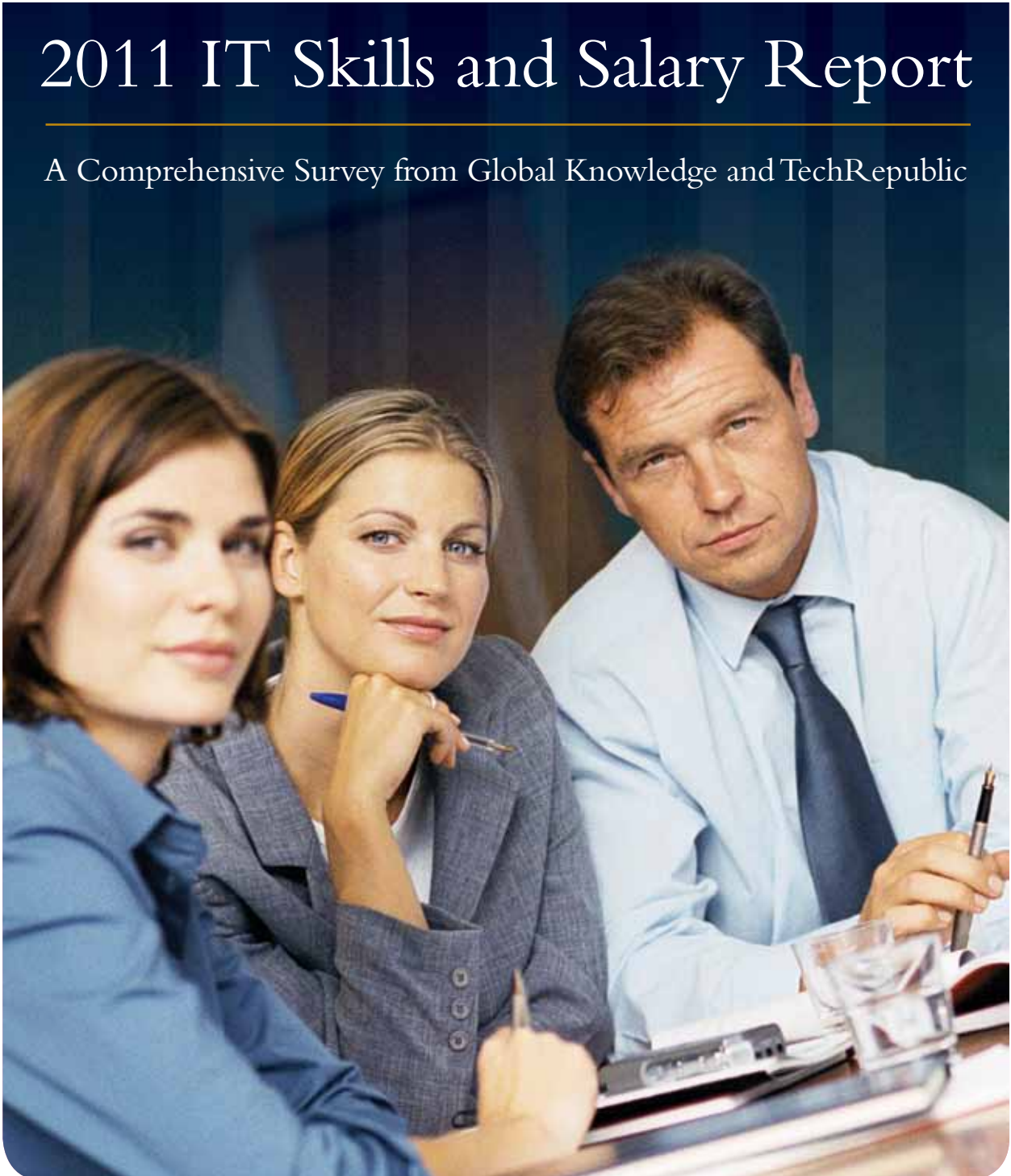# 2011 IT Skills and Salary Report

A Comprehensive Survey from Global Knowledge and TechRepublic

2011 IT Skills and Salary Report

Introduction

While the global economic recession of recent years has largely been replaced by a lethargic recovery, many workers continue to be impacted by job loss, reduction in salary and benefits, or job change. IT professionals have felt the impact of these economic tremors along with the rest of their colleagues. Organizations continue to use computers, networks, and software applications as the primary tools for doing business – in fact many have increased their reliance on IT systems in the face of streamlined staffing – but these organizations are also changing the ways they do business and looking for efficiencies wherever they can find them.

Our annual skills and salary survey, the fourth in partnership between Global Knowledge and TechRepublic, sought to capture the magnitude of these changes. As a result, new questions have been added to yield deeper insight into the factors effecting job satisfaction, the importance of skills development with training delivered across multiple delivery methods, current and expected business conditions by industry, and expected areas of concerns in the year to come.

Over 12,000 IT professionals from around the globe responded to the survey, which was completed online between October 11 to November 19, 2010. Respondents from the United States and Canada accounted for 84 percent of all responses. Complete survey methodology can be found on page 21.

For the third straight year, the stagnant economic environment held salaries in check for the IT profession. The average salary for survey respondents this year was $79,579, down 3.2 percent from the 2010 survey ($82,115). Although average salaries in the industry gave up some ground, it's important to note that they are still eight percent higher than $73,900 recorded in our 2008 study. This trend is consistent with findings from other IT industry studies(1). Current trends affecting IT workers include 1) Changes in the way IT departments are funded

and staffed, which has resulted in layoffs and salary and benefits reductions, and 2) Shifting some IT activities to "the cloud," managed services, or offshore outsourcing in order to drive greater efficiency in IT spending.

Just over half (54 percent) of this year's respondents reported receiving a raise. This is up from 43 percent seen in last year's study, but down significantly from 70 percent in 2009 *(See figure 1)*. Performance in their current position was the primary reason for receiving a raise, mentioned by half of those who received a raise. Four out of ten IT professionals reported their salaries were capped without a raise. The number of respondents reporting a salary cut declined from eleven percent in 2010 to seven percent in the current study.

On average, those respondents who received a raise saw an increase in salary of seven percent, with a median increase of four percent. Bonuses were received by 41 percent of respondents, up two points over the prior year, but down five percentage points from 2009 (41 percent vs. 46 percent). The average bonus was down $728, a decline of eight percent since last year ($7,926 vs. $8,654).

Demographically, the respondents look very similar to prior years. Average age was 44, with average career tenure of 16 years. The percentage of male respondents was consistent with prior years at 79 percent. Two-thirds of respondents have an undergraduate or graduate degree, which is flat compared to 2010.

Does Money Bring Job Satisfaction?

Never confuse the size of your paycheck with the size of your talent.

– Marlon Brando

The 2011 survey, like previous editions, includes several questions that attempt to understand the relationship among training, salary and employees sense of job satisfaction. Anecdotally, we know that job satisfaction is more than just a function of salary and it is typically related to our ability to tap into our creativity in order to fulfill our potential, and make a difference in the process. This year's data confirms that, but with a few important footnotes.

Participant Profile			
	2011	2010	2009
Base Salary	$79,579	$82,115	$81,600
Received a Raise	54%	43%	70%
Raise/Increase Amount	7%	10%	6%
Received a Bonus	41%	39%	46%
Average Bonus	$7,926	$8,654	$8,575
Average Age	44	43	42
Years in IT	16	15	15
Male vs. Female	3.6:1	3.9:1	3.3:1
College Degree	67.8%	69.7%	67%
Figure 1			

Overall, 85 percent of respondents reported being at least moderately satisfied on the job. This is an improvement over last year's figure of 73 percent overall. The improvement came primarily from those who experience little or no satisfaction with their work. That number was down 12 points year over year (14 percent vs. 26 percent in 2010). However, the data suggests room for improvement as 42 percent of IT professionals report being only 'moderately' satisfied with their job, up nine points from 2010. Conversely, 43 percent reported they were either 'very' or 'completely' satisfied *(See figure 2)*.

Still, we also shouldn't underestimate the value of workers being paid what they think they're worth. In general, there is a positive relationship between salary and job satisfaction, with salary generally increasing with satisfaction. The exception this year being those who are least satisfied with their current positions make an average of $497 more per year than those who are somewhat satisfied. This supports the idea that there are some very challenging jobs or difficult companies to work for, and that in order to compensate for these factors these jobs have to pay very well to attract and retain competent candidates *(See figure 3)*.

