# COMPUTERWORLD

# INSIDE THIS GUIDE

# **2** Gain Relevance, Avoid Extinction

Is your career in sync with the latest megatrends?

# Great Career Advice I Ignored (and Why I'm Glad I Did)

The road to success isn't always on the map.

# **8** Ways to Boost Your Career in '08

What you need to do to stay in the driver's seat.

# Swimming in the Global Talent Pool

Thriving in a worldwide labor market requires top skills and some creative tactics

# **11** Are You Obsolete?

How to stay relevant in the world of Web 2.0, Wii and other wonders.

#### **MAY 2008**

SEE MORE GUIDES AT

# Learn-Fast Guide

**Instant Expertise for the Busy Professional** 

# It's All About You

And Keeping Your Career on Track

PART OF COMPUTERWORLD'S EXECUTIVE BRIEFING SERIES

# Gain Relevance, Avoid Extinction

#### **BY MITCH BETTS**

T SEEMS so obvious to say that the IT field is undergoing more change than ever before — and changing at a faster pace. But the statement really hits home when you pause a moment to consider just a few of the megatrends of our times:

BUSINESS ALIGNMENT. IT functions these days are not only aligned with the business plan, sometimes they're completely absorbed by business units or departments. There's no "us vs. them." All IT projects are business projects.

**GLOBALIZATION.** It means many jobs can be done at offshore locations at lower cost. (Quality is another thing entirely.) Employers are caring less and less about where people live; they mostly care about talent.

THE CONSUMERIZATION OF IT. Today's IT departments are facing an influx of consumer technologies (such as smart phones) that come in through the front door, the executive suite and the back door.

**WEB 2.0 AND BEYOND.** If you're not familiar with blogs, wikis and RSS feeds, you're a dinosaur.

So the question becomes: Is your career in sync with these megatrends? "The world has changed, and you can either change with it or get swept up by it," says technology

recruiter David Hayes in *Swimming* in the Global Talent Pool. If not, you could be headed to the La Brea Tar Pits of IT (to strain the dinosaur extinction metaphor), or at least a deadend job at a place where IT really doesn't matter.

The following pages are packed with advice to help you keep your career on track and in sync with those megatrends as well as others. In the past, just keeping up with new programming languages or LAN protocols was enough to keep an IT job, or even be a star performer. No more. Companies want business savvy and versatility.

"You must keep yourself aware of and consistently educated in new things that are emerging," says Pamela Taylor, vice president of Share, an IBM user group, in 8 Ways to Boost Your Career in '08.

Tunnel vision may be the worst mistake you could make in your IT career. For example, to get ahead, learn about the industry you're in and how your organization actually makes money. "If you work in health care, you should learn more about health care. If you work in finance, you should learn about hedge funds," IT recruiter Nancy Moran told Computerworld in a recent article about boosting your career.

You can also broaden your horizons by working on multifunctional programs and multidisciplinary teams with the brightest people in

# THE JOB INTERVIEW WHAT NOT TO SAY

#### WHEN THE INTERVIEWER ASKS.

"Do you have any questions?" the worst answer you could possibly give is, "No." If that's your answer, you'll look unprepared, uninterested and uneducated, according to the Career Hub blog.

So how do you know what questions to ask? The best questions usually stem from the dialogue during the interview process, but if that doesn't happen, come prepared with specific questions about the business or position. Some questions should've popped into your head when you did upfront research on the company.

If nothing else comes to mind, a blog commenter noted that one of the best questions you can ask is, "What does success in this position look like?" It always impresses the hiring managers.

the organization. Not only do you get to see diverse parts of the organization this way, but you learn from those bright stars and you become more visible to people who could do your career a lot of good.

Computerworld editor in chief: Scot Finnie • Project editors: Joyce Carpenter, Valerie Potter • Managing editor/production: Michele Lee DeFilippo
Copy editors: Bob Rawson, Eugene Demaître, Monica Sambataro, Donna Sussman • Design: David Waugh • Online production: Dawn Petersen

A tiny investment — the time it takes to read this guide — could yield big results for your career. In the pages to come, you'll get advice about the following:

**HOW TO MAKE** the global talent pool work for you instead of against you. Hint: Companies prefer job candidates "willing to work within a global model."

**HOW TO MAKE** yourself more valuable, no matter what job you have, by adding two of the most sought-after skills to your portfolio: security and business analytics.

**HOW TO MAKE** sure you "get found" by employers when they go looking for talent on the Web.

The world has changed, and you can either change with it or get swept up by it.

DAVID HAYES

TECHNOLOGY RECRUITER

There's more, practical IT career advice like this at the *Careers Knowledge Center* on *Computerworld*'s Web site.

