CHIEF EXECUTIVE

Issue Date: November 2005, Posted On: 11/2/2005

The CEO's Role in Innovation

Can a leader personally drive new ideas? Yes.

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With new technologies constantly threatening to upend old strategies and business disruptions occurring so frequently that Moore's Law is beginning to feel like a snail's pace, innovation has become an imperative for most CEOs. "It's a word that I live and breathe," said Jane Friedman, chief executive of HarperCollins Publishers.

Friedman made that remark at a roundtable discussion in New York sponsored by Chief Executive and IBM. She had just returned from an eye-opening meeting in Monterey, Calif., with the heads of Internet sites recently purchased by HarperCollins' parent company, Newscorp. The purpose of the West Coast sessions was to figure out a way to integrate HarperCollins' content with new channels of electronic distribution—ebooks, blogs and online serialization, for starters—that are completely rewriting the operating manual for book publishers, traditionally a Luddite industry. That meeting, Friedman said, permanently altered her perspective. "We know where our books are selling and where other people's books are selling, and what's working in trends," she said. "What's exciting me now is that I can only grow in two ways: through acquisitions—but there are very few publishing companies left—or new technology. I'm very fortunate that in the last month my boss [Rupert Murdoch] has bought up four major Web sites. They need content. I have the content."

About a dozen CEOs and their chief strategists attended the roundtable. The two groups broke into separate sessions to explore innovation from their individual perspectives. The camps were largely in agreement about their views of how innovation can be achieved, but there was a subtle but important difference in their descriptions of what part the CEO should play in fostering it.

Generally, the CEOs saw innovation as something they must encourage and even point in the right direction, but not necessarily manage too overtly. Chuck Knight, chairman emeritus of Emerson Electric, spoke about spending 60 percent of his time at planning sessions throughout his company, during which business units presented their ideas for fresh products and technologies that could beat the competition. In that way, Knight was able to "stay involved with the company" without actually directing day-to-day implementation of the new ideas.

In this view, a CEO creates a climate in which innovation can flourish and acts as a "cheerleader," largely on the sidelines. "Innovating is natural for humans," added Sunil Kumar, CEO of International Specialty Products, a chemical company. "So the CEO just needs to allow it."

The strategists, by contrast, felt that the CEO's role should be a bit more activist. David Butler, product portfolio director at Avaya, a leading telecommunications company, said chief executives had to create a chain of fiscal and performance responsibility involving innovation that they could directly oversee. "If there's one thing that I could sum up about the CEO's role in enforcing innovation, it's assigning accountability, accountability that's visible in fairly short steps," Butler said. "The goals [should be] clearly defined and there [should be] a single point of accountability in delivering the expectation. By doing that, it bakes in innovation and the process of getting there into the organization as a whole as opposed to doing it as a sidebar."

CEOs also must not be timid about innovation—either promoting it or making sure that it is being achieved. "CEOs can't be comfortable with where we are, because competition is getting fiercer and fiercer," said Ed Teplitz, executive vice president of Ethan Allen Retail. "The CEO cannot vacillate."

But, Teplitz added, after CEOs have created pathways for innovation to blossom, they're entitled to expect that strategists will deliver on the promise and on time. "It's up to leadership to initiate the beginnings of change, and then it's up to us and those below us to implement it," he said. "Once we decide the direction, we need to come up with an implementation plan and just push it through." His boss, Farooq Kathwari, said his view of his own role was to be the captain of the cricket team, standing on the field and participating directly in the game.

The Customer Can Lead, Maybe

If there was some ambiguity about the role of the CEO, there was widespread agreement about how the most critical areas of innovation can be identified: follow the customers. "Innovation begins at the interface between the company and the customer," said Clive Mendelow, chief operating officer at Binswanger, a real estate services company. "And this isn't just the cliché concept of listening to your customer. This is creating a culture of understanding the big picture in which your customer operates. It's not just understanding the customer; it's understanding the milieu, the environment."

That position was echoed in the CEO group by a number of chief executives who offered examples of how closely linked customer input is to innovation. International Specialty's Kumar spoke about how Colgate-Palmolive drove his company's development of a chemical that fights gingivitis, because the consumer products company "needs to introduce new products every few years. They're much better at telling us what innovation they need" than International Specialty is at figuring it out alone, said Kumar.

Often, the key innovation that occurs, however, is not with a product but rather with a business process. Richard Huber, former CEO at waterway freight company American Commercial Lines, described one such innovation in his business, which he calls "the world's second oldest." "Toting stuff up and down the river, that's our business," said Huber. "But for customers it is much more important to know where the product is and when it is going to get there."

