EN LAWONN STOPS MIDSENTENCE, hesitates at a certain word, and instead takes a sip of water from the glass in front of him. Lawonn is sitting at a table in the Grand Ballroom of the Omaha Marriott, waiting to go onstage at the Nebraska IT Symposium, one of five CIOs scheduled for a panel discussion.

The word Lawonn hesitates to pronounce is “relegated”—as in “CIOs will be relegated to the role of infrastructure managers.” Relegated sounds so dismissive, and managing a company’s technology infrastructure isn’t exactly small potatoes.

Lawonn is the CIO of Alegent Health, a nine-hospital, 9,000-employee health care system. Lawonn worries that CIOs aren’t fulfilling their promise as high-level business executives. It’s not his own role at Alegent he’s concerned about. Along with IT, Lawonn’s responsible for the hospital group’s construction projects and retail business. And he’s just been put in charge of its budget process. No, Lawonn’s worried that the
CIO position in general, after so many years of upward trajectory, is slipping. That it will be, you know, relegated to a lesser role.

There’s a deeply rooted tension behind Lawonn’s concerns, and it pops out of our research for a forthcoming InformationWeek Analytics Report on Tomorrow’s CIO, which will be posted on our site in the coming weeks. There’s good news for CIOs in the report. Companies want more than infrastructure management from CIOs and their IT organizations. The desired attributes cited most often are leadership, effectiveness, vision, help with optimizing business processes, and insight into new areas of growth.

The bad news: Too many execs don’t see CIOs living up to that high standard. Results of a survey of more than 700 corporate managers and CIO and VP-of-IT-level executives indicate the CIO role has taken a few steps backward in the last year in terms of influence and clout. Only 39% of managers outside IT say the influence of the CIO is increasing, down from 43% a year ago. CIOs are a little more bullish on themselves, but not much: 55% say the CIO’s stature is upwardly mobile, but that’s down from 66% a year ago.

Whether they know it or not—and most do—companies need an executive leader well versed in both technology and business processes. The CIO position is tailor made to take that role, but a disturbingly large group of non-IT execs don’t have much faith in that happening. The question is, which CIOs will step up to it?

DIFFERENT WAYS TO LEAD

Leadership tops the list of attributes and abilities critical for tomorrow’s CIO; it was cited as important by nine of 10 respondents. It sounds obvious and simple, but it’s anything but when applied to the realities of the CIO role.

First, there’s technology leadership. CIOs of the future had better be able to look ahead at least three to five years to which technologies and trends will impact their industries in general and their organizations in particular, says Dan Drawbaugh, CIO of the University of Pittsburgh Medical Center. Drawbaugh himself tries to track technology trends about eight years in advance. Then the CIO can figure out which systems and tools to be “putting in today and executing on now.” Oh, and CIOs had better be good at picking long-term technology partners, too, he says.

Drawbaugh uses network convergence—the running of voice, video, and data on a single network—as an example: “We’ve seen the convergence coming for three or four years.” A lot of CIOs stayed in “tactical mode” when upgrading their networks, the result of technology shortsightedness. “It’s going to be difficult to position yourself for competitive success,” Drawbaugh says.

Then there’s business leadership. For CIOs, that requires “speaking the language of the C-suite, development of one-to-one relationships, driving the agenda,” says Harvey Koeppel, executive director of the Center for CIO Leadership, a year-old nonprofit organization funded mainly by IBM. Koeppel had been CIO of Citigroup’s consumer group.

CIOs have a chance to drive the agenda because they’re at the center of the most important trends in business today: digitization and globalization. Many companies have organizational silos with little “horizontal integration,” says Koeppel, which won’t work in a business future driven by ubiquitous connectivity and access to global resources. It’s the CIO, with technical expertise and business savvy, who needs to be responsible for “understanding what Web 2.0 is about but then helping the chief marketing officer understand how these new technologies can drive...
the marketing agenda in effective ways that drive revenue or increase client satisfaction.”

A lack of leadership skills may help explain why many CIOs feel shut out of major decisions. A third of corporate managers describe the CIO as “actively involved” in the big corporate decisions, the same as last year. But only 30% of CIOs describe themselves as “actively involved,” down from 38% last year.

TECH THAT’S READY

A close second on the list of important attributes for tomorrow’s CIO is the ability to execute. It’s tempting to say that that imperative is a reaction to the reputation of many IT organizations, deserved or not, for foot-dragging and missing deadlines. More likely, it’s that almost every sales-building new project or cost-cutting process change relies on IT.

Five years ago, Progressive Medical CIO Angelo Mazzocco says he wouldn’t have been in on the earliest discussions of a new business proposal. Now, “everything’s got technology as a part of it,” he says. Progressive Medical provides medical equipment and services to health insurers and self-insured employers, and Mazzocco is piloting a fulfillment system in support of a new business model—selling equipment and medication directly to employers’ on-site clinics, which represent a growing trend among large companies. It’s the result of “key customers pushing us into new areas,” and Mazzocco was involved in the initial discussions of the project among the C-level execs at his company, including its feasibility from an IT perspective.

