

# H-1B at 20: How The 'Tech Worker Visa' Is Remaking IT

**Patrick Thibodeau**

**17.11.2010 kl 17:12 | Computerworld (US)**

This news analysis is part of our special report on the 20th anniversary of the H-1B visa, which also includes [first-person accounts](#) from five IT workers who have been directly affected by the H-1B program and [visual and interactive tools](#) to help you analyze H-1B visa data.

When Congress created the H-1B visa program 20 years ago this month, it sent the American IT industry into uncharted territory from which it has yet to emerge.

The U.S. had an H-1 visa for foreign nationals with "distinguished merit and ability" prior to 1990, but that year, in response to warnings of an emerging "skills gap" or "skills mismatch" among U.S. engineering and technology professionals, Congress broadened the scope of the visa.

The H-1B incorporated specialty occupations -- including such IT roles as programming, systems analysis, and network and systems support -- with a minimum requirement of a bachelor's degree. The H-1B visa also allowed workers to pursue permanent residency.

Over the years, supporters of the visa have included [Microsoft's](#) Bill Gates and former Federal Reserve Chairman Alan Greenspan, who in 2009 told Congress that the annual visa cap of 85,000 is "too small to meet the need" and that protecting U.S. IT workers from global competition creates a "[privileged elite](#)."

Groups like the Economic Policy Institute have begged to differ. In a [report](#) released just last month by EPI researcher Ron Hira, an associate professor of public policy at the Rochester Institute of Technology, he argues that the H-1B along with the L-1 visa, which is used by multinational firms to transfer employees for temporary work, allow employers to bypass U.S. workers "when recruiting for open positions and even [to] replace outright existing American workers" with visa-holding foreigners. The H-1B's wage requirements are too low, according to the report, and because visas are held by employers, not workers, the H-1B promotes a relationship "akin to indentured servitude."

That dovetails with the view of many domestic IT professionals, who have never subscribed to the idea that there was -- or is -- a skills mismatch in the industry. Among them is Kristine Serrano, [laid off](#) from IBM this year, who calls the skills gap a "myth" told by businesses and parroted by elected officials.

Off shoring and the H-1B visa have become inextricably linked, displaced professionals say.

"The work didn't disappear. It's still being done; it is just being done by a group over in India now," said Serrano, who earned a master's degree in information science from the University of Colorado at Boulder in 1993 and was initially hired by [IBM](#) as a Unix system administrator.

Serrano's point is what makes the issue contentious. IT professionals who have been displaced from their jobs because of offshore [outsourcing](#) believe that the H-1B visa has made government a complicit partner in the shift of jobs. They maintain that the H-1B visa and off shoring have become inextricably linked, with offshore companies placing H-1B workers in client sites in the U.S. with the intention of ultimately transferring the work overseas.

Visa supporters say off shoring does not lessen U.S. companies' need to hire foreign students with strong academic achievements, high-tech skills and potential.

## Entrenched and expanding

Hate it or embrace it, in its two decades, the H-1B visa has become an entrenched part of global IT business, and its importance in international trade is expanding.

[Related: View maps and data showing the geographic concentration of 2009 H-1B visa applications for tech jobs as a [heat map](#), [by city](#) or as a [searchable, sortable database](#). And read H-1B: The voices behind the visa for individuals' stories of how the [H-1B program](#) has changed their lives.]

President Barack Obama, in his visit to India this month, [assured the Indian government](#) that he doesn't see outsourcing as a bad thing.

"I don't think you've heard me make outsourcing a bogeyman during the course of my visit," said Obama in India, adding that the two countries "are operating on some stereotypes that have outlived their usefulness."

The U.S. wants to expand its trade with India, selling products like aircraft, power-generation technology, and consumer goods into its vast market. The Indians want access to the U.S. IT market. And for that, they need visas.

## The rise of the OPT extension

In the years leading up to the recession in 2008, demand for H-1B visas exceeded the annual supply of 85,000, some years by 60,000 or more.

