

CertMag's 2007

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Six years after the fact, the dot-com bust still seems to haunt IT like a ghost. Cite all the statistics you want – techies are still going to remember '02, when they sent out more than 50 resumes and heard nothing back.

But the facts on the ground are that the slump is over, and as IT moves closer and closer to controlling basically the entire world, the industry is more robust than ever.

That being said, the IT certification market is not so predictable that it can be described merely as "slow, steady growth." Although some cert programs are booming, others are trending downward somewhat,

perhaps indicating that industry recovery has plateaued for now.

The more than 35,000 IT professionals who responded to the *Certification Magazine* 2007 Salary Survey reported their average salary for 2006 as \$68,820 and their average salary for 2007 as \$74,730, indicating growth outpacing inflation.

The top five highest-paying certifications saw a reshuffling from past years, with some old favorites rallying back toward the top.

Survey Methodology

The *Certification Magazine* 2007 Salary Survey was conducted over a five-week period from Aug. 1 to Sept. 5. Two methods were used to obtain responses. First, e-mails that contained a link to the online survey were sent to *Certification Magazine* subscribers, asking them to participate. Second, the survey was accessed via invitations or Web site links from 24 companies and organizations.

For the survey, 35,066 IT professionals in 195 countries provided data and the margin of error is no more than +/- 1.0 percent at the 95 percent confidence level. Surveys were data-entered, computer-processed and analyzed by Litchfield Research, a full-service market research firm that specializes in the publishing industry.

Salary Survey

FIGURE 1: TOP CERTIFICATIONS BY SALARY

Certification	Average Salary (x \$1,000)	Certification	Average Salary (x \$1,000)
(ISC) ² Certified Information Systems Security Professional (CISSP)	97.76	IBM Certified Application Developer / System Administrator – Lotus	79.38
3COM	75.90	IBM Certified Database Administrator / Application Developer – DB2	87.39
Apple – Xsan Administration	75.25	IBM Certified Solution Developer / System Administrator – WebSphere	85.92
Apple Certified Help Desk Specialist (ACHDS)	51.29	IBM Certified Specialist – Storage	83.41
Apple Certified System Administrator (ACSA)	65.52	IBM Certified Specialist – System i	65.89
Apple Certified Technical Coordinator (ACTC)	59.77	IBM Certified Specialist – System p	85.91
Brocade Certified Fabric Professional (BCFP)	96.63	IBM Certified Specialist – System x	61.30
Brocade Certified SAN Designer (BCSD)	109.51	ISACA Certified Information Security Manager (CISM)	115.72
Brocade Certified SAN Manager (BCSM)	117.11	ISACA Certified Information Systems Auditor (CISA)	98.74
Check Point Certified Security Administrator (CCSA)	91.63	Linux Professional Institute (LPI)	73.16
Check Point Certified Security Expert (CCSE)	95.37	Microsoft MCAD	74.80
Cisco CCDA	87.55	Microsoft MCDBA	78.42
Cisco CCDP	95.37	Microsoft MCDST	55.24
Cisco CCIE	111.09	Microsoft MCITP	76.13
Cisco CCIP	88.82	Microsoft MCPD	62.89
Cisco CCNA	74.81	Microsoft MCSA	72.34
Cisco CCNP	87.22	Microsoft MCSA 2003	71.76
Cisco CCSP	87.15	Microsoft MCSE	80.34
Cisco CCVP	92.35	Microsoft MCSE 2003	76.34
Cisco IP Telephony Support Specialist	87.77	Microsoft MCTS	81.00
Cisco Qualified Specialist	84.39	Microsoft MOS	55.77
Citrix Certified Administrator (CCA)	77.45	Novell Certified Linux Professional (CLP)	69.46
Citrix Certified Enterprise Administrator (CCEA)	85.63	Novell CNA	76.39
CIW – Certified Internet Web Professional	55.69	Novell CNE	82.91
CompTIA A+	57.34	Oracle DBA OCA (Japan – Silver)	79.73
CompTIA CTT+	79.75	Oracle DBA OCP (Japan – Gold)	84.52
CompTIA i-Net+	64.37	Oracle Developer OCP (Japan – Gold)	78.25
CompTIA Linux+	67.92	Oracle Siebel CRM Consultant OCP	90.92
CompTIA Network+	60.89	Other	72.35
CompTIA Project+	80.15	Planet3 Wireless CWNA	79.76
CompTIA Security+	68.70	Project Management Institute PMP	96.79
CompTIA Server+	62.53	Red Hat Certified Engineer (RHCE)	79.86
CTP – Convergence Technologies Professional	61.43	Red Hat Certified Technician (RHCT)	76.91
CWNP: CWNA	77.90	SANS GIAC	86.61
CWNP: CWSP	85.62	Sun Certified Business Component Developer (SCBCD)	81.02
Dell	58.35	Sun Certified Enterprise Architect (SCEA)	96.95
EC-Council CEH Certified Ethical Hacker	85.90	Sun Certified Java Associate (SCJA)	68.41
EMC Proven Professional	91.29	Sun Certified Java Developer (SCJD)	91.09
HDI Help Desk/Support Center Analyst	44.82	Sun Certified Java Programmer (SCJP)	79.38
HDI Help Desk/Support Center Manager	75.71	Sun Certified Network Administrator (SCNA)	85.57
HDI Help Desk/Support Center Team Lead	55.43	Sun Certified System Administrator (SCSA)	86.29
HP: Accredited Integration Specialist (AIS)	81.96	Sun Certified Web Component Developer (SCWCD)	76.45
HP: Accredited Platform Specialist (APS)	54.04	Symantec	75.63
HP: Accredited Presales Consultant (APC)	82.03	TIA CTP	63.33
HP: Accredited Presales Professional (APP)	74.79	UNIX	78.79
HP: Accredited Systems Engineer (ASE)	83.12	VERITAS	81.52
HP: Certified Systems Administrator (CSA)	86.40		
HP: Certified Systems Engineer (CSE)	82.58		
HP: Master Accredited Systems Engineer (Master ASE)	94.06		