Finally, the most important step is to take control of your career. You can't rely on your manager or company to do it. As Gartner analyst Connie Morello puts it: "You can't sleepwalk through your career" anymore. That means building a new portfolio of skills that matches the megatrends we've been talking about. That means building a "personal brand" — say, three characteristics that distinguish your work and demeanor. For instance, your brand might be "integrity, thoroughness and innovation."

"Each person has to take ownership of his or her career path," Morello says. Reading this report—and then acting on it—can be your first step down that path.

# Great Career Advice I Ignored (And Why I'm Glad I Did)

#### BY MARY K. PRATT

LIMB THE CORPORATE LADDER. Keep your eye on the ball. Pay your dues. A lot of the conventional wisdom about how to succeed in your career is sound, and the oft-recommended linear path upward frequently works well enough.

Many successful IT leaders are iconoclasts, however. They went against the grain, ignored advice or turned away from trends to find ways that were right for them. Here, they share some of their stories about the junctures where they disregarded prescribed career road maps, and they reveal how those choices helped them make it to the top.

# Brian L. Abeyta

**ADVICE I DIDN'T TAKE:** "I was advised early in my career to take a road-warrior-type consulting job that would expose me to a wide variety of business areas. What didn't seem right was the potential impact it would have on my young family," says Brian L. Abeyta, who decided instead to try his luck as an operations manager at a large telecommunications company doing innovative work.

**THE OUTCOME:** "I was in a position where I learned from some really sharp executives. They helped me to see how they maneuvered their careers, how they managed and led in the private sector, [how] to be bold," says Abeyta, now vice president of the IT management office at insurance provider Aflac Inc. in Columbus, Ga. He says he also saw how they successfully balanced their personal and professional lives.

# Bruce Brody

**EXPECTED MOVE I DIDN'T MAKE:** Bruce Brody started his career in the intelligence community, where most of his colleagues were moving ahead within that field. "But this was the 1980s, and computers were just coming into the mainstream in the federal environment. I decided to take a three-year stint in private industry to learn computer security in 1990 to '93 and then return to federal service as an information security professional," he says.

**THE OUTCOME:** "That move resulted in my becoming the

first executive-level chief information security officer on the civilian side of the federal government, and I'm still the only person ever to have served as the CISO at two cabinet-level departments," says Brody, now vice president of information assurance at Arlington, Va.-based CACI International Inc., which provides IT and network systems for national security, intelligence and e-government initiatives.

# M. Lewis Temares

**EXPECTED MOVE I DIDN'T MAKE:** Job-jumping is a tried-and-true method of leveraging your skills to get ahead quickly in IT. But it wasn't right for M. Lewis Temares, CIO at the University of Miami. "There's something to be said for not jumping," he says.

**THE OUTCOME:** Temares has built a successful career and developed a well-recognized IT organization during his 27 years at the University of Miami. "If you show you're a believer in the company, the people who work for you will be too," he says.

# Dick Daniels

**ADVICE I DIDN'T TAKE:** When Dick Daniels started in technology, he was advised to build his career within the IT organization. "At that time, technology was emerging as a true profession, and there was a large demand for technologists. But I realized that IT is only useful when you

apply it to a problem," he says. So he took a program manager's position and later became a chief operating officer.

THE OUTCOME: Daniels is now CIO for both the auto finance line and the Greenpoint Mortgage business at Capital One Services Inc. in McLean, Va. He says his experience outside of IT accelerated his advancement into the executive ranks. "The advantage I had was some dedicated years to develop my business knowledge," he says.

# Autumn Bayles

ADVICE I DIDN'T TAKE: Many IT workers are advised to specialize in a specific technology, but Autumn Bayles didn't want to do that. Instead, she pushed herself to continually work with new technologies and applications.

THE OUTCOME: "I was a bit of a generalist, but it helped me progress more, because I was never so valuable that they were afraid to let me do anything else," Bayles says. She credits her diverse professional background with helping her get into the executive ranks. She was CIO at Tasty Baking Co. in Philadelphia from 2003 and 2006 and is now Tasty's senior vice president of strategic operations.

# Howard Schmidt

ADVICE I DIDN'T TAKE: "People talk about how you have to check the boxes, how you have to hold this position before you hold that one," says Howard Schmidt,

# A Grain of Salt

How should you evaluate wellintended career advice? Researchers, career coaches and recruiters weigh in with these thoughts:

#### LOOK INWARD.

Consider how the advice fits in with your own goals and objectives.

