

Industry Salary Survey

Another day, another \$?

Elizabeth Clark, Senior Editor

If you read the February 1994 issue of our magazine, you probably remember seeing a questionnaire form. We hope you filled it out and sent it in. (If not, we look forward to your response to our next salary survey!)

The survey contained questions about your compensation status, demographics, and attitudes. Some results were surprising, and others were exactly what you'd expect. This article will outline the findings of the study with an eye toward highlighting general trends.

On the Average

Here's a sketch of the average

survey respondent: He's a 41-year-old male earning \$53,000 per year. He has been working full time for almost 20 years (about 10 of which were spent in managerial positions), and has had roughly four employers in his career. He's been with his current employer for about 10 years.

Bead Shop Breakdown

Forty percent of fabricators who responded noted that the primary product they're responsible for is multilayer boards with eight or more layers, with 33% indicating multilayer boards under eight layers. Thirteen percent identified

double-sided boards as their primary focus, with flex (9%), double-sided PTH (4%), and single-sided boards (1%) comprising the balance of responses.

Captive vs. Independent

A vast majority (72%) of fabricators who responded are from independent facilities. There was no statistically significant difference between the captives and independents in terms of income.

Examining Income

BY ---

To make our portrait of the "average" a little more individualized, we've analyzed the relationship between income and a number of additional variables.

Education

A breakdown of income by education is shown in Figure 1. As expected, there's a direct correlation between these two factors, with almost half of the employees in the lowest-income range having only a high-school diploma. The bachelor's degree category captured the largest number of respondents,

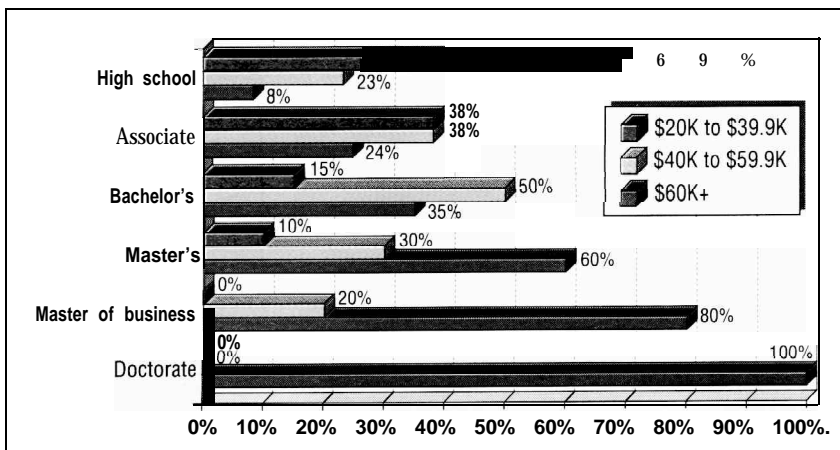


Figure 1. Current gross income by education.

Current gross income

| Job function | Total | \$20,000-\$39,999 | \$40,000-\$59,999 | \$60,000 and over |
|----------------------------|-------|-------------------|-------------------|-------------------|
| Product/mfg./process eng. | 35% | 47% | 33% | 28% |
| Sales & mktg. | 22% | 11% | 13% | 32% |
| QC/A/testing | 13% | 21% | 13% | 8% |
| Corporate mgmt. | 11% | | 8% | 24% |
| Circuit design/system pkg. | 10% | 16% | 17% | 4% |
| Engineering support | 5% | 5% | 8% | 4% |
| R&D | 4% | - | 8% | |

The Gender Gap

Figure highlights the dramatic gender gap among our respondents. A vast majority of female respondents all into the lowest-income category, while the middle- and highest-income categories are both overwhelmingly dominated by the male respondents. To determine what role tenure may have had in these results, we examined the relationship between that factor and gender. The conclusion: 48% of male respondents and 60% of female respondents have 10 or more years' tenure. However, the latter group represents only 11% of the total