Two new questions were also added to this year's survey relating to sense of job security. Given the depth of the recent economic recession and continued high levels of overall unemployment, we thought it would be useful to explore the relationship between perceived job security and one's satisfaction with his or her work. Respondents were asked to assess their current feelings on job security. Four out of ten (42 percent) reported feeling secure, one-third reported some trepidation (34 percent), while approximately one out of four (24 percent) indicated they held no illusions of job security *(See figure 4)*.

Participants were also asked to compare their current sense of job security with where they were a year ago. The majority (58 percent) reported feeling about the same (neither more nor less secure) compared to 2010. One in five feels either more or less secure than the same time last year. Of those, the majority (53 percent) feels less secure than they did last year. Not surprisingly, this group is most likely to express dissatisfaction with their current employment and is currently looking for new opportunities.

Conversely, those participants who report feeling secure about their current position are three times as likely to indicate being satisfied on the job (63 percent vs. 19 percent for those feeling

Overall Job Satisfaction

	2011	2010
Completely Satisfied	5%	8%
Very Satisfied	38%	32%
Moderately Satisfied	42%	33%
Somewhat Satisfied	10%	17%
Not Satisfied	4%	9%

Figure 2

Average Salary Based on Overall Job Satisfaction

	2011	2010
Completely Satisfied	$87,308	$86,445
Very Satisfied	$82,948	85,602
Moderately Satisfied	$78,080	$80,582
Somewhat Satisfied	$74,784	$78,439
Not Satisfied	$75,281	$73,247

Figure 3

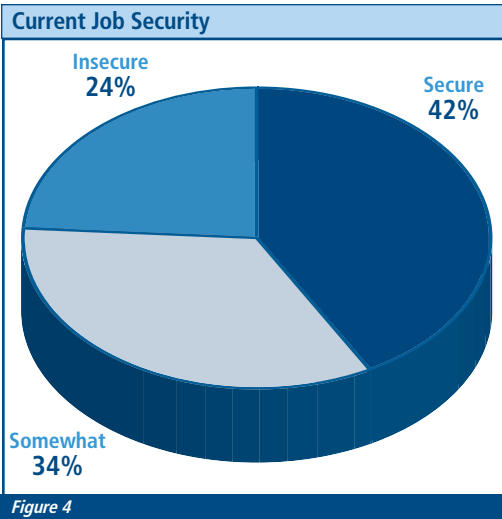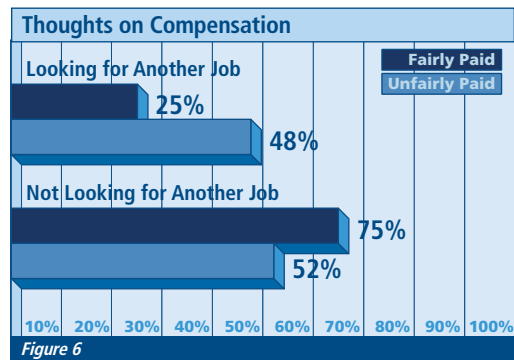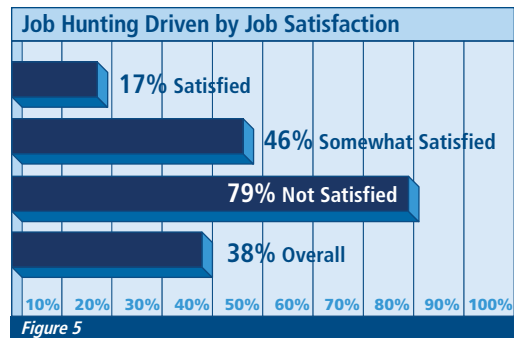**Current Job Security**

Insecure 24%
Secure 42%
Somewhat 34%

Figure 4

insecure about current position). Those feeling insecure about their current position are nearly four times more likely to report a sense of dissatisfaction with their present job (30 percent vs. eight percent for those secure in their current position).

As expected, satisfaction with the current job directly affects their willingness and intensity to search for a new position. Overall, 38 percent of the IT professionals who responded to this year's survey report they are considering making a job change. This increases to 79 percent for those who have little or no satisfaction with their current work environment, and falls to 17 percent for those who express satisfaction *(See figure 5)*. By comparison, a recent survey conducted by placement-firm Manpower reported that 84 percent, or five out of six U.S. workers plan to look for new positions in 2011. (2) Regardless of where the actual percentage lies, the bottom line is that there are a lot of people looking for new jobs. That means technical workers who are seeking new positions should expect to face a lot of competition in the labor market and should hone their job seeking skills accordingly (TechRepublic's Career Management blog has lots of tips to help).

In relationship to compensation, those who believe they are fairly paid for the work they do are significantly less likely to be planning a job search (25 percent vs. 48 percent for those who feel they are not fairly compensated) *(See figure 6)*. No surprise there.

Of the nearly four out of ten IT professionals who are considering a job change in 2011, almost 60 percent will be engaged in active job hunting in Q1, and three out of four will be actively seeking new work by summer. These percentages skew higher for those who are feeling insecure about their current positions (82 percent will be looking before summer compared to 72 percent for those who feel secure). Older respondents (those over age 45), those who saw a salary decrease in 2010, and those whose companies are facing difficult present business conditions are more likely to report they are actively engaged in job hunting.

Job Hunting Driven by Job Satisfaction

17% Satisfied
46% Somewhat Satisfied
79% Not Satisfied
38% Overall

Figure 5

Thoughts on Compensation

Fairly Paid
Unfairly Paid

Looking for Another Job
25%
48%

Not Looking for Another Job
75%
52%

Figure 6

Looking Beyond Salary –
Other Factors Influencing Job Satisfaction

Competitive salary was the most often selected factor associated with job satisfaction, with 85 percent selecting it from a multiple response list (down from 88 percent in 2010). However, it was not the only factor with relevance. On average, respondents selected seven factors from a list of eleven (down from eight factors in 2010). Other key factors include:

- Respect for the work performed (80.3%)
- Ability to increase skill set (78.7%)
- Work/life balance (76.2%)
- Assurance that my job is secure (65.8%)
- Comprehensive benefits (65.8%)
- New responsibilities (59.5%)
- Communication with superiors (57.5%)
- Communication with peers (54.2%)
- Promotional opportunities (52.4%)
- Bonus opportunities (48.1%)

These numbers were pretty consistent with results from the 2010 survey, especially the top three. Beyond the top three, there were some changes in rank. Environments that foster work/life balance, assurances around job security, and opportunities for new responsibilities moved up in importance compared to 2010. Concern over benefit packages (down 13 percent) was of less importance to respondents in 2011. IT employees appear willing to sacrifice benefits for salary and job security *(See figure 7)*.

Respondents who are looking for new jobs are driven by promotional opportunities, as opposed to lateral moves. Over 60 percent of those who reported they were engaging in a job search selected promotional opportunities as a key driver to job satisfaction, compared to 47 percent of those who are not actively looking for a job *(See figure 8)*. The job changer group also has a higher interest in bonus potential (52 percent indicated it was important to their job satisfaction, compared to 46 percent of those who were not looking to change employers.)

Non-supervisory staff accounted for half of this year's respondent pool. This group is much more interested on assurances of job security and the ability to increase skill sets than their counterparts who have direct reports. Peer level communication is also more critical.