# GET MULTIPLE

PERSPECTIVES.
A professional mentor knows what makes smart business sense, but family and friends can help you assess advice from a personal perspective.

### THINK LONG TERM.

Ponder how your decision will affect you in five or 10 years.

#### **KEEP AN OPEN MIND.**

Don't rule out advice because the options now in front of you weren't among your original goals.

CONSIDER THE SOURCE.
Some mentors truly have your best interests in mind; others' advice might be clouded by their own issues.

# MAKE A LIST, I trust your gut.

Write down the pros and cons of following the advice so you can analyze it. Weigh the results against how you actually feel about the situation. A long list of pros shouldn't win if the advice makes your stomach turn.

a board member of the nonprofit (ISC)<sup>2</sup>, the International Information Systems Security Certification Consortium. He says he chose not to follow a prescribed career path and instead looked for opportunities to use his talent and expertise in situations "where there was something new to be built or something in existence that needed to be fixed."

THE OUTCOME: Schmidt says that by finding those opportunities, he was able to accelerate his career through high-profile jobs such as White House cybersecurity adviser and chief security officer at Microsoft Corp. and eBay Inc.

# John Glaser

**EXPECTED MOVE I DIDN'T MAKE: Like** most college graduates, John Glaser was expected to join the stampede into professional life. Instead, after graduating from Duke University in 1976, he went to work at a salmon cannery in Alaska, hitchhiked to Panama and then headed back to North Carolina to be with his college sweetheart. Glaser says he didn't know what he wanted to do for work at the time, and he didn't want to rush into the wrong job just to get his professional life started.

**THE OUTCOME:** While living in North Carolina, he got a tech-related job at the Research Triangle Institute working on the National Medical Care Expenditure Survey. Something clicked, and Glaser settled into a career in health care IT. He is now CIO at Partners HealthCare Inc. in Boston. He has also been married for 27 years to the woman he went back for. ■

# 8 Ways to Boost Your Career in '08

#### BY MARY K. PRATT

ODAY'S IT professionals are an evolving breed. The job keeps morphing as companies demand not just technical know-how, but more business acumen, analytical skills and industry knowledge as well.

Kudos if you've pulled that all together, but don't rest just yet. The evolution isn't over, as the upcoming year promises more changes. If you want to stay in the driver's seat of your own career, put these items on your to-do list:

# INCORPORATE SECURITY INTO YOUR RESPONSIBILITIES.

Security and related disciplines, such as business continuity and disaster-recovery planning, are permeating all levels of the organization. That means all IT workers, and not just the security folks, will have to contribute by understanding how business processes, technical requirements and security intersect.

"Everyone has to understand security to a certain degree and apply it to their responsibilities," says Sam Helmich, vice president of technology at ADM Investor Services Inc. in Chicago. The learning requirements vary by IT positions, but Helmich recommends that you seek out security classes and certification. Finding mentors from the security team is another good way to prepare.

RE-ENGINEER PROCESSES.

IT has always been responsible for keeping everything running and developing new systems, says Michael Cummins, CIO

at the Georgia Institute of Technology's College of Management and a clinical professor of management, but now he sees a new responsibility emerging: re-engineering business processes and workflow.

"We've seen movement to business processes and workflow analysis as you try to show how systems can help re-engineer how you do the work and make it more efficient," Cummins says. "That's where we see all these big productivity gains."

To deliver this, you must understand how your business-side colleagues actually do their jobs, he says. You can start by signing up as a project lead, finding a business-side mentor or working as a systems analyst.

USE ANALYTICS TO GUIDE BUSINESS DECISIONS.

"We're seeing more and more companies that are stellar examples of using data analysis to run their business," Cummins says. Casinos, for example, collect and analyze detailed data on individual players and then tailor their marketing based on those findings. Other industries are following suit, which means you'll have to set up the systems and understand what data to mine and analyze.

To brush up on analytics get onto projects that expose you to

8 BLAZING HOT TECHNOLOGIES FOR '08 WWW.COMPUTERWORLD.COM

Here are eight hot technologies that experts say should be top of mind this year.

the needs and goals driving non-IT departments, study vendor information on how business intelligence applications can provide data to drive decisions, and get training in Six Sigma, a data-driven methodology for eliminating defects.

BE MORE VERSATILE.
There will always be a need for deep technical skills, but you'll be obsolete if all you can offer is one particular expertise, says Pamela Taylor, a solutions architect at a subsidiary of a Fortune 50 company and vice president of Share, an IBM user group.

"Keep yourself open to new approaches," Taylor says. "While there is some need for specialization and to demonstrate an expertise for the particular role you're in now, you must keep yourself aware of and consistently educated in new things that are emerging."

