

IT/Software jobs *Navigate* through the Economic Downturn

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The economic landscape has undoubtedly changed since this time last year, and the IT/Software industry has certainly not escaped unscathed. In 2000, IT/Software jobs at all levels were paid significantly higher salaries than the overall industry average, and some jobs even continued to maintain the double digit increases gained between 1997 and 2000 (“**Salary Increases 1997-1999**”, prepared for Software Human Resource Council (SHRC), May, 1999).

This report, jointly produced with the Software Human Resource Council, examines the salary changes of IT/Software jobs in 2001; this is an update to the report “**I.T. Salaries Take A Jump**” released October 2000 for the SHRC. That report proposed that the increases in the salaries of IT/Software jobs, which were well above the industry average, were the result of a shortage of skilled and experienced individuals in the sector.

Patterns and Trends

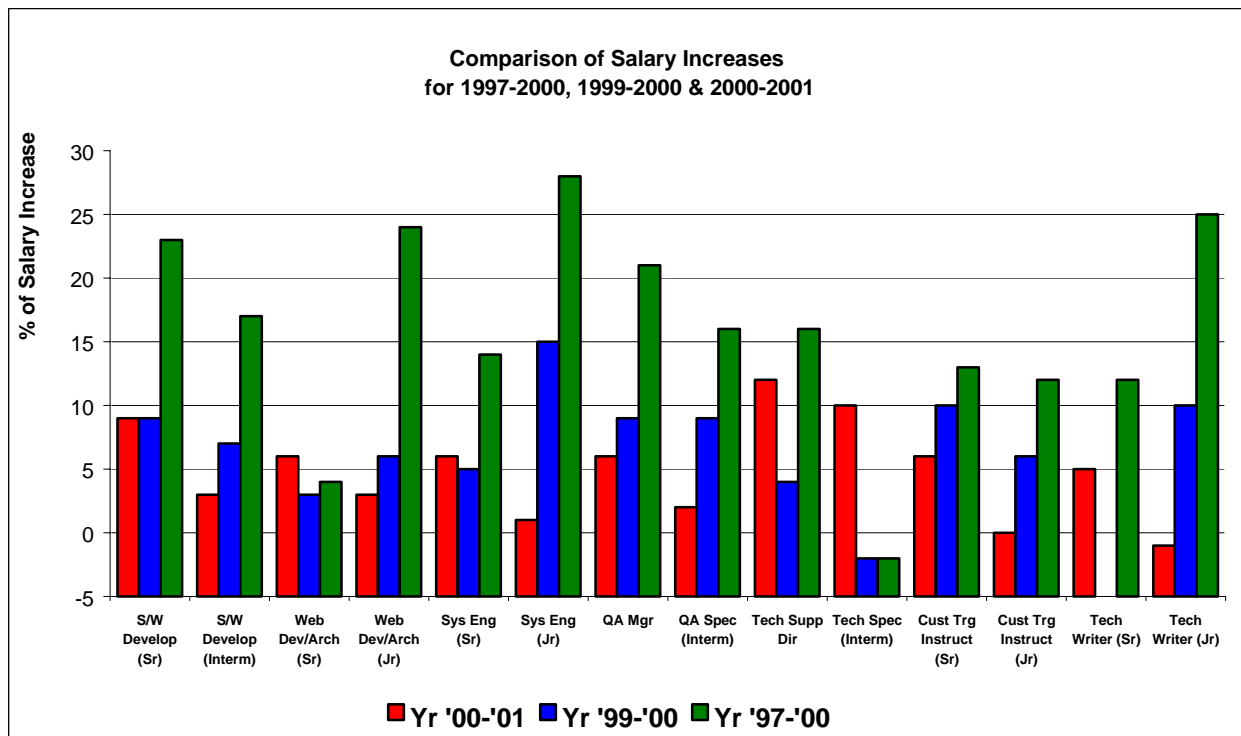
Based on the analysis of salaries between 2000 and 2001, salaries of IT/Software jobs have indeed been influenced by the economic downturn. But, to what extent, really? The underlying results will show that not all IT/Software jobs, and not all levels of IT/Software jobs have felt the same impact. The following are some of the trends that emerged from the analysis:

