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# Navigating Your IT Career

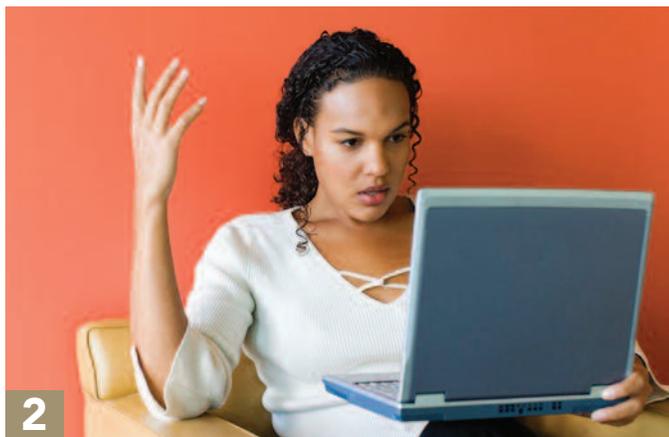
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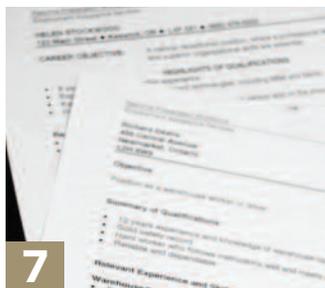
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# contents

## Navigating Your IT Career



This content was adapted from Internet.com's Datamation, ServerWatch, and IT Career Planet Web sites. Contributors: Drew Robb, James Maguire, Deb Shinder and Katherine Spencer Lee.



**2** For IT Workers, How Bad Will It Get?  
*James Maguire*

**5** Recession-Proof Your IT Gig  
*Drew Robb*

**7** IT Job Hunt: Standout Cover Letters and Resumes  
*Katherine Spencer Lee*



**10** Three Job Hunting Makeovers That Won't Cost a Dime  
*Drew Robb*

**12** Surviving the Technical Interview  
*Deb Shinder*



**19** How to Not Get an IT Job: 10 Tips  
*James Maguire*

## For IT Workers, How Bad Will It Get?

By Jennifer Zaino

It was with no small alarm that I perused a monthly Dice tech job report this past fall. Published on Nov. 11, it showed that Dice listed 75,640 IT jobs. That seems like a nice healthy number – until you realize it typically hovers around 90,000.

Still worse, looking at the site on Nov. 20 I saw the total had fallen to 70,811. Such a steep drop in such a short period – what's going on?

Tom Silver, Dice's chief marketing officer, told me that the fall was a rough season for job postings. While Dice's job postings were down 20 to 25 percent from the previous year, for most of 2008 the site had its usual 85,000 to 90,000 job listings. "Roughly half of that decline has been in the last four weeks," he said in November.

The figures from outplacement consultancy Challenger, Gray & Christmas are similarly grim. The firm reports that tech job cuts surged in the third quarter of 2008 and now threaten to reach the highest annual amount since 2003, when cuts totaled 228,000. Through October 31 of last year, job cuts by telecommunications, electronics, and computer

industries totaled 140,000. Almost two-thirds of those losses happened since July.

What's disconcerting is that these cuts aren't, say, unskilled retail jobs that are unstable by nature. This is a sharply slowing job market among some of the most educated, skilled workers. Workers that hiring agents perennially complain that they can't find enough of. (Which is why, they explain, they look overseas.) Apparently they're not as hard to find as they used to be.

Which begs the question: how bad is it going to get?

Dice's Silver, who keeps close tabs on IT hiring trends, calls it a major unknown.

"The uncertainty is fairly widespread and nobody really has any sense where this thing bottoms out," he says. "For the near term,

anyway, things are going to be fairly slow as companies assess where they can cut back."

Given the state of the economy, it's no wonder that the downturn has dragged tech down with it. "One needs only to open up a newspaper to know what's happen-



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For the near term, anyway, things are going to be fairly slow as companies assess where they can cut back.

## Navigating Your IT Career

ing in the environment," Silver says.

To be sure, the current cuts are nowhere near the horrific bloodletting of 2001 to 2002, when a staggering 1 million plus tech jobs were axed. (695,000 in 2001 and 468,00 in 2002, according to Challenger, Gray & Christmas figures.)

John Challenger, CEO of Challenger, Gray & Christmas, doesn't expect this downturn to be nearly as bad for tech as was the dotcom bust.

"In 2000-02, tech really led the way into the recession and was at the center of that storm," he tells me. "This time it's more about banking and housing and automotive – tech's been dragged into this instead of leading the way."

Yet as is often the case, IT staffers will bear a greater brunt than management.

"I think it will be worse for the rank and file workers. When companies have to cut they still may need a manger for the department," Challenger says. "But every area of the company can fall under the knife. So people really do need to prove they're essential, that if they were to leave there would be nobody else who could do what they can do."

"That's the surest defense – if you were to leave there would be a big gaping hole in the IT department's capabilities."

IT hiring, of course, correlates with IT spending, and expectations are muted at best.

"It does seem like it's getting worse right now, not better. Even the optimists don't think the economy's going to turn around until the spring," Challenger says. "Certainly business spending, which tech is so reliant upon, is challenged right now."

Stephen Minton, an IDC analyst, notes that the research firm has recently lowered its forecast for IT spending in 2009. Domestically, "Our new forecast is that the IT market will be pretty flat, either slightly posi-

tive or slightly negative...which is much lower than we've had over the last five years."

He points out that observers can extrapolate from this forecast that if companies aren't implementing as much new IT, their need for workers will be correspondingly lower.

There are, however, a couple of possible mitigating factors in the lackluster tech job market.

The dip in the Dice job numbers may be due partially to yearly seasonal trends, Dice's Silver says. "Some of that drop happens every year, particularly in tech."

The fall off in job postings typically starts in mid-November and runs through the holidays, usually picking back up in January

The fall off in job postings typically starts in mid-November and runs through the holidays, usually picking back up in January, he says. Both IT recruiters and workers often put plans on hold in this period. Workers, in particular, want to stay with their current employer long enough to collect their year-end bonus.