#### WORK ON MULTIFUNC-TIONAL PROGRAMS AND MULTIDISCIPLINARY TEAMS.

Companies are putting together more teams of workers from diverse departments to deliver technology-related projects, says Diane Morello, an analyst at Gartner Inc. in Stamford, Conn. Getting assigned to those teams is a key to getting broad business knowledge and becoming known outside IT.

"Individuals are going to work much more consistently around multidisciplinary teams, and that means their competencies need to be understood and known by people outside their skill sets," Morello says.

In short, you must be skilled in teamwork, effective communication and change management. Try to work for managers who operate across business units. Or, if you can, get assigned to a boundary-spanning role, and seek some relief from daily operational duties so you can focus on the big picture.

BEEF UP YOUR
BUSINESS SKILLS.
The need to do this has been
building for a while, but 2008
will put an even greater emphasis
on business acumen, says Kate M.
Kaiser, an associate professor of IT
at Marquette University and coordinator of the Society for Information
Management study "The Information Technology Workforce: Trends
and Implications 2005-2008."

The need for business knowledge is moving farther down the IT work-

force chain, she says. Even newly minted IT workers will have to have business smarts. Moreover, companies are looking for IT workers who have expertise in functional areas, such as marketing or finance, says David Foote, CEO and chief research officer of research firm Foote Partners LLC in New Canaan, Conn.

Getting a degree in business management — an MBA if you have a tech-related bachelor's degree, or a bachelor's in business if you have an associate's degree in technology — can help prepare you for this new reality, Kaiser says. But so can on-the-job management experience, such as leading projects.

BE MORE ACCOUNTABLE.
The folks in finance, marketing, HR and other corporate departments already use data to evaluate performance. IT workers will increasingly have to do the same, Cummins says. Granted, evaluating an IT shop can be hard,

because of the lack of productivity measures and because of the difficulty of measuring certain, sometimes intangible, gains. But be prepared to show your value.

Learn Six Sigma-type tools and benchmarking, and learn from business managers who have reputations for running efficient departments.

MANAGE YOUR OWN CAREER.
You can't rely on your manager, company or vendors to determine a path for you, because those predetermined paths might be too narrow or even obsolete, Foote says. You yourself must prepare for tomorrow by evaluating your skills and filling in what's missing through certification, education and on-the job experience.

"This is the year you can no longer sleepwalk through your career," Morello adds. "Each person has to take ownership of his or her career path." ■

# **Swimming in the Global Talent Pool**

## **BY MARY BRANDEL**

HEN HE was a 16-year-old student, Jeff Kiiza would never have imagined that 10 years later he'd be writing code in Perl, PHP/MySQL and AJAX for companies in the U.S., Canada, Australia and Spain — and that he'd be doing it from his home in Cordoba, Argentina. "Back then, it would have been a dream or science fiction," he says. "But the availability of greater free-flowing bandwidth and companies turning to the Internet have allowed it."

Hemang Dani is pretty amazed that in the past six months, he has boosted his income to \$5,000 per month by working for companies in the U.S., the U.K., Germany and Australia. Not bad, considering the low cost of living in his home city of Mumbai, India. Dani's projects range from coding "shopping carts" and enabling creditcard processing on Web sites to managing portals as a webmaster.

Dani and Kiiza have jumped with both feet into the global talent pool. Both worked for overseas organizations even before they joined Menlo Park, Calif.-based oDesk Corp.'s online marketplace, which links programmers with businesses that need their services. Kiiza coded for a university in Tanzania, and Dani picked up work through GetaFreelancer.com, which is owned by a Swedish company called Innovate IT.

And because there are more programmers like them every day in developing parts of the world, IT professionals in the U.S. are now competing in the global talent pool as well. While many U.S. companies today are still hiring globally only when

their need is short-lived or skills are scarce or too high-priced in the local or domestic labor pool, some are going global simply to find the best of the best, no matter where they're located, according to Kevin Wheeler, president of Global Learning Resources Inc., a recruiting consulting firm in Fremont, Calif. "Cisco, Microsoft, Google — these companies have clearly taken the position that they're

# **Stop Treading Water**

Tips for pulling ahead in your career from Gartner analyst Diane Morello

#### SWIM OR SINK.

If you're planning on following a pure technology track, set a goal to be "the most excellent, the most adept and one of the fastest studies out there for moving into new areas of technology," Morello says. "If you're not continually refining what you're doing, you do lose ground."

#### PICK THE FAST LANE.

Be ruthless about which industries provide the most forward-looking opportunities in your interest area, and be realistic about where the best job options lie. "If I go to the IT-specific job boards, 70% to 80% of the jobs are at service providers," Morello says.

