



INDUSTRY HIRING PICKS UP—ARE YOU READY?

BY JOHN W. STOUT — JOHN@STOUTSYSTEMS.COM

The IT industry job market *is* warming up. Pent up demand from tabled software engineering projects and overall increased national productivity is fueling a measurable boost in hiring.

Salary caps, generally depressed for the past two years, are also edging back up.

Kiplinger, the respected DC news organization, predicts that despite flat corporate infrastructure investment in 2010, US firms will spend about 3% more to meet demand for backlogged IT needs. The organization also noted that the demand for skilled IT professionals once again outstrips supply, as 60% of businesses in certain industries say it's difficult to find qualified employees.

What does that mean? **Once again, it's becoming more challenging to find the technical talent** companies require to complete projects and get their software products to customers, as well as hire the talent to fortify their internal IT structures and provide support services. As to this later point, Robert Half's survey of Chief Technology Officers show that the specific IT skills most in demand:

- network administration (70%)
- end-user desktop support (66%)
- Windows OS administration (62%)
- database management (58%)
- and wireless network management (52%).

In another survey, 58% of the Chief Information Officers surveyed plan to hire in the second quarter, with a third of those CIOs bringing in a mix of full-time employees and contractors.

Two years ago, I wrote about an apparent IT Industry "Brain Drain"—a regional as well as national problem. And while we certainly aren't experiencing the heavy industry activity of pre-2008, it's worth noting what all of us must again confront about hiring.

People who have been underemployed during the business slowdown—those stuck in either dead-end positions or those who were forced to accept underemployment to keep income flowing in—will now be endeavoring to get their careers back on track. Some of these people will have the talent and experience to select from multiple job offers. One strategy that has been effective for employers we know is to hire more senior technical personnel with legacy skills and retrain them. They know most everything there is to know about software development practices, how to develop quality code, how to prevent bugs, etc. Many of these people would join a company at a reasonable annual salary if they knew that they would be retrained and then advanced in position.

An employer who doesn't respond to the changing marketplace (a) will not attract the highest quality candidates, and (b) will frequently lose the ones they have. Human resources managers, CTOs and engineering

managers would be wise to **re-assess career growth paths** within their own companies.

A company's own technical employees are its best ambassadors. Therefore, a company has to do everything possible to **make the work environment and rewards as attractive as possible**. This not only draws new employees, but it also motivates its current employees to recruit for the company. Here are suggestions:

- Offer compensation packages that include benefits technical people consider desirable. As a note on compensation, we find **IT salary surveys are too often useless**; they treat technical talent as a canned commodity and ignore the hard fact that talented IT professionals know what they are worth and will frequently command more than a salary survey suggests. To understand that talent is not a commodity is to have a mindset for attracting the best.
- **Institute better development processes** and, *where it makes business sense to do so*, migrate off legacy technologies onto new ones, especially where these will benefit the company with long term cost-savings. In Stout's own consulting business service, we find this is the most significant source of improvement in a company's efficiency and bottom line. In general, technical people do not like to be working with out-dated technologies and they really don't like to work in an environment that discourages quality development practices.

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CLOUD COMPUTING—SPEEDING UP SOFTWARE ADOPTION

BY BILL HEITZEG — BILLHEITZEG@STOUTSYSTEMS.COM

I attended a pre-proposal meeting recently where a very large company was asking their vendors and other interested parties to comment on and ask questions about their software selection process. A group of five in-house managers had been assigned to create this process and the written specification. Now the five of them were present to attempt to explain and clarify the written document we all had in our hands. For a little context, the audience was composed primarily of high-level managers representing vendors or their supporting partners. They seemed strong in understanding the proposal from both the financial and business implementation perspective.

Very early in the extended Question and Answer period, the issue of Cloud Computing came up. The preliminary spec was asking that the next generation of software be more “Cloud-like.” The audience was obviously looking for clarification. Remember this wasn’t a technical audience and even if it had been, the specification wasn’t really clear. The moderator of the panel asked if anyone else on the panel could explain Cloud Computing. No one volunteered. The audience laughed a bit. He smiled and then asked if anyone in the audience could give us a brief definition. Dead silence. He smiled a little wider and said, “Does anyone here know anything about Cloud Computing?” That was it for me. I had to put my hand up.

I explained to the room that Cloud Computing is the idea of delivering common business applications like word processing, spreadsheets, contact management, and so forth online, accessed from a Web browser. The applications and the data are stored on servers that are somewhere on the Internet—hence the concept of the cloud. A person or a business should be able to see the computer world as a cloud, where users can pick and choose from the applications and services they need and want at the moment. I then went on to describe some of the current business models that were out there. I finished by talking about the current public offerings like Amazon, Google App Engine and Microsoft Azure. I was kind of proud of myself for trying to connect with them on a business level

and from comments I later received, I think what I said was helpful. Unfortunately it didn’t really address the specification or a real need by this group. I didn’t realize that at first, but as I sat down, I started really wondering what the panel meant by making the software more Cloud-like.

The company already has a first generation version software product. How is that product delivered? As a Web application. Since one great example of providing software on-demand as a service is a Web application, the existing product is already on track as being “Cloud-like.” Even more strange, the ultimate users, a number of in-house business units, pay only for what they consume. This is very much according to the Cloud Computing “metered service” approach. Yet despite these two critical Cloud elements, they needed the next generation to be more Cloud-like?

So what was I missing? What part of the Cloud model were they talking about?

