of their R&D programs to capture the benefits of this change.

For example, General Electric Co. and Microsoft Corp. now have R&D centers in Bangalore, and Wall

Street has outsourced sophisticated research on global capital markets to India. Eli Lilly & Co., GlaxoSmith-Kline and Novartis established drug discovery operations in Singapore after the government there took active steps to position itself as a prime destination for biomedical R&D and clinical trials.

This shift in the balance of economic power means that businesses are not only competing globally for value-generating innovations but also tapping into a larger, more geographically diverse network of the people from whom those innovations are likely to come. If an organization has a narrow mindset when it comes to innovation—believing it to be something that is primarily management driven—it will have a difficult time identifying

profit-oriented new ideas arising from the knowledge and experience of its own people, wherever they are located around the world.

New mindsets, new model

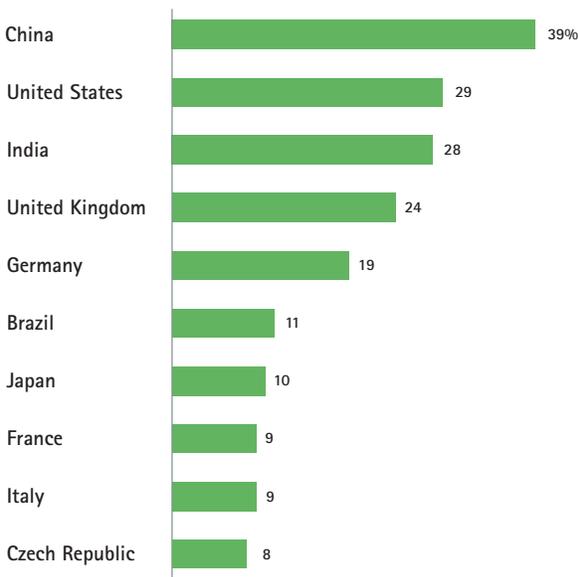
In a multi-polar world, what is needed is a new model for value-creating innovation—one that presumes that:

- a) the world and marketplace are so complex that no single management team can ever have all the good ideas and all the right answers;
- b) ingenuity, experience and, most of all, relevant and practical innovations reside not only in the executive suite but also with a company's workforce at large, because these people spend most

R&D: The big spenders

Business leaders identified China, the United States and India as the top prospects for R&D spending from 2004–2007.

Leading destinations for R&D spending from 2004–2007



of their lives in the world of practical applications of ideas; and

- c) bringing those people together in dialogue and collaboration—real, virtual or both—is a key to evoking the innovations that may lie in a latent fashion in their minds and everyday experience.

Such a model would not proceed simply by presenting employees with an innovation fait accompli that they were asked merely to implement; nor would it claim innovation as the exclusive remit of R&D employees or other specialists. Instead, this model would actively involve people in the vibrancy of discovery and dialogue, and would put in place the means to distill the fruits of this dialogue into value-generating ideas.

Although no innovation model could possibly take into account all employee opinion, sentiment and thought, this model would still give employees in general a clear message: Your brains are the intellectual capital of our company. Your input into the future direction of our company matters.

A few companies are already making this model work. Consider a recent initiative directed by David Vachell, head of learning strategy and policy for BT Global Services, a division of the global telecommunications company. Vachell's mandate was to help BTGS's sales and customer service employees adapt to a new selling environment centered around value-based sales and solution selling, rather than the sales of individual products and services.

Vachell took what he describes as a "collaborative network" or "social learning" approach to this goal. "We began by bringing together quite large groups of people—40 to 50 people at a time—for an intensive workshop," he says. "The most

important part of the workshop was the dialogue of the people with each other. In effect, they worked out for themselves what the new performance environment and learning curriculum might look like."

Next was a three-month period when diverse groups worked on projects specific to their particular performance environments. These "real-life work projects," as Vachell calls them, were then informed and refined by interaction with colleagues and a senior facilitator or coach. After three months, each team came back and presented the outcome of the projects to the other groups.