"At least 5 to 10 percent" of the autumn drop was due to seasonality, Silver says, while noting that his calculation has an element of

speculation in it.

And, while Dice's numbers suggest a cold wind blowing through tech hiring, the fact remains that IT unemployment is markedly lower than overall joblessness. The national unemployment rate has spiked up to 6.5 percent and is trending higher. But IT unemployment sits somewhere around 3.5 percent, based on the latest Bureau of Labor statistics. "It's all relative," Silver says.

One indicator of the health of IT hiring: the ratio of job openings that are full time vs. contract openings. Dice's tech openings are typically 70 percent full time, 40 percent contract. (The overlap is because some jobs are listed as "either or both" full time and contract.)

Silver predicts this ratio will change. In a recessionary environment, employers lean toward contract hires, fearing the risk of bringing on full time staff. "That's what we saw back in 2002," he says.

## Navigating Your IT Career

"I would expect to see, probably over the next 6 to 12 months or so, an increase in the number of contractor positions."

Companies assess which major projects can't be postponed and hire a crew of contractors accordingly. When the project is done the IT pros typically get a 'thank you' and are sent home, though there's always a possibility the assignment turns into full time.

Amid the gathering gloom, a few bright spots still exist. Surprisingly, some smaller markets continue to see increases in job openings.

Silver says that while major markets like Silicon Valley, New York and Washington DC, which have thousands of jobs, are down heavily, secondary markets, cities with around 1,000 jobs, are up, if modestly. And sometimes

not so modestly. Cleveland and Cincinnati "are up by over 20 percent," he says. If you're willing to relocate, the openings are still out there.

Similarly, certain sectors continue to look okay. Specifically, the virtualization job market. "Granted, it's still small," Silver says. Yet virtualization will continue to grow as companies seek to improve their efficiency. CIOs looking for payback in a 12 to 24 month project are willing to consider virtualization even in a belt-tightening period.

Silver also notes that some of the most commonly hired positions – he points to Java Programmer and Database Administrator – are retaining their value in the marketplace. "They are declining but they are still among the most popular." ■

## Recession-Proof Your IT Gig

By Drew Robb

Sadly, an awful lot of IT staff got jettisoned as the big financial companies shed staff in record numbers in late 2008. There have been plenty of job losses strictly within the technology sector, too, in recent months.

This is not a good climate to be looking for work, and the bloodletting is far from over. More casualties are likely in the coming months.

### Doubling Up

Say you have been a backup administrator since the Middle Ages and know that field inside out — or you are a server manager specializing in UNIX. In a tight market, it's critical to broaden your skill set. Add in a new platform such as Linux, or an extra facet such as SAN management, or perhaps something completely different like security expertise.

This applies equally to those still fortunate enough to have work. If you widen your scope enough, maybe you will be retained while others are let go. Similarly, if you don't have employment, adding to your skills can only help your resume.

There are many ways to go about this. Lots of good certifications are available from a wide range of industry bodies. Vendor certifications can also be valuable. Going back to school evenings, if you are employed during the day, is another possibility.

It might also help to get some real-world experience to back this up. Volunteer to do IT for a non-profit, church group, or society, and learn your new field in a non-critical environment. After a few months, you'll have figured out the basics and be well on your way to mastery. This also gives you something sensible to say to those embarrassing questions about how you've been spending your time since your last job. Your answer may even seal the deal.

As far as what skills to add, take a deep breath — the answer may not appeal to you. A recent study by career site Jobfox found that recruiters are most often looking for sales people and business development personnel. Now, if you "hate" sales, maybe it's time to reconsider. Take a sales course and gain some sales experience. You don't have to become a sales rep. There are loads



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If you widen your scope enough, maybe you will be retained while others are let go. Similarly, if you don't have employment, adding to your skills can only help your resume.

## Navigating Your IT Career

of pre-sales, sales engineering, and sales support positions around that demand a high degree of tech savvy. By marrying your existing skills with a little sales know-how, you automatically become more employable.

For example, many vendors have skilled individuals in presales who help customers with product demos or setting up test environments inside their own data centers. Such jobs come under the sales umbrella but don't necessarily demand a lot of direct sales. Similarly, there are sales positions designed to ensure a smooth implementation. You grease the sales process by setting up a new system in the customer's environment and stay alert for upsell opportunities. These positions require the ability to interact with customers and listen

to them, as opposed to the ability to close million-dollar deals.

For those who really don't want to venture beyond the tech perimeter, the top purely tech positions most in demand at the moment are software design and development, followed by network or system administration, and then IT executive positions, such as CIO or CTO. Adding any of these zones to your current talents could pay dividends. A network admin could perhaps consider learning system admin skills (and vice versa) as a way of increasing value to the organization or a prospective employer. ■

# IT Job Hunt: Standout Cover Letters and Resumes

By Katherine Spencer Lee

IT employers may receive many responses to their job ads, but finding professionals with the necessary skills remains difficult. In fact, in a recent Robert Half Technology survey, CIOs identified "finding skilled technology professionals" as their No. 1 challenge. This may be due to the fact that so many highly skilled IT job candidates fail to present themselves adequately in their cover letter and resume.

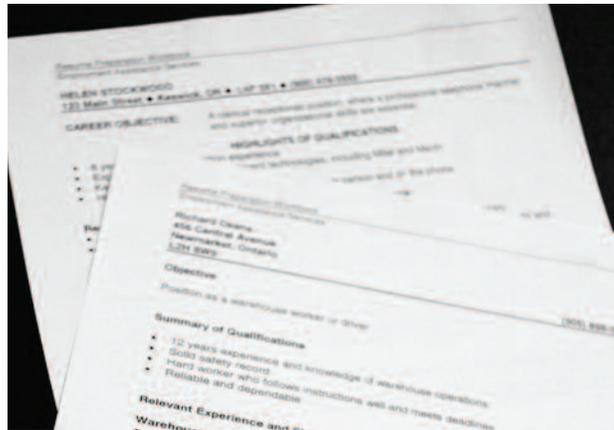
## The Cover Letter: A Firm Handshake

The cover letter is a crucial but often overlooked part of setting yourself apart from the competition. As the job application process increasingly moves online, you might be tempted to think a formal cover letter is no longer necessary, but that's not the case. In another survey by our company, 86 percent of senior executives said cover letters are valuable when evaluating job candidates.

