

REAL WORLD

CASE

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IT Leaders: IT/Business Alignment Takes on a Whole New Meaning

CIOs thought they knew what business-IT alignment was. But fighting the dark forces of recession has really taught the lesson—to some of them, anyway.

At a truly aligned company with all cylinders firing, every executive, every manager, every employee works on one goal: winning customers. In the past, CIOs saw their role as, say, installing business intelligence tools so that the marketing group could analyze customer data, or upgrading enterprise resource planning software for the supply chain guys to improve order fulfillment. Vital work, of course, but inwardly focused and a few steps removed from living, breathing, money-spending customers. But now, as shown in the 2010 State of the CIO survey by CIO Magazine, top technology executives increasingly see bringing home the bacon as their job, too.

Nearly one third—30 percent—of the IT leaders polled say meeting or beating business goals is a personal leadership competency critically needed by their organizations, up significantly from the 18 percent who said so one year ago. Eighteen percent also named “external customer focus” as a critical skill, double 2009’s 9 percent. Double.

Meanwhile, 22 percent cited “identifying and seizing on commercial opportunities”—up more than triple from the year before. Yes, triple.

It’s clear that the recession has deepened CIOs’ understanding of and commitment to business beyond IT. CIOs are interacting with customers directly and working side by side with product engineers to build IT into new goods and services.

“In so many of the products offered now, the differentiating component is the IT capability,” says Drew Martin, CIO of Sony Electronics. Certain Sony televisions, for example,

can stream movies wirelessly, one of several products and features that Sony’s IT group itself helped make possible. CIOs should get their IT departments involved in product development—if IT can truly step up. “You have to have an awareness of where your business is trying to go,” he says. “Then you have to make sure you have the capability to support that.”

“At Konica Minolta USA, the IT group also influences what the company sells,” says Nelson Lin, CIO of the U.S. unit that is part of the \$9.7 billion Konica Minolta Holdings in Japan. For example, Konica Minolta printers, measurement devices, and medical tools contain enough computer technology that when they break or get replaced, customers must dispose of them carefully to avoid environmental hazards.

Lin saw end-of-life equipment disposal as a service that customers would pay for. Lin and other senior executives view Konica Minolta as an advanced technology company and through that prism, he says, the CIO’s input becomes even more valuable. He stepped up to lead discussion of equipment disposal as a money-maker. “I’m doing it for our own e-waste already. It’s now a matter of doing this large scale,” he says. “It’s the right thing to do, everyone knows. But it could be revenue for us, too.”

Denise Coyne, CIO of Chevron’s corporate departments and services companies, was previously CIO of the oil and gas giant’s marketing group as well as manager of 200 Chevron gas stations.

She would go to conventions to talk up the company’s point-of-sale system with gas station operators. “I found out what they wanted,” she says. Her MBA and nine years in marketing have shaped how she approaches IT, she says, assessing projects from finance and business perspectives, for example.

Patti Reilly White has been with Darden Restaurants for 20 years, 10 of them as CIO. IT has “always” been customer-focused at Darden, she insists, but the past two years have been particularly intense. Projects in development include a system to text customers when their tables are ready, doing away with the flashing-light buzzers that restaurant greeters now hand out to waiting diners.

“What our guests want is for us to value their time and personalize the experience for them. We in IT try to find ways to do that,” Reilly White says.

Some CIOs even run businesses themselves. In addition to overseeing internal IT for the \$3.6 billion Nasdaq OMX Group, executive vice president and CIO Anna Ewing runs Market Technology, a division that sells Nasdaq’s technology to financial exchanges around the world. The unit brought in \$359 million in contracts in 2008, for everything from advisory services (helping customers set up various kinds of exchanges) to trading, clearing, and post-trade systems.

Before coming to Nasdaq in 2000, Ewing didn’t have profit-and-loss responsibility in her previous positions at CIBC World Markets or at Merrill Lynch. But at those

FIGURE 11.1



CIOs are increasingly turning their attention to customers and new product opportunities.

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companies, she chose a commercial direction as much as she could: At CIBC, she was a founding member of the financial services company's e-commerce site. Among several positions at Merrill, she led client technology. She was named Nasdaq's CIO in 2005.