Job Satisfaction Factor		
	2011	2010
Competitive Salary	1	1
Respect for the Work You Perform	2	2
Ability to Increase Skill Set	3	3
Environment That Supports Work/Life Balance	4	5
Assurance That My Job is Secure	5	6
Comprehensive Benefits	6	4
Opportunity for New Responsibility	7	8
Communication with Superiors	8	7
Communication with Peers	9	9
Promotional Opportunities	10	10
Bonus Opportunities	11	11

Figure 7

Figure 8
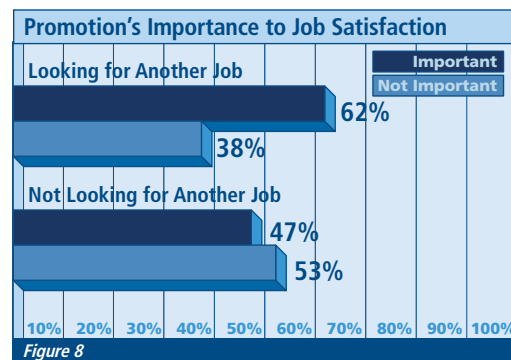
Female respondents share most of the same viewpoints as their male counterparts, but there were several areas of substantive difference. Women in the IT profession, relative to their male colleagues place greater value on the nature of the benefits package (67 percent vs. 61 percent), environments that foster work/life balance (82 percent vs. 74 percent), interpersonal communication with peers (62 percent vs. 51 percent) and superiors (63 percent vs. 55 percent), and respect for the work achieved (87 percent vs. 77 percent). There is no difference in overall work satisfaction between men and women.
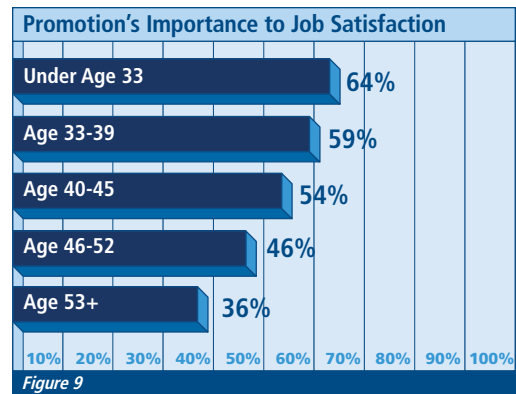
Age is a significant differentiator in the realm of job satisfaction. Younger IT professionals are more apt to place higher value on competitive salary and bonus potential whereas their older counterparts place greater emphasis on the comprehensive nature of their benefits package and achieving respect for their work. The ability to build skill sets, acquire new responsibilities and pursue promotional opportunities is of more importance to younger workers *(See figure 9)*. The need to maintain a balance between work and life takes on more significance for those in their early 30s to mid-40s, a time when family responsibilities begin to grow. Overall satisfaction shows an increasing trend with age.

It appears that job satisfaction among IT professionals is rebounding from its low point in early 2010. Data released by the Corporate Executive Board reported that satisfaction in the IT ranks reached an all-time low during the period of late 2009 through early 2010.(3) Their measure is the percentage of "highly engaged" employees, those willing to put in extra time and effort to solve problems, reached a low of four percent (down from 12 percent in 2007). This correlates with data reported previously in this study. With our current measure of satisfaction on the increase let's see if the trend continues in 2011.

Information Seeking –
How Do IT Professionals Stay Up to Date?
Respondents were asked if and how they engaged in a series of information seeking activities. Over 80 percent of IT professionals use the Internet to research topics of interest. Three out of four have downloaded a white paper, with approximately the same percentage having taken a lunch hour to view a webinar. As for formal training, 42 percent have attended an 'out of office' training session, with half reporting they participated in self-paced online training.

Promotion's Importance to Job Satisfaction

Under Age 33	64%
Age 33-39	59%
Age 40-45	54%
Age 46-52	46%
Age 53+	36%

Figure 9

In addition to formal training, informal methods of learning are quite popular. Over half of the respondents (55 percent) reported they engaged in an informal training session while at work. This could be in the form of a 'lunch and learn' session, viewing a webinar, following an online community, or downloading a mobile instruction application.

Professionals in the technology space employ several learning methods. Three out of four IT professionals have attended traditional instructor-led classroom courses. Over two-thirds have employed printed study materials to prepare for exams and research solutions to existing problems. Online self-directed courses and DVDs or e-books are also used. One-on-one mentoring and study groups are used less often. With the variety of content delivery options available, traditional classroom training is still viewed as the gold standard.

Overall, IT professionals are voracious information seekers. They are constantly working to gain new skills, stage new software and hardware for testing, study for certification and specialist exams, or prepare themselves to qualify for new positions. Six out of ten respondents undertake six or more of these types of activities in their efforts to stay current **(See figures 10 and 11)**. Information seekers are more apt to pursue learning and networking opportunities, both formal and informal. They are more satisfied on the job; tend to be involved with project management or business process improvement, while pursuing new career opportunities as well. Not surprisingly, their efforts pay off with a significant salary differential. Information Seekers earn eight percent more than members of the 'Engaged' group ($82,424 vs. $76,025) and 14 percent more than members of the 'Unaware' group ($82,424 vs. $72,323).

Acquiring New Skills and Polishing Existing Ones

Learning is an active process. We learn by doing.
Only knowledge that is used sticks in your mind.

– Dale Carnegie

IT is one of the fastest-changing professions on the planet. The practical knowledge it takes to do most of the jobs in IT is swiftly wiped away and replaced at a breath-taking pace. That puts a lot of pressure on IT workers to keep their knowledge and skills up-to-date. Many of the opportunities for IT training are associated with new deployments by the major hardware and software developers. Over three-fourths of respondents
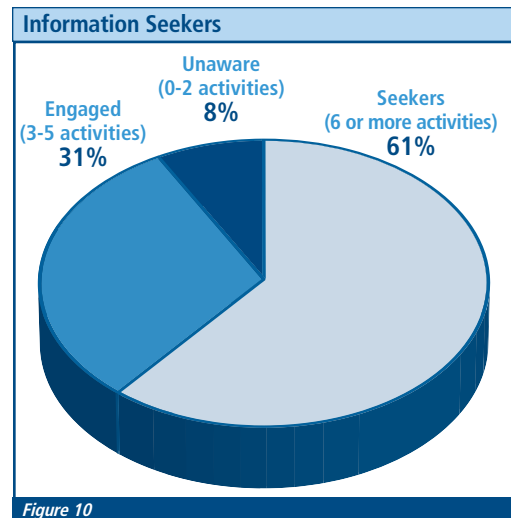
Information Seekers

Unaware (0-2 activities) 8%
Engaged (3-5 activities) 31%
Seekers (6 or more activities) 61%

Figure 10

Information Seeking Activities

	Overall	Info Seeker
Researching a Topic Online	82.2%	93.2%
Downloading a Whitepaper	73.7%	87.5%
Viewing an Online Webinar	69.1%	86%
Informal Learning Session at Work	55.1%	71.5%
Content on Mobile Device	50.9%	65.9%
Self-Paced Online Training	49.4%	64.9%
Professional Seminar or Luncheon	49%	66%
Joining an Online Community	45.2%	61.9%
Classroom Training	41.6%	53.6%
Formal Training Session at Work	36.4%	50%
Instructor-led Online Training	29.9%	42.2%
Using a CD-based Training Tool	27.7%	36.9%
Contributing to a Blog	17.3%	25.2%
Posting or Following on Twitter	14.1%	20.4%

Figure 11

took some form of training in the prior year, up from 66 percent in 2010 survey. The majority of those that trained (67 percent) did so to build new skills *(See figure 13)*. Even in the era of being relieved just to have a job, one-third of respondents who trained did so with the intent of increasing their compensation.

Does training have an impact on compensation? Almost three-fourths of respondents (74 percent) believe that training can impact base salary, up from 64 percent in last year's survey. The strength of this belief is consistent across gender and age, but does vary somewhat by job role, size of the IT department, industry and tenure. Programmers and system designers are less likely than the norm to believe that training has an impact on salary. Belief in training's impact upon salary is greatest with those having up to five years of tenure in the technology field (83 percent) and declines to 71 percent for those with more than 25 years of tenure.

Belief in training's positive impact upon salary is highest in smaller IT departments and declines when department sizes exceed 100 staff members. The strength of this belief varies by industry with respondents from manufacturing sectors generally holding more strongly to the belief of training impacting salary than their counterparts in professional services, banking and transportation.

What does the data say? Do those who believe training has an impact upon base salary earn more than their counterparts? Overall the answer is no, which is consistent with last year's survey. On average those who believe training impacts base salary earn less than those who do not ($78,403 vs. $82,953). Again this was consistent with the 2010 survey. This difference was most pronounced for those in the middle of their career (11 – 20 years). It becomes less pronounced for those with more than 20 years of tenure. One can infer that more experienced, well-paid IT professionals may view themselves as already well-compensated with less room for salary growth.

