

# Reinventing The CIO

Tomorrow's IT leaders will have to be part general, part maestro, and part evangelist

By [Chris Murphy](#)

Chief information officer, take no comfort in your title--it's a starting point at best. Those who want to remain in a position of power and influence in the coming years will need to be something more: an E-leader. CIO, VP of IT, MIS manager--whatever the appellation, the role has significantly evolved from its roots in the basement world of mainframe tech support. And it continues to change. The supercharged E-commerce holiday season provides the most recent example of the need for new approaches.

The Internet has made technology everybody's business, inspiring managers throughout a company to experiment with how IT can revolutionize their corner of the business. At the same time, technology choices are exploding. These forces are creating a leadership vacuum, a gray space waiting for someone to paint a companywide vision for how E-business translates into higher revenue, lower costs, and better customer service. CIOs can star in this role, but only if they become established E-leaders who direct the mission rather than support it.

The first constant for a CIO: change. "The rate at which the position is having to reinvent itself is getting shorter and shorter," says John Keast, who last month was named CIO and chief technology officer of Branders.com, following a stint as CIO of San Francisco energy company PG&E Corp. "CIOs have to frequently shed their skin and become a different person."

It won't be easy. Reginald Foster, chief E-commerce officer of consulting firm American Management Systems, says executives within most businesses haven't looked to the CIO to lead the kind of radical changes E-business initiatives create. "CIOs have never really had the charter to go to a vertical-market business manager and say, 'I'm here to put you out of business,'" Foster says. "The majority haven't been hired to be that kind of change agent." Foster doesn't rule out a CIO assuming that role, but says it will only be done by those who can redefine the expectation of the position. "It could be the CIO, but it's the CIO with the leadership and business skills to catalyze and force business reinvention."

The successful future CIO will be an "assimilator of change," says Kenneth Bohlen, CIO at Textron Inc., an \$11.5 billion manufacturing company in Providence, R.I. He predicts that CIOs who don't always put business goals first will never own that leadership role and will instead be pushed aside by other ambitious executives. "If IT people don't respond in a businesslike fashion, they're going to lose the opportunity to come to the boardroom," Bohlen says. "You'll see the business-savvy people who have come to understand some of the technology begin supervising IT functions."

As CEOs and other top business leaders put more focus on IT, the pressure on CIOs has never been greater. Roy Vallee, CEO of Avnet Inc., an \$8.4 billion Phoenix distributor of electronic components and computer parts, says IT is to distributors what research and development is to manufacturers--the starting point for innovation. He expects his CIO to cut through the daily hype of new technologies and figure out how to help customers directly. "Prior to the Internet, most CIOs were accountable to the internal customer. If solutions fell short or weren't fully functional, the internal managers were a buffer," Vallee says. "Now, the people doing Web development are directly accountable to the external customer."

To emerge as E-leaders, it won't be enough for CIOs to build upon business knowledge, management and communication skills, or the ability to mobilize support for IT ideas. Where it was once sufficient for CIOs to get business managers to "buy into" IT initiatives, E-leaders can no longer be satisfied until business managers come to them with ideas for using technology to reinvent their business models, says Keast of Branders.com, which will offer online ordering of corporate-logo branded items. The CIO will need to move from evangelist for innovation to shepherd of good ideas.

Just last year, Keast had been content to evangelize. As CIO of PG&E, a \$20 billion energy company, he spent his time proselytizing to managers about the potential for technology-driven innovation to change the business, and he considered it a huge accomplishment when he could "raise the bar on awareness." Still, these discussions generally happened only when he sparked them.

In the future, Keast says, he'll measure his success by whether IT ideas are bubbling up when he isn't around and whether people know they can turn to him to make them happen. For example, late last year, members of the energy trading department at PG&E called Keast with an idea: Could they create a computer system to automatically reconcile accounts that traders now close out at the end of the month by telephone?

"The question is, have I created an engine for ideas and is there a conduit to present those ideas?" Keast says. "The CIO has to be that go-to person for good ideas, no matter where those ideas come from."

While encouraging ideas for innovation from business managers, the future CIO can't lose sight of the primary need for E-leadership. Vallee of Avnet--which recently acquired \$1.7 billion Marshall Industries--expects his CIO to see the big picture and spot when an enabling technology creates an opportunity that business-unit managers don't see.

Three years ago, Vallee and then-CIO Anthony DeLuca thought the falling cost and increasing performance of hardware for database-management systems could make a common, global database feasible. Business-unit managers resisted, saying they had higher IT priorities and couldn't put a return-on-investment value on the information the system would generate. "We decided to go ahead with the project anyway," Vallee says. Now there's a backlog of requests from business managers to put more data fields into that system. And the former CIO, DeLuca? He's been promoted to director of global operations.

