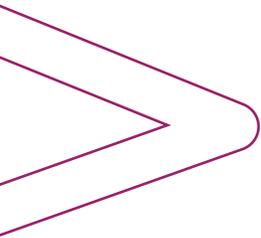


IT Certifications – Are They Worth it?

A look into the value of IT certifications and the trends that are driving them

It seems that information technology certifications show no sign of decreasing in relevance. In fact, look for numerous new certifications to appear this year. Job seekers continue to develop relevant job skills and gain a competitive edge by pursuing credentials such as PMP, CISSP, and MCSE.

But are a few extra letters on one's business card really worth the cost in time, effort, and dollars when there is such a demand for IT professionals in the workplace? It seems so, based on information provided by those who track job placements and salaries.



Certifications Continue to Be Valued

Many IT workers find that relevant IT skills and associated credentials give them a competitive edge in the job market. Businesses today face a critical IT skills shortage. The shortage of workers competent in areas such as IT security, mobile computing, cloud computing, analytics, Java, .NET, and C++ could affect economic growth and provide a direct challenge to global organizations looking to manage and secure their information technologies.

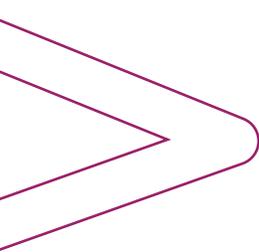
Although the global economy is still in recovery and jobless rates are high, the jobless rate for IT workers in the U.S. is less than half of what it is for other workers. In some segments of the economy, the jobless rate for IT workers is as low as 1.5 percent. Many employers and recruiting agencies are advocating for an increase in H-1B visas so more foreign tech workers can be brought in to help meet the demand.

Many recruiters and IT hiring managers place high value in IT certifications and use them as a means to filter candidates for positions, as such credentials provide a way to establish that candidates have a certain level of knowledge. Unique keywords such as CompTIA, MCSE, CISSP, and PMP, which are unlikely to be found except in the resumes of those who hold such certifications, provide good search terms to narrow down candidates with specific skillsets.

Although there is face validity and evidence to support the idea that credentials help IT workers get jobs and raises, the real value of IT certifications seems to inspire endless debate among IT workers. The evidence, however, shows that IT workers with certifications land better-paying positions. For example, an article on Monster.com indicates that project management professionals without PMP certification made an average annual salary of \$81,600, while those holding a PMP earned \$89,000. Uncertified systems engineers made \$72,700, while Cisco-certified (CCIE) systems engineers made \$92,300. The evidence seems quite strong that certifications do correlate to salary.

Of course, certifications not only provide credentials that confirm a baseline of knowledge, they also provide targetable goals that learners can use to structure and guide their learning process. Is an IT worker skilled merely because she holds a particular certification, or is she skilled because she invested time learning, in preparation for the certification exam? Clearly, it's the learning associated with a certification that is valued by employers. But the certification holds value because it serves as evidence that the holder has attained a level of knowledge, verified through testing.

Because hiring managers and recruiters continue to value certifications, it is clear that they will continue to be important in the field of information technology. Following are trends to look for this year in regard to the IT certification landscape.

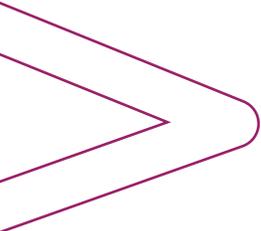


Performance-Based Exam Questions

A study by CompTIA identified that, while a majority of IT hiring managers value certifications as a means of authenticating that IT workers have a base level of knowledge, increasing demands on human resources departments have led to a need to better screen potential employees for on-the-job performance. In short, HR departments would like to rely more heavily on certifications to evaluate not only that IT workers have specific knowledge, but also to evaluate how well they can actually perform on the job. In response, CompTIA decided to revise their assessment model toward a performance-based approach.

This approach requires that candidates actually perform a task or solve a problem within a simulated work environment rather than simply answer questions. By requiring that candidates apply their knowledge in a hands-on environment, the certification is more likely to relate to real-world performance.

The best way to prepare for hands-on performance, arguably, is to practice within a hands-on environment. Logical Operations' LogicalCHOICE platform provides various tools to help students prepare for performance-based exams. In addition to hands-on class activities and labs that provide experience working within the real environment, LogicalLABS provide a live environment that students can use after the class to practice their skills. Of course, portions of CompTIA exams are still delivered through conventional multiple choice questions. LogicalCHOICE provides assessment questions that the learner can use to practice such questions as well.