However, receiving training does typically have an impact on salary, according to the data in this year's survey. Those that trained in the prior year earn an average of $3,383 or 4.4 percent more than those who did not train ($80,621 vs. $77,238) *(See figure 12)*.

Training in the Last 12 Months			
Tenure	Did Not Train	Trained	% Diff
1–5 Years	$51,520	$53,812	4%
6–10 Years	$65,053	$69,416	7%
11–15 Years	$75,416	$81,366	8%
16–20 Years	$84,914	$88,830	5%
21–25 Years	$87,640	$95,761	9%
26+ Years	$94,373	$98,144	4%
Total	$77,238	$80,621	4%

Figure 12

Reasons For Training			Ranking	
	2011	2010	2011	2010
Build New Skills (Not related to a new software deployment)	66.7%	80.2%	1	1
Prepare for a New Product Deployment or Software Upgrade	46%	41.1%	2	5
Prepare for a Career Certification or Specialist Exam	45.5%	49.5%	3	2
Advance My Career to Qualify for a Different Job	40.8%	46.3%	4	3
Work With Cutting Edge Technology	38.2%	42.4%	5	4
Increase My Compensation	33.6%	34.0%	6	7
Solve a Particular Problem	31.9%	29.9%	7	8
Requirement by Employer	31.5%	26.8%	8	9
Evaluate New Products for Possible Purchase	26.3%	34.9%	9	6
Gain Recognition From Management	24.4%	21.1%	10	11
Prepare for a Career Change	17.2%	22.6%	11	10
It Was Recommended By Colleague	12.3%	10.5%	12	12
Prepare for Channel Specialization or Designation	10.6%	9.4%	13	13
Government Mandates (e.g. 8570 Initiative)	7.0%	7.5%	14	14
Other	1.9%	4.8%	15	15
Figure 13				

Why Do We Train?

Training takes time, money and energy to complete. It often takes IT workers out of the office and off key projects and billable hours. With this in mind, why do IT professionals seek out training? The number one reason in both the 2011 and 2010 surveys was the intent to build new skills, although it was down significantly between surveys *(See figure 13)*. Preparation for a new product deployment or software upgrade moved up in the rankings from fifth in 2010 to number two in 2011, which offers evidence that companies are starting to strategically invest in new IT projects again.

The decision to train is typically not due to a single reason. Less than ten percent of respondents reported they took training with a single intention. On average, the decision process involved an attempt to meet four separate needs through training. This number varied significantly with 'Information seekers' indicating they used training to solve 4.8 separate needs compared to 3.3 for the 'Unaware' segment. Information seekers are more than twice as likely as the 'Unaware' to use training to prepare for a channel specialization or to evaluate new products. They are also more likely to take advantage of training as a means to work with cutting-edge technology, gain recognition from management, or because a course was recommended by a colleague.

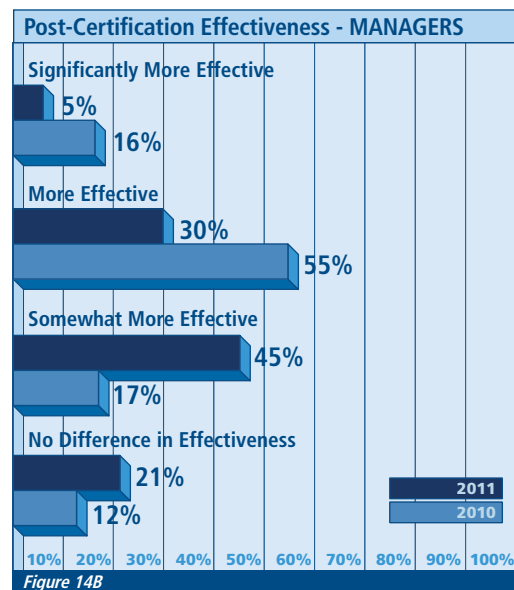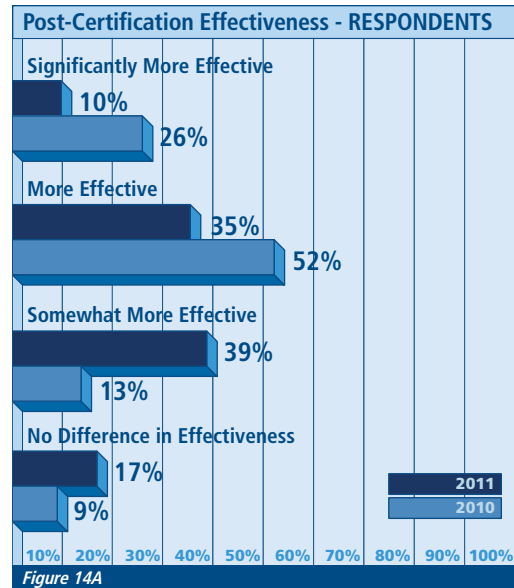## The Role of Human Resources in the Training Decision

Less than 30 percent of respondents reported their training efforts were coordinated outside their IT group by human resources or a dedicated training department. The likelihood of using a dedicated training department, or an HR resource, to coordinate training increases with the size of the IT department. Company-preferred training vendors were used by 13 percent of respondents. In the majority of cases (over 60 percent) where preferred training vendors were used, the option for the IT worker to recommend an alternative provider exists.

Certifications – Are They Worth the Effort?

Over half of the respondents (55 percent) who reported they took training did so to pursue a certification or recertify. This is comparable to the 2010 study. Nearly sixty percent of this group believes their certification pursuits will impact their base salary. Unlike the previous section regarding training in general, those who train for certification purposes do show a higher average salary ($79,352 vs. $75,256), a difference of $4,096 or 5.4 percent.

Does certification impact job effectiveness? There is a general decline in the perception of certifications on job effectiveness. Approximately 45 percent felt they were 'more effective' or 'significantly more effective' on the job after completing their certification training *(See figures 14A and 14B)*. This is down significantly from 78 percent in 2010. Have the opinions of managers, who are responsible for overseeing staff certification, changed over the year? It would appear there has been a shift in opinion there as well. The percentage of managers reporting 'no change' in effectiveness after certification rose from 12 percent in 2010 to 21 percent in the current survey. Conversely the percentage reporting their staff was 'significantly more effective' fell from 16 percent to five percent. This will be an interesting trend to watch, as IT directors could be moving toward putting more emphasis on pure training than training with certification attached. Of course, the exception will continue to be consultants and integrators who need certified workers to maintain some partner relationships and who use certification to demonstrate and market their expertise.

Despite a downward shift in opinions on job effectiveness, respondents still view certifications as a worthwhile investment in their career. Seventy percent reported they felt efforts to obtain a certification were worth the additional commitment. This percent is unchanged compared to last year's survey. Half report they perceive their certification efforts to be of value to their

Post-Certification Effectiveness - RESPONDENTS

Significantly More Effective
10%
26%

More Effective
35%
52%

Somewhat More Effective
39%
13%

No Difference in Effectiveness
17%
9%

2011
2010

10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Figure 14A

Post-Certification Effectiveness - MANAGERS

Significantly More Effective
5%
16%

More Effective
30%
55%

Somewhat More Effective
45%
17%

No Difference in Effectiveness
21%
12%

2011
2010

10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Figure 14B

company. Less than 30 percent believe the value of a certification has declined or that having a certification is 'over-rated'.
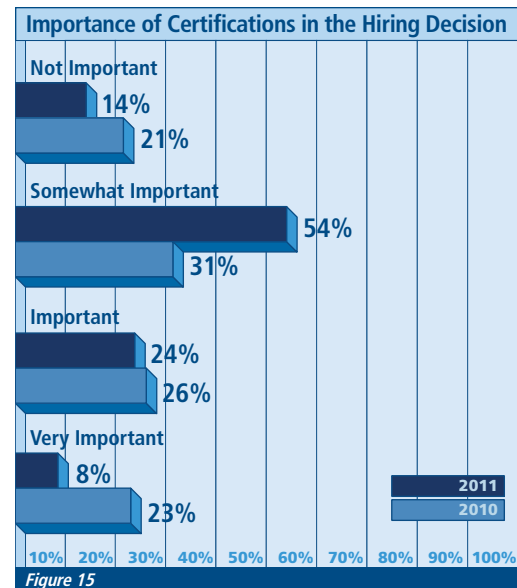
Level of Responsibility

IT staff members with no managerial duties accounted for 53 percent of this year's respondents, up from 48 percent in 2010. Less than one-third of respondents hold supervisory responsibilities. Among the managers, nearly 60 percent have budget responsibility and 53 percent are called upon to make hiring and training decisions.