As Progressive Medical shows, one test of an IT organization’s effectiveness is its ability to respond to new initiatives. One measure of that is the amount of money it spends on new projects compared with maintaining current systems and applications. Many CIOs aren’t doing so hot. The average split in our survey is 70% of IT budgets going to maintain current operations and 30% on new initiatives. Last year, it was 64% maintenance and 36% new development. Mazzocco’s IT organization recently hit the 60/40 mark, the result of a “conscious effort to get more people involved in new development,” he says.

Even more aggressive is Randy Mott, CIO of Hewlett-Packard, who’s looking to cut his organization’s ratio of time spent on maintenance to new development to 20/80. Mott’s IT overhaul, which also involves large-scale data center consolidation and application reconciliation, is part marketing strategy by HP, which sends Mott out regularly to proselytize it. But it highlights characteristics more CIOs should exhibit: Be bold, take risks—and then execute.

COMMUNICATION ISN’T TAP DANCING

The third most important attribute for the future CIO is the ability to collaborate and communicate. There’s a “huge gulf” between the IT organization and its corporate colleagues, warns Rob Carter, CIO of FedEx, making communication particularly critical for the CIO.

CIOs face a big challenge explaining why it’s harder to build a scalable application that supports lots of customers with huge transaction volumes and high concurrency than a simple PC application. “Everybody has experience writing spreadsheet macros,” Carter says, but very few business executives understand the challenges in delivering big applications. “You have to be very effective in explaining, why does it cost so much and take so long?”

For example, a new feature from FedEx, called QuickShip, lets customers track packages from their Microsoft
Outlook systems. That application is part of FedEx’s push toward “customer-side integrations,” and Carter uses it as an example to explain to colleagues the payoff from a long-term commitment to Web services. “It takes a lot of work to create a Web services architecture,” Carter says. That needs to be communicated, but in terms the business-side values.

“When you start to talk to the business about Web services, you’re highly likely to get a glazed-over look,” he says. So Carter explains Web services in terms of how it changes the ties FedEx can build with its customers—how it allows access to business capabilities because effective Web services plug into available apps. And that leads to the real future potential of the Internet, one that doesn’t require a customer to type in FedEx.com to have an online tie to the company. “It’s not about dragging people to your Web site all the time,” Carter says. “The future isn’t about destinations on the Web, it’s about connectedness.”

CIO BLIND SPOTS

CIOs and their non-IT peers agree on the top two most important ways an IT organization contributes to the success of the business: “operates and maintains existing systems” and “oversees and ensures network functions and availability.” Fair enough: Shipments gotta ship; e-mail’s gotta flow. But it’s in choice No. 3 where things get interesting.

For CIOs, the third most important way IT contributes to the business involves “large-scale deployment of technologies and systems”—more of the same in terms of IT’s historical role. For non-IT corporate management, though, the answer to No. 3 is “contributes to company innovation and growth.” Hey, where’d they get the crazy idea that IT can contribute to innovation and the growth of the business? CIOs place it sixth on their list, after minimizing costs and consolidating platforms.

More CIOs should think like Richard Entrup, director of IT at the Museum of Modern Art in New York. His IT group recently worked with the museum’s digital media group to implement an application that lets the iPhone act as an audio guide to the museum. It’s not a major application, but it’s indicative of the way IT supports the needs of the business, Entrup says.

The evolution of the CIO from a technology manager to a business-oriented executive has been given for a long time, so it’s a surprise to see our survey respondents backing off from that conventional wisdom.

It’s not for a lack of role models. Filippo Passerini, CIO of consumer products company Procter & Gamble, runs a services organization that, along with IT, includes HR, payroll, and other corporate services. HSBC North America recently promoted its CIO, Andrew Armishaw, to chief technology and services officer, adding responsibility for security and fraud operations, corporate real estate, and other business areas to his IT functions. Tim Stanley, CIO of Harrah’s Enter-
Ralph Szygenda, CIO of General Motors. “Go work in business, find out how that works.” Szygenda says experience early in his career as a computer salesman taught him a lot about the computer industry and business in general. More than 90% of all survey respondents consider running a business unit outside of IT “very important” or “valuable” experience for potential technology leaders.

PROCESS ORIENTATION

When it comes to the factors that are pushing the CIO to become more of a business leader, both corporate managers and CIOs put at the top of their lists tech chiefs’ need to “manage/optimize business processes.” A similar question, with a similar response, was this: “What do you see as the main opportunities before CIOs today?” The No. 1 answer by both CIOs and corporate managers is “improve and/or innovate new business processes.”