While it's no longer surprising to hear a CEO or CIO cite E-business as a top priority, executives are struggling with how best to manage this crusade. Recent research by KPMG and the research and consulting firm Benchmarking Partners suggests the E-leadership role remains up for grabs.

The study interviewed executives at 48 companies--most of which had more than \$1 billion in revenue--and found that only 26% had one person charged with leading E-business efforts companywide. Less than half of the companies surveyed had an executive with an E-business or E-commerce title, and only 40% of those executives managed a budget for E-business. Typically, the initiative and budget is coming from a group--such as marketing or supply management--that sees an opportunity and starts implementing an Internet strategy.

Decentralized IT initiatives let business-unit managers push projects far into development before they face scrutiny from outside their departments. In a study looking at the role of centralized IT leadership, the Working Council for Chief Information Officers, an arm of the Corporate Executive Board, a Washington think tank, says some companies reported that in-depth audits found more than \$100 million in unbudgeted IT spending.

Benchmarking Partners managing director Debra Hofman calls it a "let-the-flowers-bloom" approach. "There's a lot of activity and discrete investments, but there's not a lot of cohesive vision for the activity," she says. "There needs to be some sort of framework and vision for what a company wants and how E-business applies to them."

E-business further complicates the delicate task a CIO has of balancing centralized IT projects and responsibilities to business units. It has become common for some IT personnel to report to both an IT department and a business-unit manager. But the emergence of E-commerce officers and specialized E-business units could result in the future CIO sharing turf--or fighting for it--more often. That means CIOs and the next generation of IT leaders should be boning up on their marketing skills today, executives and analysts say. "Many CIOs are being left out of E-commerce initiatives," says Bud Mathaisel, CIO of electronics manufacturing services company Solectron Corp. in Milpitas, Calif., and former CIO at Ford Motor Co. "That's because many of those projects are being led by marketing. This may be a major phenomenon--the IT people within marketing groups moving onto the fast track to CIO."

Berge Ayvazian, president of consulting firm the Yankee Group, predicts that in some cases there will be a power struggle between the CIO and the person in charge of a company's Internet initiatives, since the most successful E-business leader will become a company star. "What will happen to the CIO and IT as this shift happens? Who will be the gatekeeper of IT?" Ayvazian asks.

But to some, this presumption of a growing rivalry between CIOs and E-business managers doesn't ring true. At Charles Schwab & Co., where a heavy trading day brings 10 million or more transactions by phone, broker, and the Web, so much of the company's business is tied to E-commerce that CIO Dawn Lepore doesn't worry about being considered anything but one of the core business managers. "I don't look at myself as a technologist, and neither does my boss or my peers," says Lepore, who reports directly to co-CEO David Pottruck along with four other top executives. "They look at me as the person who runs the factory that fuels our business."

Schwab also illustrates the new opportunities for IT leaders. Lepore hired the person who's now enterprise president for the electronic brokerage, Gideon Sasson, luring him from his role as VP of information services technology at IBM to run the technical development team of the initial eSchwab online-trading unit. In 1997, when Sasson jumped to head the electronic brokerage unit, it was the first time a non-CIO had stepped from a technical to a general management job at Schwab.

These opportunities spring from the fact that the new leadership environment at many companies is letting CIOs measure success not in traditional terms--finishing projects on time and under budget--but by the numbers that top business managers strive to influence: revenue and profit.

At Visteon Corp., the \$18 billion parts subsidiary of Ford, IT staffers are working closely with the marketing department to create an online business for replacement parts. The company does about \$700 million in aftermarket parts sales today, with very little sold directly to consumers. By reaching users and new distributors online, its goal for that business is \$2.5 billion in 2002. "Can we, through technology, go out there and create an Internet business and put a revenue target on it?" asks Visteon CIO Dave Bent.

Bent says this gives IT the chance to lead the company into a new line of business. Already, marketing and IT people together have created an online catalog for audio equipment and back-seat video game systems that consumers would buy and have installed after they purchase their vehicles.

With the growth of E-business, the career path for the techno-savvy manager is becoming broader, yet more complex. At the top, E-commerce is tying IT more directly to the bottom line and expanding technology's role in every corner of the business. This makes it more likely that successful CIOs--E-leaders--will be seen as having the breadth of experience needed for higher executive jobs.

"The person who will take over my job will have a technology background," says Steve McDermott, CEO of Garban-Intercapital's operation in the Americas, a 950-person institutional money and securities brokerage with more than \$250 million in annual revenue. "During the '80s and into the '90s, it was the finance and MBA types. In the future, it will be the E-commerce and technology types."

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As CIO of Farmers Insurance Group Co. in Los Angeles, Cecilia Claudio spends about 60% of her time on general business issues during projects such as an IT-driven reengineering of claims handling. During the past year, the company has been planning its move from a largely paper-based system to an Internet platform that will let agents, claims representatives, and customer-service personnel check a claim's status online. "It's going to change the culture of the people in our claims department," she says. "We find ourselves dealing with change management."