If you skip the cover letter or treat it as an afterthought, you miss a great opportunity to stand out – and give

hiring managers a reason to bypass your resume. So what makes a good IT cover letter? Here are some tips:

- **Submit smart.** When applying through online job boards, always choose the option to add your cover letter to your resume. When e-mailing application materials to a hiring manager, paste your cover letter within the body of your message.



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- **Name names.** Address your letter to the specific hiring manager rather than using a generalized introduction. If you don't know the person's name, call the company and ask.

- **Keep it brief.** Hiring managers don't have time to wade through your life story. Limit your cover letter to one well-spaced page if printed, or a few short paragraphs if submitted in the body of an e-mail.

- **Target the opening.** Research the company and demonstrate how your specific skills, knowledge and work history fit the job and could benefit the organization.



If you skip the cover letter or treat it as an afterthought, you miss a great opportunity to stand out – and give hiring managers a reason to bypass your resume.



- **Explain any gaps.** If you have any lengthy employment gaps, note how you filled the time. Mention professional development courses or self-training that show additional efforts to keep your skills current.
- **Stick to the facts.** Never stretch the truth to make a strong impression. Provide concrete examples of how your work contributed to your previous employers' bottom line.
- **Look ahead.** Demonstrate your enthusiasm and interest in the position by identifying next steps such as, "I'll follow up with you next week to discuss meeting in person," at the end of your letter, and then make sure you do.
- **Read and reread.** Just as you would scrutinize your resume, take time to review your cover letter for typos and grammatical errors. Have a friend or mentor read it as an added precaution.

### The Resume: A Clear, Compelling Story

Of course, a promising cover letter will be quickly forgotten if it's not backed up by an equally well-crafted resume. Many of the cover-letter tips outlined above apply to resumes – especially the importance of targeting, clarity, brevity and, above all, honesty.

#### Here are a few additional pointers:

- **Lead with an objective.** At the top of your resume, include a short statement outlining the type of position you're seeking, along with two or three credentials that qualify you for the role. Concentrate on the value you can bring to the company and what the firm will gain from hiring you, not the expectations you have of the position.
- **Focus on business contributions.** A strong IT resume isn't just a list of facts and technical skills – it should paint a portrait of what you can do for an employer. For every position you've held, list several specific achievements and explain how each benefited the company.
- **Use keywords.** Your resume may be scanned into a database and searched for keywords relevant to the job you seek. Including keywords that match phrases

## The Growing Need for Business Skills

By Lynn Haber

When you get right down to the nuts and bolts of today's IT job market, technical skills alone aren't enough. Employers want IT professionals with equal parts business savvy and technology expertise. In short, differentiate yourself by understanding both the business your company is in and the customer it serves.

The days of the IT department silo are gone. IT professionals who bring together the business role and technology role are best suited to be the business problem solvers for the company's tech division.

"It's not technology first, business second, anymore," says Ian Ide, partner and general manager of the New York technology division of Winter, Wyman, a recruitment firm.

As you move up the ranks of IT professionals, there's more of a requirement to understand the business and be able to interface with business units. As strategic players in the organization, CIOs and CTOs have always had to understand the business. This requirement, however, is trickling down to other IT players, as well.

"If you're working on e-commerce for Gucci or Amazon, you have to understand how that world works; if you're building an accounting or other type of internal application you have to be able to interface with the business units to know what to build; if you're building the company Web site you need to understand the consumer and the interface...we see the need for business knowledge across the board for IT professionals," says Ide.

Certain industries, such as financial, healthcare and retail, for example, that have their own jargon and unique business processes are more likely to seek candidates with industry-specific business knowledge.

IT professionals don't need a MBA degree to get ahead – although it can be a real plus for those who have it – but they must be able to align technology to business goals and customer needs.

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## Navigating Your IT Career

from the job description in your application materials is also a good way to catch a hiring manager's eye. For example, if you're applying for a job that requires Java expertise, include the word Java in your resume and highlight projects you've worked on that entailed extensive use of this application. Don't go overboard, however, or your resume may become difficult to read or sound too repetitive.

Among IT job candidates, the combination of a concise, targeted cover letter and resume is a surprisingly rare one-two punch. By taking the time to craft these application materials for each of the positions you apply for, you encourage hiring managers not only to take notice, but also to view your skills and experience in the best possible light. ■

### Avoiding Outsourcing

The close integration of technology and business knowledge is probably what keeps certain technology jobs from being outsourced. "The roles that we see are those that do require business savvy as a key component," says Peter Woolford, market manager at Kforce Inc., a professional staffing firm in Boston, Mass.

Finding the IT professional with the right combination of tech skills and business knowledge today isn't easy. Companies, however, are willing to wait, says Woolford.

"There's been a trend over of the last couple of years to leave the IT positions open, sometimes for three to six months, in order to find the right person," he says.

In the best of all worlds, companies like customer service-centric Litle & Co., an independent payment processing company based in Lowell, Mass., would be able to find IT professionals capable of moving seamlessly between the business and IT sides of the business. But today, that individual is a rare find.

So Litle requires that all of its employees attend Litle University to learn about each department in the company and how it serves its customers.

That includes IT personnel. "We train our developers on both the business side and the engineering side," says Jason Pavona, vice president product management at Litle. "We mandate that our engineers understand our business so they build better code," he adds.

Using agile software development, engineers at Litle move quickly. "But it means our engineers must have an understanding of our business, our merchants and our customers," says Pavona. Agile software development, in essence, breaks projects into small parts, which results in a fast-paced environment with new releases coming out once a month compared to once a year with more traditional development methodologies.

### Getting There

Industry experts agree that business knowledge is best acquired on the job.

The ideal path to developing business savvy is to target the industry you want to work in early on and leverage the experience over time, suggests Ide. "Then volunteer on projects that bring in new technology," he adds. Building on specific industry experience will ease the transition to another job.

Companies look for IT job candidates with experience in their industry.

It's not too late to get started. "There's no question in my mind that this will be an ongoing trend and spread even deeper into the IT department," says Ide.