That process orientation makes sense. The CIO’s overview of corporate-wide systems and applications gives the CIO as deep and encompassing an understanding of the organization’s business processes as any executive, on par with that of the CEO and CFO. It makes sense that the CIO would seek—and be called on—to leverage that process expertise.

“My current role may very well be a future role for CIOs,” says Ed Kamins, chief operational excellence officer for technology distributor Avnet. Kamins was the CIO at Avnet before moving full time to his current position three years ago. “I’m really the chief process officer,” he says.

His position was the result of some hard lessons that automating a bad process delivers a “faster bad process, that digs a hole and wastes money faster,” Kamins says. For example, when selling industry-standard servers became the fastest-growing part of Avnet’s business, instead of cashing in, the company kept falling behind in quotes, orders, and delivery. Avnet was using the same processes to take orders, configure the products, and ship them that it had used for custom-built servers. It figured out about half of those steps weren’t needed, Kamins says, letting it cut the time it takes to put together a commodity server from 48 hours to just under two hours. That let it capture the revenue growth without adding people.

As for who is pushing the CIO toward a greater role on the business side, over half of CIOs say it’s the “CIO’s own ambition and foresight.” Funny thing is, their corporate counterparts don’t see it that way. Their choice is “pressure from the CEO, CFO, or other C-level executives.”

The lesson: Prove it. “CIOs have to take the initiative to find those process problems on their own and fix them,” says Stephen Pickett, past president of the Society for Information Management and current chairman of the SIM Foundation, which advocates for technology management. Pickett’s also VP and CIO of Penske. “What I preach, I practice,” he says.

TECH IS WHO YOU ARE

Innovation is fifth on the list of important attributes for future CIOs. Given how relentlessly innovation is mentioned in connection with the CIO and IT, it’s surprising it isn’t at the top.

It’s high on Marta Foster’s list. As the VP of IT at Procter & Gamble responsible for ap-
Application development, she and CIO Passerini determined three areas IT could help with business innovation: more personalized and effective communication and collaboration among employees, more predictive and real-time business analytics, and reducing new product time to market.

Foster’s teams are at different stages on those fronts. In collaboration, P&G’s one of the largest users of Cisco’s sophisticated—and very expensive—videoconferencing technology. In predictive analytics, “we’re just beginning to think what a solution in that area would look like,” she says. Members of Foster’s team are talking with people in financial services to tap their expertise in building sophisticated simulations. For speed to market, Foster just implemented an approach that puts a small IT group square in the middle of an improvement project. Turns out, one of the longest lead times for a new product is the back-and-forth between P&G’s package designers and the outside companies that create the actual new packages and materials. P&G has 350 of those designers, and the IT team uses workflow tools to manage the exchange needed to get the various iterations approved. It’s a good example of “compressing time to market, directly in the middle of our stream,” she says.

On the list of future opportunities for CIOs, there’s another insight into what corporate managers want from technology leaders—and that CIOs might be missing. The second item on the corporate managers’ list is “use customer/business data to drive sales growth,” and the third item is “use customer/business data to influence new product development.” CIOs have the chance to leverage their stewardship of a key organizational asset, data, to contribute to their companies’ bottom lines. Even better; they’re seen as the expert capable of doing it. “Data integration, interoperability, and real-time access to these data stores is driving new businesses and new industry practices,” says UPMC’s Drawbaugh.

UPMC is working on interoperability among the 12 to 15 electronic health record applications it uses, in particular “semantic interoperability,” so a medication can be recognized even if it’s referred to four different ways in four different applications. The IT team might push that agenda, but it also should recognize that this interoperability requires “an expertise above and beyond what a technologist has.” But the business benefit can be measured in improved quality of care. “If you have the intelligence to act on this data, you differentiate your products and services from your competitors,” Drawbaugh says.

All this talk about innovation, business process, and operations raises a risk: that CIOs downplay the importance of technology expertise.

Surprisingly, only half of the CIOs in our survey identified “technical breadth and depth” as a key CIO attribute, while two-thirds of corporate managers think it’s important.

FedEx’s Carter considers “investigating new technologies” an integral part of his job, and he takes the broad view of what’s included. He researches life sciences and biotech in part because the industry will likely need “very reliable, monitored” logistics, but also for how that technology might be applied to his business. FedEx is working on a project, code-named Smart Package, that involves the use of sensor technology tied to GPS, temperature, vibration, and light.

CIOs must walk this line. They need to be the ultimate go-to authority for all things technology, yet they must translate that to business relevance. Rather than tap dance around the fact that enterprise IT can be costly, complex, and time consuming, they need to take that head on and explain why it’s worth the pain. Executives outside IT want to believe a CIO can mix data, process knowledge, and vision for the future, and lead companies to higher profits. Many doubt that they have one. The opportunity’s there to set the record straight.

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