"In effect, we were asking them to simultaneously develop the business and develop themselves," notes Vachell. "They used the change ideas coming out of the initial workshop, as well as the subsequent dialogue with their peers, to create programs that had an immediate impact on how BTGS went about enabling its sales and service employees."

How successful was the program? Vachell says: "I went to every closing event for this program. Many of the participants—including some very experienced people—came up to me and said this had been a transformational program for them because they actually had become a different person in the process. They said that this approach had taken them far, far beyond a tactical approach to improving their sales methodology. They had actually had reason to look at themselves differently."

The evidence of success is more than anecdotal, however. Vachell and BTGS's management team have run numbers that show that the return on investment for the program exceeds 500 percent.

The success of the BTGS initiative was founded on several distinctive characteristics, according to Vachell.

The learning program was peer driven; guided but not stifled by management; and based on facilitation and dialogue rather than a didactic approach.

The structures for multi-polar innovation

What can organizations do to encourage this kind of dialogue-driven mindset and, more important, put an infrastructure or network in place that monitors, records and harvests potential value-creating innovations from that dialogue and collaboration?

A network offers an effective way to understand how value is created in any organization: Energy flows among all the people who are in some way stakeholders of a company, just as communication flows between nodes on a network. Energy comes into an organization through innovation, goes out to customers in the form of products and services, and returns as revenue; it goes out to stakeholders as dividends and returns as additional investments. If insufficient energy flows into the organization—financial energy through revenues or innovation energy through R&D—the company stagnates and perhaps dies. In the industrial era, companies tried to monitor and control that flow of intellectual energy from the top down, through a vertical or pyramidal organizational structure. This approach wasn't ideal and it didn't always succeed, but it was simple, familiar and sometimes worked brilliantly.

The dream of new kinds of value that might be delivered through flatter, more horizontal organizational structures has been explored and kept alive for some years by a number of forward-looking management thinkers and executives. Not everyone has agreed in practice, however, and organizational behaviors generally indicate that the management pyramid is alive and well.

Today, however, the issue is no longer whether executives are going to adopt a flattened hierarchy; it has been flattened for them. To act as if this is not so is to commit economic suicide in a multi-polar world.

Unfortunately, there are few successful models for making a flattened structure for innovation work consistently and predictably. It is all well and good to talk about how corporate energy will flow horizontally instead of vertically in this new world, from London to Bangalore to Manila to Topeka. But someone has to make that happen—not only to put in place the physical network that enables that kind of work but also to optimize the flow of energy.

We believe that enterprise learning—the activity and the function—has both the opportunity and the challenge to create the infrastructure that can encourage and support innovation in a multi-polar world. Here are three ways it can do so.

1. Learning as the “relay” of corporate intellectual energy and performance

Several academics have written recently about the different kinds of networked organizational structures most conducive to organizations that compete in an economy based

on the flow of intelligence around the globe. A networked, or “spider’s web,” organization is one with the

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Heard it through the grapevine

By Michael E. Bechtel and Lauren M. Chewning

How does a company—especially a large one—distill a multitude of raw ideas into value-creating innovations (see story)? One key is to tap the imaginations and experiences of the entire workforce, which, in turn, becomes not only the source of the ideas themselves but also a critical element of the evaluation process that separates the great thinking from the merely good.

That's the idea behind the Accenture Innovation Solutions Network, a "mass collaboration" technique for managing the innovation process. Known inside Accenture as the "innovation grapevine," the tool begins with a "seed," as it were—a strategic challenge or business idea. Something like, "How can we improve our operations to deliver world-class customer experiences?" Or, "What recruiting programs might help us compete more effectively in the war for talent?"

The next step is to find fertile ground for the seed among the people of the organization (or business partners, or even customers) who are knowledgeable about the topic under discussion and who might be able to contribute breakthrough, value-creating ideas based on their own experience and on their collaboration with others. People contribute their input to a central electronic repository, so ideas aren't lost and so their origin can be tracked.

So far, so good. But as demonstrated in the accompanying article, merely having a colossal electronic suggestion box really won't help the innovation process much. Who is going to sift through all the ideas, and based on what criteria? Who is going to separate the good grapes from the bad ones, and then turn the whole thing into fine wine?