Brocade Certified SAN Manager (BCSM) moved into first place — up from second place last year — with an average salary of \$117,110. ISACA Certified Information Security Manager (CISM), a consistent performer in past years, came in second place with \$115,720.

Cisco CCIE, which dominated the Salary Survey in '03 and '04 but slipped out of the top five thereafter, came in third this year with \$111,090. Brocade Certified SAN Designer (BCSD) follows in fourth place with \$109,510. ISACA Certified Information Systems Auditor (CISA) placed fifth with \$98,740.

See Figure 1 for a list of the average salaries of 95 of the top certification programs listed in this year's survey.

Overall, IT professionals saw their wages increase by 17.1 percent, a slight improvement over last year's increase of 16.7 percent. More than a quarter of respondents received at least a 25 percent increase in pay, which is also an improvement over last year's numbers.

Not surprisingly, the top-performing certifications saw percentage gains over last year's numbers in terms of salaries earned, with the top five seeing growth rates at 31 percent to 55 percent.

The certifications with the five lowest average salaries, meanwhile, trended downward — they were down 27 percent to 41 percent from the average salaries in 2006.

Last year was the first time in the Salary Survey's eight-year history that even the lowest average IT salary (by certification) charted was more than \$50,000 annually. This year, that figure slipped back down to less than \$50,000, with the lowest average IT salary at \$44,820.

These numbers indicate a disparity of sorts between where the highest- and lowest-earning certs are headed (the rich get richer and the poor get poorer), but they also demonstrate the role certification increasingly is playing in helping fledgling IT pros get their feet in the door and into that first job.

Companies offering certification programs have been quick to recognize this trend — many introduced entry-level certs this year, including Cisco. Jeanne Beliveau-Dunn, senior director of product and technology marketing, said career development was a driving force behind this change.

"It's really about finding a way to recognize those people who have developed some skills, learned the fundamentals and want to eventually move forward into the other career certification tracks but want to get into that first job and have some kind of proof of their talent," Beliveau-Dunn said. "As we look at the talent pool that's out there to support the growth of the industry, we're definitely running into some constraints.

"We have partners and customers out there trying to hire talent, and they're not able to fulfill all their needs and, of course, it only gets worse as the market keeps growing. So, what we're trying to do is make some major investments to reshape the whole learning environment and get it thinking forward, not just to what today's careers and jobs are but, hopefully, setting them up for the future."

This year, Adobe Systems launched a line of certifications for its software targeted toward individuals at high school, college and workforce-entry levels. Adobe partnered with Certiport to produce these entry-level certifications.

"As a country, we're extremely focused on funneling people into IT, and this is one of those areas where we can say there are programs that meet industry standards and prepare people for IT careers," said David Saedi, Certiport president and CEO.

The United States is focused on funneling people into IT because doing so is essential to remaining competitive globally well into the 21st century.

"The U.S. is at the frontier of modern scientific and technological advances, which means that sustaining economic growth depends substantially on our ability to advance that frontier," said Peter Orszag, director of the Hamilton Project, an initiative by the Brookings Institution intended to formulate an economic strategy to advance domestic opportunities and growth. "We don't have the advantage other countries have in moving up to the technological frontier — we need to be pushing it forward. The way that we can best remain at the technological frontier is by investing in individuals."

As such, IT is an industry that continues to grow, providing an arena for careers from the entry level to the C-level and everywhere in between. And it offers a wide range of salary opportunities, most of them trending upward.



You can read our past Salary Survey coverage through CertScope! Just run a search for 'salary' to read more than 166 CertMag articles on the subject, and link to 134 Web sites covering salary concerns in general.

We'd like to start a dialogue about the Salary Survey with you, our readers. So, as you read this special section, head over to our Salary Survey forum discussion board (www.certmag.com/salaryforum) to share your thoughts or perhaps even get some tips on how to revise your compensation to be in line with these numbers. 🙌

— Daniel Margolis, dmargolis@certmag.com

Identifying You: The IT Pro

So, according to the CertMag 2007 Salary Survey, who are you? Big surprise — most of you are men (about 90 percent).