The Bush administration, unable to persuade Congress to increase the visa cap, developed an alternative strategy: It extended the amount of time a foreign student with a science, technology, engineering or math degree can work for a private employer without a work visa, from 12 to 29 months. Critics called it an [H-1B extension by other means](#).

Since that White House action in mid-2008, nearly 20,000 students have applied for what is called the Optional Practical Training (OPT) extension. Given that demand for H-1B visas has been sluggish for the past two years, and that H-1B [visa fees were increased](#) this year, critics wonder whether foreign workers are using OPT extensions rather than H-1B visas to remain in the U.S.

The U.S. Immigration and Customs Enforcement (ICE) agency keeps track of every OPT request and the hiring company but typically doesn't distribute the information. It produced the list in response to a Freedom of Information Act request by an anonymous source, who subsequently made the list available to Computerworld. The list was verified by ICE.

The data shows which institutions are using the OPT extension and in what ways. [For more detail, see [Non-visa foreign student work applications](#) filed since mid-2008 for a searchable, sortable database of Optional Practical Training extension requests filed by U.S. employers.]

Foreign students, particularly from top-tier universities, are being employed at large firms. At Carnegie Mellon University, for instance, [Intel](#) has six OPT extension students working for it; [Oracle](#) has eight students.

But the university that has the largest number of students who applied for OPT extensions is a relatively small one. Students at Stratford University in Falls Church, Va., accounted for 730 OPT extensions in 2009 alone, and many of the companies employing them are IT consulting and services firms, often with offices in India.

Stratford has an enrollment of about 2,000 full-time students, with about 40% in computer-science-related programs. Most of the foreign students are in the master's program and make up about three-fourths of the enrollment, according to university President Richard Shurtz. Last year, Stratford expanded with a campus in New Delhi, in conjunction with a private manufacturing group.

Some 30 countries are represented at Stratford, with students from India representing the largest share. Many of the Indian students enroll in graduate software engineering courses, and with the OPT extension, they can get nearly three years of experience in the U.S., and then go home "and get great jobs," says Shurtz.

"

If the U.S. wants to continue to be an economic power, they are going to have to absorb those workers in the U.S. in support of our economy instead of sending them home," he contends, adding that the H-1B visa "allows us to keep that brain power."

### **Small shops remake the IT landscape**

H-1B critics have focused their attention primarily on large offshore firms that employ some H-1B workers in the U.S. (Infosys Technologies Ltd., for example, received 4,559 H-1B visas in 2008.)

But separately, the H-1B visa has changed the IT consulting landscape, creating a new type of company -- technically a U.S. company, but one that is staffed primarily by H-1B visa holders and often has offices overseas, usually in India, where client work is completed. These firms represent a new kind of competition in the IT consulting marketplace.

A sampling of the makeup of these firms was [detailed in a lawsuit](#) filed by the TechServe Alliance in Alexandria, Va. The organization, which represents a handful of such firms, filed the suit against the U.S. Citizenship and Immigration Services (USCIS) over an interpretation of its rules.

The companies include Broadgate Inc. in Troy, Mich., which counts 21 H-1B visa holders among its 46 IT workers; Logic Planet Inc. in Edison, N.J., which employs 95 IT workers, including 89 on H-1B visas; and DVR Softek Inc., also in Edison, N.J., which says that 45 of its 50 tech workers hold H-1B visas. Both Broadgate and Logic Planet hired students from Stratford, and from other schools as well, according to the government's listing.

The rise of these small IT consulting and services firms that almost exclusively employ foreign workers has led to increased scrutiny of H-1B applications for companies of all size. Two years ago, the USCIS used a random sample of 246 cases drawn from a pool of nearly 100,000 and found 51 with problems [ranging from fraud to "technical violations,"](#) which can be something as small as a mistake in the application.

