

COMPUTERWORLD

The Myth of 'Versatilists'

By Marcus Courtney
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Computerworld recently took on the difficult task of forecasting the state of the IT sector in four years [["The IT Profession: 2010,"](#) July 17]. It was a thought-provoking package of forward-looking stories -- especially the report predicting the skills that tech workers will need to ensure long-term job security and marketability in a changing economy.

Looking into their silicon balls (crystal is so 20th century), industry experts predicted that those with tech knowledge and considerable business savvy will carry the day. Such "versatilists," the IT prognosticators claimed, will add business value by navigating a complex tangle of departments, projects and relationships both within and beyond the company that employs them. Success in IT will depend less on, say, development know-how or engineering savvy and more on a multilayered amalgam of business connections, strategic planning and marketing expertise.

Exciting stuff, almost enough to make you want to run out and enroll in an MBA program -- except for two small problems.

The first has to do with what industry leaders such as Microsoft Chairman Bill Gates say they need: *specialized* workers with advanced degrees in computer science and engineering. The second has to do with what those leaders are doing about this perceived need: lobbying Congress and the administration to try to increase the number of foreign technical workers allowed into the U.S. Their argument for raising the cap on H-1B visas is based on a claim that there aren't enough qualified U.S. workers to go around.

Confused? So am I. That's because we're hearing a classic mixed message. Even as industry moguls bemoan the shortage of technically skilled experts, they are predicting a future where candidates with focused technical expertise are less desirable than multitasking generalists. Trying to conjure an answer to what mix of skills and education is necessary to satisfy the employers of tomorrow would vex even Harry Potter.

Let's dissect the facts.

For more than five years now, job growth in the U.S. IT sector has been significantly weaker than industry leaders like to claim. According to a recent study by the University of Illinois at Chicago's Center for Urban Economic Development, fewer than one quarter (76,300) of U.S. IT jobs that were lost when the tech bubble burst have been recovered over the past three years.

Meanwhile, tens of thousands of jobs have been shipped overseas to low-wage countries. If current trends continue, we can expect more than 3.3 million U.S. industry jobs and \$136 billion in wages to move to countries such as India, Russia, China and the Philippines by 2015, according to Forrester Research.

This double whammy -- the elimination of skilled positions, coupled with the rapid offshoring of tech jobs at every pay grade -- is wreaking havoc on U.S. workers at all levels and leaving technology professionals little incentive to broaden or adapt their skills.

It's little surprise that thousands are now giving up hope, shifting to lower-paying professions and dissuading future generations from even considering careers in the technology field. According to the Computing Research Association, the percentage of college freshmen listing computer science as their probable major fell 70% between 2000 and 2004 -- not a good sign regarding where things are headed.

If the U.S. hopes to retain its role as the global driver of the information economy, business leaders and the government need to pay close attention to these trends and start focusing on what can be done to reverse them. We need to make a conscious decision that the U.S. wants to support a vibrant high-tech industry capable of creating -- and sustaining -- jobs with wages that can support a family. This requires retaining engineering jobs in the U.S. and disabusing ourselves of the idea that a vibrant tech economy will be based on a foundation of versatilists.

Instead, let's consider a new approach based on providing substantive worker training, capping the number of H-1B visas awarded each year and creating meaningful incentives for employers to keep their operations rooted in American soil.

Business leaders must reach out to unemployed or underemployed IT workers and start a major effort to retool the already qualified workers in the industry to meet the required skills of today and the emerging skills of tomorrow. Capping the number of H-1B visas awarded each year at current levels will accomplish two goals: It will encourage employers to look for qualified U.S. workers first, and it will send a signal to students considering degrees in technology that they may have job prospects upon graduation. Finally, Congress and the White House need to review and reform tax policies that provide incentives for multinational corporations to move their workforces overseas.

In the 1990s, IT fueled the U.S. economy, in part by creating thousands of highly skilled living-wage jobs. We need only the chance to regain our footing.

No one knows for sure what the IT market will look like in 2010, and it may very well require versatilists to help move us forward. But without tens of thousands of technically skilled U.S. workers leading the way, none of us may ever find out.

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