For the most part, you're a relatively young group. The majority of you are younger than 40, with the highest percentage (about 27 percent) in the 25-to-29 age range, followed by about 23 percent of you in the 30-to-34 range. Only about 10 percent of you are younger than 24.

Educationally speaking, about 33 percent of you hold a bachelor's degree and about 21 percent have a master's degree. Ten percent have received some technical training (no college degree), and about 13 percent of you have earned a high school diploma.

You're a veritable United Nations of IT professionals, with respondents from 195 countries, ranging from Austria and Zimbabwe to Chile and Mongolia.

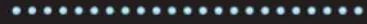
Once again, the majority of respondents to the Salary Survey live outside the United States, but the largest single country remains the United States, with 9,114 respondents out of 35,066, or about 37 percent. The next-highest percentage of respondents was India, with 11.6 percent, followed by the United Kingdom at 4.4 percent and Canada with 4 percent.

For those who do live in North America, the highest percentage of you are in California, with 9.4 percent, followed by Texas (7.6 percent). Ontario, Canada, comes in third, with 5.1 percent. Virginia follows (4.8 percent), then Florida (4.4 percent) and Illinois (4.3 percent). New York rounds out the 4 percent range with 4.2 percent.

According to the Salary Survey, about 94 percent of you are certified in a technical field, with many of you receiving your first certification in the last three years. Nearly 15 percent of you received your first certification in 2007, and about 60 percent of you received your first cert in the last five years.

The average number of certifications you hold stayed relatively consistent in the past year, with just a slight bump upward from 3.04 in 2006 to 3.31 in 2007. The largest percentage of you (about 24 percent) holds two certifications.

Thank You!

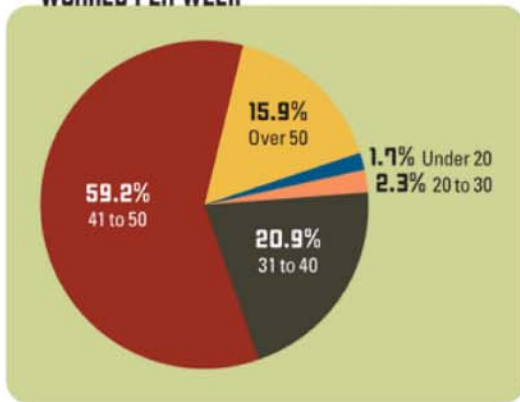


We would like to thank the following companies and organizations for helping promote this year's CertMag Salary Survey. Their assistance helped make possible this study of the effects of certification on IT salaries globally.

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|------------|-------------------------|
| Apple | Kaplan |
| Brocade | Nortel |
| Cisco | Novell |
| Citrix | Oracle |
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| HDI | SAS |
| Hitachi | Sox Institute |
| HP | |
| IBM | The Training Associates |
| ISACA | |

CERTIFICATION MAGAZINE

FIGURE 2: AVERAGE HOURS WORKED PER WEEK



This is a change from last year, when the largest group of respondents held only one certification. The percentage of you who hold more than three certifications rose to about 34 percent this year from 30 percent in 2006, and the number of you holding six or more certifications rose from 13.5 percent in 2006 to about 16 percent in 2007.

The number of you who added one new certification to your portfolio in the past year, 36.5 percent, just barely beat out the number of you that added no certifications in the past year, 36.4 percent (it came down to a difference of 42 responses among more than 35,000 survey respondents).


But among those who added new certs, there was an uptick in the number of people who added more than two, from about 23 percent in 2006 to about 27 percent in 2007.

The majority of you work full time, at about 93 percent. Only 3 percent of you work part time, and 2.5 percent were currently unemployed. The majority of you, about 59 percent, work on average 41 to 50 hours per week.

Most of you have been in the industry for fewer than 10 years, with just 3.5 percent for less than one year. About 31 percent of you have been in the field for one to five years and 35 percent for six to 10 years. The remainder, a little more than 30 percent, have been in IT for 11 or more years.

The majority of you have been with your current employer for fewer than five years, with about 17 percent of you having been there for one year, about 19 percent for two years and about 12 percent for three years. About 24 percent of you have held your current job with your employer for less than a year.

According to the Salary Survey, 43.5 percent of you plan to change jobs in the coming year, and 56.5 plan to stay.

Nearly 63 percent of you work for companies with fewer than 5,000 employees, about 17 percent work for companies with 5,000 to 29,999 employees, about 12 percent work for companies with 30,000 to 99,999 employees and about 8 percent of you work for organizations with 100,000 or more employees. 

— Mike Prokopeak,
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What Issues are Important to IT Professionals?

The state of the workplace today can be perilous.