To close this knowledge gap, American Commercial combined GPS technology with electronic data systems and produced real-time reports detailing the exact location of shipments and estimated arrival times. This innovation cemented business relationships that could have drifted to the competition. "A system where you could tell the customer exactly where their two barges of styrene were and when they were going to get to Memphis became more important than the transportation of the product itself," said Huber. "I found that every innovation in my business came from trying to satisfy a customer's needs."

As with most aspects of innovation, however, there's some ambiguity about listening to the customer too much, some attendees said. If a company relies solely on the customer and not the instincts of management as well to determine which new ideas are worth pursuing, it could find itself woefully behind more cutting-edge competition in short order. Brian Murray, operations group president for HarperCollins, described how Swiss jewelers became so enamored with making incremental improvements to the tiny mechanical parts in their watches that they were blindsided by the emergence of quartz technology. As a result, Japanese companies dominate sales in popular, less expensive, yet high-quality quartz watches, while the Swiss are racing in vain to catch up.

"If you listen to your existing customers, a disruptive innovation can come along, like something that's technology based, which the customers are behind the curve on. They don't know what new markets could be coming down the road," said Murray. "So you need to have two sets of antennae out there: one listening to your customers, but the other looking at what is completely disruptive that even your customers may not be attuned to."

While some innovation occurs in high-level planning discussions and management retreats, CEOs said they realize the strategic importance of providing channels for innovation to flourish in more unpredictable ways as well. It seems that there is a distinction between innovation that is incremental and innovation that is disruptive. They are different processes and must be managed differently.

To allow the really new ideas to bloom, Emerson's Knight spoke about a strategic investment program at his company, in which as much as $20 million a year would be budgeted for employees who had potentially lucrative, unproven concepts that needed an infusion of cash to get off the drawing board. Walter LeCroy, founder of LeCroy Corp., which makes electronics for particle physics research, said that the company had a major new product recently "based on an idea that was generated by an engineer who was getting frustrated, and whom I had encouraged to steal some time from his boss and go try it out on his own. Ideas don't flourish on their own; they require advocates, and encouraging advocates of ideas is an important part of what a CEO has to do."

Can CEOs create processes that spark radical innovation or must they happen by accident? At least some CEOs believe that structures can be created inside their companies to let the really big ideas break out from the static. Tracy Bahl, CEO of Uniprise, the services arm of UnitedHealth Group, said that his company has an innovation lab that lets selected employees vet their ideas against the business' strategic direction and required capital. "They can go through a staged methodology that ultimately allows us to get some visibility on these ideas before they get squashed anywhere else in the multiple layers of the organization," said Bahl. "Innovation can come from anywhere. [CEOs should] create the expectation within the organization that innovation is just as much a part of your job as the operating disciplines that you have to perform every day. In other words, I don't expect you just to make the [performance] trends for each period, I also expect you to reinvent."

Perhaps what makes innovation particularly daunting is that it is difficult to pin down exactly what it is and when it is required in a business environment. Each organization must determine the type of innovation that is most essential to its success—based on the company's industry, structure, size, time in business and competition, among many other factors—and then trust this conclusion enough to make it a centerpiece of the organization's strategic plans.

The Many Paths of Innovation

At the CEO roundtable, the meaning of innovation rapidly broke away from the typical notion that it must involve a technological invention. "Innovation is much more than just technology," said Saul Berman, a partner at IBM Business Consulting Services. "In fact, we've done some research that says there's not a correlation between invention and innovation, that you can look at companies and the number of R&D patents they file and try to correlate that with their success at innovation, and there's not a very strong correlation.

We see innovation being the combination of marketing insight increasingly and technology know-how."

That was just the beginning. To others, cost-cutting was innovation. "If we have a much better way of producing the product than we did last year, that's going to use less people and get the job done faster and better. That's real innovation," said Leigh Abrams, CEO of Drew Industries, which manufactures components for recreational vehicles. "We look at every facet of the business for innovation, and not just one, because we're not the kind of company that's going to come up with the new iPod."

To make matters even more complex, innovation can come from many directions. The traditional view of it is that it must come from deep within a company, but increasingly it also can come from a business partner or research institution. It can even develop as the result of outsourcing processes. When AT&T was broken up, leaving then local carriers without an obvious innovation source, as Bell Labs had been, these companies outsourced much of their research and development to equipment manufacturers.