## Three Job Hunting Makeovers That Won't Cost a Dime

By Drew Robb

You hear much about makeovers these days. Stars getting a new look. Even regular 30- and 40-something people being jarred out of that "Breakfast Club" or "Miami Vice" image. Well, how about a makeover for the IT job market seeker?

This doesn't necessarily mean a new hairdo, a visit to the dentist or an updated wardrobe — although they might play a part. What we are talking about is an employability makeover.

### Attitude Makeover

Understandably, there's a lot of fear in the marketplace these days. From stocks crashing to mortgage bailouts to talk of a lengthy recession, it isn't the best of time to be looking for work (or searching for a new gig).

Recently, that news was worsened by announcements of impending layoffs by American Express, Fidelity Insurance, and many others in the financial sector, as well as the technology sector. This can make it seem hard to either keep an existing job or find a new one.

One thing that has been observed over and over again

is the fact that those with a positive outlook tend to do better than those who swim in self-pity, self-doubt, or the idea that something can't be done. This doesn't mean you should go around with a fake smile or a pretend personality. But time and again, negative attitudes are paralleled by negative actions. In other words, those who conceive great difficulty in finding a job are giving themselves ample justification to not bother even trying.



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Perhaps the person has been battered down by months of fruitless endeavor. After sending out many resumes, or failing to land any of the many jobs interviewed for, frustration is inevitable. But if it gets you down so much that you can't bounce back, your chances of getting something are severely hampered.

Instead of complaining about how bad it all is or letting rigor mortis set in, do something about an area you can control — yourself. Ask yourself a few simple questions.

- How many jobs have I applied for in the past month?
- How many resumes have I sent out?

“ Instead of complaining about how bad it all is or letting rigor mortis set in, do something about an area you can control — yourself. ”

## Navigating Your IT Career

- How well did I prepare for those last interviews?
- How can I improve myself to make myself even more employable?
- Do I exude negativity to such a degree that I put people off — even friends and long-time associates?

Be honest. You might be surprised about what you discover.

Do something to jar yourself out of apathy. Whatever it takes to renew the batteries, do it. Attack the job market again with gusto. Your enthusiasm to get to work telegraphs itself to others more than you know. So be positive and really decide to get a job. Then, make sure that you are actively working on achieving that goal every day.

I don't mean think about it or idly look at a couple of job sites each day. No. Treat getting a job as though that is your job. Spend all your days working on getting back to work. Call friends and old associates, send out resumes, send letters and e-mails. Knock on doors if it makes sense to you to do so. Hard work in the realm of finding work greatly increases the chances of success.

### Resume Makeover

That tired old resume of yours may be the problem. If it isn't netting you any interviews, it might be time to have a friend or professional review it. Start by eliminating all typos. Perhaps you also need to get away from the drab old timeline or single-page format. The point is to do something to jazz it up so it makes it through the keyword scanner and catches the eye of an HR recruiter.

Another good tactic is to tailor each resume to each specific application. Tweak the content so it shows how you fit that job. Move the most relevant sections front and center. Your resume is a sales tool. Use it to gain you more interviews.

### Networking Makeover

If you aren't finding work, it's also likely that your networking skills have gotten stagnant. Maybe your approach was successful a decade ago when you were last on the market. Times change. Invest some time in studying the job market. Read articles and books about it. Find out what the latest networking gurus are saying. Join a couple of clubs that might forward your goal. Enroll in a course or two to make yourself more employable — and use that venue to find more job possibilities.

If you don't have a profile on Facebook or LinkedIn, get on them, and put as much care into your online presence as your paper one. These sites offer a host of networking resources from connections that can be both made and easily re-established as well as job postings.

In short, find a way to open up new lines of communication if the old ones aren't working. Go to trade shows, maybe even show up at a high school reunion and find out who is in your field. Volunteer to help in a related area and do a great job. Speak at an event. Do something to heighten your visibility and gain attention from the people who might hire you. Enterprise in networking is what it is all about. ■

# Surviving the Technical Interview

By Deb Shinder

It seems there is no quicker way to strike terror in the heart of an IT professional (or aspiring IT pro) than to speak those ominous words:

"First, you'll need to pass a technical interview."

I've had students who were at the top of their network training classes call or write to me in a panic, asking what to expect. As if a job interview weren't nerve-racking enough by itself, when you add the word "technical," it becomes a whole different -- and even scarier -- prospect. This article will, I hope, help you to overcome your fears and doubts about the process and tame the tech interview beast.

Before I get into the how-to's, though, I have a confession to make. Even though I've sat on the other side of the interview desk on many occasions as the hiring authority, even though I enjoy the chess-like game of strategy of the job interview situation, even though I am -- after building a highly successful IT business

along with my husband, teaching hundreds of students in computer-related courses, and with 11 IT books published -- pretty confident of my skills and knowledge, I still dread the "technical" interview.

## A Fact of Life

But it's a fact of life in this industry, so it's important to learn our ways around the tech interview, anticipate some likely questions (or types of questions) that we'll encounter, and understand what the technical interviewer is really looking for (contrary to what you may feel during the interview, most are not sadists who stay up nights thinking of new ways to torture job applicants with obscure and convoluted interrogatories).



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## The Purpose of the Technical Interview

The purpose of the technical interview is ostensibly to evaluate your level of knowledge or skill in the topic

The purpose of the technical interview is ostensibly to evaluate your level of knowledge or skill in the topic areas relevant to the position for which you're being considered.

## Navigating Your IT Career

areas relevant to the position for which you're being considered. However, there's more going on in most interviews than that. In reality, as you struggle to explain the differences between DHCP and BOOTP or frantically search your memory for the best definition of "asynchronous," your interviewer is likely to be judging you on any or all of the following:

- First and most obviously, how much you know about the hardware, operating systems, applications, and/or networking technologies with which you would be working.
- How articulate you are, especially for a position in which you may be called upon to write reports or documentation, or give presentations to users or upper management.
- How poised and personable you are, especially in a position like tech support or network administration, where you will have to deal with many people at all levels of the organization.
- How well you handle stress, especially if the position is in a high-pressure, time-sensitive environment.
- How innovative you are; that is, whether you're able to "think outside the box" to come up with new solutions rather than just spout the party line of the moment.
- Whether you've had hands-on experience with the products, or you only know the "factoids" you read in books or learned in a classroom.
- How vendor-centric you are; that is, whether you only know one product line for example, Microsoft or Novell, or have a broader base of knowledge that is necessary in today's modern "hybrid" network environments.
- How willing you are to take on extra duties or work overtime when necessary; how much pride you take in your work and in doing a good job.
- How well you balance ambition and leadership with

the ability to follow the instructions and defer to the wishes of management, even if you disagree.