Increased Importance of All Things Mobile

Mobile devices are proliferating at an astounding rate. Sales of tablets are expected to outpace sales of PCs by 2015. It is estimated that 2 billion smartphones will be in use worldwide by 2015. To put that into perspective, consider that last year there were 1 billion automobiles in use worldwide.

Mobile devices are increasingly important to businesses. Many organizations provide company-issued mobile devices to their employees, and the “bring your own device” (BYOD) movement continues to gain acceptance. In fact, a recent CompTIA survey revealed that more than six out of ten companies allow or mandate the user of employee-owned mobile devices. 78% of U.S. white collar workers now use mobile devices for work. Organizations are developing mobile apps to provide their employees with constant access to business information, and are adopting mobile versions of customer relationship management (CRM) and other third-party business software.

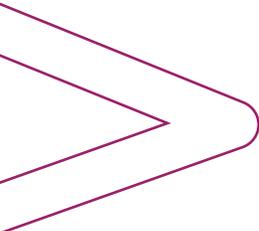
All aspects of mobile devices, including setup, administration, software development, and security, are being included in certifications. For example, the CompTIA A+ certification now includes extensive coverage of mobile devices and related concerns. Specific certifications that are focused on mobile devices, such as the Sun Certified Mobile Application Developer (SCMAD), now exist, and many new certifications will undoubtedly arise in the coming year to address the unique requirements posed by the increased use of mobile devices.

Although the mobile device market has been dominated by Apple's iPhone and iPad devices, the landscape is continuously changing. Android sales have surpassed those of Apple's devices, showing that the market is still dynamic and very competitive. The Microsoft's Windows 8 Phone platform, although still holding a very small portion of the market, is gaining users at an aggressive rate.

Look for organizations to ramp up their mobile app development capabilities. Correspondingly, the need for workers with mobile app development skills will increase. ITCareerFinder.com identified Mobile Application Developer as the "best computer job for the future," with an average annual salary of \$95,000, and with 292,000 new jobs to be created by 2020.

There will be a corresponding demand for training and certifications to validate the skills of mobile app developers. Certifications will also be developed to deal with a variety of other issues related to mobile devices and apps, such as architecting a secured wireless environment.

Keeping up with all of the changes and challenges within this environment presents a hurdle that must be cleared by IT workers who want to maintain a relevant knowledge base. Many developers will need to build upon their existing skills in desktop app development, web development, and systems administration to become competent in supporting, managing, and developing apps for mobile devices.



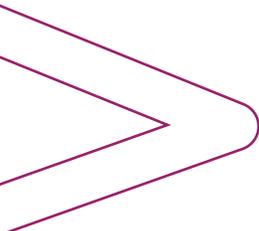
New Focus on IT Security Skills

The prevalence of mobile devices and apps will bring the potential for a wide array of new security problems. CompTIA has announced their intention to create a new security credential for mobile app developers.

But it's not just the increase in mobile device use that is spurring the need for an IT workforce that is prepared to deal with security issues. Many other factors have arisen recently, making IT security an urgent need in many organizations.

Months-long attacks on American banks and financial institutions combined with the rise of cyber warfare have increased the attention on IT security in private and government organizations. The increase in e-commerce and cloud computing has escalated the potential for security problems. Almost every online store from Amazon to Zappos can cite examples of denial of service attacks or breaches in their site security, as well as behind-the-scenes players in e-commerce, such as Global Payments, the credit card clearinghouse for Visa, MasterCard, and other big name credit card companies.

IT security skills are increasingly in high demand, with Certified Information Systems Security Professionals (CISSP) attaining salaries well into six digits. IT workers in many government, military, and civilian security positions are required to earn and maintain this certification. Look for additional security certifications to be created in response to the need for IT security skills.



HTML5 Programming Emerging as an Important Skillset

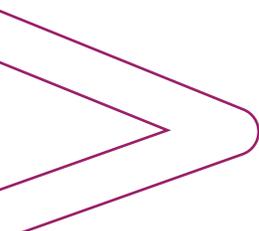
HTML, JavaScript, and CSS have largely been viewed as web client-side programming languages – the domain of the web browser. Coding to target the web client – essentially a web browser – has been viewed as a strategy for making “one size fits all” content for the wide variety of platforms (desktop computers, tablets, and smartphones) on which that content might be consumed. Web applications provide

a user interface that works across all platforms that can muster a web browser.