As the meeting continued on into the afternoon I kept getting little bits and pieces of information. I talked to three of

the five panelists personally. I even took a five-minute break to read the Wikipedia article on Cloud Computing and do a little Web research. I’ve been an active developer of Web Services and Web Applications for almost six years now, so I feel I’ve been a genuine contributor to the current Cloud infrastructure. Never-the-less, I left the meeting convinced that I hadn’t really understood what piece of the cloud they were missing.

A few days later, as I was reading my *n*th article on the Cloud, I stumbled across the part of the Cloud with which they were having a problem.

At the meeting I had been told something by one of the panelists about what it takes for a business unit to adopt this software.

The company requires its business units to use software only from vendors who are on the “approved” list. This



Cloud computing sound too technical to you? Ok, it's a little technical, but really it's an important business model, so we encourage you to bravely read on...

requires a time consuming evaluation period including things like face-to-face presentations and pre-scheduled software evaluations. Mind you, this is even for a Web application that is hosted off-site and uses a pay-as-you go model. When a business unit chooses a new vendor they need it to work with their own back office accounting and their own business rules, so for each "roll-out," the vendor and business unit have to customize for the unit's back office. To be clear, every business unit has one or more of its own unique back office applications.

So here we have a metered, no-install Web application, but it can take over a year to adopt? It's crazy really. I think the Cloud piece that they need next is the adoption piece.

Adoption is a key element of the Cloud. A Cloud offering needs to have the quickest and most efficient adoption possible. Any Cloud offering should aspire to little or no adoption time. This allows for the end user to turn on a dime and change to another software offering in the blink of an eye. If they can't do that, then the software that they are using is bound to become stale.

To me, there are two problems to solve. First, the evaluation period needs to be cut down. Second, the back-office customization needs to be dragged into the Cloud age.

I would replace the current evaluation with an iPhone App Store approach. When a vendor submits its software for review it goes through a set of automated tests to ensure compliance. If the software passes the tests, then after some small subjective evaluation (1 or 2 hours at the most) the software is placed into the hands of any and all business units.

Addressing the back office seems pretty straight forward. Even though each business unit has its own back office, there really is only so much information available from the vendor software, so to me, that's where to start. Build a Web service into the vendor's software that allows any and all back offices to request and receive the information they need. To me, this would be a simple W3C compliant Web Service. This

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"channel" into the needed back office information would be part of the specification, and to be considered compliant, each vendor would have to implement it.

The first migration would still be difficult, but a lot easier than it would have been. Just using a standard Web service makes things go smoother, speeding adoption and reducing errors. The real advantage though is that once this back office connection has been written, the business unit can switch to another vendor in the blink of an eye.

With adoption effort, time and cost down to almost zero, a business unit could quickly change from one vendor's software offering to another easily. This gives the business units a real advantage economically. It also is very helpful to the vendors as well. Vendors who give a good presentation and do good customization work aren't always the ones with the best software offerings. With an inexpensive adoption model, vendors can focus their efforts on getting their software right and keeping it fresh into the future.

I was kind of skeptical of the Cloud model up until this experience. Not because it doesn't make sense, just because it seems more of a buzzword than anything. Strangely enough though, when I was forced to look at this project from a Cloud perspective, I discovered something very useful. The Cloud means many things to many people, but when you look at something like software adoption, I think most would agree that zero-effort adoption is definitely the Cloud way.

Bill Heitzeg is a Business Development and Technical Services professional with Stout. In a career that includes roles as an engineer, programmer and chief technologist, he led teams to success on a number of challenging projects including distributed Web-based systems and high-speed information processing. For the past several years, Bill has also been a business development pro, and is expert at filling the gap between how technical services are sold and how they are implemented.

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• **Institute training programs** for employees, especially on new technologies and methodologies. This could be in-house training or company-supported seminars.

A company must have **descriptive job postings** designed to interest talented job seekers. Too many ads that Stout's recruiting and staffing pros see are written with a "seller's market" attitude. An ad must be written to *market* how great the job is. An ad should speak to how exciting the project and technologies are, how progressive the company is technologically, emphasize the quality of the work environment and location, and how great the benefits are—while, as much as space permits, providing specifics about each of these points. Note that, by our own surveys of employment candidates, the technology and location points are key.

It also never hurts to better connect with and support the local software community. This means a company should **get more**

visible to the people it needs to attract. No one will have stronger credibility with other technical people than a company's own techies, so have them attend networking events, user groups and technical society meetings; one company I know rewards their "spokespeople" with gift cards for attending such meetings.

In summary, it is vital to understand that, despite less-than-attractive national unemployment numbers, jobs are not scarce in every sector. The companies that recognize that IT is *not* one of those suffering sectors will have the jump in the competitive hiring market.

John W. Stout is the founder and president of Stout Systems. With 30 years' experience in the computer industry in a variety of roles, he is an advocate of the effective communication of technology issues and objectives.

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MOBILE APPS: MOVING BUSINESS



One sector of the software industry that is increasing significantly is that of mobile applications. It is expected by some experts to rival the earlier

explosive growth of the Web. To better understand and support that growth, Stout Systems recently co-sponsored and contributed to a Detroit-area industry event titled *Mobile Applications: The New Platform that is Moving Business*. The event was held at Automation Alley headquarters in Troy, MI. John W. Stout, Stout's founder, was Master of Ceremonies for the event and also spoke about Stout's many experiences producing applications for the iPhone. The event was well-attended and, most importantly, very well-received by a large audience that included decision-makers from a number of local companies and organizations.



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