- How loyal you'll be to the company.
- How honest you are (including whether you're able/willing to say "I don't know" when you don't know the answer to a question).
- Whether you have the wherewithal to find out the answers to those questions and the solutions to those problems that you don't know.

Wow. That's a whole lot of evaluating going on. No wonder technical interviews make us so nervous.

“  
How enthusiastic do you seem? Do you project an image of someone who really wants the job?  
”

Now that you're aware of some of the underlying purposes of the interview, you should go through the list, and consider how you can tailor your answers to positively impact the interviewer's impressions in each of these areas. Obviously, "knowing your stuff" is mandatory, but that alone is not enough to get you through the interview with flying colors.

### Practice Makes Perfect

Practice your interview skills with a technically-savvy friend or ask yourself questions and then practice your answers in front of a mirror. Videotaping your practice interviews can be an extremely useful aid. Although you may be embarrassed the first time you watch yourself "perform," you may be amazed at the little nervous gestures or speech habits (for instance, a peppering of "you knows" or "I means" or "umms") you weren't aware of before.

As you review the tape, ask yourself questions like these:

- How enthusiastic do you seem? Do you project an image of someone who really wants the job?
- Does your body language send undesirable signals (i.e. slumped posture that indicates laziness or sloppiness, or shifty eyes that might be interpreted as a sign of dishonesty)?

- Do you respond clearly and confidently when you know the answer to a question?
- If you don't know the answer, do you say so in a straight forward manner, without being overly apologetic or appearing perplexed - and then tell the interviewer what steps you intend to take to go about finding the answer?

Once you've identified the problems, you can work on correcting them. Make additional tapes so you can see your progress. As you watch, ask yourself honestly whether you would hire yourself, based on the impression you make in the interview.

Unfortunately, your actions and words and personality are only one part of the equation, and whether they add up to a job offer or rejection may also depend in part on the personality of the person conducting the interview. We'll consider how you can size up the interviewer's personality type and mood, and how this information can be used to "fine tune" your responses later.

### Types of Questions Commonly Encountered in the Tech Interview

A technical interview typically goes beyond the usual "tell us about your background and experience" of a regular job interview. It may also include questions that have nothing to do with computer hardware and software, designed to measure your logic, reasoning and general problem-solving skills. Some of the biggest IT employers are notorious for this tactic, and it's these "brain teaser" questions that often throw the inexperienced interviewee for a loop.

### Why Are Manhole Covers Round?

Famous (or infamous) examples include such questions as "why are manhole covers round?" (Because a round cover with a lip cannot fall into the manhole. A square cover could be turned diagonally and dropped into the square hole.)

Many of these are more involved, such as the old "fox, chicken and grain" scenario that goes like this: a man has a boat and wants to transport a fox, a chicken and a bag of grain across a river. There can only be one item in the boat with him at a time. He can't leave the fox alone with the chicken, or the chicken will be eaten. He

## The IT Skills in Highest Demand

By James Maguire

**T**hese are good days to be a network administrator or a desktop support specialist. For that matter, wireless network pros and Windows gurus are also feeling the love.

As seen in the survey results below, IT professionals with certain skills are in deep demand. Robert Half Technology, which provides firms with IT staffers on a full-time and contract basis, surveyed 1,400 CIOs about what skill sets they're most urgently seeking.

As you peruse the results, notice how they reflect the IT world in its current form and its future direction.

For instance, it's no surprise that Network experts or Windows administrators are in demand. They form the backbone of today's enterprise IT department; likewise with desktop support. Could the rank and file navigate their e-mail account without a helping hand?

Take a look at the high demand for Web development experts – despite that fact that many companies don't actually sell online. The growth of software-as-a-service and the incessant movement of business toward the Internet keeps these experts well compensated.

Two of the hot jobs are essentially one job: Wireless network management and Telecommunications support. The enterprise is increasingly not only a physical place but a conceptual destination to log-in to remotely. (This trend, along with software-as-a-service, begs the question: will anything IT-related still reside within the enterprise walls in a few years?)

The survey reveals that .NET and Java continue to be mission critical development environments, regardless of influential skeptics who feel Java is grossly overrepresented in college classrooms.

*continued*

can't leave the chicken alone with the grain or the grain will be eaten. How does he get them all safe and intact to the other side? (We'll provide the answer later).

Many technical job candidates come out of interviews mumbling "What in the heck do foxes and chickens have to do with administering an XP/UNIX/NetWare network?" Believe it or not, your ability to analyze a problem such as the one in the scenario, mentally evaluate your options, and come up with a solution has a lot to do with network administration. If you can't think through and apply logic to a simple non-technical fox and chicken problem, how much more difficult will it be to troubleshoot problems that also require extensive technical knowledge?

### You Don't Have to be Correct to Be Right

In addition to logic questions, you will probably be grilled quite intensely about specific technical topics. If you have an IT certification such as MCSE, CNE, or CCNA, your interviewer will probably be looking for answers that show you've done more than the "right answers" for the certification exams. In fact, a savvy interviewer will use his/her knowledge of the exam questions to try to trip you up.

The key here is not to try to pass yourself off as having more experience than you really do. In today's tight job market, people with "paper certs" do get hired - and if they've been honest upfront about their experience level, they can get valuable training and work their ways into excellent, high-paying positions. On the other hand, those who misrepresent themselves often get thrown into situations they can't handle and end up being "let go." Remember that one of the things your interviewer may be evaluating is how honest you are. Nobody is eager to hire a liar.