#### PRACTICE WITH WINNERS.

Don't discount how important it is to work with the most dynamic and top-notch people, whether through electronically mediated forums or in person. "By virtue of working with them, you're expanding and enriching yourself," Morello says.

going where the talent is," he says.

Companies such as MySQL AB don't care where employees live; they hire for raw talent. The open-source software maker's 320 employees reside in 25 countries, and 70% of them work from home, according to Steve Curry, director of corporate communications at MySQL.

Even more-traditional companies like Henkel Corp., a consumer products maker in Dusseldorf, Germany, are letting the work flow to the worker when they're in search of scarce talent. For instance, Henkel's need for IT professionals with experience in SAP's Advanced Planning and Optimizer module prompted the company to extend its talent search outside of North America and Western Europe, even though that's where the software is used the most, says Amy Bloebaum, vice president and CIO at Henkel of America Inc. "When we're looking for a specialized skill that's in high demand, we're very flexible in terms of where the talent is located,"

With all that in mind, IT professionals in today's job market need to begin preparing now to swim among the fresh schools of competitors in the global talent pool. "If you're 45 and plan to work until you're 65, you're going to be forced to embrace this," Wheeler says.

#### **KEEP CURRENT**

To play in the global game, you don't have to be young, but you do have to exude what technology recruiter David Hayes calls "relevance." This means having at least a basic understanding of some of the so-called

Web 2.0 technologies that have emerged in the past few years, such as blogs, wikis, podcasting and RSS feeds.

"The world has changed, and you can either change with it or get swept up by it," says Hayes, president of HireMinds LLC in Cambridge, Mass. "On your resume, if you don't talk about something you do that's connected to one of these new spaces, you won't even be considered. So start running a cooking blog or say you enjoy podcasting your wife's rock band."

Another key area to at least understand and perhaps participate in is the open-source community. "There's a belief system in there, and you have to be able to express that," Hayes says of the open-source world. "If you want to know what's going on in the world, participate in it."

Though this may not be easy for IT veterans, it's a good way for them to rejuvenate their careers, Wheeler says. "I'll talk to an IT guy with 15 years of experience who knows three or four different programming languages and has really good system experience. Then I start talking about phishing or blogs or PHP, and they look at me like, 'Huh?'" he says. "I don't expect you to do that stuff, but at least you should have heard of it."

IT professionals seeking to work

on-site in a corporate setting also need to hone their personal marketing messages, particularly about how they bring value to the business. "Most of our customers want someone in their physical office because it requires interaction with the business community and a holistic connection to the business," says Hayes.

Unfortunately, this isn't what comes across in the bulk of the resumes that Bloebaum sees. "It's very important for job candidates to convey how they made a difference in their last job," she says. "When you read as many resumes as I do, it becomes apparent very quickly which ones think of their technology experience in a business context [and which] think in a technology context."

Even IT professionals who pursue hot technology areas such as reusable software components, service-oriented architecture or wireless applications are practically unemployable if they can't meld that knowledge with how it's used, says Diane Morello, an analyst at Gartner Inc. For instance, if you market yourself as an expert in reusable software, you also have to convey your ability to synthesize information about business processes and translate that into software modules, she says. "You need to take a larger view than your own specific

job — whether it's a global view, an industry view or a process view," Morello says.

This, says Wheeler, is how IT professionals can show what he calls "charisma." "So many people who have IT skills are technicians — competent executors of things like writing code," he says. "But when you talk to recruiters and hiring managers, they want an IT person who's skilled but has some edge — some moxie or an understanding beyond just being a technician."

#### **TABLES TURNED**

And U.S. companies are not the only ones looking for these intangible traits. Indian firms such as Wipro Ltd., Tata Consultancy Services Ltd. and Infosys Technologies Ltd. are recruiting workers overseas, including in the U.S. At Infosys, for instance, the Global Talent Program looks for graduates from top U.S. universities for software engineering positions.

A key characteristic that Infosys seeks in candidates, according to Bikramjit Maitra, vice president of human resource development at the company, is "learnability." "We take people for their ability to learn, not just for the specific knowledge they have," he says.

So far, 126 U.S. citizens have been hired to undergo such training in

# **HOW TO GET 'FOUND'**

**THE GLOBAL TALENT POOL IS A LARGER PLACE** than most IT professionals are accustomed to operating in – so large, in fact, that it's easy to get lost in the depths. It's also an increasingly virtual place. Recruiters, job seekers and the most talented people in the technology profession spend much of their time on the Web.