At Nasdaq, Ewing and her team recently launched a free iPhone application for checking stock quotes as a way to experiment with hot new consumer technology and seed the ground for some revenue-generating app in the future. The app debuted on a Friday. By Tuesday, without advertising, the stock-checker was the fifth most downloaded free financial app at Apple's site. "We wanted to see if the appetite was there," Ewing says. "It is." A CIO's ability to spot new business opportunities comes from thinking like a CEO, she says. "Product development and technology go hand-in-hand."

Still, most CIOs have no P&L duties. That's a mistake, says Bill Deam, CIO of Quintiles Transnational, a \$2.7 billion medical research company. Starting in 2007, most of Quintiles' top executives, including the COO, the head of corporate development and Deam himself, were assigned one key customer account. Deam says he tries to cultivate good relations with senior managers at his assignment, a \$15 billion biotech and pharmaceuticals firm.

Quintiles helps the biotech firm conduct clinical trials for medicines in development. Deam reviews the account with an executive at the customer company every Friday and visits every six months. He hopes his efforts not only produce closer ties but also more business between the two companies. But that takes time.

"They want to make sure that all the work we do for them is performed excellently, without issues," Deam says. "Then we can go to the next phase of the relationship; this is very much about the business side," he says. For example, Quintiles would like to sell customers on the idea of outsourcing their technology infrastructures, Deam says, and he sees a pivotal role for himself in that strategic sales process. "My job is to make sure senior executives feel comfortable enough to talk to each other."

Doing sales calls is a relatively simple way for a CIO to learn about customers. The CIO's presence also adds weight to what the salesmen claim. Having a CIO on a sales call

isn't uncommon, but it's especially important now when so many products and services rely on IT, says Hilton Sturisky, senior vice president for information and communication technology with the \$14 billion BCD Travel.

BCD manages travel for big companies whose employees use BCD's web technologies to, for instance, book flights and hotels. Special services, such as tools for analyzing your company's travel data for ways to cut costs, are also available.

When Sturisky went out with BCD's sales team recently, it wasn't so much to contribute but to listen, he says. BCD hasn't yet won the contract; sales cycles are 9 to 12 months in the travel services industry, he says. But he thinks that being there made a difference. "There was appreciation that we take a collective approach to serving customers and that added credibility to what the sales professionals were saying," he says. As a result of those conversations, Sturisky is considering how to provide such new services as sending notifications of canceled flights to travelers' smart phones, along with alternative itineraries.

CIOs who want to focus on external customers may have to deal with internal resistance. The way to overcome that, says Coyne of Chevron, is to be visible.

When she is trying to change how people work, for example, she meets in person as much as possible with colleagues above and below her. At "Dining with Denise" lunches, she talks with lower-level employees about corporate change. At meetings once or twice a year with Chevron's senior-most executives, she explains the value of IT. In between there are monthly meetings with departments and governance boards. All the while, it's her voice, her face out there. "Blogs, e-mail, town halls, dining. The objective for me is to continuously remind everyone of the bigger picture."

Reilly White, too, is aware of her visibility at Darden and tries to use it as a tool. When restaurant operations crews see IT managers and staff in kitchens and dining rooms, they know Reilly White takes their partnership seriously. If you're not "out there" she says, you risk not understanding what your business needs.

Source: Adapted from Kim S. Nash, "2010 State of the CIO: Today's Focus for IT Departments—Business Opportunities," *CIO.com*, December 17, 2009.

CASE STUDY QUESTIONS

1. How does the job of the CIO change with the assumption of customer responsibilities? Do you agree with this new development. Why or why not?
2. Why would there be internal resistance to CIOs becoming more externally customer-focused than they were before? Does this present a threat to executives in other areas of a company?
3. How do companies benefit from having their CIO meet customers and generally become more involved with product development? What can companies do now that was not possible before? Provide a few examples.

REAL WORLD ACTIVITIES

1. The IT function is notorious for being dynamic, and its leaders are no exception. Go online to research recent trends affecting the traditional roles of senior IT executives and how those roles are changing. Prepare a presentation to share your findings with the rest of the class.
2. "In the future, the prevalence of IT in product offerings will blur the distinction between IT and other areas of the company, to the extent that the IT function will cease to exist as a separate entity." Do you agree with this statement? Why? Break into small groups with your classmates to see if you can reach a consensus on the issue.