One minute, you have a job, you're happily building your 401(k) investment portfolio and thanking the stars the cost of living isn't escalating more quickly. The next thing you know, a bunch of people in your department become victims of economic downsizing or company restructuring. Even worse, you're fired for reasons better left unnamed.

So, it makes sense that the CertMag 2007 Salary Survey results show that the state of the IT job market, job security, as well as compensation and benefits are issues that pose serious concern for IT pros. Survey results were fairly evenly split among those three topics, with a roughly 32 percent response rate.

Once a dominating topic of conversation on the IT landscape, outsourcing has died down as a top concern, which might indicate a slowdown in the number of organizations outsourcing some or all of their IT functions.

About 23 percent of respondents report they benefited greatly from the process and actually work for an outsourcing company. More than 62 percent of respondents said outsourcing has not affected them personally, but the Salary Survey gathered quite a few comments from those who have gone through the process.

"As a senior consultant, I have been retained by my company and even given a substantial raise as we have gone through our offshoring phase," one respondent said. "But my team has been hit hard, losing quite a large percentage of staff, mostly due to voluntary separation and early retirements rather than actual layoffs. The quality of service we were able to provide suffered accordingly, and our customers are now unhappy. Reversing the damage is proving difficult and expensive."

As with almost any efficiency-related process improvement, results seem to depend on how the organization handles preparation before outsourcing — and job mobility afterward — for the position or positions affected.

“At the end of 2004, my job as an AV tech was outsourced, and I was moved to the networking group by my company,” one respondent said. “It paid for retraining, including certification in a new field, and it worked out great. More recently, we have outsourced some of the more menial tasks in the network field, freeing us up to do more interesting things like network implementation projects.”

And some individuals even turned the tables.

“I lost my job because of (outsourcing) and started my own company,” another respondent said. “I am now very successful, and people outsource to me.”

Unfortunately, not all the comments we received were as positive as those — some say that in the absence of outsourced team members, they now have more work, or the environment in their department has deteriorated, with the threat of outsourcing looming. Others are having difficulty finding a comparable position or even finding any job at all.

One respondent said both he and his wife lost their positions, and then they went into debt to retrain themselves because neither the government nor their previous employer would help defray education expenses.

Then, there are perhaps more typical complaints about lack

FIGURE 3: AVERAGE SALARY BY EDUCATION



of technical or vendor support and irritation with communication barriers. Additionally, many independent IT contractors are gnashing their teeth over lost contracts.

Certification showed up significantly on many IT professionals' radar, and many respondents said

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certification saved their jobs when the outsourcing bug bit their company.

"Certification helps me get more clients that are not referred by clients I already have," one respondent said. "It creates confidence."

Twenty-eight percent of respondents report being extremely concerned about the future of certification, which might relate to worries over exam validity and the slow but steady rise of performance-based certification tests. Performance-based tests are often thought to be more difficult to pass yet present a more accurate picture of an IT professional's skill level and ability to execute real-world job tasks, and more certification vendors are replacing traditional test formats with performance-based platforms.

Slightly more than 26 percent of survey respondents reported being extremely concerned about employer support for certification, and 24 percent said they were extremely concerned about recertification and maintaining skills.

This might mean IT certification holders and seekers will need to come up with clever ways to study more economically for their exams, or they might have to illustrate exactly how and why certification is valuable to their respective organizations to get an affirmative response when they request training funds. ↗

— Kellye Whitney, kwhitney@certmag.com

The Role of Demographics

It's simple, right? Whatever in-demand certifications you hold automatically determine your salary.

Not exactly.

As we've found over the last few years and continue to see with the CertMag Salary Survey, demographics (including education, age and sex) play a huge role in determining your salary and can create earning gaps. Some, such as age, are closing in to nearly even. Others, such as sex, continue to increase.

It's natural to see disparity based on varying factors — everyone isn't equal, and that's a fact in negotiating salary for any job, not just IT.

In this year's survey, for example, there was an increase in salary for employees with technical training versus those who went through a degree program, which highlights how the demand for specific certifications relates to other, unrelated academic achievements.

This follows the trend of the past few years: IT salaries are becoming less affected by traditional higher education than by technical training. According to the survey, only individuals with a doctorate draw a higher average salary than those with technical training.

Those with a bachelor's degree or master's degree average around \$53,000, whereas someone with technical training independent of a degree program averages \$54,000. The monetary difference there isn't severe, but it is significant, considering the time, money and effort spent on attaining the degree versus just a year or two of technical training.

Even so, only about 10 percent of respondents say they have technical training but no college degree, even with its salary ramifications.

This leads to questions about age: Is the small percentage of employees with only technical training representative of young people knowing it's equally profitable to just go through technical training or evidence that many haven't latched on to the idea of dropping formal education altogether?

The study points to the latter as the more likely scenario, in that the older you are, the higher your average IT salary.

Individuals 49 and older can expect to make at least 48 percent more than the average salary, but people younger than 25 can expect to make at least 60 percent less.