Managed properly, getting innovation through outsourcing is highly cost-effective. "It's incredibly important to outsource innovation," said Maggie Wilderotter, CEO of Citizens Communications, a telecommunications carrier in rural and small markets. She said she watches what the major service providers such as SBC and Verizon are spending money on, such as Internet-based television, and jumps in when the technology has been proven. "We have at our disposal today a lot more capability and innovation in the marketplace of competitive dynamic suppliers than if we were to try to [create innovative telecom equipment] on our own," she said.

Acquisitions are another path of innovation, CEOs and strategists alike agreed. And they agreed that acquisitions are primarily the CEO's decision and, as such, are an activity that requires chief executives to provide strong leadership. Edgar Haug, a partner at the law firm Frommer Lawrence & Haug and a specialist in intellectual property law, cited the case of Pfizer acquiring Warner Lambert, primarily to gain control of the cholesterol drug Lipitor. "That was a good decision to buy Warner Lambert, to buy that product," said Haug. "Did Pfizer do any innovation to get Lipitor to the market, although it's enjoying 95 percent profit margin on $9 billion a year [in sales of the drug]?" Not really, "but [the CEO] made the right decision that innovation is important, even if it's someone else's innovation that we have to buy."

Attendees concurred that innovation, in whatever form, must permeate an entire company. "From our perspective, the definition of innovation cuts across the whole organization," said Bill Battino, the head of the communications practice of IBM Business Consulting Services. "It's product and services, it's how you're organized, it's the processes you have, the partnerships that you form, the metrics that you have in place, the incentives. Those are all elements."

But attendees recognized that it is much easier to fail at innovation than succeed. The primary reason? Innovation requires shifts in culture, deep organizational involvement, expensive resources, open communication and management commitment. Many CEOs want to avoid this cumbersome basket of tasks, or maybe prefer to tackle it halfheartedly—especially if they can hide behind reasonably good earnings performance. The strategists, particularly, viewed this as a classic fatal flaw. "It's been my experience that often if a business seems to be doing well and meeting its revenue and profit targets, there's little desire to actually innovate," said Andy Jones, head of strategic planning at OgilvyOne, the marketing agency.

Added Dan McCarthy, senior vice president at Citizens Communications: "In the past, we've had CEOs who really didn't have the stomach for the cultural change that was required out of the innovation."

This sentiment, however, was not lost on the CEOs, who recognized the danger of their own skittishness or complacency. "As a CEO, the thing you have to overcome most of all," said Drew Industries' Abrams, "is the fear of innovation."

Innovation, the Emerson Way

The company's latest technique is "swarming."

Chuck Knight, chairman emeritus of Emerson Electric, ran the company for 27 years. During that time, its sales increased more than 16-fold and net earnings more than 18-fold. Knight is the author of Performance Without Compromise: How Emerson Consistently Achieves Winning Results (HBS Press, 2005). In our conversation with him, Knight began by describing where innovation flourished at Emerson.

"It all came out of our planning process, which is where I spent 60 percent of my time. I went to every planning conference for 27 years and those conferences drove innovation at Emerson. We re-planned every business every year, unless it was doing well. That's how I knew what was going on. I didn't want to manage the people who reported to me, I wanted to manage the 5,000 people who were in the planning conferences or contributing to them."

Out of these meetings a couple of decades ago, Emerson top brass concluded that the company couldn't continue to grow purely as a components supplier for appliances, process controls and cooling equipment. Integrated systems components were becoming a more efficient, less expensive option. And that presented a troubling challenge to Emerson.

"We knew we had to get beyond components and begin to manufacture systems. In air conditioning, we made motors and sensors, but we didn't have a complete compressor system to bring to market. So we acquired a company called Copeland, which was experimenting with the so-called scroll (named for its shape) compression technology. We put a lot of money, $150 million, and a lot of staff time behind developing this," said Knight. "It was a gamble, but now our scroll compressor systems—in Whirlpool and Carrier air conditioners, for example—are outselling the traditional compression market by more than three times. New technology and shrewd technology management enabled us to reinvent that industry."

Knight had similar success with another system, dubbed PlantWeb, which is a smart process control system that can manage an oil refinery, for instance, from a distance via computer and other electronics.