That's where applied wiki technology and crowd sourcing come into play. The innovation grapevine uses a wiki concept—a shared composition and editing environment like Wikipedia—but inverts it. Instead of asking a crowd of people to come back with one synthesized bit of thinking about a topic, it gives people one

idea and asks them to come back with as many applications and variations as possible. Call it a "divergent wiki," rather than a convergent one.

Now the branching aspect of a grapevine becomes more than just a nice metaphor. Because it is in fact the branching of ideas, and the morphing and improvement of an idea as it moves from one person to the next, that offers real potential for creating a value-generating innovation.

Often it's not the original invention that turns out to be the moneymaker—it's the subsequent one, which takes the first idea to a new level. The classic example is the steam engine, which seemed to have limited commercial application until the invention of the mechanism that converted the up-and-down motion of a piston into rotary motion.

The grapevine then asks those same contributors to evaluate the ideas that reside in the general repository—much as a website such as Amazon.com uses its huge customer base to generate product ratings. Think of the TV show *Who Wants to Be a Millionaire?* When the contestant polls the audience for an answer, the crowd produces the correct one more times than not (indeed, statistically, more often than the "call an expert" option).

So imagine executives who have put out a request on the innovation grapevine for ideas in support of a new strategic initiative. When they monitor the results of the process in a couple of weeks or so—open up the wine cask, so to speak—they will find not only a bunch of ideas but ideas evaluated and ranked according to the collective wisdom and experience of the entire organization.

By putting ideas through this process, informed and shaped by people currently involved in leading-edge and frontline experiences, a company increases its chances of generating value-creating innovations.

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ability to operate with little or no formal order-giving hierarchies.

The independent nodes of these organizations, as Tuck School of Business at Dartmouth scholar James Brian Quinn writes, “contain essentially all the accumulated knowledge of the organization and work to a great degree without formal authority interactions most of the time.”¹ There may be a “center” to this organization, but it’s one more akin to a “city center”: It exists to bring people together, not necessarily to tell them what to do. The center collects and transfers information from and for the nodes.

Although Quinn was ahead of his time more than a decade ago in detailing the kinds of organizational structures necessary to succeed in the knowledge economy, the situation is now exponentially more complicated. In a multi-polar world, each person in the network of internal and external players is, in fact, a “node.” So an organization has as many nodes as it has employees, partners and customers.

Recall the earlier point about the concentration of energy within a pyramidal organizational structure. In a flat, horizontal organization, companies must constantly be concerned about “signal loss.” To think that the energy originating in one set of nodes—in, say, Chicago—will be of equal strength when received by a team in Mumbai or Prague or Poughkeepsie is unrealistic at best.

This is analogous to a home wireless network, where the signal isn’t always equally strong in all rooms of the house. Residents may need to install relays or signal boosters to solve the problem.

The horizontal organization is going to need those power relays too. And it is the learning function, above any other—because it already has so many touchpoints throughout a company—that has the capabilities to ensure that flat organizations do not suffer from a signal loss that saps their competitive strength.

Why the learning function and not, say, the internal communications function? Because the strength of the signal depends not just on passive reception but on active participation along those connecting nodes. The proper functioning of the horizontal, networked organization goes far beyond simply sending “communications” to the nodes. Communicating is absolutely essential, but because of inevitable signal loss, it is active work and learning performed along the node connections that keeps the signal strong.

Some companies are already working to set up their innovation relays. Wells Fargo & Co. bank, for example, created an “innovation network” to tap into its workforce for ways to improve its customers’ experience. In the first application of the network, more than 250 employees submitted 50 separate ideas resulting in seven high-quality innovations for the company, many of which resulted in innovations that have generated value for the bank. The innovation network is now a permanent part of the bank’s learning infrastructure (see “Future value and innovation: How to sustain profitable growth,” *Outlook*, September 2007).