In fact, being visible to potential employers means that you need to be "findable," and that means being in places where people are congregating today, says David Hayes, president of HireMinds. "And it's not at church on Sunday morning anymore," he adds.

"There are people who get jobs [easily] who never even wrote a resume because they're not posting to CareerBuilder.com anymore," Hayes says. "They just have a profile on a social network."

Such networks include LinkedIn, Ryze.com and Ecademy. In fact, if someone mentions a potential job candidate to Hayes, the first thing he does is check for information on LinkedIn.

It's important to ask yourself what a hiring manager would find if he searched for you on the Web, says Kevin Wheeler, president of Global Learning Resources Inc. Becoming active on blogs, podcasts or in open-source communities or creating your own Web page are all ways to become more easily found.

"If you don't have a blog or a Web site and you never made a public speech or aren't part of a volunteer group or committee, there won't be anything out there, so you have to build a presence for yourself," Wheeler says.

Another tactic is to "search-optimize" your resume by including a keyword section on it where you can list relevant terms such as the industries you've worked in and the technologies you're able to apply, Hayes suggests. "You're spoon-feeding them the words they'll be searching for," he explains. "It makes you findable, and it also shows you're connected, since search engines are a giant part of the employment process."

India. One of these is 24-year-old Matt Sorge, a mechanical engineering graduate of MIT. "In the interview, I spoke a lot about the fact that I worked at two to three jobs that were fast-changing and dynamic and that I had to learn on the spot to contribute to the common goal each day," he says. "They were looking for that type of individual because information technology is changing every day, and they don't need people who are stagnant."

It's a trait that Sorge notices not only among the software engineers he meets in India but also in many employees, from the instructors at Infosys to the maintenance people in the hotel he stays in. "Everybody here is extremely motivated and willing to be here until the job is done," he says.

Sorge's time in India will also help him as employers increasingly look for candidates with multicultural experience and the ability to work on global teams. "I'm not saying we won't hire people with experience in [just] one business, one function or one country," Bloebaum says, "but it's quite important for people who come from a variety of skills and backgrounds to make up the IT organization."

The preferred candidate is willing to work within a global model, says John Dubiel, who was recently hired to be a U.S.-based practice director at Tata Consultancy Services North America. "Employers want people who understand different work models, like offshore models, or where your team is in multiple geographic locations outside the U.S.," he says.

It also includes having an open mind about your source of employment. "People in the U.K. and Europe are much more accustomed to working for multinationals [with overseas headquarters] than Americans are," Morello says. "It's a difference between parochial thinking and global thinking — that global doesn't necessarily mean Western."

Dubiel says a company's location will matter even less over the next five years. "Pretty soon, the issue of whether I work for a U.S. or Indian company will be irrelevant," he says. "All these companies that offer services are pretty much the same; only the headquarters will change."

When that happens, it will become more important than ever for IT professionals to grab hold of their careers and start steering them. "Many people sleepwalk through their careers," Morello says, "but even older programmers can expand themselves to look at other aspects of knowledge they possess and make it part of the living, breathing experience they offer to a company."



Is programming headed for extinction in the U.S.?

# **Are You Obsolete?**

## **BY MARY BRANDEL**

INCE KELLEN has had a successful IT career. Currently CIO at DePaul University, he is also an international speaker on customer relationship management and the Internet. He has written four books on database technology and is completing a Ph.D. in computer science at DePaul.

But he's pretty proud of another recent accomplishment: achieving a skill level of 2325 in Wii tennis.

It's not all about showing off for his two kids, both under the age of 12, one of whom can handily beat him in Wii baseball or boxing. He also likes to observe how the software adjusts as the player's skill level improves, particularly when it comes to the handheld remote, which is programmed to be sensitive to physical gestures. "It's gone to the next level of interactivity." Kellen says of the Nintendo system. "The player becomes highly skillful at manipulating the interface."

This capability, he says, may not be applicable to the corporate development environment today, but it could be someday. And Kellen's curiosity about his kids' favorite video game system is a good example of the mind-set IT managers need to develop as they face what some say is one of the biggest challenges of the profession today: staying relevant as consumer-rooted and communitybased Web 2.0 technologies infiltrate the corporate world at the grassroots level and threaten to render the control-and-command style of IT management obsolete.

According to a growing chorus of IT leaders, consultants and bloggers, IT needs to shift into a new role. It should continue its traditional responsibilities, such as governance, security and control of costs and return on investment. But it should

IT will catch on to corporate-sponsored blogs, wikis and social networks, but the question remains whether they will catch on in time, or will the technology they adopt will be antiquated by the time it's implemented?

