

# Careers in Business and Technology

**Careers in information technology roughly fall into several categories: creators, maintainers, managers and the supporting cast.**

## Creators

If your career ambition is to design, build or manage new IT products, then you're a creator. You'll most likely work for a technology vendor, or perhaps for a subcontractor or large company that has custom IT needs. Positions among the creators include technical staff and business staff. Key roles in each include:

### Technical Staff

- Research and Development (R&D)
- Designers/Developers
- Programmers
- Testers/Quality Assurance (QA) Staff and Support

### Business Staff

- Product/Project managers
- Industry Liaisons
- Technical Writers
- Market Researchers/Pre-Sales Engineers

## Maintainers

The people that keep computers working so people can concentrate on doing tasks and solving problems are the maintainers. They spend most of their time installing, fixing and upgrading the computer, software and networks, and in helping non-IT people interact with them. Examples of job titles would include:

- |                    |                          |                            |
|--------------------|--------------------------|----------------------------|
| •Systems Analysts  | •Storage/Backup Managers | •Security Specialists      |
| •Help Desk         | •Database Administrators | •Programmers (Internal)    |
| •Network Engineers | •Telecom Technicians     | •Webmasters/Web Developers |

## Management

Sample job titles in this category would include:

- Chief Information Officer (CIO)
- Chief Technology Officer (CTO)
- MIS/IT/Call center Directors
- Middle Managers

## Technology Supporters

This group includes all the people who work in nontechnical roles that are vital to the IT field, such as sales, training, marketing, finance and law.

## 2012 Top 15 Tech Consulting Firms

1. Deloitte Consulting LLP, New York, NY
2. Booz Allen Hamilton, Mclean, VA
3. Clarkston Consulting, Durham, NC
4. Smartronix, Inc., Hollywood, MD
5. Accenture, New York, NY
6. Cognizant, Teaneck, NJ
7. Capgemini, Paris, France
8. Infosys Consulting Inc., Fremont, CA
9. Wipro Consulting Services, Bangalore, India
10. Perficient, Austin, TX
11. McKinsey & Company, New York, NY
12. IBM Global Technology Services, Armonk, NY
13. Gartner, Inc., Stamford, CT
14. Oracle Consulting, Redwood City, CA
15. Cisco Systems, Inc., San Jose, CA

*For more details on the top 25: Vault Tech Consulting Firm Rankings 2012: Vault IT Consulting 25*

## The Work Environment:

Though most IT jobs don't just leave you chained to a desk without outside human contact, (in person collaboration is one of the biggest features of a tech-focused job) there is still a modicum of hard, solitary, work that is part of the reality of writing and testing new code, building the infrastructure of effective websites or maintaining a company's servers and other hardware.

## Industry Trends:

*Evolving Occupations:* The one constant of technology and tech careers is change. Given the speed of technological advancements, some positions may even completely transform or disappear in a matter of just a few years. The key is to staying on top of trends in the tech industry is to stay one step ahead of the game.

*The Economy:* The IT field is in a transitional state, and it remains relatively lucrative for those holding jobs. However, many factors in recent years have driven down the number of IT jobs substantially and recovery has been slow.



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## The Tech Interview:

Technology interviews are no walk in the park. While there's much variation between interview processes, just as there is between technology employers, many tech interviews contain standard elements— prescreening, tests, brainteasers and peer interviews.

<p><i>Prescreening</i></p> <p>Before any actual face-to-face interview, many employers use third-party companies to prescreen applicants over the phone. The prescreening interview's job is to filter out candidates.</p> <p>Many of this interview's questions will fish for reasons to keep people out. The interviewee must work to win a face-to-face interview. No answers should imply any problems with work, punctuality, personality conflicts, etc.</p>	<p><i>Tests</i></p> <p>Tests are very common for entry-level IT jobs. Sometimes a company will have a standard test for everyone; sometimes the interviewer will test you based on your personal experience and stated ambitions. Other times the test will be just a list of multiple-choice questions; other times they will sit you down in front of a computer and give you a task to complete.</p> <p>To find the right fit, employers have been using more drug tests, background checks, credit checks and personality tests. According to a survey by Management Recruiters International, 30% of companies now use personality tests. There are no right or wrong answers for many of the personality test questions; the employers simply want to see if your personality would fit their office.</p>
<p><i>Brainteasers</i></p> <p>Puzzle-style questions enjoy immense popularity in IT interviews. Because the standards of technology is changing so quickly, it is hard to hire someone specifically for one specific skill set. So, they are looking for mental flexibility and the ability to deal with new things.</p> <p>They're looking at your verbal explanation of your approach to the problem. And while they don't expect you to just zero in on the most efficient algorithm, they do expect you to give a good, compelling explanation of what you try, what you do next and how you bounce back from this idea that may not have work out.</p>	<p><i>Peer Interviews</i></p> <p>IT companies may send an applicant on several grueling peer interviews in one day. The idea is that you are not interviewed by a human resource person, but by the people you're going to be working for who are usually in a better position to assess your experience and skills in the technical field.</p> <p>Peer interviewers want a candidate that fits their environment: the manager's personality, and the team's way of thinking.</p>

## Common Mistakes Made in the Job Search Process:

- Overestimate job availability
- Spend all time networking with 2 or 3 companies, Cast a wider net!
- Skip self-assessment/may not be the best fit for the industry
- Don't embrace past experience for leverage
- Don't take time to understand full details of the tech industry

Find examples of technical interview questions in the "Vault Guide to Technology Careers", Chapter 4, found in the OPCD

## Resources:

### Professional Associations

- American Society for Information Science and Technology
- Association for Computing Machinery (ACM)
- Association of Independent Information Professionals (AIIP)
- Association of Records Managers & Administrators, Inc.
- Association of Shareware Professionals
- Association for Women in Computing
- Computer & Communications Industry Association
- Information Technology Association of America
- Institute of Electrical and Electronics Engineers (IEEE)
- International Webmasters Association
- Institute for Operations Research & The Management Sciences
- League of Professional Systems Administrators

### Job Postings Websites

- ComputerJobs.com
- Computer World - Careers
- Computerwork.com
- Tech-Centric.net

### Miscellaneous Career Information

- Sloan Foundation Careers in Science, Technology, Engineering and Mathematics ([www.careercornerstone.org](http://www.careercornerstone.org))
- Computer Science Career Guide ([www.khake.com/page17.html](http://www.khake.com/page17.html))
- Computer Science and IT Jobs in the Federal Government ([www.makingthedifference.org/federalcareers](http://www.makingthedifference.org/federalcareers))
- Institute for the Certification of Computer Professionals ([www.iccp.org](http://www.iccp.org))