The findings, however, were enough to prompt the USCIS to increase its scrutiny of H-1B visa applications through "request for evidence" -- proof that the job for the visa worker is a real one. Immigration attorneys say those requests can be extensive and may even include photographs of a future employee's workspace and the schematics of the building in which the office is located.

Marko C. Maglich, an attorney at White & Case LLP who specializes in labor, employment and immigration law, says petitions can be as thick as five inches, and hiring firms have to prove that there is indeed a bona fide company. "There is going to be more resistance now," he says.

### **The H-1B gets political**

Some argue that Congress has to make changes to the visa program that not only increase oversight, but also do more to protect U.S. jobs. In its report, the Economic Policy Institute contended that policy changes to the H-1B program could retain tens of thousands of jobs for U.S. workers.

Compete America, which represents industry groups and universities that support the H-1B visa, dismissed the report and said the "overwhelming weight of the evidence shows that highly educated foreign-born professionals benefit the U.S. economy."

But the recession and rise of the off shoring of IT and other services made the jobs shift a top political issue in the most recent national election, and a prominent one in some races, particularly in the contest in California between U.S. Sen. Barbara Boxer, a Democrat, and her Republican challenger, former Hewlett-Packard Chief Executive Carly Fiorina.

Boxer repeatedly attacked Fiorina for [layoffs](#) and off shoring during her years at HP. Boxer won re-election. Another ex-CEO, Meg Whitman of eBay, who was defeated in her run for governor of California, was also hit on the outsourcing issue.

"The fact that these two tech CEOs did not win I think sends a message to both parties. There is some popular discontent that [they] don't understand," said Norman Matloff, a professor of computer science at the University of California, Davis, who testified in Congress in 1998 on what he called the myth of a software labor shortage.

**Although there is an ongoing push for immigration reform in Congress, both sides on this issue are doubtful that the election divisions will lead to new legislation. H-1B opponents, however, are fearful that a bill to [raise the H-1B cap](#) could be attached to an appropriations bill during the lame-duck session before January.**

As for U.S. IT workers themselves, activism ebbs and flows regarding the H-1B issue, says John Miano, who founded the Programmers Guild to organize IT workers in 1998, when Congress began expanding the H-1B program. Miano himself was working as an IT consultant at AIG in the mid-1990s when the company hired an outsourcer who used H-1B workers to replace U.S. workers.

"Even at the peaks, [techies] tend to be moderately active -- they are not into politics and things," says Miano. (See H-1B: The voices behind the visa for thoughts from some U.S. IT workers on why they feel the need to stay anonymous in their criticism of the H-1B program.)

As for Serrano, her layoff from IBM will mean a change of careers as she heads back to school to pursue a degree in nursing. She feels her IT career prepared her well for nursing because both fields require people who are detail-oriented and cool under pressure. An ideal outcome of the nursing training, she says, would be to combine her IT and nursing skills into a health informatics career.

The contractor that Serrano trained at IBM was from China, but Serrano didn't know her immigration status. And despite having to train her replacement, Serrano says she had a good relationship with the woman, "because she's just another person that's struggling in a whole world of struggling individuals." Serrano says she isn't bitter. She sees the struggle facing IT workers today paralleling the same kinds of challenges that workers of earlier generations faced. But she would like to see a change in the national discussion on off shoring.

Serrano believes that businesses and government need to be "completely open about what's going on" -- about offshore outsourcing and reasons behind it.

[Related: View maps and data showing the geographic concentration of 2009 H-1B visa applications for tech jobs as a [heat map](#), [by city](#) or as a [searchable, sortable database](#). And read H-1B: The voices behind the visa for individuals' stories of how the [H-1B program](#) has changed their lives.]

***Patrick Thibodeau covers SaaS and enterprise applications, outsourcing, government IT policies, data centers and IT workforce issues for Computerworld. Follow Patrick on Twitter at Twitter @DCgov. His e-mail address is [pthibodeau@computerworld.com](mailto:pthibodeau@computerworld.com).***