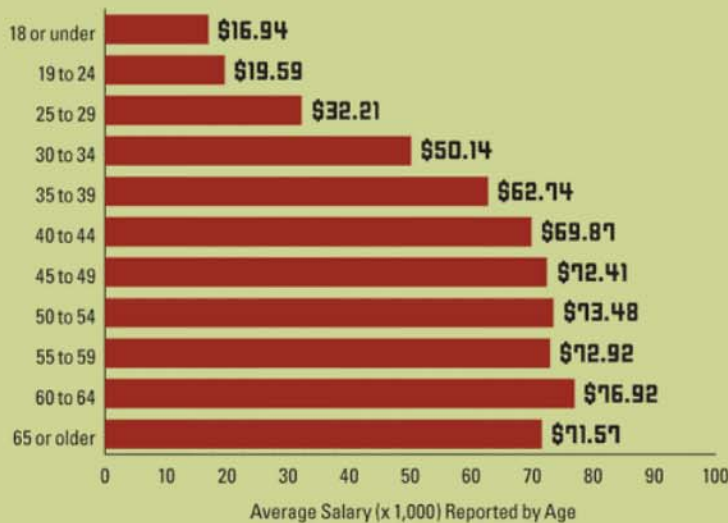
Being that age and experience are often inexorably linked, such disparity in salary makes sense, but it could be indicative of other factors, as well.

Many elderly professionals have had to continue working or change careers long after they expected because of longer life expectancy and the rising cost of living. A result of such societal change is older, experienced people earning certifications much later in life than they normally would, thus driving up their value even more.

But regardless of salary benefits, it still isn't that common to jump straight into technical training without some sort of higher education.

The CertMag 2007 Salary Survey measured other time factors, as well, including the time spent at your current company and time spent in a certain job. Both factor into your total salary.

FIGURE 4: AVERAGE SALARY BY AGE




Interestingly, the average salary for respondents based on their time with an organization peaks and then dips over a 10-year period. If you spend eight years in an organization, the average salary is \$77,300, whereas if you spend nine years, the average drops to \$75,980. After 10 years, the average salary goes back up to \$77,830.

If you hold the same job at the same organization, the pattern is similar. Experience in one job yields an increasing salary up to five years — in the fifth year, salaries average \$76,000, but one year later, they are at an average of \$73,000.

The average salary dips down again after nine years and goes back up after 10 years. Individuals who have been at the same organization for more than 10 years have an average salary of \$78,070.

These are important figures to note for understanding the time frame of your maximized earning potential.

In respect to sex, male respondents average about \$2,000 more than their female counterparts, who this year only constituted 9.7 percent of respondents, a 0.6 percent decrease from last year's survey. 

— Ben Warden, bwarden@certmag.com

Certification's Price Tag

For a few CertMag 2007 Salary Survey respondents, love apparently means never having to say you're not certified — some answered "my girl-

friend," "my wife" and "my husband" to the question, "Who paid for your most recent certification?"

It was more of a family affair for about 2 percent of respondents, who said a friend or relative paid for their most recent certification. Four respondents cited their brother, and one person cited a sister (mom and dad appeared to be the family members most willing to help aspiring IT certificants).

One mom truly went above and beyond parental duties, though — one respondent wrote, "My mother sold her

farm produce and paid for my exams."

Now, that's love.

Most respondents were not as lucky, though. Nearly 39 percent of respondents had to dip into their own wallet, and for 44.6 percent, their employer footed the bill. These were, by far, the most popular responses to the question.

The next-highest percentage of respondents said their employer reimbursed them for their most recent certification (7.8 percent), followed by splitting the cost between the respondent and his or her employer (6.6 percent). For a lucky 5 percent, a vendor/voucher picked up the tab for their most recent certification.

Ivory towers and Uncle Sam proved to be less generous, though. Not even 1 percent of respondents said a grant paid for their most recent certification (0.8 percent), and the next-least-popular means of paying for the most recent certification were scholarships (1.2 percent) and the government/GI Bill (1.3 percent).

The CertMag 2007 Salary Survey also asked respondents how much money they spent to get their primary certification.

Nearly 60 percent of respondents said they spent less than \$500, compared with about 44 percent last year.

Further, in 2007, the average amount of money respondents spent to get their primary certification was \$1,272, a drop from \$1,781 in 2006 (a 28.6 percent decrease) and \$2,580 in 2005. Nearly 50 percent of respondents said they spent no money to get their primary certification.

These statistics indicate that the amount of money IT professionals are spending for certification is decreasing.

This holds true for spending on study materials, as well. According to the CertMag 2007 Salary Survey, 82.2 percent of respondents spent less than \$500 on study materials to get their primary certification, up from 63.8 percent last year.

In 2007, 90.1 percent of respondents spent less than \$1,000 on study materials to help them get their primary certification. In 2006, 86.6 percent reported the same.