REAL WORLD
CASE

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Centene, Flowserve, and
Shaw Industries: Relationships,
Collaboration, and Project Success

Managed care provider Centene has just finished deploying a new financial system. CIO Don Imholz says the project, which involved multiple PeopleSoft modules as well as financial planning and reporting software from Hyperion, was completed “very quickly”—in 12 months—and on budget.

Imholz believes the project was successful for a number of reasons, including that the company implemented proven technology and hired a systems integrator to help who was experienced with PeopleSoft. Most importantly, Imholz says the project was successful because of “good teaming between the IT organization, the finance organization and the systems integration resources.”

In other words, much of the project’s success came down to people skills.

The constructive relationship between IT and finance—and in particular, between Imholz and Centene’s CFO, William Scheffel—ultimately kept the project on track when the going got tough.

And it did get tough.

For example, at one point, the project team was having trouble setting up the technical environment needed to deploy a Hyperion module that a third-party was going to host. The difficulties that IT encountered put the project’s schedule at risk, says Imholz.

Had the relationship between IT and finance been acrimonious, the organizations would have pointed fingers at each other—a counterproductive move that would have further delayed the project. Instead, says Imholz, they worked together to recover the lost time and keep the implementation on schedule.

“We could have blamed each other and told each other we can’t help,” says the CIO. “But there’s no value in doing that. It delays getting to the solution. If IT or finance tried

to recover the schedule alone it wouldn’t have happened. We had to do it together.”

Good relationships—between IT and business partners, project managers and IT staff, and project managers and stakeholders—keep IT projects on track, say IT leaders and project management experts.

Bad relationships, however, are a leading cause of project failure.

Faced with mounting operational and regulatory pressures, Linda Jojo, Flowserve’s CIO, knew it was time to simplify the company’s entire IT infrastructure—an endeavor that would bring about sweeping changes across an enterprise spanning more than 56 countries.

At Flowserve, a world leader in the supplying of pumps, valves, seals, automation, and services to the power, oil, gas, chemical, and other industries, Jojo’s assignment was heavy on IT change as the company sought to update processes and systems: establishing a common IT infrastructure, introducing global help desk capabilities, and cutting dozens of disparate ERP systems. But that didn’t stop her from taking a decidedly business approach to simplifying Flowserve’s IT footprint.

“The first step was making sure that this wasn’t viewed as an IT project,” says Jojo. “From our CEO, our leadership team and our board of directors on down, we’ve made sure that this project is something we talk about in terms of its business impact.”

It’s a tactic that helped set the scope for a project that could have otherwise become unwieldy. For starters, Jojo helped assemble 35 divisional representatives from across the globe at the company’s world headquarters. Here, holed up in a conference room for 17 weeks, these divisional representatives pored over disparate systems and processes, deciding what was—and wasn’t—worthy of improvement.

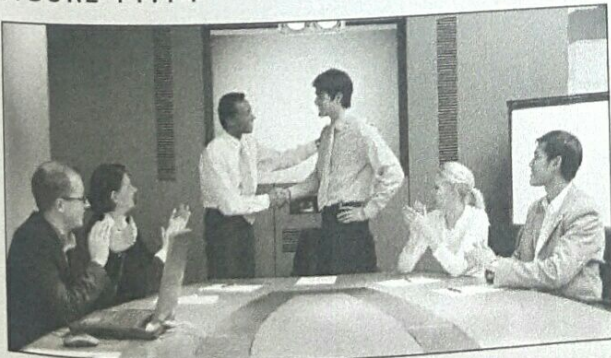
Throughout this period, Flowserve also called on internal subject-matter experts, from engineers to sales representatives, to offer their in-the-trenches take on the company’s shortcomings.

The result: a blueprint for business standards, the design of a common financial chart of accounts, and the creation of a set of data standards for customers and suppliers. In addition to creating project perimeters, Jojo says that by involving business leaders in the critical design phase, she was able to garner widespread support for a companywide strategic business initiative costing more than \$60 million over four years.

“I’ve seen projects that should have been successful fail purely because of relationship issues,” says Greg Livingston, director of IS planning and system development at Shaw Industries, a flooring manufacturer.

On the other hand, when mutual trust exists between IT project managers and stakeholders, “IT project managers are more likely to discuss problems that could threaten the project as they arise,” says Imholz. If bad blood exists between the two groups, project managers may not be inclined to point out those issues, or they may try to cover them up.