### Treat the Interview Like an Exam

However, it's not dishonest to do all you can to present yourself in the best light possible. And it's not dishonest to study for your technical interview. Review technologies with which you're less familiar, if you think they may be discussed in the interview. For example, if you've been working for three years in a pure Microsoft environment, and you expect the technical interview to include some questions about NetWare or UNIX,

And all hail the newcomers: Virtualization, the server-stretching technology that several years ago most CIOs weren't thinking about, is now needed by a third of companies. And Open source development, which just a few years ago wasn't on this list at all, is in demand by about one in five firms.

On a related note, the survey asked CIOs what they're doing to "address the challenges of locating skilled IT professionals." The most popular fix (28%) was to hire less experienced people and train them. Other common solutions included providing current staff with incentives to boost their productivity (26%) and using contract or project-based IT staff (20%). Oddly, 5% of the CIOs answered "don't know." It's safe to assume they're not getting the most from their staff budget.

CIOs were also asked which techniques they found most effective in improving IT staff retention. Naturally, the top option was increased compensation (27%), followed by professional development and training (21%) and offering flexible schedules (18%). Again, strangely, a solid 11% answered "don't know." Given that talented staffers have choices in even a tough job market, that's a troubling answer for the companies those CIOs work for.

CIOs were asked: Which of the following technical skill sets are most in demand within your IT department?

(All the execs worked for companies with more than 100 employees; they were allowed to select more than one skill. The survey was conducted in September 2008.)

Network Administration (LAN, WAN)	70%
Windows Administration	69%
Desktop support	69%
Database management	58%
Wireless network management	47%
Telecommunications support	44%
Web development/Web site design	42%
Business Intelligence/reporting services	33%
Virtualization	32%
.NET development	22%
CRM implementation	22%
ERP implementation	20%
Linux/Unix administration	20%
Java development	17%
Open source development	17%
XML development	17%

there's nothing wrong with refreshing your knowledge by reading books about those technologies before the interview. If you can get your hands on a NetWare or UNIX box and do a little hands-on practice, that's even better. The more comfortable you feel with your level of knowledge and skill, the better you'll come across in the interview.

### Answer to Fox and Chicken Dilemma

The answer to the fox and chicken dilemma is really very simple, but many people puzzle over it endlessly because of their one-way mode of thinking. Here's the solution:

The man takes the chicken across first, leaving fox and grain together on the other side. He returns and gets the fox, but when he deposits the fox on the other side, he takes the chicken back across, so that the fox and chicken aren't left alone together. He drops the chicken off back on the other side, picks up the grain, and takes it across to deposit with the fox. Finally, he returns to retrieve the chicken and takes it to the other side.

At no time were the fox and chicken left alone together, nor were the chicken and grain. At no time was more than one of them in the boat with the man simultaneously.

The reason this puzzle is so difficult for many people is that it never occurs to them that they can take something back once they've transported it to the second side. Your ability to solve this puzzle demonstrates a willingness to think "outside the box" and come up with creative solutions that still fit within the specified parameters.

### Tips and Techniques for Surviving and Succeeding in the Technical Interview

Although it's fine to review some of the technical facts the night before your interview, staying up all night trying to "cram" is not productive. You should get a good night's sleep so you'll be fresh and awake and your brain will be working properly during the interview. Other do's and don't's include:

**Do:**

**Be on time for the interview.** "On time" means don't be late, and don't be significantly early, either. It's best allow yourself plenty of time to get there, just in case you hit a traffic snag or have to take a detour. If you don't encounter problems and end up arriving far ahead of time (more than 15 minutes), go find a convenience store and have a cup of coffee, or wait in your car for a while. While tardiness is a pet peeve of interviewers, most are just as put off by the candidate who comes in much earlier than scheduled and sits around in the reception area looking impatient.

**Dress appropriately.** Appropriate dress for an interview is not necessarily the same as appropriate dress for work after you get the job. Just how formally you should dress depends on the company atmosphere and the position and demeanor of the person who's interviewing you. It might be appropriate to dress up more if your interview is with the company president, than if it's with an "in the field" tech manager. It's better to err in the direction of too conservative than to dress too casually, but if you overdress too much (i.e. you're much more formally dressed than the interviewer), you may come across as stuffy and lose points. If you've researched the company and interviewer beforehand, you'll have an idea of what type of dress is most appropriate. That brings us to the next "do."

**Do your homework.** Many, many candidates go into interviews -- technical or otherwise -- "flying blind." If you don't care enough to find out about the company so you can talk intelligently about why you want to work there, why should the interviewer care enough to hire you?

**Follow up after the interview.** The end of the interview is not the end of your candidacy (unless you really bombed, and even then a good follow-up can sometimes turn things around). I have been told personally several times in my working life that the reason I got a particular job was because I was the only candidate who sent a follow-up "thank you" note to the inter-

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Many, many candidates go into interviews -- technical or otherwise -- "flying blind."  
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## Navigating Your IT Career

viewer, restating my interest in the position. It takes about five minutes and costs only the price of a postage stamp (and this is one instance where snail mail makes a better impression than e-mail), and can make the difference between coming out on top or getting that "we are sorry that your talents don't fit our needs" form letter.

### Don't:

**Overwhelm the interviewer.** It's great to be enthusiastic, but don't bubble with enthusiasm -- it's a quiet, professional sort of enthusiasm that you want to convey.

**Ramble.** Answer the interviewer's questions thoroughly and in appropriate detail, but don't veer off the topic to attempt to demonstrate everything you know about everything. Make your answers as concise as possible. On the other, don't:

**Answer in monosyllables.** For instance, "Have you worked with DHCP?" is not, despite appearances, a simple yes/no question. The interviewer expects you to follow your "yes" with examples of how you've deployed DHCP in a routed network, or how many DHCP servers you've configured, or how you implemented a DHCP superscope on a multinet. If you must answer "no," you should add (if true) that although you haven't had a chance to work directly with DHCP yet, you have studied the topic and know x, y and z about the protocol and when and how to use it.

**Let one mistake cause you to give up on the interview.** Everyone makes mistakes, but some candidates will stop trying if they realize they've answered a question incorrectly or incompletely, or didn't know the answer at all. If the interviewer corrects you, accept it gracefully and tell him/her that you appreciate the opportunity to learn something new. If you realize you've bungled a question but the interviewer doesn't mention it, you may want to bring it up at the end of the interview: "you know, I just realized that when I answered (whatever the question was), I was thinking about something else. A better answer to that would have been -" This lets the interviewer know that you

really do know the correct answer, and that you're honest enough to admit it when you make a mistake. Because employees who try to hide, cover up or deny their mistakes can be costly to a company, most interviewers will appreciate this quality.