Over 60 percent of managers anticipate sending their staff to IT training during 2011, up slightly from 2010. Interest in sending staff to project management training is up slightly over last year at 23 percent and business skills training is off slightly at 25 percent. Over two-thirds of hiring managers believe that certifications have an impact upon a new hire's base salary, up slightly from last year. However there has been a shift in the overall view of certifications in the hiring process *(See figure 15)*. Less than 10 percent of hiring managers viewed them as 'very important' when making staffing decisions (down from 23 percent in 2010). However, this is not consistent across all industry sectors. Aerospace, homeland defense, and systems integrators continue to place more emphasis on certifications in the hiring process. This could also be a function of the numerous options available to train staff once they are onboard.

There appears to be modest growth in training budgets for 2011. The median in 2010 was $2,400 per employee, with the 2011 figure up ten percent to $2,650. Nearly 30 percent of the companies and organizations represented in the current survey expect to spend $4,000 or more per employee. These firms cluster in banking and finance, government (especially defense and homeland security), aerospace, systems integrators, telecommunications, and utilities.

Final Word on Training

As businesses and organizations of all sizes continue to rely more heavily on technology to streamline and automate business activities and empower workers, we will continue to see the need for IT training. Research conducted by IDC in 2008 reported that 61 percent of IT managers believe that the skill level of their team is the critical driver to success.(4) This combined with the inherent personal need of technology professionals to continue learning means training remains not only a benefit, but a necessity for job satisfaction and career growth.
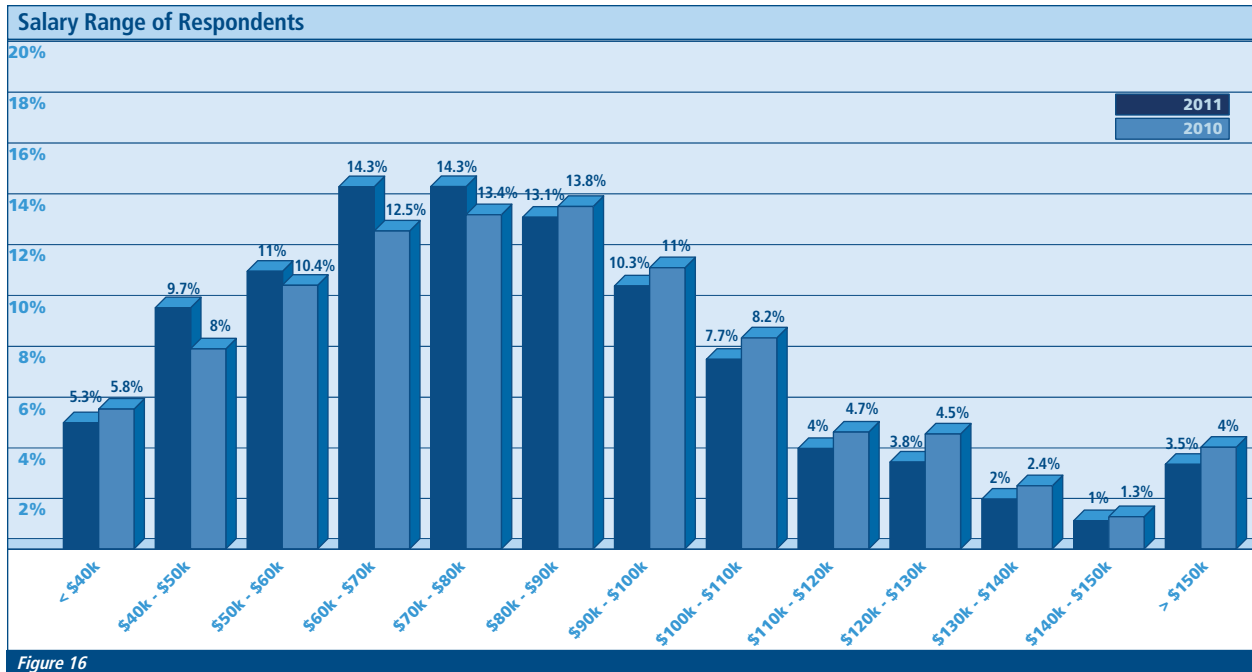
Importance of Certifications in the Hiring Decision

Not Important — 14% (2011), 21% (2010)
Somewhat Important — 54% (2011), 31% (2010)
Important — 24% (2011), 26% (2010)
Very Important — 8% (2011), 23% (2010)

2011
2010

Figure 15

Salary Range of Respondents

Figure 16

Trends in Base Pay, Bonuses and Benefits

Money isn't the most important thing in life, but it's reasonably close to oxygen on the "gotta have it" scale.

– Zig Ziglar

In the 12 months between the 2010 and 2011 surveys, the IT profession continued to reinvent itself along with the compensation models used to pay employees. The percentage receiving a raise climbed to 54 percent, up from 43 percent in 2010. The average raise realized was 7.1 percent or $5,710 (median was 4.2 percent or $3,000). However, the average salary itself showed a decline of 3.1 percent to $79,579, compared to $82,115 in the prior year *(See figure 17)*. This was driven by an increase in the percentage of respondents falling in the $40,000 to $79,999 range *(See figure 16)*. This range accounted for 44 percent of respondents in 2010 but jumped to 49 percent in 2011. Respondents in this range were also less likely to receive a raise.

There are other factors associated with the likelihood of receiving a raise. The percentage of those receiving raises skewed higher for three groups: respondents under age 40; those whose job functions involved data security or business process improvement; and those in analyst, system architect, engineering, and quality control job roles. IT department size is also associated with the likelihood of receiving a salary increase. Raises were more common for respondents in departments with 100 or more IT staff. Those with over 20 years in

Participant Profile			
	2011	**2010**	**2009**
Base Salary	$79,579	$82,115	$81,600
Received a Raise	54%	43%	70%
Raise/Increase Amount	7%	10%	6%
Received a Bonus	41%	39%	46%
Average Bonus	$7,926	$8,654	$8,575
Average Age	44	43	42
Years in IT	16	15	15
Male vs. Female	3.6:1	3.9:1	3.3:1
College Degree	67.8%	69.7%	67%

Figure 17

their career were less likely than early career IT professionals to receive a raise. This correlates with the decreased likelihood by senior management to have received a raise. This group was more apt to report no movement in their salaries.

Gender did not play a role as men and women were equally likely to see an increase in salary. Neither was supervisory level a factor. Supervisors were as likely as staff to receive a raise, according to the survey data.

Feelings on the fairness of compensation are strongly associated with receiving a salary increase. Two-thirds of those who report being fairly paid saw a salary increase compared to 45 percent of those who report feeling unfairly paid *(See figure 18)*.

Those who indicated taking training in the prior year were more likely to have benefited from a salary increase (57 percent vs. 46 percent of those who did not train). Respondents who trained in ITIL, project management, IT management, and business analysis were more likely than their counterparts in other areas to receive a salary increase. In regard to certification, those who had earned a certification within the prior five years were more apt to see a salary increase (57 percent reporting receiving a raise vs. 51 percent for those who had not certified).

There is a significant relationship between salary increases and job satisfaction. Respondents who did not receive a raise are less apt to report being satisfied with their current position. As shown previously in Figure 2, less than 42 percent of those who did not receive an increase reported being satisfied, compared to 64 percent of those who received a raise. Not surprisingly, those who did not see an increase are more apt to be considering a new position.

Over half of those who received a raise reported it was driven by their performance in their current position *(See figure 19)*. Over 40 percent reported their raise was due to a standard company increase. Respondents who acquired new skills of added value saw larger average raises ($8,103 [10.7 percent] vs. $5,307 [6.5 percent for those who did not acquire new skills]). A similar effect was noted for those who took on new responsibilities in their current position ($7,200 [9.1 percent] vs. $5,349 [6.6 percent]). Cost of living increases average 4.9 percent ($3,689) for those who received them.