1. Senior level jobs and highly-skilled technology jobs are still showing strong salary increases; some, are even continuing the double digit trend. The salary increases show that, despite the slide in the economy, companies are focused on retaining their highly skilled and highly experienced technology staff. For example, senior level jobs in Design and Development such as Software Developers continue to show healthy increases from about 9% to 17%. And, senior level technical staff such as Technical Support Specialists in Problem Management, Quality Assurance, and Education and Training are also showing increases of about 5% to 12%. The high double digit rates that were reported between 1997 and 2000 seem to be a thing of the past; since late 2000 organizations have had to learn to operate in an environment where fewer sales, the absence of lower venture capital dollars, and a drop in stock market value has resulted in smaller salary budgets.
2. The IT/Software jobs in the operations area, such as Network Administrators, Help Desk Analysts, Computer Operators and Systems Programmers have seen salaries remain unchanged or even taken a dip since last year. Over the last few years there has been an influx of these types of skills in the market, particularly at the entry-level. The levelling off of salaries in these areas, is likely the result of market demand catching up with supply.
3. The strong increases in salaries in the Technical Support area (10% - 12%), at the management and senior levels indicate that organizations' are focused on maintaining quality service to their clients. In times of economic pressures, it is essential for organizations, more than ever, to make every effort to continue to keep their current

clients satisfied with their products. In contrast, IT/Software jobs that normally depend on the generation of new customers such as Customization Programmers, Training Instructors and Technical Writers have experienced much lower increases or in the case of Customization Programmers, a complete levelling off.

4. Salaries of Web based jobs have fallen; in particular, the salaries of junior and intermediate level Web Developers/Architects are lower than in 2000. As the Web loses its newness and as more junior and intermediate skills supply the market, these jobs seem to be losing their market strength. Further, salary increases for jobs whose focus was on web site development and maintenance have declined, while those jobs that require technical expertise such as, in developing business to business web applications have shown significant increases. For example, the salary of a Web Site Manager increased by 2% from 2000 to 2001 while an Internet Applications Developer Manager's salary increased by 17%.
5. The economic downturn has had an impact on the Informatics Consultancy stream; salaries at all levels are continuing to increase from last year, however at a lower rate from 1999/2000. A possible reason is that organizations, in an effort to streamline costs, may be outsourcing this work rather than hiring new staff.

The graph below reveals that highly skilled IT/Software jobs still demand strong increases in 2001 but, the economic downturn has impacted the streams differently. See Appendix "A" for a chart presentation of the data.



Note: The numbers provided are based on national base salary only; however, it should be noted that companies in this industry continue to top up base salaries with cash incentives and stock options.

Analysis by Stream

Design and Delivery:

Salaries for jobs in the senior and managerial levels of software development have shown steady increases. The current base salary for a Software Development Manager is \$98,780, an increase of 11% from \$88,976 in 2000. Software Developers continue to show strong salary increases, but the rate of increase for junior and intermediate level software developers has started to lose pace. Salaries for a junior and intermediate level developer have increased by 2% and 3% respectively. In contrast, senior level developers' salaries have grown by 9% from 2000. The current base salary for a senior software developer is \$92,524 in 2001 from \$85,140 in 2000. Clearly the economic decline has not hampered salaries for this highly experienced senior level of developers.

Technical Architecture, Capacity & Performance:

Salaries in Systems Engineering have kept pace with the overall industry; however, jobs at the senior level have realized healthier increases. The salary of senior Systems Engineering has increased by 6% from \$87,313 in 2000 to \$92,681 in 2001. Expertise in complex systems architecture continues to obviously be in demand. Similarly, Network Architects at the senior level have also experienced strong increases; in 2001 senior level Network Architects earned \$79,904 compared to \$72,359 in 2000 – an increase of 10%.

Quality Assurance:

Quality Assurance continued to experience salary increases in 2001, but at much lower rates than last year. Management jobs in QA were least affected and continued to show some strong gains, although the changes in increases are not as high as they were between 1999 and 2000. The salary for the management level increased by 6% from \$72,662 in 2000 to \$77,222 in 2001. Salaries for test engineers and technicians however, changed slightly (1% to 2%) or in fact, dropped. A possible explanation could be attributed to organizations' decisions to slowdown their investment in new product development or functionality thus decreasing the demand for QA jobs.