For developing client-side user interfaces for web applications, the combination of HTML, JavaScript, and CSS have provided a powerful triumvirate for presenting content (HTML and possibly XML), input validation and programming functionality (JavaScript), as well as formatting and layout (CSS). Version 5 of HTML includes features that provide even more power to web developers, including better support for graphics and media. Although HTML5 is not yet formally a standard, major portions of it have already been implemented in web browsers.

Recently, producers of application development tools have created programming environments that enable programmers to use these languages to define other types of software, such as mobile and desktop computer applications. Using the JavaScript programming language, developers can access hardware on mobile devices such as GPS, accelerometers, and other sensors, providing JavaScript programmers with access to features previously available only through languages such as Java and Objective-C. This provides a path for web developers to become app developers and may make app programming more accessible to a wider audience of developers.

This trend is extending to the desktop. With the release of Windows 8, developers can write Windows Store apps for desktop PCs and tablet computers using HTML5, JavaScript, and CSS. Microsoft now offers a Microsoft Certified Solutions Developer (MCSD) certification path for Windows Store Apps developers based on programming in HTML5, JavaScript, and CSS.



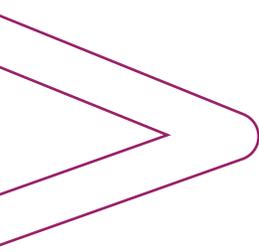
PMP and Project Management Skills Continue To Be in High Demand

The Project Management Professional (PMP) certification continues to be in high demand among employers, and by some estimates is one of the most highly esteemed credentials, with average salaries approaching the six-figure amount.

Why such large salaries in an environment where organizations are looking to do

more for less? Well, that may be exactly the rationale behind hiring skilled project managers. Smaller, leaner project teams require more effective project management to produce good results. Project managers with the skill to glean more productivity are highly desired, and are compensated accordingly.

Logical Operations has produced new PMP courseware, which provides a complete learning path for those seeking the Project Management Professional certification.

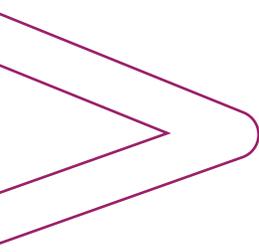


Increasing IT Spend on CRM Software

Another phenomenon driven at least in part by the move to mobile devices will be increased spending by IT departments on customer relationship management (CRM) software.

Currently, 50% of corporations have a CRM implementation in place, and according to the Gartner research group, spending on CRM software will increase significantly over the next two years. As CRM companies shift toward cloud-based solutions, there is a lower entry cost for organizations looking to “develop a more meaningful ongoing relationship with customers.” According to Gartner, approximately sixty percent of North American respondents intend to increase their spending on cloud services and software as a service (SaaS) over the next two years.

The demand for experts in these systems is growing rapidly, as companies look for proven professionals to help them deploy and make better use of CRM software. Salesforce.com already offers certifications on their products for administrators, developers, implementation experts, and architects. This will drive a demand for training.



Top Ten Certifications

One way to consider IT certification trends is to look at certifications that are in highest demand on job boards. Dice.com recently released their list of the top ten most requested certifications:

1. **PMP (Project Management Professional)**
2. **CCNA (Cisco Certified Network Associate)**
3. **CompTIA Security+**
4. **CompTIA A+**
5. **MCSE (Microsoft Certified Systems Engineer)**
6. **CompTIA Network+**
7. **MCP (Microsoft Certified Professional)**
8. **CISSP (Certified Information Systems Security Professional)**
9. **ITIL (Information Technology Infrastructure Library)**
10. **MCITP (Microsoft Certified IT Professional)**

These, of course, represent trends that can vary weekly based on who is hiring and the projects they're hiring for. Although the positions shift over time, it is safe to say that all of the skills included in this list will be in high demand in the coming years. Other lists found in a Google search for "certification trends" produce similar trends.

Logical Operations provides courses that students can use to prepare for all of these certifications. For more information, visit www.logicaloperations.com or call 1.800.456.4677 to learn more about our courses for new certifications are under development.

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