Job mobility is associated with higher raises. Respondents who took a lateral position within their company saw a raise of 10.9 percent ($8,996) compared to 6.8 percent ($5,430) for those who did not. Lateral moves to a new company garnered
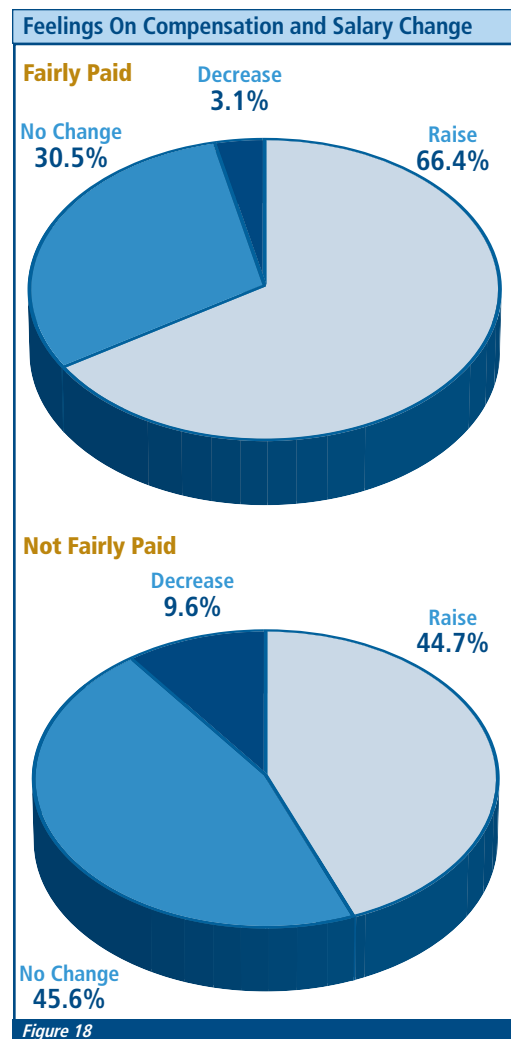
Feelings On Compensation and Salary Change

Fairly Paid

- Decrease 3.1%
- No Change 30.5%
- Raise 66.4%

Not Fairly Paid

- Decrease 9.6%
- Raise 44.7%
- No Change 45.6%

Figure 18

Reasons for Receiving a Raise

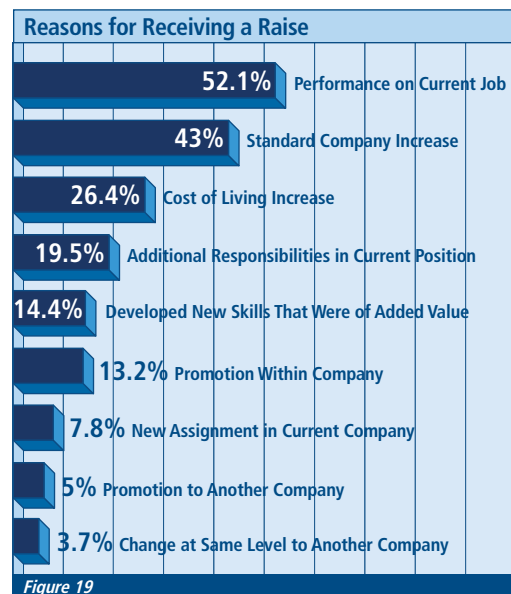| Percentage	Reason
52.1%	Performance on Current Job
43%	Standard Company Increase
26.4%	Cost of Living Increase
19.5%	Additional Responsibilities in Current Position
14.4%	Developed New Skills That Were of Added Value
13.2%	Promotion Within Company
7.8%	New Assignment in Current Company
5%	Promotion to Another Company
3.7%	Change at Same Level to Another Company

Figure 19

an average raise of 14.4 percent ($12,026). Promotions both within the company and with a new company brought about significantly higher raises. IT professionals who took an internal promotion saw an average raise of 11.1 percent ($8,576). Those who took a promotion with a new company increased their salary an average of 18.4 percent ($15,617). Is it any surprise that ambitious workers in hot IT roles such as software engineer or business analyst tend to jump from company to company to maximize their earning potential?

Fortunately only seven percent of the survey respondents reported they experienced a decrease in salary. Economic conditions were largely the cause. Those who took a cut in pay saw an average decrease of 28 percent ($19,604) with a median of 12.5 percent ($10,000). These high numbers make it appear that IT executives with hefty salaries likely bore the brunt of the decreases.

Bonus Plans

Over 80 percent of the IT professional respondents reported being part of a bonus program. From this group, half received a bonus within the last year. The average bonus was approximately $7,926 (down eight percent over the prior year), but the median bonus amount was $5,000 (up two percent over 2010). Approximately 70 percent of those who earned a bonus last year are optimistic they will do so in the coming year. Overall, 18.5 percent of respondents were not bonus eligible. For the majority of this group (84 percent) there is little optimism they will move into bonus eligibility in the coming year. Similar opinions are held by those who are in a bonus program, but did not receive a payout in the last year. Seventy percent expect to receive no bonus in the near term.

Benefit Packages

Relative to the 2009 survey, there are still significant changes taking place in the benefits packages for IT professionals. On the plus side, the percentage receiving employer-paid healthcare is up seven points from 77 percent in 2009 to 84 percent in the current survey. Three out of four have a dental insurance plan and 69 percent have some form of employer-paid life insurance (both are flat compared to 2009). On the down side, the percentage having a 401k or other retirement plan is lower; as is profit sharing and access to employer-paid training. Vacation or some other form of paid time off (PTO) stands at 86 percent, down from 89 percent in 2009. Clearly, the trend of companies curtailing expenses by reducing the cost of benefit packages continues *(See figure 20)*.

Benefit Comparison			
	2011	2010	2009
Vacation/Personal/Sick Leave	86%	90%	
401k or Retirement Plan	70%	75%	
Dental Insurance	78%	79%	
Health Insurance	84%	85%	
Life Insurance	69%	70%	
Employer Paid Training	47%	46%	
Profit-Sharing	16%	20%	

Figure 20

The Impact of Training and Certification on Salary

One of the things that may get in the way of people being lifelong learners is that they're not in touch with their passion. If you're passionate about what it is you do, then you're going to be looking for everything you can to get better at it.

– Jack Canfield

Certifications represent a measurable sign of achievement in the IT profession. They take time, money, and energy to complete. The reasons why IT workers pursue them vary, but in the end the majority of professionals believe certifications are a career investment. In fact, 81 percent of those who earned a certification in the last five years stated it was a worthwhile endeavor. In the current survey, 45 percent of the respondents reported earning a certification within the last five years, up from 33 percent in the 2010 survey. Approximately half report they feel their certification has a positive impact on their base salary, down slightly from 53 percent last year.

Seven out of ten respondents reported training in the prior twelve months. From this group 51 percent did so to prepare for a career certification or specialist exam. For these respondents, there was a positive relationship between post-certification effectiveness and their certification's perceived impact to base salary. In other words, those who felt more effective on the job after certification also were more apt to say that certifications positively impacted salary. Overall, professionals who had earned an IT or project management certification during the last five years earned an average of $2,720 (3.5 percent) more than their counterparts ($81,079 vs. $78,359).

The type of training taken is associated with differences in salary. Those that took only IT training averaged approximately $73,000. Respondents who took IT and some form of project management or business skills training averaged approximately $82,000. Those that took no training at all averaged $78,317 (some of these are likely to be well-trained already). Respondents whose training was exclusively business-related, including ITIL®, or project management averaged $87,730.

Certifications and Salary

Nearly half of the respondents (45 percent) reported they earned an IT, project management or business-related certification in the prior five years. This group was asked to select from a broad slate of certifications (270) across 20 categories,

including business process, imaging and printing, database, security, virtualization, and wireless, among others *(See figure 21)*. Seven percent of the respondents (678) hold a Project Management Professional (PMP®) certification. Average salary for those with this certification is $103,570, placing this group in the top 20 percent of salaries.