FIGURE 11.14



Fostering relationships between IT and business partners has a major impact on project success.

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"If you look at projects that fail, invariably someone on those projects knew things were going bad," says Imholz. "If you don't have relationships and trust, those things don't surface. And when you don't do something about problems in a timely manner, those problems invariably get bigger. In many cases, minor problems become more serious because they're not addressed in a timely manner. A culture of openness is absolutely essential to good project performance."

Furthermore, when something does go wrong with a project, business partners are less likely to place the sole blame for them on IT if they respect IT, says Shaw Industries's Livingston. In fact, they're more likely to give IT some leeway with the project schedule, he says.

"It doesn't matter what technology you're using, how talented your technology staff is and how knowledgeable the business partners are on process and business improvement: Every system initiative will have issues," says Livingston. "If you don't have a relationship, you resort to pointing fingers as opposed to being transparent and admitting 'we messed up' or 'we didn't test that as well.' If you have a good relationship, you'll sit down and find a way to make it work."

Decisions affecting the project also get made more promptly when everyone involved gets along. "Fast and good decisions are crucial to keeping projects on track," says Imholz. "The failure of senior people to make decisions means decisions are made at lower levels of the organization. If you have a software developer who's waiting for a decision on a business requirement, there's three things that can happen: He can guess what to do and guess right. He can wait for a decision and while he's waiting he's not as productive. Third, he can guess and guess wrong. If those are equal possibilities, two-thirds of the time it will be detrimental to the project. And if you stack enough of those decisions on top of each other, it will negatively impact the project."

Despite the positive impact good relationships have on project management, IT project managers rely more heavily on software and methodologies than on building relations when they need to improve their delivery. It's no wonder: Compared with the time it takes to build relationships, software seems like a quick fix. IT project managers are also most comfortable with tools.

Shaw Industries's Livingston is using Scrum, an agile software development practice, to improve relationships between IT and business partners and ensure project success. With Scrum, says Livingston, business partners meet with IT during a four- to eight-hour planning meeting to look at all the projects in the backlog and to jointly determine which one will bring the greatest value to Shaw Industries. IT then divides the project into sprints—30-day increments of work. When IT completes a sprint, business partners assess IT's progress and suggest any necessary changes.

"The agile development methodology, just by design, promotes better relationships," says Livingston. "Scrum and Agile force interaction on a more frequent basis. By doing so, IT delivers solutions on an incremental basis to the business, as opposed to the waterfall method, where it's a year and a half before the business sees the fruits of an initiative."

Livingston says it's not necessary for IT and other business functions to get along swimmingly for Agile to work effectively. Agile can work even if there's initial tension between the groups, he says. "We've had groups with troubled relationships, and certainly initial meetings are not always effective out of the gate," he says. "But at least we can agree that we're going to focus on 15 key items in the next 30 days, and at the end of the 30 days, we'll get back to you."

The process forces IT and business partners to prioritize projects together and agree on the 15 items IT will complete in 30 days. Scrum also then drives IT's behavior. At the end of that 30 days, IT has to show something for its work. Scrum makes IT accountable to the business.

When business partners see IT making tangible progress every 30 days, their confidence in IT grows. Says Livingston, "If the business partner sees results more frequently than they used to, relationships can get better. Agile promotes better relationships just by forcing a process, forcing interaction."

Between the structure that Scrum imposes and the relationships that grow out of it, project delivery improves. Livingston says Shaw Industries is seeing this happen: "Better collaboration results in better value for the business," he says.

Source: Adapted from Meridith Levinson, "Project Management: How IT and Business Relationships Shape Success," *CIO.com*, September 16, 2009; and Cindy Waxer, "Using IT to Transform the Business: Three Keys to Success," *CIO.com*, August 6, 2007.

CASE STUDY QUESTIONS

1. Why do you think the practices described in the case led to success for these companies?
2. How do they change the structure of projects so that the likelihood of a positive outcome increases?
3. In the case of Shaw Industries, how did Scrum help?
4. Provide three specific examples from the case, and explain where and how those activities helped the company move their projects along.
5. Using examples from the case and your own understanding of how those worked, can you distill a set of recommendations that companies should follow when managing technology-based projects? Would these be universal, or would you add any limitations to their applicability?