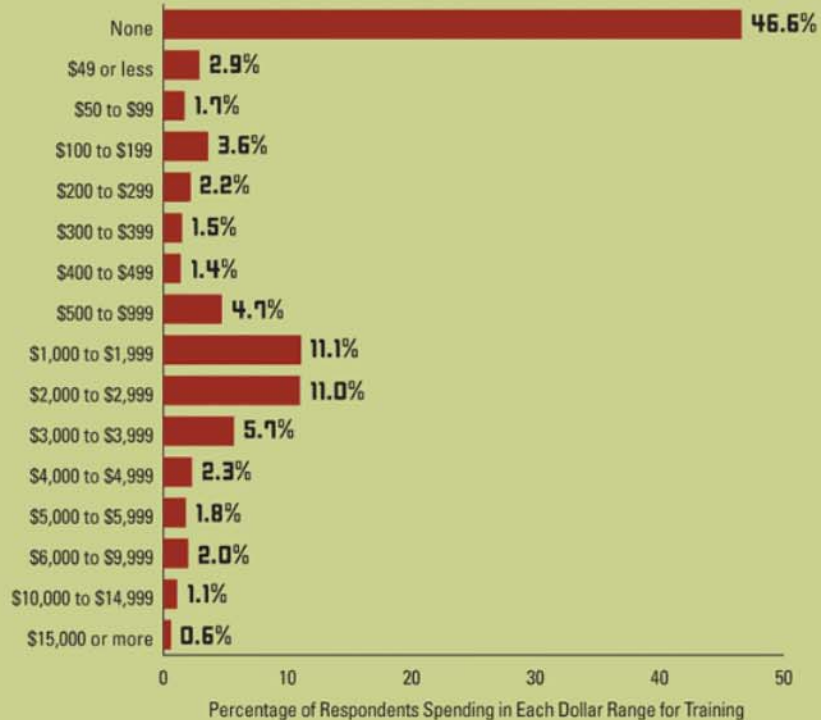
Another decrease was in the average amount of money respondents said they paid for study materials: \$513 in 2007, \$659 in 2006, \$1,029 in 2005 and \$1,039 in 2004.

When it comes to the variety of study materials available to prepare for certification examinations, three trump the competition, as they did last year: on-the-job training (OJT), practice exams and self-study books. Respectively, 72.1 percent, 68.9 percent and 68.3 percent of respondents said they were extremely or very valuable.

The fourth- and fifth-most valuable study resources were instructor-led training at a training center and product documentation. For the former, 43.5 percent of respondents said they were extremely or very valuable, and 41.2 percent indicated the latter.

The least valuable study materials or resources, according to CertMag 2007 Salary Survey respondents, were Internet mailing lists and newsgroups and community and technical college courses.

FIGURE 5: DOLLARS SPENT ON TRAINING




According to respondents, many study materials are not used at all when preparing for certification examinations. Of the 11 options available on the CertMag 2007 Salary Survey, seven had very high levels of nonuse — at least 2,945 respondents said they did not use them.

The study materials with the highest level of nonuse, in descending order, were community and technical college courses, vendor-authorized boot camps, online universities and e-learning, brain dumps from Web sites, Internet mailing lists and newsgroups, instructor-led training at a training center and computer-based training simulations.

When it came to the bang for their buck, 41.8 percent of respondents said the value of the price paid for their most recent certification was excellent or very good, which mirrors the results from the CertMag 2006 Salary Survey. Just 18.8 percent of respondents said that value was fair or poor, which is also the same as last year's survey.

In regard to the quality of their learning materials, 68 percent of respondents said they were excellent or very good, and 4.9 percent considered them fair or

poor. These also were the same results as the CertMag 2006 Salary Survey. 

— Lisa Rummler, lrummler@certmag.com

Some Surprises in Specialization Salaries

A couple of years ago, *Certification Magazine* first reported on the emergence of “dynamic IT.” According to research firm IDC (which explained the phenomenon in various studies) this trend represents the combination of three factors:

- Dynamic application: construction of technology platforms that have integrated applications
- Dynamic information: a move toward a broader, more inclusive perspective with regard to data management
- Dynamic infrastructure: when organizational structures shift to more streamlined and efficient arrangements (it also pertains to corporate mergers and acquisitions in IT)

In a more simple and synthesized explanation, dynamic IT refers to a comprehensive view of the technology sector — rather than focusing on one tool or task, it examines the entire technical infrastructure, the personnel who create and maintain it, the data management and communication it enables and the organizational objectives it serves. To put it even more succinctly, it places the emphasis on the “information” part of information technology.

The influence of dynamic IT can be seen in the compensation levels of the assorted specializations covered in the CertMag 2007 Salary Survey. Most of the top-paying professions concern the preservation, protection, availability and accessibility of information.

In an unprecedented development, three specializations registered more than \$90,000 in average annual salary. Storage design and implementation was No. 1 with a bullet this year, coming in at \$95,940. This category’s income rose nearly 10 percent, which helped catapult it from third place to first in a year.

Information assurance was ranked a somewhat close second at \$94,550. A newcomer to the Salary Survey, this field largely deals with data integrity and confidentiality.

