IT Employment Trends: Analyzing 2003 Data and the Future

By Dr. Ed Anthony

The NaSPA 2003 salary survey is now complete. NaSPA board member Dr. Ed Anthony takes time to analyze the results and gather information about the issues our members face in the current IT job market and what these results could mean for the future.

The NaSPA 2003 salary survey is now history, and it is time to reflect on what we found as we analyzed the data provided by our members. We will state up front that some of the findings were surprising in light of the current job market described in the industry press. Although the findings we share are generally positive, it should be kept in mind while considering them that the sample size was somewhat small, which may have caused some skewing of the results.

METHODOLOGY

The survey was conducted online via the NaSPA Web site. Members of NaSPA were e-mailed information concerning the survey and a link to it via the NaSPA e-news broadcast. The survey format was identical to the 2002 annual survey and consisted of 19 close-ended questions soliciting job information such as position, salary and bonus and demographic information such as age, location and gender.

DEMOGRAPHICS

An overwhelming majority of the respondents to the survey were male (88.7%). The average age of the respondents was 47. Most have a college degree, but only 11% have an advanced degree. Thirty-two percent noted having an industry certification. Microsoft certifications (MCP, MCSE and MCDBA) were the most common type of certification noted. On average, respondents had 21 years of experience in IT and have been with their current employer for 10 years, although at least 28%, the largest group had been with their employer less than two years. They work an average of 45 hours a week. The experience covered a wide range of operating systems and languages. Because of the large number of mainframe systems programmers responding (44.6%), Assembler, CICS and COBOL were heavily used. The greatest number of those taking the survey came from the southeast coast (21.4%) and the north central portion (19.2%) of the United States.

INDUSTRY COMPARISON

Although NaSPA now represents quite a diverse IT membership as evidenced by the many professional areas respondents came from, it still has a strong technical mainframe base from its early beginnings, and that was the largest participating group in the survey. Based on this finding, we decided to compare some of our results with 2003 surveys done by other industry media organizations (Computerworld, InformationWeek, Dice.com) so that members can get not only an accurate look at what currently makes NaSPA members unique, but also to see how they relate to industry norms.

Comparing NaSPA’s demographic results for the last two years with those of Computerworld’s recently completed 2003 salary survey,1 with over 16,000 respondents, and their previous 2002 survey,2 with over 9,000 respondents, shows some interesting points. Figure 1 shows the demographic data for both years of both surveys for items for which similar data elements were collected.

NaSPA, like the IT industry, has a high concentration of males in computing employment. The lack of females in the industry has been a serious concern for some, especially among those in academia. Researchers are try-
ing to understand what causes this gap. Some suggest it goes back to how the computing profession is presented throughout the grade and high school years to males and females, along with how they are steered along certain paths, with the outcome being that mostly men pursue a degree in the field. There are many researchers and advocates trying to encourage women to consider the computing field, and there are many scholarships and grants to be had by organizations seeking the recruitment of women for the field.\textsuperscript{3,4}

The age differential between the industry and NaSPA is somewhat expected since the respondents, as has already been noted, appear to be long-time members of the association. The difference in the number of years experience also seems to bear this out. An interesting trend, though, is that the mainframe population is aging, and in our most recent survey, 59\% of the respondents were over the age of 45. This may point to an opportunity for those who would be seeking employment in years to come, since there is a growing awareness that there may be many open mainframe-based positions in the next 5-10 years as a vast number of those who have been in the field for many years start retiring.\textsuperscript{5,6}

NaSPA, like the IT industry, has a high concentration of males in computing employment. The lack of females in the industry has been a serious concern for some, especially among those in academia. Researchers are trying to understand what causes this gap.

Corresponding to the age range of the respondent pool, our survey indicates many never have held a college degree (29\%). Many, when first staring in the computing profession many years ago, did not need a degree. Clearly, though, the trend is for the acquisition of a degree, and there is a trend for respondents (11\%) to earn an advanced (master’s or above) degree (up 3\% this year). If this trend continues, we would expect that the association membership will show similar demographic characteristics (age and college degree attained) over time.

NaSPA members are generally less likely to have held industry certifications, but that would seem to reflect their relying on their many years of experience and the area of expertise (systems programming) that may not need or have a certification associated with it. There is no definite trend here, as the numbers may be skewed by the sampling size. The debate over the efficacy of certifications still rages,\textsuperscript{7} and perhaps we can tackle that issue in a future article.

NaSPA respondents were more likely to be technicians than those in the other industry surveys noted earlier, and this may explain some of the difference in college degree attainment. Members on average work about the same number of hours as others in the industry. Most survey respondents came from the same regions as the other industry surveys (southeast and north central).

### THE IMPORTANT STUFF

You are probably thinking that all that information above is well and good, but let’s get to the issue that is important to all of us—where’s the money?

First we should note that no one in our survey said that they worked for free. Figure 2 shows how the respondents to the survey compared over the last three years, and then we will discuss the average compensation in relation to other industry sources. Due to the smaller sample size (177), we will not attempt to segment the salary averages into positions but will seek to do this in future surveys.

A careful look at Figure 2 shows that salaries over the last three years have been moving up for association members. In 2001, 39 percent earned over $75,000; in 2002, it was 45.4\%; and in 2003, it has risen to 58.8\%. If the demographic trends we discussed hold true, it would be expected that this trend would be reversed as younger individuals take the place of those expected to retire. The average salary for respondents was $77,000, which was 9.2\% higher than last year. As we have already noted, due to the uniqueness and size of this sample, this does not match the 2-3\% most of the IT industry is experiencing. Dice.com notes the average IT salary as $70,598 for all IT professionals.\textsuperscript{8} The InformationWeek 2003 Salary Survey average was $69,400.\textsuperscript{9} Based on our survey, NaSPA respondents enjoyed a salary 10\% higher than the industry average. This, again, is likely due to the unique composition of this group of respondents. It is good to see, though, that many members are still doing well despite the tepid economy.

71\% of the respondents received a raise this year, and that is a very slight improvement over the 70\% of last year. This figure is in line with the IT industry. The numbers still seem to indicate that organizations are tracking costs carefully and are not afraid to freeze salaries or defer
increases. The IT job market in general appears to be strengthening slightly based on the industry news, but there is still a great deal of caution. Others have noted that the market trend is more promising than one hears in the news.10

Our survey also asked about bonuses, since that can often be part of a compensation package. This year 52% of those surveyed reported receiving a bonus. This is up from 44% last year. This may either reflect a strengthening market or the possibility that employers are trading off a bonus for salary increases to keep their best employees. The average bonus was $5,700. This is an increase over last year’s average bonus of $4,300.

CONCLUSION

Overall, although our group of respondents appears unique, they appear to be doing quite well in comparison to the industry as a whole. As McGee notes, although there may be questions about how bright the future may be, IT is still a well-paying profession and generally intellectually challenging.11 We appreciate all those who participated in the survey and expect to refine and expand on it in the future. If there are particular questions related to the job market, certification or education you would like us to discuss or research in the future, your comments are welcome and can be sent directly to Dr. Ed at e.anthony@naspa.com.