REAL WORLD ACTIVITIES

1. The Scrum approach to project management has become quite popular in recent years. Go online and research other companies that are using it to organize their projects. Have those experiences been positive as well? What can you tell about how the approach works from your research? Prepare a report to summarize your findings.
2. Would the issues discussed in the case be solved by making a business executive the head of any projects involving IT? Why or why not? Break into small groups with your classmates and develop a justification for both alternatives.

REAL WORLD CASE 3

Forrester, NMSU, Exante Financial Services, and Others: Getting Real about Strategic Planning

It must be nice to be the CIO of a FedEx, or a GE, or a Credit Suisse, where IT and the business are so tightly aligned you can barely tell the two apart. In such companies, corporate leaders understand that IT is a strategic asset and support it as such. These are places where the CIO is encouraged to spend the majority of his time on the Big Picture. If one works in that kind of IT Wonderland, getting a good strategic plan down on paper is probably a snap.

The vast majority of CIOs, however, work in places where the business itself may not have a clearly articulated strategy. In such companies, corporate leaders don't care too much for IT, much less value it strategically. These are places where the CIO's time is devoured by day-to-day operations and there's little time left to look beyond the next few months. If one lives with that kind of tactical IT reality, getting a good strategic plan down on paper is practically impossible.

For most CIOs, putting together an IT strategic plan—that annual road map to guide IT through the next 12 months and beyond—is dauntingly hard. Although the odds may be stacked against the average CIO, the truth is that those IT leaders who don't master the art of strategic planning won't last long. “The purpose of the IT strategic plan is to improve the business-IT relationship. A CIO needs it to communicate with the business, to tell them that he understands the company's needs and to set expectations,” says Alex Cullen, Forrester Research vice president and research director.

“A CIO can't succeed without it.” Michael Jones, CIO of the National Marrow Donor Program, calls it “the business case for IT.”

The cardinal rule in developing an IT strategy is to connect it to the business strategy. “The business should have desired outcomes—market share gains, higher customer satisfaction levels, shortened cycle times,” says independent IT analyst Laurie Orlov. “IT has to figure out where they factor into that.” Yet for all the whining CIOs have had to endure about how IT needs to be more strategic, the businesses they support are often in even more dire strategic straits. “Businesses very often don't have a strategy. Or they do, but it's very high-level and vague. Or they reserve the right to change it. Or they have some strategies, but they don't apply to all the business activities taking place,” says Forrester's Cullen.

So, CIOs who operate in strategy-free organizations are off the hook, right? Wrong. “It's the ultimate cop-out for CIOs to say they can't do an IT strategy because the business doesn't have an articulated strategy,” says Orlov. Fuzzy business goals present a challenge, but smart CIOs should see that as an opportunity. “People in the business are very focused on operations or other minutiae,” says Dave Aron, vice president and research director for Gartner Executive Programs. “IT can help the business articulate what will help it win and how IT fits into that. Then you go from just being an order taker to actually influencing overall strategy.”

Michael Hites knew the lack of vision at New Mexico State University (NMSU) would be a challenge. “If you don't have the highest level plan in place, even the best IT strategic plan won't work,” explains Hites.

“I've seen it; I've lived it.” When he became CIO in 2003, NMSU's plan was no different from any other school's. So Hites's first IT strategic plan was standard and risk-averse. IT plodded along doing good work but nothing particularly strategic. In the absence of a more ambitious university plan, there was nothing to anchor a real IT strategy, says Hites. “If you stick your neck out [in that environment], the university may or may not be behind you,” he notes.

Then a funny thing happened. After several years of bugging people about the lack of a strategic plan for the university, Hites was put in charge of strategic planning for the entire university and named vice president of planning and technology.

Hites and his team have lots of great ideas—about \$15 million worth of them, he says—but his organization is “funded to the tune of half a million a year.” The question he's faced with each year is “how to spend that little bit to do something strategic. If the university has the ‘mom-and-apple-pie’ strategy of ‘helping students succeed’ or ‘increasing research,’ anything you do is going to foster those objectives. And you can never be sure you're making the right choices. But if a university steps out on a limb and says, ‘We will have best online education program in criminal justice in world,’ then that becomes the strategic focus,” says Hites.

“It can be appropriate for the CIO to help push business along in terms of strategy,” says Forrester vice president and principal analyst Bobby Cameron. That doesn't necessarily mean the CIO takes on a second full-time job.