It has skyrocketed in importance in the past couple of years because of the rising importance of compliance issues regarding privacy, security and risk management. In fact, there are many practitioners in

this area who deal far more with formulating policy than with handling technology.

The third sphere to pass the \$90,000 mark was strategic systems design and implementation. This specialization supplanted two from last year: system design and system integration.

As a result, it covers quite a bit of ground, and it can range from convergence to enterprise resource planning (ERP). It’s also contributed significantly to process improvements in marketing and sales.

Interestingly, security — heretofore the hottest thing in IT — fell from first place last year to fourth this year, and it actually declined in average salary from \$93,500 to \$87,890. This suggests either a glut of professionals in this discipline, a decline in industry demand or both.

Still, it would be presumptuous to assume information security has fallen dramatically in importance. After all, it’s still in the top five in CertMag’s Salary Survey, and it rates highly in most rankings of technology specializations.

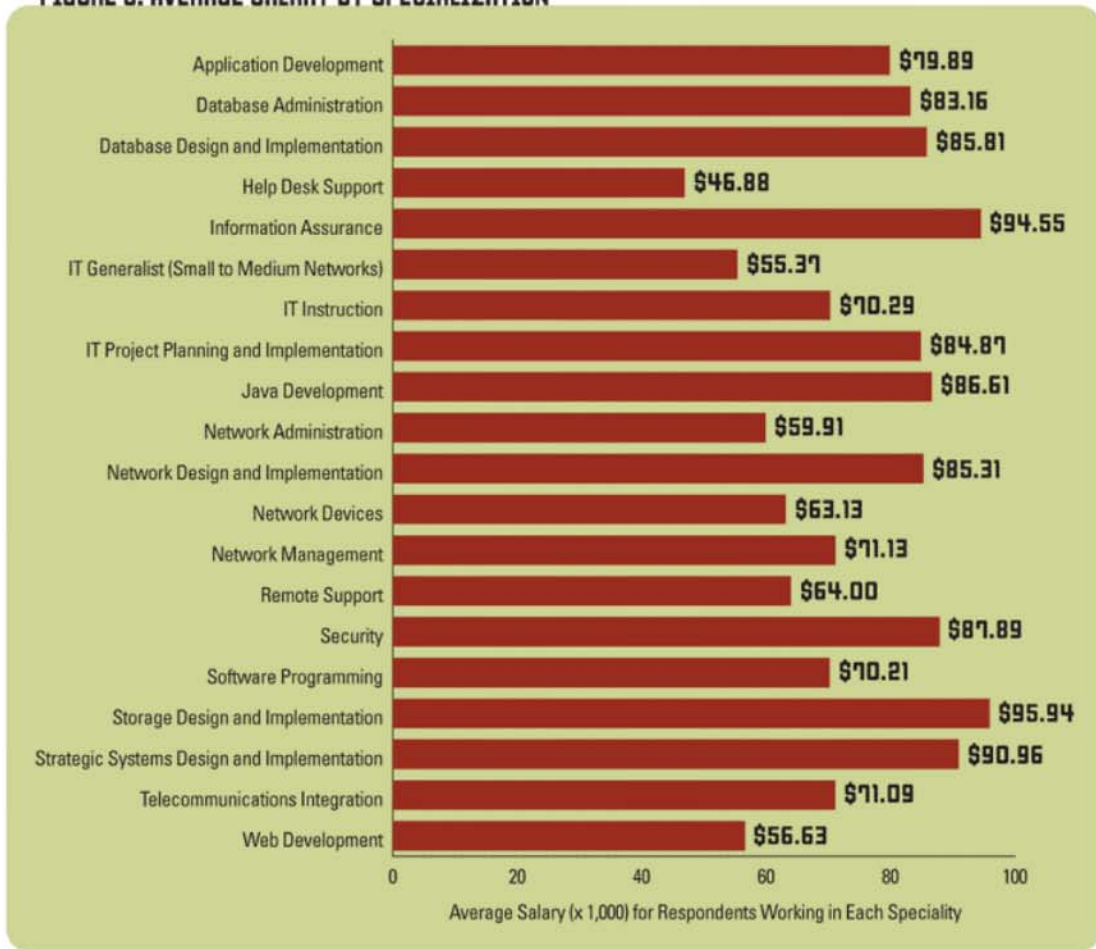
Coming in fifth was Java development, which registered \$86,610 in average annual salary. This strong finish demonstrates this programming language’s popularity, and its adoption continues to grow at a rapid rate because of its ability to run on many different platforms and its simple object model.

Falling out of the top five in 2007 were network design (second place in 2006) and project management (fifth in 2006). Last year, they brought in \$89,770 and \$85,590, respectively, and posted modest losses in annual income this year with averages of \$85,310 and \$84,870. Still, the network design and implementation category did place seventh overall, and it claimed the most respondents out of all the specializations included in the study.

