Is information technology labor drying up?

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The Year 2000 Crisis has put the industry in the spotlight, yet pundits can't illuminate the larger debate: Are there enough American IT workers?

SASHA, A THREE-YEAR-OLD Rottweiler, lives a jet-set dog's life thanks to the worldwide Year 2000 (Y2K) computer assessment and conversion crisis.

As reported recently in IT Recruiter magazine, the dog's 32-year-old owner, Michelle Caputo, who has worked for nine years as an information specialist consultant for Electronic Data Systems Inc. (EDS), is flown every week from Dallas to Fairfax, Va., where she toils on Y2K work. In her absence the firm pays a Texas pet sitter to watch Sasha and has been known to fly the canine to visit Caputo on weekends. Now EDS is looking into leasing a Fairfax apartment for the duo.

To support its need to hire 500 highly talented Y2K workers. the company spent countless hours creating a compensation package that is hard to refuse. EDS provides numerous generous benefits to Y2K workers, including a four-day work week; coverage for dry cleaning, pet care, and travel expenses (including domestic partner trips); premium pay; plus an incentive "profit" bonus for remaining with the company until the year 2000.

EDS is not unique in this regard. However, it may be one of the few corporations to be so open about what it does to encourage long-term commitment by certain high-tech employees.

Truly, international Y2K mania has just begun. It's a classic "Revenge of the Nerds" tale - but this time it's no movie. Information technology (IT) workers who are programmers are so hot they're ice-cube "cool" in corporate America, which may spend in the low trillions during the next few years to fix the Y2K bug affecting millions of lines of computer code. Since the crisis impacts virtually all industries, chances are good that it will alter your labor force, company, and personal life

someday soon.

Corporations Face Y2K: "Asleep at the Wheel?"

What is at stake? Futuristic-minded pundits are saying that governments and companies with crippled computer systems risk a range of potential disasters including internal financial devastation; financial injury to employees, suppliers, and clients; and economic ruin due to related lawsuits.

Although some firms retain competent in-house Y2K talent, these days at least 70 percent of companies are hiring Y2K consultants, according to a survey by Cap Gemini's Transmillennium Services Group, an international computer services firm.

Unfortunately, 90 percent of those surveyed described their quest to find competent staff as "difficult." One reason may be that although 4 percent of companies surveyed found Y2K work exciting, a whopping 72 percent admitted that it was "boring." The survey also reveals that just one out of three companies has developed a Y2K plan; six out of 10 haven't undertaken complete assessments of how the problem will affect them or how to fix it.

Leon Kappelman, author of the book Year 2000 Problem, states that one of three companies is "doing nothing" about the problem. He feels the government should provide tax incentives to benefit firms that address Y2K, "and perhaps penalize those who are not."

Moreover, the crisis could cause a 5 percent decrease in the growth rate of the U.S. gross domestic product if the shortage of information technology workers is not addressed promptly, reports IT Recruiter, citing statistics from the Hudson Institute, an Indianapolis think tank. In an interview in that magazine, Senator Spencer Abraham (R-MI) reacted to those figures: "That translates into about $200 billion in lost output, nearly $1,000 for every American." (More about the senator, who is chairman of the Senate Immigration Subcommittee, later.)

What's Behind the IT "Shortage"?

Programmers who are over 50, as well as retirees who made their living working on mainframe computers - certainly not currently in vogue - are now supplying much of the brainpower to governments and companies clamoring for Y2K solutions.

"Five years ago we had companies saying they didn't want to retain the COBOL mainframe people," explains Bill Hill of Cincinnati-based Hill and Associates, which places only permanent information services people and contractors. "Today, those

people are almost worth their weight in gold. Y2K really inflated their salary structure, but it's only temporary. The older guys are doing well in any given environment."

Hill attests to the "tremendous" availability of technical professionals in both the oldest and the newest technology. "The market couldn't be better from our standpoint," he says. The average salary for employees he places ranges from $50,000 to $60,000 a year.

Additionally, most are given "healthy" sign-on bonuses plus lengthy vacations. Hill notes that Midwest employers tend not to be as "aggressive" as East and West Coast employers in regard to high salaries and luxurious benefits.

According to a survey conducted by the Virginia Polytechnic Institute and the Information Technology Association of America (ITAA), about 346,000 IT positions, representing nearly 10 percent of the computer industry labor force, are vacant. Compounding the problem is that 100,000 or so IT jobs open up every year - three times the number of annual graduates in the field.