When Kelly Clark joined Exante Financial Services, a financial services provider for the health care industry, he wanted to change the IT strategic planning process.

“Generally, it's done at the end of the year,” explains Clark. “You look at the budget, see you have X number of dollars, and figure out what you can do. It's reactive.” Clark wanted a proactive process, a “business overlay that said, ‘here's what the market is looking for, here's what we have, here's what we need.’” Exante had a business road-mapping process but no business and systems strategy, so Clark told his CEO and CFO they needed one—and they bought it. “So off we went,” says Clark. “We created an enterprise strategic plan and IT became a piece of that.”

Bethesda Lutheran Homes and Services (BLHS), a faith-based provider of services for individuals with developmental disabilities, was a couple of years into a five-year organizational strategic plan when Brian Tennant became its CIO. The plan, however, was strategic in name only. “It was generic: Be the best and grow by this amount,” recalls Tennant. “But it was unclear why they picked the growth number or how they would measure it. And they hadn't paid

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much attention to whether it was on track. Nothing was grounded in reality." Frankly, that didn't matter much to Tennant at first. BLHS had acquired Good Shepherd Communities, based in Orange County, California, in 2005. It increased its size by two-thirds, and there was a "whole pile of modernization to do," recalls Tennant, including adjusting the core ERP system. Even with an overarching business strategy, IT's mission was clear: Integrate and upgrade.

Now that all that work is wrapping up, Tennant knows it's time to create a plan to guide his department of 10 through the next three to five years. But Tennant is not waiting for the 105-year-old organization to come up with a new five-year plan specific enough to guide IT; he's helping shape it. "I see myself as a member of the senior management team who just happens to be in charge of IT," says Tennant. "So I'm taking the opportunity to weigh in early and weigh in on all disciplines, not just my own."

Senior leaders, Tennant included, are vetting the new plan with the board, operating divisions, donors, and families of those to whom they provide aid. The goal is to create what they're calling "strategic positioning statements," such as attracting a younger demographic as donors or expanding services or creating financial stability. "I'm already starting to think about how IT will fit into those goals," says Tennant.

Exante's Clark says that if strategic planning is important, IT needs to put its money where its mouth is. "Often the problem is financial," Clark says. "Everything is focused on capital expenses." Clark says he has invested in people

and processes to make sure the IT strategic plan remains a priority. "You need a dedicated team," he says. "Most organizations don't assign IT strategic planning to someone as a full-time job. Hence it doesn't become a discipline; it becomes a burden." Clark made strategic planning the full-time responsibility of his directors. "Once the positions were open," he says, "we found people were itching to do it."

"Someone in IT should be thinking about IT strategy most of the time," agrees Orlov. "And their job the rest of the time should be making sure they're connected to everything that's going on in the business."

If an IT leader can set aside extra time now, the theory is that strategic planning will become an organic part of the company's life and interactions. It will no longer be like a series of appointments that you'd just as soon cancel—and it will get easier.

"If you did a strategic plan for the first time last year, you'll find that this year it takes less time. And next year will be even better," says Cullen. "You can focus more time on discussions with people and less time on the mechanics of putting it together. It could even become the part you like best about your job because that's where you can talk about what you want to do and why it matters to the organization."

It could be fun—which is why strategic planning isn't really like a root canal. Root canals have no fun parts.

Source: Adapted from Stephanie Overby, "How to Get Real About Strategic Planning," *CIO Magazine*, January 28, 2008.

CASE STUDY QUESTIONS

1. Consider statements made in the case about business often not having an overarching business strategy that can serve as guidance for the development of a strategy for IT.
2. How is it possible that companies get by without some sort of stable and clear direction? What does this tell you about the business and industry environment in which they operate?
3. Dave Aron of Gartner notes that in some cases the lack of clear business strategy provides an opportunity for IT leaders to step in and help articulate it and the role IT will play in the new strategy. This sounds like a good thing for IT people. What is the downside of being in this situation?
4. Why do you think IT's success is dependent on the overall business strategy of an organization? Why must they be tied together? Provide several reasons.