Cisco's CCNA (Cisco Certified Network Associate), held by over 700 respondents, and Microsoft's MCSE (Microsoft Certified Systems Engineer) round out the top three. Salaries for IT professionals holding these certifications range from $79,536 to $83,234. We round out the top five with ITIL® V3 (average salary of $93,250) and Security+ (average salary of $75,508).

Salary by Job Role and Function

This year, primary job functions were separated out from job roles to provide a clearer picture of salary dynamics based on IT responsibilities. Eleven primary functions were identified along with 15 job roles. Survey respondents were also offered the option to write-in an "other" response *(See figure 22 and 23)*.

Managers and those who administer or support IT systems accounted for one-third of responses. IT managers typically have 17 years of tenure with an annual salary averaging $89,636. Respondents in the systems administration arena average 13.8 years in the profession with a yearly salary of $65,749.

Over half of the respondents were at the staff level, similar to the 2010. Tenure for this group averages 14.6 years with earnings averaging $70,823. Frontline supervisors account for nine percent of respondents. This group averages 15.6 years of tenure and earns approximately 11 percent more per year than the staff they supervise. Middle management accounted for 25 percent of the respondents. The average mid-level manager in IT has been working in their career for 16.5 years and earns $85,210. Senior managers and executives accounted for 13 percent of the respondent base in the current survey. Average tenure ranged between 18 – 20 years with annual base salary ranging from $101,475 to $115,500 *(See figure 23)*.

As one would expect, respondents tasked with supervising the work of others have greater average salaries than their non-supervisory counterparts. Supervisors, at all levels, account for 32 percent of the industry, down from 36 percent in 2010, which means companies are likely moving to bigger teams and fewer middle managers. The difference in average salaries

Salaries by Popular Certifications		
Certification	**Salary**	**Base***
CCNA - Cisco Certified Network Associate	$79,536	709
PMP® - Project Management Professional	$103,570	678
MCSE - MS Certified Systems Engineer	$83,234	628
ITIL® v3 Foundation	$93,250	586
CompTIA - Security+	$75,508	459
MCSA - MS Certified System Administrator	$75,328	450
ITIL v2 Foundation	$96,128	306
Server+	$70,880	296
VMware Certified Professional	$87,151	259
VoIP/Telephony	$85,669	252
MCITP - MS Certified IT Professional	$77,529	236
CISSP - Cert Info Sys Security Professional	$100,735	235
MCITP - Server Administrator	$75,311	184
CCNP - Cisco Certified Network Professional	$97,296	172
MCDST - MS Certified Desktop Support Technician	$60,360	164
Project+	$87,057	156
MCTS - Windows Vista, Configure	$73,474	148
MCITP - Enterprise Administrator	$79,824	147
MCTS - Windows Server 2008 Active Directory Configuration	$72,039	144
CCDA - Cisco Certified Design Associate	$97,995	139
Figure 21		*Number of Survey Respondents*

Click here for a complete list of salaries by certification.

Salaries by Primary Job Function		
Job Function	**Salary**	**Base***
Business Processes	$92,804	576
Applications/Programming	$88,753	1,159
Secuirity	$87,815	401
Non-IT Function	$85,113	443
Database	$83,152	446
Data Center	$82,402	411
Web Development	$78,643	245
Communications (inc. Telecom & UC)	$77,836	514
Other IT Functions	$77,415	2,406
Servers & Storage	$76,294	1,208
Networking (LAN, WAN, Wireless, etc)	$72,355	1,748
Operations & Facilities	$72,044	509
Total	$79,579	10,066
Figure 22		*Number of Survey Respondents*

between supervisors and their staff ranges from $7,714 for front-line managers, $8,547 for middle management, and $10,607 for senior management.

Salary by IT Department Size

There are many benefits associated with working for a smaller company; however, salary is not one of them, according to the survey. Statistically significant differences in average salary were found at all levels of staff size. IT departments with fewer than ten team members at their location account for over one-third of all survey responses (38 percent). This group had the lowest average salary at $69,962. Respondents working in IT departments with 10 – 99 staff members averaged 16 percent more than those in the smallest IT departments ($81,357 vs. $69,962). IT professionals working in departments with 100 or more staff average 31 percent more than those in the smallest IT departments ($91,236 vs. $69,962). This differential is consistent with results from 2010.

Salary by Industry

Across all industries those who manage, implement, and support IT infrastructure play a critical role in the success of their companies and organizations, but there are definite differences in earning potential in the various sectors *(See figure 24)*. This year we had the largest number of survey respondents from the government sector (including federal, state and local, but excluding defense), followed by healthcare, education, and the financial sector. Salaries by industry sector ranged from $64,698 in educational services to $96,421 in pharmaceutical and bio-med research. We round out the top five industries, in terms of base salary, with aerospace ($93,066), mining, oil and gas ($88,835), IT consulting ($88,077), and systems integration ($86,941).

Geographic Impact on Salary

As we have seen throughout this report, salary is a multi-faceted equation. Skills, industry, education, and tenure all have an impact. One variable that cannot be dismissed is geography. Whether there is a scarcity or surplus of workers is a function of the cost of living, the diversity of the economic base, and the overall desirability of a region, among other factors. This economic fact of worker supply-and-demand can drive salaries up or down across different locations.

Salaries by Job Role	
Job Role	Salary
Vice President	$126,693
Executive-level (President, CXO, SVP, etc)	$122,072
Director	$108,132
Systems Architect/Design	$98,138
Consultant	$93,594
Project Manager	$90,698
Manager	$89,636
System Engineering (Implementation)	$79,732
Quality Control, Usability & Testing	$79,036
Programmer	$78,293
Analyst	$73,578
Technical Writer	$67,659
Training	$67,583
Other Roles	$67,237
System Administration/Support	$65,749
End-User Helpdesk/Support	$52,649
Total	$79,579

Figure 23

Salaries by Industry	
Industry	Salary
Pharmaceutical or Bio-Med Research	$96,421
Aerospace/Defense	$93,066
Natural Resources – Mining, Oil or Gas	$88,835
IT Consulting	$88,007
VAR, IS Integration	$86,941
Government –Military and Homeland Security	$86,808
Automotive	$84,808
Insurance, Real Estate, Legal	$83,491
Banking & Finance	$83,281
Utilities	$83,049

Figure 24

Nationwide Salary Comparison

Figure 25

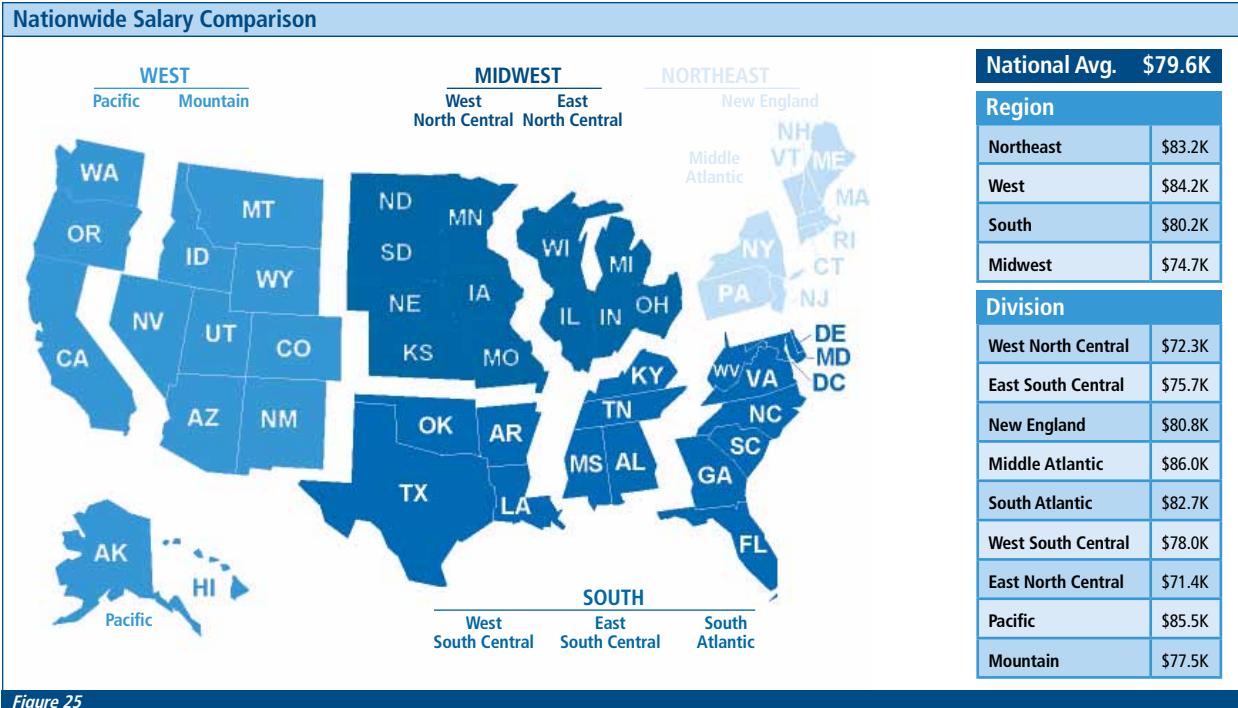| National Avg.	$79.6K
Region	
Northeast	$83.2K
West	$84.2K
South	$80.2K
Midwest	$74.7K
Division	
West North Central	$72.3K
East South Central	$75.7K
New England	$80.8K
Middle Atlantic	$86.0K
South Atlantic	$82.7K
West South Central	$78.0K
East North Central	$71.4K
Pacific	$85.5K
Mountain	$77.5K