For the aspiring professional a few steps down from CIO, there have never been so many career tracks: leading the technical side of an Internet startup, joining the E-commerce team at a large company, changing the culture within a large, traditional IT department. Avnet's Vallee predicts IT people will find it easier to move into nontechnology management positions as companies increasingly fill senior management jobs with IT executives. "It's conceivable that a warehouse system management developer might become the site logistics manager," Vallee says.

So what experience makes sense for tomorrow's E-leader? Two skill sets are clear: people skills, to explain an idea and inspire support for it; and business knowledge, to know a company's place in the market and how it needs to change. A more pressing issue concerns what technical skills an E-leader needs.



Maureen Osborne, CIO of IT consulting firm Whittman-Hart, leans toward a broad range of skills over a specific technical expertise. The person has to have led complex projects, especially assessing the risks for the business and allocating resources, and also must have managed senior staff, not just fresh-from-school IT grads. But profit-and-loss financial understanding also is very important, something IT managers can sometimes be insulated from at larger companies. "Running a profit-and-loss is a great experience for a CIO, when you have to really know the financials of the business," Osborne says. "Maybe even if it's at a smaller company."

Others put heavier emphasis on technical experience. Keast cautions against jumping too quickly to an Internet startup, where an IT person will be forced to be a generalist. He recommends approaching a CIO position by rounding out technical experience--for example, a person who has mostly designed network architectures should get experience managing them.

Charlie Feld, who had been interim CIO of Delta Air Lines Inc. until December and is now guiding the company's E-business efforts, compares the emerging leadership role with that of a maestro. Feld is leading a small team of IT and business-side employees charged with integrating new, fast-changing technologies into legacy IT systems used by a traditional 70,000-person workforce. The complexity of that process is why he says E-leaders will continue to need an intensive, hands-on IT background. "It's like making a tuba and a violin play together," Feld says. "Someone has to be the maestro, and in order to do that you have to have some technical experience."

So far, there's no standard educational pedigree for tomorrow's E-leaders. But business schools are rapidly adding E-commerce to their curriculum. Carnegie Mellon and Columbia universities last year launched programs specifically designed to teach technology-business management, using business school and computer sciences faculty. Students learn the finer points of marketing, along with the relative strengths of different programming languages. "To answer whether a sales channel conflict is real, you have to be able to discuss whether the technology is in place to let the competition actually happen," says Douglas Dunn, dean of Carnegie Mellon's Graduate School of Industrial Administration.

Even junior IT people should build their professional and interpersonal skills while on the job, says Scott Dinsdale, chief technology officer of entertainment Web site FirstLook.com Inc. and former CIO of BMG Entertainment. Dinsdale recommends IT people spend at least 10% of their time developing broader professional skills, whether by taking a communications class, reading about business, or just spending time with marketing people. "Most junior IT folks spend a lot of time reading about IT, but they should read more business," he says. "IT people need to think of themselves as business people with an IT specialty, just like business people who have a finance or marketing specialty do."

To bring all this together, the biggest test of E-leaders will come in their ability to inspire people. E-business by its nature must become dispersed through an enterprise. Leading that effort requires motivating and managing people with widely different interests to rally behind common goals--from business-unit executives with their eyes on next quarter's results to IT employees looking for a cutting-edge project.

E-business further complicates that because companies' implementation of it is somewhat ad hoc and dispersed. E-business "may add up to a lot, but they're doing it in small bites," says Hofman of Benchmarking Partners. "It's harder to have a long-term vision for it."

At the same time, in order to put IT closer in touch with the rest of a business, many CIOs are moving their staffs out of central offices and into departments so they can better understand and respond to business-unit needs. Companies such as PG&E and Schwab have IT employees report to a business manager and an IT manager. Carla von Bernewitz, CIO of the U.S. government's Defense Logistics Agency, recently moved 600 of 1,000 centralized IT staffers so they would be closer to users.

Given the scarcity of high-tech workers, keeping a dispersed team motivated and pointed toward the same goals will be many E-leaders' pivotal challenge. "It's not the perks that keep people--as long as you pay competitively. What makes people stay is inspiration," says Dinsdale of FirstLook.com. "People want to feel like they're part of a winning team. They want to work with a General Patton."

All these forces demand that the E-leaders of tomorrow work more and more like a CEO: Paint a vision, set goals and standards, provide resources, inspire talented people, and then let those people who know their specialties come up with great ideas. It's a role that demands a high level of visibility and great deal of behind-the-scenes maneuvering. The same could be said of the

future role of IT. "If I do my job right, the business managers will be espousing the benefits of the Internet," says Textron's Bohlen. "And IT will just be in the background."