¹ James Brian Quinn, *Intelligent Enterprise: A Knowledge and Service Based Paradigm for Industry* (New York: The Free Press, 1992), pp. 120-121.

2. Learning that connects the nodes with knowledge

For some time, knowledge management has been a technological solution in search of the right business need. In a multi-polar world, with work dispersed globally, the need has suddenly become clear: For a horizontal organization to succeed, it must become world class in capturing the energy and excellence created or discovered in any one node or set of nodes—nodes that are both inside and outside the organization—and in getting that energy to all other parts of the network. Knowledge management, in other words, is really just another form of learning.

The horizontal organization has been described as one moving from “command and control” to “sense and respond.” That means the learning function has to do more than just push training out to people to support a known need. It must be able to assess the real-time needs of criti-

cal nodes or node groupings and get knowledge and experience there to support that work.

Knowledge management is not just about making information, news or content readily available—even content indexed by performance need; this form of knowledge sharing and content management is too passive. What a flat organization needs is actionable knowledge, and the best kind of such knowledge will likely come from another part of a company: “I know what you’re trying to do; here’s what we did, and it worked.”

That’s information that generates an active response along the node connectors. To be effective, knowledge management and collaboration technologies have to deliver this kind of actionable knowledge—real-time or near-real-time learning directed toward a practical business need.

3. Learning that supports collaboration

The business leaders who are most hopeful about the future of the multi-polar world are those who realize that innovation-fueled advancements in science and technology will be more important than ever in the coming years. Why? Because of the ability to collaborate on a global scale. It is now possible to develop talent anywhere in the world, tap into it anywhere, and bring that talent together to create value “horizontally,” thanks to advancements in collaboration technologies and applications. (For a related article, see “Not your father’s collaboration,” *Outlook*, January 2008).

New and more sophisticated technologies will, and must, support this

collaborative power of the multi-polar world. Workflow software, for example, is what makes it possible for work to flow across functions and locations while executing a single process. When we say that we can send “energy” or knowledge or work from one set of nodes in a horizontal organization to another, it’s really the workflow software that’s doing it. Such programs let companies create virtual offices connecting workers in real time anywhere in the world there is an Internet connection.

A second collaboration-related influence is exemplified in the self-forming communities of wikis, blogging groups and other social

networking websites. These collaborative groups are a distinctive component of the multi-polar world: self-forming, self-organizing communities coming together not in response to an “order-giving hierarchy” but to serve a common interest or in search of solutions for a common need.

The ability of nodes in the horizontal organization to connect to one another—whether the impetus is self-directed or through authoritative direction—will distinguish winners and losers in a multi-polar world. Individual genius once fueled the success of multinationals. Today, it is the collective genius of networked organizations that fuels innovation and growth.

Harvest time

What remains is for the learning function to develop the business, process and technological expertise to create an innovation-harvesting infrastructure—the means to identify the specific ideas and collaborative energies with the potential to become value-generating innovations. Wells Fargo’s innovation network is one successful example.

Yet the answer is not simply some sort of innovation “suggestion box.” Again, the infrastructure must be built close to the action: To be effective, an innovation network must be based on an integrated learning, knowledge

management and collaboration infrastructure. It’s not just the quantity of ideas that counts but their viability.

Innovation can come from anywhere, of course, but viable, value-creating innovation is most likely to come from those actually grappling with performance issues, looking for new ways to serve customers or meet an immediate need. For example, when one global energy company went looking to its employees for breakthrough ideas, one came directly from the workers in the gas fields. Everyone else had overlooked the potential benefits of removing the wellhead restrictions on the older wells; when this suggestion was implemented, the company had a ready way to realize \$750,000 in annual benefits. Why hadn’t anyone thought of this before? “You never asked us before,” replied one of the workers.

In a multi-polar world, executives must be prepared to trade a bit of their traditional control for the energy that comes from an always on, always connected network of people. Such a network can push communications and support to a workforce, sure. But more important is the fact that it’s a network that not only sends signals but receives them. It locates the intellectual energy with the highest potential and sets in motion the processes that can create a breakthrough innovation, the kind that fuels high performance.

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