The average salary of respondents across the U.S. is $79,579, down 3.1 percent from 2010. It ranges from $74,749 in the Midwest to over $83,278 in the Northeast. Within these broad regions, the Mid-Atlantic region had the highest salary base with an average of $86,019, followed closely by the Pacific region ($85,564) *(See figure 25)*.

On a state/district level, Washington, DC had the highest average salary at $97,612 due in part to its broad base of government, defense, and consulting employees. Other top paying states include New Jersey, Maryland, Connecticut, Virginia, and California. The lowest average IT salaries are found in the northern plains states of Idaho, South Dakota, and the more rural parts of New England. These states also have lower costs of living and fewer large employers, both contributing to lower salaries *(See figures 26 and 27)*.

Looking Forward

According to Gartner's annual forecast, global IT spending is expected to rise 5.1 percent to $3.6 trillion in 2011. To be certain, a portion of that growth will result from the relatively weak U.S. dollar, but regardless, spending is still expected to rise by at least 3.5 percent. Areas with expected growth above the norm include telecommunications equipment (9.1 percent), computing hardware (7.5 percent), and enterprise software (7.5 percent).(5)

Top 5 States by Salary	
Washington, DC	$97.6K
New Jersey	$96.0K
Maryland	$93.7K
Connecticut	$91.3K
Virginia	$91.3K

Figure 26

Bottom 5 States by Salary	
Idaho	$62.2K
Maine	$60.3K
South Dakota	$59.6K
Vermont	$58.3K
Nevada	$53.9K

Figure 27

Click here for a complete list of salaries by state.

Reinforcing that forecast, three out of four survey respondents indicated they were seeing a rise in IT projects. This is up 15 points from last year's survey (77 percent vs. 62 percent). This skews up for several industries: automotive (84 percent), banking and finance (83 percent), insurance and legal (82 percent), healthcare (84 percent), natural resources (89 percent), retail (83 percent), and system integrators (81 percent). Several of these industries benefited from federal stimulus funding, especially healthcare. Two industries continue to face challenging business conditions and do not expect to see projects coming online with as much exuberance. These include construction (64 percent) and aerospace (67 percent).

Respondents were also asked to report on their current and expected business conditions. Over half (56 percent) indicated that their businesses were either growing slowly or experiencing a period of solid growth. This is up 14 points from last year (56 percent vs. 42 percent). There is a significant relationship between projects coming online and perceived business conditions. For example, respondents from construction and aerospace are more likely to report they are experiencing difficult business conditions, and therefore less likely to report seeing projects being initiated or revived.

The primary critical concerns facing respondents' organizations are the economy and budget limitations. Current economic consensus calls for limited growth, which means companies will not benefit from a significant influx into their respective markets. Growth will result from a more customer-centric approach and a rapid response to demands in the market. IT will be tasked with staying flexible enough to enable companies to compete more effectively.(6) The strongly-held opinion that there are not enough resources to keep the ship afloat while also sailing in new directions will have to be overcome by senior IT management.

As for skills to be added, almost one-third indicated virtualization was on their radar for 2011. This is up seven points from 2010 (32 percent vs. 25 percent). This is followed closely by cyber security, network administration and project management skills.

Summary

Despite the shadow of slow economic times, there remains a sense of optimism among IT and business professionals. The majority of survey respondents believe their personal economic conditions and those facing their companies will improve in 2011.(7)

While the average IT worker salary in this year's survey was down 3.1 percent year-over-year, it is still up eight percent compared to 2008 (the first year of this survey), and IT worker demand in multiple industries and for multiple skill sets and job functions remains strong. The world is more dependent on technology than ever, and IT workers who can continue to keep the world running and push their organizations forward with the latest innovations will remain a valuable asset.

Also, our respondents and their managers agree that training and certification improve job performance. This increase in employee effectiveness is critical to note as budgets begin to return to previous levels but still remain under scrutiny. The key, then, to job security and increasing one's salary, as born out in the data, is improving personal job performance. Becoming a continually active learner and regularly updating IT knowledge and skills play a key role in job performance, job satisfaction, and compensation.

Survey Methodology

The Global Knowledge/TechRepublic 2011 survey was conducted online from October 11 to November 19, 2010. More than one-half million survey invitations were e-mailed to recipients from the databases of Global Knowledge, TechRepublic, and other partner companies. Links, including the survey invitation, also were provided in online newsletters. The 2011 IT Salary and Skills Survey yielded over 12,000 completes from around the globe with 84 percent coming from the United States and Canada. This online survey was powered by Qualtrix and tabulated using SPSS.

About Global Knowledge

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About the Primary Researcher

Greg Timpany is the Senior Market Research Manager at Global Knowledge Training LLC. Greg has over 20 years of experience in the fields of market research, competitive intelligence, and database marketing. He has designed and implemented studies for both the consumer and business-to-business industry spaces. In addition to conducting research, Greg is a published author and lecturer with a focus on the effective use of marketing data. Prior to joining Global Knowledge, he held positions with Guitar Center, Los Angeles Times, and Wilkin Guge Marketing among others. Greg holds an MBA in Information Systems and Marketing from California State University, San Bernardino.

Endnotes

1. IT salaries flatten with benefits in decline

http://campustechnology.com/articles/2010/01/07/
report-it-salaries-flatten-benefits-decline.aspx

Janco, in their 2010 IT industry study, pointed to a number of causes for the flatting of IT salaries and decline in benefits since 2007. The last few years have brought cost-cutting mindsets, business closures and extensive outsourcing.

2. Manpower surveys says 84 percent of US workers will look for a new position in 2011

http://www.theatlantic.com/business/ar-
chive/2010/12/survey-84-of-workers-want-a-new-
job/68580/#

3. IT Job Satisfaction

http://www.computerworld.com/s/article/9143194/
Surveys_IT_job_satisfaction_plummets_to_all_time_
low

4. IDC Training Impact Survey, 2008 (IDC#215762)

61 percent of managers surveyed reported the 'skill of the team' was the key driver to success in IT departments.

5. Global IT spending expected to rise 5.1 percent to $3.6 trillion according to Gartner

http://www.zdnet.com/blog/btl/gartner-raises-it-
spending-forecast-for-2011/43316

6. Reshaping IT Management for turbulent times

December 2010 McKinsey Quarterly publication - Roberts, Roger, Hugo Sarrazin, and Johnson Sikes.

A dual model for managing IT is proposed – one component that drives efficiency utilizing lean management practices (Factory IT) and a second which embeds IT teams within business operations that allows for enablement (Enabling IT) and faster response to changing market demands. Predictive analytics, business intelligence and "app development: are examples of IT-driven processes that help organizations better compete in the market.

7. Modest Pay Increases Expected in Year Ahead

http://online.wsj.com/article/SB100014240527487038
14804576035890093290776.html?mod=WSJ_Ca-
reers_CareerJournal_4