This article has been based on the premise that your tech interview was of the on-site, in-person variety. However, there is another type of technical interview, conducted over the phone. Some of the tips we've given will be the same, but in some aspects, the telephone interview is different.

### Telephone Interview vs. In-Person Interview

You might think that having your technical interview over the phone would be easier than doing it in person. After all, you don't have to worry about under- or over-dressing.

In some ways, it is easier -- but you also lose some of the advantages of the face-to-face interview. Most crucial is the inability to observe the interviewer's body language for clues to his/her demeanor. Remember how we said up to 80 percent of what is communicated is based on body language? It's difficult to gauge the

response to your words when you can't see the interviewer. One result is that you must be much more careful about using humor, or deviating from the subject. You won't have the interviewer's physical reaction to signal you that it's time to get back on track.

### Expect the Unexpected

Another problem with the telephone interview is that it may occur unexpectedly. Many interviewers are courteous and will set up a specific time to call, but some will surprise you, phoning and wanting to do the interview right now, at a time that may not be optimum for you. This can be disorienting and even cause your mind to "go blank."

You may think that if you're interviewed by telephone, it will be easy to "cheat." You can have the books or your computer in front of you, and look up the answers

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It's difficult to gauge the response to your words when you can't see the interviewer.  
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to questions you don't know. You'll probably find, however, that it's very difficult to do this without the interviewer knowing. Unless you know ahead of time what the questions will be and have your books and WebPages marked and ready, it's going to take too long to look up answers for you to pretend you're not consulting a reference. And of course, if you know the questions ahead of time, you can go ahead and learn the material and not have to look it up during the interview.

### Dress For Your Telephone Interview

Finally, although a telephone interview may seem less formal and less intimidating than an in-person interview, it is just as important that you prepare for it, and that you present yourself well. To hire or not to hire -- it's not uncommon for that decision to be made based on a telephone interview. At the very least, the telephone interview will determine whether you advance to

the next step, which is usually an in-person interview. And the first impression that you make on the phone can pave the way to make that next step smoother, or it can be a difficult obstacle to overcome.

### Summing it Up: Survival of the Fittest

Surviving and thriving in the technical interview is both an art and a science. Interviewing is a skill, and as such, the more you do it, the better you'll get.

Finally, remember that if you don't get a job offer as a result of this interview, that doesn't mean the time was wasted. Consider it a learning experience. After all, many people pay good money for "practice exams" that allow them to get familiar with what the experience of taking a certification exam will be like. You got this "practice interview" for free - and if you're smart, you'll analyze it and use it to help you prepare for the next. ■

# How to Not Get an IT Job: 10 Tips

By James Maguire

You have IT skills and you have experience as a tech professional. You're even willing to take a shower and dress nicely for an interview. But you've seen some big fish slip away. Other candidates scored the IT positions you were after.

Or, you're sitting in your current tech job seriously thinking about switching employers, and you want to shape up your approach. You want to boost your chances that the phone will ring with a lucrative offer. Ring, baby, ring.

In either case, the following guide to tech job-hunting faux pas can help. By avoiding these mistakes, you increase your chances of increasing your salary. And that's a good thing.

So stop scouring the job boards for a moment and take a gander:

## 1) Put a generic objective at the top of your resume.

On a daily basis, hiring reps in Human Resources departments see about 10,000 resumes with an Objective or Goal at the top that is mind-bogglingly generic.

For instance:

"OBJECTIVE: To work for a dynamic IT company where I can experience career growth and work with a highly qualified tech team."



Jupiterimages

That piece of boilerplate says absolutely nothing about you specifically. Worse, it encourages bored, overworked hiring reps to place your resume in the dreaded discard pile.

"Having a very generic resume basically reveals that you'll take any kind of IT job that comes along," says Nick Corcodilos, a veteran IT headhunter and owner of AskTheHeadhunter. "You're applying for almost anything in IT you might be remotely qualified for."

To better romance an employer, your Objective should be tailored specifically for them.

Naturally this requires you to research your prospective employer's business niche. Then write your Objective with them in mind.

To better romance an employer, your Objective should be tailored specifically for them.

## Navigating Your IT Career

Such as:

"OBJECTIVE: To leverage my database programming skills to enable a growing IT firm to better target the small and mid-sized database application market."

Bingo! That's an arrow sent right to heart.

### 2) Make it clear you're unconcerned with the company's bottom line.

You're in deep danger of getting an IT job if, in the interview or cover letter, you emphasize your focus on company revenues. To avoid getting hired, pay no attention to business concerns whatsoever. Make it clear you're an IT expert — business is a subject you have only shuddering disdain for.

In many companies, the business dweebs exist in a separate armed camp from the tech geeks. Both sides glare at either other uncomprehendingly. Letting the hiring rep know you'll stand on one side only is a sure way to miss the job offer.

Or, if you want to get hired, Corcodilos reveals one of his secrets:

"One of the most successful techniques that I teach to candidates is to go into the interview and talk about profitability of the department and company for the manager. Managers never get people any people coming in and talking about that stuff. Managers are usually startled when somebody comes in, a technologist, and says 'there's a profit component here – and I'm concerned about that.'"

### 3) Let the manager know how fed up you are with your prior employer's technology.

This one is a classic for IT staffers, given that the quality of an employer's technical infrastructure so affects their daily life. If the servers are semi-ancient, or the IT budget is doled out grudgingly (a constant), the tech staff grumbles. Sometimes loudly.

Expressing these emotions in a job interview is a mis-

take, Corcodilos notes. "Tell the manager that you're applying with how much you're fed up with your old company because the technology sucks." Then forget about the job offer.

"Every company you talk to might look like they've got new, golden technology," he says. "But what any CTO will tell you is that our technology is probably as far behind as the last guy's."

It's a case of the grass looking greener. "If you're the manager on the receiving end of this stuff and you know better, it kind of makes you realize you're talking to someone who's not very sophisticated."