The other end of the spectrum was a bit more predictable, including specializations that typically place at or near the bottom of the survey. Help desk support came in last with \$46,880 average annual income, with IT generalist (\$55,370 in 2007) and Web development (\$56,630) placing right above it in the rankings.

These numbers might seem dismal when contrasted with the aforementioned IT categories, but when you compare it with U.S. per capita income, which was about \$42,000 in 2006, they don’t look bad at all.

FIGURE 6: AVERAGE SALARY BY SPECIALIZATION



Finally, the specialization that came closest to the overall average income of \$74,730 was telecommunications integration. This field, which deals with convergence in a somewhat narrow and tactical sense, reached \$71,090 this year. This category might be above average next year, though, as its compensation increased a little more than 10 percent from 2006. 🐦

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International IT

Globalization is the name of the game in any industry in the 21st century — it just makes sense to take the search for talent and resources international.

IT is no exception to this trend, and the Salary Survey reflects this, presenting a globally diverse picture of where IT professionals are and what they're earning. A selection of the data received from the 195 coun-

tries that responded to the CertMag 2007 Salary Survey can be found in Figure 7.

The countries with the highest average salaries jostled for position a bit this year. Denmark moved from the No. 2 spot up to first place, with IT professionals reporting salaries of nearly \$87,000 a year, on average, which is up about \$11,000 from last year.

Switzerland, last year's top performer, moves down to second place, as it experienced only slight growth in IT salaries this year. Last year's average salary was reported as \$79,630, and this year's is \$79,920.

Norway, which was knocked out of the top five average salaries last year, returns at No. 3 with \$74,480, up nearly \$12,000 from last year. The United Kingdom takes fourth place, with \$72,740, up more than \$8,000 from last year.

The United States brings up the rear of the top five, with an average salary of \$71,470, which is perhaps proof that IT is becoming more of an international concern than ever.

Last year, Australia moved into the top five as Japan was knocked out. Australia fell back out of the rankings this year but still saw salary gains, going from \$63,360 last year to \$68,710 this year. Japan, meanwhile, continued a meteoric fall, going from \$52,360 last year to \$41,290 this year (down nearly \$19,000 from 2005).

On the other end of the spectrum, the countries with the lowest average salaries in the CertMag 2007 Salary Survey were different from last year — in descending order, Bulgaria, India, Pakistan, Thailand and Jordan replaced the Philippines, Egypt, Sri Lanka, Serbia and Montenegro, and Bangladesh.

Jordan's average salary, the lowest in 2007, was \$12,880. Thailand earns just slightly more, with

\$12,890. Pakistan (\$14,200), India (\$14,980) and Bulgaria (\$15,000) round out the top five.

It's a surprise to see India re-enter the top five, given that this country has seen so much explosive IT growth, particularly with Western countries outsourcing so much in the way of help desk and tech support there.

It should be noted, however, that even in moving back down into the top five, India saw growth over its average salary of \$13,910 last year. In fact, last year's lowest average salaries ranged from \$11,110 to \$12,900, and this year's range (\$12,890 to \$15,000) is more proof of IT growth across the board.

Last year's lowest performer, Bangladesh, saw high gains, moving from average salaries of \$11,110 per year to nearly \$17,000. The Philippines also saw tremendous gains, going from \$12,420 to \$19,650. Egypt experienced similar growth, going from \$12,110 to nearly \$17,000. 📈

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FIGURE 7: AVERAGE SALARY BY COUNTRY

Countries	Average Salary (x 1,000)	Countries	Average Salary (x 1,000)
United States	\$71.47	Malaysia	\$17.69
Argentina	\$20.53	Mexico	\$26.03
Australia	\$68.71	Netherlands	\$53.29
Austria	\$49.38	New Zealand	\$56.06
Bangladesh	\$16.88	Nigeria	\$19.45
Belgium	\$54.05	Norway	\$74.48
Brazil	\$35.28	Pakistan	\$14.20
Bulgaria	\$15.00	Peru	\$17.88
Canada	\$62.47	Philippines	\$19.65
Chile	\$27.10	Poland	\$24.54
China	\$20.78	Portugal	\$39.51
Colombia	\$20.90	Romania	\$16.42
Czech Republic	\$22.92	Russia	\$27.22
Denmark	\$86.95	Saudi Arabia	\$29.97
Egypt	\$16.90	Singapore	\$36.74
Finland	\$62.02	South Africa	\$36.53
France	\$46.32	Spain	\$41.22
Germany	\$52.02	Sri Lanka	\$15.19
Greece	\$24.25	Sweden	\$55.42
India	\$14.98	Switzerland	\$79.92
Indonesia	\$16.99	Taiwan	\$24.42
Ireland	\$59.02	Thailand	\$12.89
Israel	\$32.58	Turkey	\$34.58
Italy	\$33.15	Ukraine	\$15.95
Japan	\$41.29	United Arab Emirates	\$31.84
Jordan	\$12.88	United Kingdom	\$72.74
Korea – South	\$31.82	Venezuela	\$27.91
Kuwait	\$26.82	Vietnam	\$20.94