"We put $250 million into that project. Before we developed PlantWeb, we were a leader in pressure and measurement devices but we didn't have an overall system to sell. In the early 1990s, we acquired Fisher, which had the platform that we could put our components in and develop an intelligent digital process control architecture," he said. "The new technology was designed, piloted and perfected within a five-year span. It yielded opportunities for process customers to reduce capital costs while increasing capacity and productivity. And we knew we won the battle in this area when our instruments had gotten so smart that at one of our meetings, a temperature regulator called our cell phones from one of the refineries and said, 'I'm in trouble. I'm not working right. I'm at this location; this is my tag number, fix me.' That was the beginning of the end for our competition in terms of being the leader in the process control business."

The latest innovation at Emerson is known as “swarm engineering,” a cost-saving, accelerated development method that the company has begun to implement in low-cost locations, including China, India and the Philippines.

“In these countries, the price of engineering talent is a fraction of that in the West and it is a talent of high order. So not only can we employ more high quality engineers there at a constant level of spending, but we also can deploy these additional engineers in new ways,” Knight said. “That’s what swarm engineering does: It lets us assign large teams of engineers to swarm to a project and break it into steps that can be done in parallel rather than in sequence.

“A traditional development approach might take five years and 50 engineers working sequentially to complete. With swarm, 90 lower-cost engineers working on some components in parallel can complete the development in about two-thirds the time. And with component costs coming down, say five percent a year, with swarm we could actually redevelop the product twice in a five-year period for the same cost as the traditional method. That’s a huge competitive advantage,” he said

Becoming a “Fast Follower”

Citizens Communications lets others take the risks.

Citizens Communications, which provides telephone and Internet services for rural areas in 23 states, is not flush with cash like Verizon and SBC. It can’t afford to make mistakes on new products that don’t pan out. So CEO Maggie Wilderotter says her company is often less an innovator and more a “fast follower. We’ll sit on the perch and watch what Verizon and SBC do,” she says. “Once we see that it’s successful, we’ll jump on the bandwagon very quickly.”

An example is Citizens’ recent deal with EchoStar Communication’s Dish Network to provide satellite TV, ideally as part of a bundle with DSL high-speed Internet and local and long distance telephone calls. Citizens made the decision to partner with EchoStar only after monitoring SBC’s introduction of Dish for clues about how popular the service would be and any implementation hiccups. “We watched what they did for six months,” she says. “We also worked with Dish to get market feedback and learn about installation issues. Then when we decided to tackle satellite TV, within 60 days I had it launched in every single one of our markets. It took SBC a year and a half to launch. Now, I have a higher penetration in my markets on that same product set than SBC does.”

Wilderotter is much less sanguine about IPTV, which is an Internet-based, two-way television system that lets customers interact with their sets to, for example, order products or access information related to shows. The innovators, she says, are going to stub their toes for a long time before seeing a return, if ever. Consequently, Citizens is staying on the sidelines. “I’ve seen the [IPTV] spreadsheets for Verizon and SBC and they’re about this long. It’s eight years out and there’s still no money to be made,” Wilderotter says. “We’re watching what they’re doing, and we’re following how they do it. If it gets hot, we’ll be there.”

Despite this second-mover strategy, Wilderotter defends her company’s innovation record. In certain areas where innovating is a no-brainer, such as rapid DSL penetration, Wilderotter says Citizens was the first carrier to hit 20 percent market penetration. It’s the questionable technologies that the carrier has to be careful about, the CEO says. Otherwise, the business could be lost and the economics of rural regions harmed if the wrong choices are made. “Our innovation is different—it’s situational,” argues Wilderotter.

Who’s who

• Leigh J. Abrams is chief executive of Drew Industries, White Plains, N.Y.
• Tracy Bahl is chief executive of Uniprise, a unit of UnitedHealthcare Group.
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• William J. Holstein is editor in chief of Chief Executive.
• Richard L. Huber is a director and former CEO of American Commercial Lines.
• Andy Jones is a senior partner and head of strategic planning at OgilvyOne.
• Farooq Kathwari is chairman, president and chief executive of Ethan Allen Interiors, Danbury, Conn.
• Charles Knight is chairman emeritus of Emerson Electric.
• Edward M. Kopko is CEO of Butler International and chairman and CEO of Chief Executive Group.
• Sunil Kumar is president and chief executive of International Specialty Products.
• Walter LeCroy is chairman of LeCroy Corp.
• Dan McCarthy is senior vice president, field operations, Citizens Communications.
• Clive G. Mendelow is vice chairman and COO of Binswanger.
• Brian Murray is group president, HarperCollins.
• Thomas Policelli is president of Uniprise.
• Edward Teplitz is executive vice president of Ethan Allen.
• Corey Whitely is vice president of operations, Ethan Allen.

• Maggie Wilderotter is CEO, Citizen Communications