### 4) Project a sense of the lone individual.

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IT staffers are famously perceived as techie geeks whose heads are buried in arcane tech knowledge. The stereotype says they have compensated for lack of social skills by becoming experts in an absurdly complex area. Consequently, they're glint-eyed loners who know only how to twist the dials.

If you actually talk with tech professionals you realize this isn't true. (Well, it's true sometimes but not often.) But HR people, in interview situations and as they scan a resume or talk with recommenders, look for signs that you're unable to play well with others.

So if you want to avoid getting the job, demonstrate that you're unwilling to compromise. Interpersonal flexibility must be avoided. Let them know you take amusement in the sheer idiocy of non-technical people.

The key here is to be passive. Don't take the lead and volunteer information or ask questions. "Go into an interview and just answer questions," Corcodilos says. "Don't ask about what problems and challenges the organization is facing, because you're afraid you can't provide ideas." Of course, if you can't provide ideas about improving systems (bonus points: trimming costs), you probably shouldn't be there – and you probably won't be.

## Navigating Your IT Career

### 5) Send in a resume and wait for HR to process you.

Simply sending in a resume and sitting back and waiting for the phone to ring is a great way to avoid employment. You're jumping in with a big pool of fish and it's likely you'll remain unnoticed.

Those candidates who truly want to be hired do everything possible to get an inside track. Submitting their resume is step one, followed by some downright Machiavellian maneuvering. "Spend a little time and find who the manager is and who knows the manager," Corcodilos says. "The way to get a job is to act like an insider. If you're not an insider, make an effort to becoming an insider – develop some contacts."

"Work backwards: go talk to people who can influence the manager about bringing you in."

The point is to vault yourself from the also-rans to the finalist rank. "What you need to be doing is competing with the candidate that the headhunter is bringing in or the candidate who's actually got a contact with the manager."

Ideally – and it's not always possible – you should even attempt to control which company rep you interview with. Avoid the idiot at all costs.

"Interview as intelligently as possible with a naïve manager, but you're totally wasting your time. I've known lots of talented guys who go into an interview, and the reason they blow it: they're interviewing with a dope."

"If you know you're going to meet with a turkey, you've got to figure out how to meet with somebody else. If you have a contact within a company, you might be able to wrangle a different kind of interview." But, he concedes, "I'm not saying it's easy."

### 6) Do all your searching online. (Never pick up the phone!)

Tech job boards are numerous online, but to actually land of the jobs, you need to take action beyond the Internet. Networking on the phone is "absolutely," one of the most effective job-hunting techniques, says John

Estes, a VP with Robert Half Technology.

"The best way to find a job, whether you're out of a job or just looking for a better one, is just good old-fashioned networking."

Experts estimate that well over half – as much as 70 percent by one count – of all jobs are filled by personal contact. So get out there: professional organizations, old coworkers, friends, trade shows. Maximize the element of human contact as you let the world know you're job hunting.

### 7) Make a whole lot of noise about all your certifications.

IT certifications are often a valuable way to boost your attractiveness in the marketplace. Plenty of tech pros have a heaping handful of certs.

But going into an interview and loudly trumpeting your certs can send a red flag to a hiring rep.

"What that tells the manager is that you're trying to impress him with all the certifications – and you really don't have the skills," Corcodilos says.

"What I find is that managers distinguish candidates one of two ways.

One is the person who can really walk the walk – and they may or may not have certifications. But then there are the ones who lean so hard on the certifications, they're compensating for the fact that they really don't know how to use the technology."

So yes, mention your certs. But making them the centerpiece of your sales pitch might help someone else get hired.

### 8) Don't learn new skills – especially in the growing areas.

There are as many opinions about the future shape of the IT industry as there are players. Given the massive changes riling the market – as cloud computing emerges, as outsourcing continues – who's to say exactly what the ideal IT career strategy is?

Those candidates who truly want to be hired do everything possible to get an inside track.

## Navigating Your IT Career

But a common belief among IT futurists is that tech professionals will need to wear a variety of hats. Versatility is essential. The highly specialized niche expert, of course, will likely never fade. But for many IT workers, having a broad basket of skills is probably the best way to avoid outsourced replacement.

### 9) Don't live (or consider moving to) the best cities for IT job growth.

Which begs the question: what are the best cities for IT job growth? Well, that depends on how you define it.

If you're talking of jobs, the leaders (in this order) are: 1) New York/New Jersey, 2) Washington DC/Baltimore, 3) Silicon Valley, 4) Boston, 5) Chicago, 6) Los Angeles, 7) Dallas, 8) Philadelphia, 9) Atlanta, 10) Seattle.

(Yes, there are more tech jobs in Washington/Baltimore than Silicon Valley – by a wide margin. And you thought you were cool because you pay \$3,000 for a one-bedroom apartment in the Valley.)

But if you're talking growth in jobs, the order is as follows (the accompanying number states three quarters of 2008 vs. same period in 2007): 1) Hartford, CT (30%), 2) Cincinnati (28%), 3) Miami (23%), 4) Pittsburgh (22%), 5) Charlotte (21%), 6) Cleveland (14%), 7) Detroit (12%), 8) Minneapolis (12%), 9) Denver (9%), 10) Seattle (9%).

Of course some of these smaller locales are seeing high percentage growth because the base of IT jobs is

small, so any increase gives a major percentage boost.

Note that Seattle is on both lists.

### 10) Bonus point for older workers: focus on age discrimination to the exclusion of all else.

In a tech landscape that changes faster than you can say Twitter, older workers need to make sure their outlook is as fresh as that perky 31-year-old's. Or they at least need to fake it.

"If you go into an interview and you're worried about being discriminated against because of your age, most managers can smell it," Corcodilos says.

"They can tell you're worried about being discriminated against. There are bigots out there who are going to discriminate against you, and you have to decide if you want to sue them or just walk away."

On the other hand, "there are managers who don't have a problem with age – unless they can smell your concern about it. Then what they're worried about it is, they're going to hire somebody with attitude who's always looking for age discrimination, and it's going to distract them from their work."

Bottom line: In the interview, focus on the company's bottom line instead of your age, and it'll help you as much as anything. ■