**JOSH HOLBROOK** 

PROGRAM MANAGER, YANKEE GROUP RESEARCH INC.

loosen control over parts of the business intent on improving productivity through the use of downloadable rich Internet applications, social networking, collaboration tools and other Web 2.0 technologies. Anthony Bradley, an analyst at Gartner Inc., foresees "a significant shift in power that IT ignores at its own peril." With free Internet applications, Web platforms and social software, "the consumer side of the world is driving most technology advancement, not enterprise IT," he says.

There's still a question of how innovations like social networks, RSS, microblogs, wikis and mashups will translate into enterprise profits, but few doubt that they need to be explored, and not just by IT.

"Users have stormed the gates of IT," says Josh Holbrook, program manager at Yankee Group Research Inc. in Boston. "IT will catch on to corporate-sponsored blogs, wikis and social networks, but the question remains whether they will catch on in time, or will the technology they adopt will be antiquated by the time it's implemented?"

That's why IT leaders like Jeff Kuhns are discussing how to balance control with user-inspired innova-

# SEASONED, NOT ANTIQUATED

Vince Kellen has a good view into emerging technology trends because he works at a university. Many students were born around the

same time as the World Wide Web, and they expect their school or work environments to mirror their personal lives, where Web capabilities are



ever-present. Some observers use the term "digital natives" to describe people with this outlook, as opposed to "digital immigrants," for whom Web 2.0 technology is a second language. "The way they think about technology is different," says Kellen. "It's like water; it's just there."

But even as a digital immigrant, Kellen is more fluent than many of his contemporaries, thanks to his interaction with the natives. tion. "The companies that figure out how to do this will not only have happier, more productive employees, but the IT department will be free to focus on forward-thinking projects that could help drive revenue and innovation," the senior director of IT at Pennsylvania State University wrote on his blog recently.

#### **AVOIDING EXTINCTION**

The job of maintaining the perception of relevance — and possibly avoiding extinction — may require IT managers to take a close look at their current management styles and make some tweaks, especially if they've been working in IT for a while. "The main issue for CIOs is that they're just plumb unaware [of consumer technology developments] or pretend it's not there," Kellen says, adding that he makes a point of working and interacting with consumer electronics.

He cites Apple Inc.'s iPhone as an example. Because it's optimized for short videos, it may be useful for training or disseminating information to sales teams. Kellen's antennae are also up on text messaging, which has become a necessity for basic social interaction among college students who will soon enter the workforce. "I'm not sure what it means yet, but they're used to engaging in textual expression using a language that's not broadly accessible and through which they project their personalities," he says.

Kellen is still a tad tentative about the concept of Enterprise 2.0 — a term used to describe the vision of open, decentralized, community-driven technology platforms. "The Web 2.0 phenomenon is just a tiny bit more smoke than fire," he says, because no one has figured out yet the direct relationship between the unstructured data it produces and increased corporate competitiveness.

"Just having more blogs and wikis isn't the answer," Kellen says. "You have to figure out what the organization is going to learn from this, structure that knowledge and turn it into profit."

And he's trying to prepare for

the day that happens. At DePaul, Kellen has formed a team focused on Web 2.0 developments, and he is pressuring vendors to make these technologies more relevant to the corporate market.

In companies where C-level executives may not welcome an IT manager moving too far away from a command-and-control style of leadership, he suggests seeking out key users to harness their passion and talents. "You can build an innovation agenda, staff it and fund it," Kellen says. "Even if it's not something that's immediately productive, in a two- or three-year time frame it will produce something."

#### **LEAVING THE WORLD OF 'NO'**

And sometimes, all users want is a sense that IT is open to the idea of, say, creating a wiki, even if IT believes a wiki will be useless until it's integrated with the CRM system to produce business intelligence. That means avoiding the perception of what Ian Patterson, CIO at Scottrade Inc., calls "Dr. No" or the "Abominable No Man." "The guy wanting to update the wiki doesn't care about your grand scheme," he says.

One way to provide immediate satisfaction while also performing the due diligence of ROI and risk assessment, he says, is to break grand schemes into smaller parts and let users know what they can expect. For instance, IT might promise to deliver a user-requested wiki within a week while planning to create a business intelligence reporting mechanism two or three months later, knowing that the user would chafe at waiting that long for his initial request to be met. "Start looking at things in 30-day increments, not six-month increments," Patterson says. "There are always projects that are 90-, 180-, 360-day projects, but

Shorter-term projects may not need the controls and processes that longer- term projects do, for instance. By seeing things less in a "one size fits all way," Patterson says, IT becomes a collaborator rather than an inhibitor.

how do you handle those things that

should be done in a week?"