REAL WORLD ACTIVITIES

1. Go online and follow up on some of the organizations featured in the case (note that Exante Financial Services has recently merged with OptumHealth). How have these organizations been doing lately? Research what the news media and their own financial reports say, if anything, about the role of their IT investments and practices on their current status. How does that relate to what you read about them in the case?
2. One of the organizations featured in the case is New Mexico State University (NMSU). Think about how IT can be of strategic importance to universities and educational institutions. Break into small groups with your classmates to discuss some possibilities and how these apply to your educational experience. What suggestions would you have for improving its performance?

REAL WORLD
CASE

4

Blue Cross and Blue Shield,
and Others: Understanding the
Science behind Change

Kevin Sparks has been trying to get his staff to change the way it monitors and supports the data center for the past year, but he hasn't been getting anywhere.

Not that he's getting resistance—at least not overtly. His staffers at Blue Cross and Blue Shield of Kansas City agree that installing automated monitoring software, along with a centralized control room and a set of standard processes for responding to problems, would be more efficient than the way they deal with things now, which is mostly through ad hoc heroism.

"Logic always prevails and everyone will agree—at the intellectual level—that we need to change things," says Sparks, who is vice president and CIO. Then he finds himself surrounded by empty chairs at meetings while the people who should be sitting there are off fighting the latest fire.

"I tell them I need them at the meetings and if we changed things they'd have the time to be there. But things always break down when we talk about taking monitoring out of their hands through automation," Sparks says.

To help his staff accept the new processes, Sparks says he's taken layoffs off the table, even though the proposed automation and process efficiencies could reduce the need for bodies. The change is part of a larger effort to implement the IT Infrastructure Library (ITIL) process framework to improve overall productivity. "I don't want fewer people; I want the ones I have to do more things," he says, sighing with frustration.

In other words, Sparks's staff doesn't seem to have any logical reason for resisting the changes; but before you dismiss them as a bunch of inflexible, fearful losers, know this: They are just like you.

Maybe your resistance to change manifests itself in a different way or in a different setting; for example, it might be a refusal to throw away that old slide rule, to look while the nurse draws your blood, or to dance at weddings. We all refuse to change our ways. This happens for reasons that are often hard to articulate, until you begin to look at it from a scientific perspective. In the past few years, improvements in brain analysis technology have allowed researchers to track the energy of a thought coursing through the brain in much the same way that they can track blood flowing through the circulatory system.

These advances are bringing a much-needed hard foundation of science to a leadership challenge that to CIOs has long seemed hopelessly soft and poorly defined: change management. Pictures of the brain show that our responses to change are predictable and universal. From a neurological perspective, we all respond to change in the same way: We try to avoid it. Yet understanding the brain's chemistry and mechanics has led to insights that can help CIOs ameliorate the pain of change and improve people's abilities to adapt to new ways of doing things.

Change hurts. Not the boo-hoo, woe-is-me kind of hurt that executives tend to dismiss as an affliction of the weak

and sentimental, but actual physical and psychological discomfort.

The brain pictures actually prove it. Change lights up an area of the brain, the prefrontal cortex, which is like RAM memory in a PC. The prefrontal cortex is fast and agile, able to hold multiple threads of logic at once to enable quick calculations. Like RAM, the prefrontal cortex's capacity is finite; it can deal comfortably with only a handful of concepts before bumping up against limits. That bump generates a palpable sense of discomfort, producing fatigue and even anger.

Resistance to change is not inevitable. The prefrontal cortex has its limitations, but it is also capable of insight and self-control. The ability to be aware of our habitual impulses and do something about them is what makes us human.

"The prefrontal cortex is extremely influential in our behavior, but it does not have to be completely determinative," says Jeffrey M. Schwartz, research psychiatrist at the School of Medicine at the University of California at Los Angeles. "We can make decisions about how much we want to be influenced by our animal biology."

Unfortunately, traditional change management tactics are based more in animal training than in human psychology. Leaders promise bonuses and promotions to those who go along with the change (the carrot), and they punish those who don't with less important work and the potential loss of their jobs (the stick). "The carrot-and-stick approach works at the systemwide level—offering cash bonuses to the sales department to increase the number of customers in Latin America will get you more customers there, for example—but at a personal level it doesn't work," says David Rock, founder and CEO of Results Coaching Systems, a consulting firm. "Our personal motivations are too complex, and you can only offer so many raises."

Patience is critical, says Rock. "You have to paint a broad picture of change and resist the urge to fill in all the gaps for people," he says.