However, the Institute of Electrical and Electronics Engineers (IEEE), the largest technical society in the United States, has a beef with those labeling the situation a "shortage." (The Washington, D.C.-based trade group represents the career and public-policy interests of 220,000 U.S. electrotechnology and IT professionals.) The problem, according to an IEEE spokesman who did not want to be identified, is that too many of its job-seeking members 35 years old or older are blatantly ignored by employers.

"Companies are narrowing the pool of workers unnecessarily," he says. "If you're saying the only person who can do an [IT] job is a recent graduate, that tends to drive the salary price up for that type of worker. That may be true for positions using recent technologies such as Java, but not for all of them." Firms involved in high bidding wars "are shooting themselves in the [financial] foot."

He points out that in the past few years, a dangerous corporate culture has emerged -- especially in computer software development -- trumpeting the idea that the IT field is only for the young. "The myth says you have to live on Jolt Cola and work 100 hours a week to be a competent front-line software worker. People in their mid careers or older generally can't [put in the hours] due to family concerns."

Instead of searching for many months to find the best-trained employees, IEEE advises employers considering new hires to take a good look at older American workers with general IT skills who are in the field, underemployed, or were forced to

retire early. "They can be retrained in the required specialty and be up and running in a month or so. But companies aren't doing this. As a result, they're causing an artificial shortage for a small number of workers."

In an effort to combat age discrimination, many older IEEE members are dropping years of valuable experience from their resumes and leaving only the last five (or less), relates the IEEE spokesman. "It's amazing" what happens when potential employers call in people with abbreviated resumes for interviews, he says. "Their faces fall [when they see the wrinkles]; our members are all saying the same thing happens!"

Others looking at the labor shortage have a different perception. "There's a [labor] shortage period, not just in technology but overall," asserts Barry Lawrence, spokesman for the Alexandria, Va.-based Society for Human Resources Management, the world's largest HR society.

From what members tell him, Lawrence doesn't readily believe that IT employers are discriminating much in regard to age or job skills. "[The shortage] certainly hits the technology area hard. Those companies are trying very hard to find good people anywhere, too."

The Push for Increased Foreign Hiring Another reason companies seeking IT labor often ignore older, retrainable U.S. labor is because these workers tend to have higher salary requirements due to financial commitments, says the IEEE representative. Younger graduates cost less. So, too, do "H1-B" foreign workers, he points out.

Created in 1991, the H1-B program provides 65,000 special work visas a year to highly skilled and/or educated foreigners to fill software and hardware IT positions. The IT shortage has birthed a new Senate bill to raise the number of annual H1-B visas to 95,000. (Proposed by Senator Abraham of Michigan, it was scheduled for a vote this spring.) The Information Technology Association of America supports the bill; IEEE is solidly against it, confirms John Reinert, the group's president.

H1-B visa-holder workers aren't immigrants, says Reinert, but are "virtually indentured servants, subject to deportation if they lose their company sponsorship." Moreover, they earn as much as a third less than the prevailing wages in their fields, which makes them financially more attractive than their U.S. co-workers.

"The resulting lower wages and higher unemployment discourage the best and brightest from entering the [IT] field," Reinert adds, "and the dependence on foreign labor becomes ever greater. And when we can't produce enough engineers and computer scientists, our long-term technological competitiveness - even our national

security-is threatened."

However, skill levels - not salaries - do play a major part in H1-B hiring, say many firms. In an April 20 article in The New York Times, an Intel spokeswoman was quoted as saying that 3 percent of its 67,000 people were H1B workers. Of those, nearly 80 percent hold master's or doctorate degrees.

According to the same story, at software-consulting firm Mastech Systems, 1,733 employees are H1-B workers. Most of those individuals have a bachelor's degree in computer science and less than five years computer experience. Are they in their positions because they filled a real need or because they are cheaper than nativeborn workers? The truth, according to Chuck Rusdill, Mastech's investor relations director, is that the firm hired overseas labor because of the decreasing number of U.S. computer science graduates.

"We came out against these immigration quotas the first time around," says Barry Lawrence of the Society for HR Management. "For 10 years we've warned people there was going to be a decrease of entrants in the work force. Now we have HR people looking for anyone under any rock for any talent."

Lawrence cautions employers not to forget the retention side when hiring. "It's also very important. If companies are going to underpay their people, they're setting themselves up for heartache, as it's more difficult to find a new employee than an old one."