Take the word "no out of your vocabulary," Patterson says, and start thinking in terms of "That's a possible idea; let's see what we can do with it."

After all, if users perceive IT as a roadblock, they'll just find other ways to accomplish what they want, and Holbrook says they can succeed. He has seen entire sales teams turn to consumer technology to make them more productive, only to have IT shut down the applications because they weren't sanctioned. In one case, he says, the CFO overturned IT's decision because it was seen as inhibiting revenue generation.

# SEASONED, NOT ANTIQUATED

## Wynne Haves has recruited

her son, 14, as a mentor. "I ask him a lot of questions, she says. When she first started hearing about blogs and wikis, for example, she



asked him to explain what they were. "Of course, I got the eye roll, and that's when I knew I was a dinosaur," she says.

But in reality, interaction with her young mentor will keep her evolving.

#### **DON'T GIVE UP**

At Constellation Energy Group Inc., the attitude in the CIO's office is not "We can't do it" but "This is interesting; is there applicability?" says Wynne Hayes, chief technology officer at the Baltimore-based company.

This kind of open attitude can make increasing your business savvy as important as improving your Web 2.0 fluency. "There are kids coming out of school who can run circles around IT in terms of Web 2.0 technology," Hayes says. "That makes it important to become more

business-oriented so that we don't become hindrances to getting business done."

The open attitude has already led Constellation to try out a novel approach to systems development. When the commodities group recently needed a new application developed quickly, it turned to Glastonbury, Conn.-based TopCoder Inc., which stages regular coding competitions, ranks developers who compete and then makes this talent available to businesses that need systems built.

The work is broken down into dozens of pieces so that developers work in parallel with one another. When coding is complete, the components are integrated. This speeds the job, which has "tremendous value" for the commodities business group, Hayes says.

Despite such results, few advocate opening the floodgates to a huge change for IT and the business. The world of Web 2.0 is messier than any corporation is accustomed to. For instance, traditionally, any information that was published - whether internally or externally — was checked and cross-checked and subject to a corporate approval process. With Web 2.0, that type of governance is completely irrelevant, if not destructive to the very purpose of the blog or wiki, Hayes says. "The last thing we want to do is put governance around it," she says. "It's incumbent on the individual to take responsibility."

So it's not just a question of whether IT is ready. It's also a matter of communicating to other business leaders the changes these technologies imply, ensuring that they're prepared for the autonomy the technol-

# SEASONED, NOT ANTIQUATED

Ian Patterson keeps up with

the latest trends by using any consumer technologies he can get his hands on. "I have it all – an iPod, a BlackBerry Curve [on which] I down-



load and test out all our podcasts; and I've spent some time on Second Life," he says.

Not that he buys into everything he tries out. After three months on Second Life, for instance, he gave up. "I think it will be there someday, but it's kludgy," he says. "The concept is there, but it's still too slow."

ogy requires, and planning a phased implementation. Constellation is piloting wikis and blogs in its commodities group and exploring their applicability for engineers and IT.

"We want to make sure the culture is ready for the shift — that they're responsible for content," Hayes says. And that also means readers must be responsible for critically analyzing the information they read.

Patterson agrees that collaborative publishing and social networking tools should not be overly managed by IT. Scottrade uses Web-scanning technology from RSA Security Inc. to ensure the accuracy of what gets published on the public Internet, but those processes are handled by business people, not IT.

#### **ACHIEVING BALANCE**

Employees increasingly expect that the technologies they use in their personal lives will follow them everywhere they go — and that they won't need any help implementing them. Given such expectations, IT professionals are struggling to redefine their roles.

They tend toward three approaches, Holbrook says: seek and destroy (shutting down unapproved applications), acknowledge and ignore (doing nothing to manage the situation), or solicit and support (trying to support all the technologies brought in by users). He suggests a fourth way: enabling the creation of online communities for users to share best practices for managing consumer technology in the workplace.

"IT can be involved in these communities and help shape opinion about which tools are best and how they can be optimally deployed, but it only intervenes when an application poses an unacceptable security risk," Holbrook says.

This enables users to bring in consumer technology but mitigates support headaches.

"This is a big change for IT," he says, "because it's a move to a communal method of managing end users."

Another big part of the balancing act is user education, Patterson says. "It's about having an open dialogue with the business [people] so they understand what it's going to cause from a compliance or e-discovery or risk perspective," he says. "There's a fine line between being considered a dinosaur and being considered an enabler."

40 UNDER 40 WWW.COMPUTERWORLD.COM

See what the next generation is up to.