"They have to fill them in on their own. If you get too detailed, it prevents people from making the connections on their own." Leaving holes in any plan is especially hard for CIOs, who tend to be ambitious and process-oriented, which means they have thought out all the details involved in a strategy or systems change and believe they know all the steps required to get there. In general, they're bursting with the need to tell everyone exactly how to do it.

"When I put out change proposals, it's obvious to me why we should be changing, so when people resist I tend to get more aggressive in trying to convince them," says Matt Miszewski, CIO of the state of Wisconsin. "But we lose people in that situation. The more we try to explain things, the more dug in they get."

To try to focus people's attention on personal insight and change their behavior, Rock uses the same technique that psychoanalysts have used since the profession began: He

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asks questions. "When you ask someone questions, you are getting them to focus on an idea," he says. "When you pay more attention to something, you make more connections in the brain." Rock also says that asking questions gets people to voice their ideas. "The best way to get people to change is to lay out the objective in basic terms and then ask them how they would go about getting there," Rock says.

One of the biggest mistakes that leaders, like CIOs, make in trying to win over the skeptical middle is assuming that everyone is motivated by ambition, as many CIOs are. Many people, especially IT professionals, are motivated as much or more by the work they do (for example, the craft of software development) as they are by the opportunity to move up in the hierarchy. "There are a lot of people who don't want to be king or queen," says Michael Wakefield, senior enterprise associate at the Center for Creative Leadership, a consulting firm. "That's difficult for people to reveal because they fear their bosses will start to question their courage and commitment." If these people don't see an opportunity to maintain their allegiance to the work they love as part of a change, they won't see the benefit of going along. They will remain skeptical or, worse, move into the camp of active resisters.

One of the best ways to bring the skeptics around is through learning.

At the New York State Workers' Compensation Board, a change readiness survey of employees at the beginning of an effort to shift compensation cases from paper folders to elec-

tronic files found that employees' number-one demand was for training. "They wanted reassurance that we weren't going to ask them to do something new without giving them the support they needed to do it," says Nancy Mulholland, who is deputy executive director and CIO of the Workers' Compensation Board.

Change management is time-consuming and hard to quantify for process-oriented CIOs. Yet avoiding the challenge leads to failure. "Anybody can stick \$2,000 in someone's face to get them to finish a job, but it's the people who can inspire others to follow them that are the most successful in the long run," says Richard Toole, who is CIO for PharMerica, a pharmacy services company. "The soft stuff is important," but inspiring others to change isn't a matter of charisma or charm, say the experts.

Sparks's latest tactic for engaging his staff's prefrontal cortexes was to bring in an outside consultant to discuss the IT Infrastructure Library program and to field concerns. "We had an outstanding instructor, and she was able to address many of the questions people had," recalls Sparks. "I could begin to see the lights come on in some of the skeptics. After a long meeting, one of my people stood up and said, 'You know, we should have started working on this [automated monitoring] six months ago.'"

Source: Adapted from Christopher Koch, "Change Management—Understanding the Science of Change," *CIO Magazine*, September 15, 2006.

CASE STUDY QUESTIONS

1. Although a very detailed change proposal may prevent people from making their own connections, as discussed in the case, it may lead others to consider the proposal to be vague and unfinished. How do you balance these two concerns? What guidelines would you use to ensure that you are not veering too far off in either direction?
2. Kevin Sparks of Blue Cross and Blue Shield of Kansas City had a difficult time convincing his people of the need for change. What would you have suggested he do before you read the case? What about afterwards? How did your recommendations change as a result?
3. Organizational change goes beyond promotions and the threat of layoffs. What ways other than those discussed in the case would you use to entice people to embrace proposed changes? Provide several suggestions and justify their rationale.

REAL WORLD ACTIVITIES

1. Search the Internet for examples of recent successful and failed IT implementations. What was the role of employee involvement and resistance in each one of those? What strategies did companies use to manage the change process, and how much success did they have in doing so?
2. Prepare a report to share your findings with the class.
3. Break into small groups to discuss what change management strategies and tactics you would use to ensure a smooth transition, either at a company you are familiar with or at one you know about from previous research for this or another class. How would you achieve a good balance between positive and negative consequences, as well as involvement in the process? Choose one of your group members to share your insights with the rest of the class.