Problem Management:

The strong increases in salaries in the Technical Support management and senior levels indicate organizations' value in keeping current customers happy and satisfied with their products. Technical support specialists, except for the junior level, experienced a 9% to 10% increase in salaries. Salaries for jobs that provide lower level technical support, such as Help Desk Analysts and Computer Operators continued to flatten. Help Desk Analysts at the intermediate and senior levels experienced a 1% increase from 2000, while the salary of the junior level Help Desk Analyst remained unchanged. A strong supply of lower level technical skills in the labour pool may be starting to hamper demand for these types of skills.

Customer Education & Training:

Salaries for senior level customer training held their own during the downturn. However, the downturn has negatively affected the junior and intermediate level positions. Organizations may be reacting to the decline in new customers by cutting on trainers and retaining a few senior level trainers on staff to manage their current clients. For example, the salary of the senior level Customer Trainer revealed an increase of 9% between 2000 and 2001, while the junior level trainer's salary remained unchanged during this time period. Technical writers

experienced the same fate as trainers, probably for the same reason; senior level technical writers' salaries increased to \$72,316 in 2001 from \$68,965 in 2000 while the salary of a junior technical writer dropped by 1%.

Conclusion

The impact of the economic downturn, which began late last year has certainly begun to be felt in the IT/Software sector. Although most job streams experienced significantly smaller salary increases in 2001 than in between 1999 and 2000, the salaries of the highly technical skilled jobs seemed virtually unaffected. Junior and intermediate level jobs in all streams have been hit the hardest during the economic fallout. In an attempt to keep their senior level staff, it would seem that companies are prepared to continue to compensate them - possibly at the expense of the less technically experienced junior staff.

It would seem that the increases in salaries from 2000 to 2001 in the IT/Software industry reveal that, despite the economic downturn, the industry is still experiencing labour shortages in highly skilled technical areas. Although it can be speculated that salary increases may continue to slow or flatten in this industry, the data shows that companies are still willing to pay high salaries even during tough economic times in an effort to avoid potentially losing their highly skilled technical staff. On the other hand, the trend in higher salaries for senior and highly skilled technical staff may be jeopardized should the economy not show signs of recovery. After all, companies will undoubtedly start to feel the pinch and may not have the flexibility to continue to pay higher salaries – even if it means losing their highly skilled, experienced staff.

Source: PERSONNEL SYSTEMS' *compINSIGHT*[®] High-technology Compensation Survey and *compINSIGHT*[®] IT Compensation Survey. www.compinsight.com

Appendix "A"

| Functional Stream | Job Title | Salary Increases (%) | | |
|-----------------------------------|---------------------------------------|----------------------|--------|--------|
| | | '00-01 | '99-00 | '97-00 |
| Design and Delivery | S/W Develop. Mgr | 11 | 8 | 24 |
| | S/W Developer (Senior) | 9 | 9 | 23 |
| | S/W Developer (Intermediate) | 3 | 7 | 17 |
| | Internet Applications Develop Mgr | 17 | 1 | 7 |
| | Web Developer/Architect (Senior) | 6 | 3 | 4 |
| | Web Developer/Architect (Junior) | 3 | 6 | 24 |
| Technical Architecture | Systems Engineer (Senior) | 6 | 5 | 14 |
| | Systems Engineer (Junior) | 1 | 15 | 28 |
| Capacity & Performance | Network Architect (Senior) | 10 | 5 | 42 |
| | Network Architect (Intermediate) | 2 | 31 | 67 |
| Quality Assurance | Quality Assurance Manager | 6 | 9 | 21 |
| | Quality Assurance (Intermediate) | 2 | 9 | 16 |
| Problem Management | Technical Support Manager | 10 | -1 | 0 |
| | Technical Support Director | 12 | 4 | 16 |
| | Technical Specialist (Senior) | 10 | -2 | -2 |
| Informatics Consultancy | S/W Consultant (Senior) | 6 | 8 | 17 |
| | S/W Consultant (Junior) | 1 | 8 | 16 |
| Education | Customer Training Instructor (Senior) | 6 | 10 | 13 |
| | Customer Training Instructor (Junior) | 0 | 6 | 12 |
| | Technical Writer (Senior) | 5 | -5 | 12 |
| | Technical Writer (Junior) | -1 | 10 | 25 |