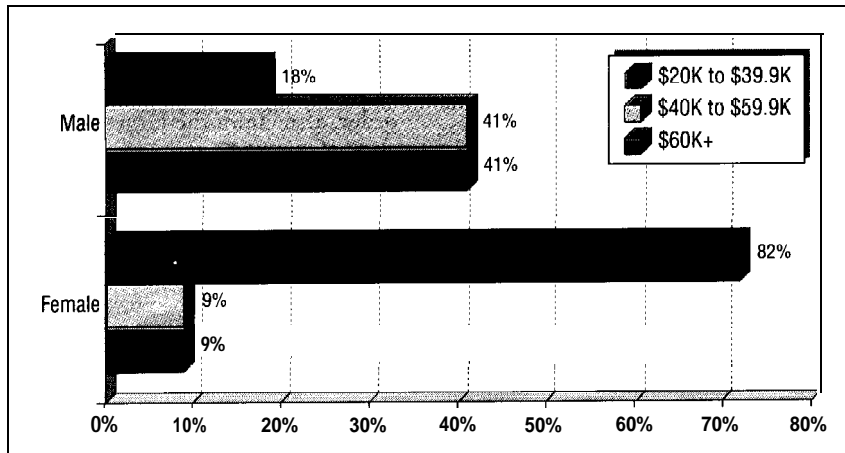


Figure 2. Current gross income by gender.

Table 2. Income by years of experience.

| Years of experience | Total | \$20,000-\$39,999 | \$40,000-\$59,999 | \$60,000 and over |
|---------------------|-------|-------------------|-------------------|-------------------|
| 1-10 | 19% | 20% | 24% | 16% |
| 11-20 | 41% | 55% | 37% | 40% |
| 21-30 | 24% | 20% | 27% | 20% |
| 31-50 | 16% | 5% | 12% | 24% |

with the members of this group dominating the mid-range salary category. The master's degree holder emerges as the *real* moneymaker.

Job Function

Table 1 illustrates income by job function. Almost 50% of those in

the lowest-income bracket are production/manufacturing/process engineers. The quality control/QA/testing group is also relatively concentrated in this bracket. The sales and marketing sector, however, is doing very well, comprising 32% of the \$60K-plus category.

Are workers in the PCB industry getting their fair share of the goods?

sample, indicating that tenure had a significant impact on the results.

work Experience

Table 2 shows the impact of work experience on earnings. Though the two are usually expected to increase in direct correlation with each other, some of the numbers in the table buck this trend. It seems that a lot of respondents who've put in only one to 10 years are already in the mid-range income bracket. Also, there are a lot of people in the 11-to-20-year bracket who appear to be stuck in the lowest-income category.

Age

The anticipated direct correlation between age and salary is shown in Figure 3. The over-45 set dominates the highest-income bracket, but there is a surprisingly small income differential between the 20-35 and the 36-45 segments.

Reader Poll

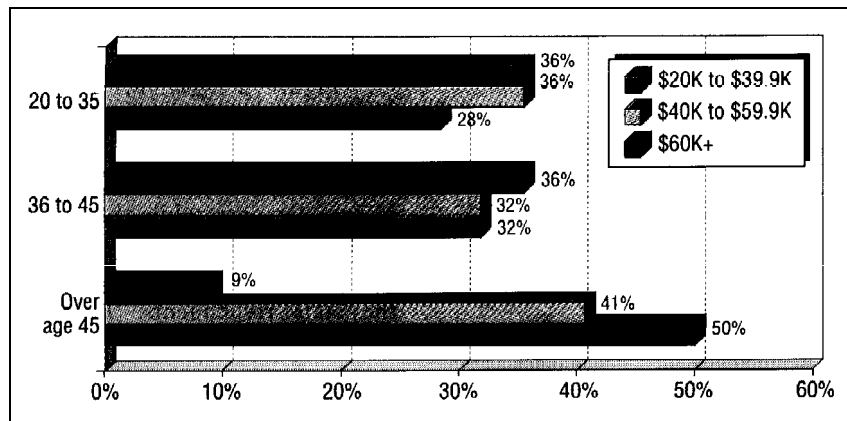


Figure 3. Current gross income by age.

Table 3. Income by company size (estimated annual sales).

| Annual sales (millions) | Total | \$20,000- \$39,999 | \$40,000- \$59,999 | \$60,000 and over |
|----------------------------|-------|-----------------------|-----------------------|----------------------|
| Over \$100 M | 31% | 15% | 42% | 42% |
| \$11-\$100M | 32% | 35% | 23% | 27% |
| \$5-10 M | 18% | 25% | 12% | 19% |
| Less than \$5 M | 19% | 25% | 23% | 12% |

Company Size

Now let's find out if workers in the printed circuit board industry are getting their fair share of the goods. Table 3 shows income by company size, based on the criterion of the firm's estimated annual sales. Generally speaking, the larger the company, the greater the employee's chances of landing in the \$60,000-plus category.

Geographics

Income from a geographic perspective' is explored in Figure 4. Herein lies another surprise: Respondents working in the South captured a disproportionately large share of the highest-income category. As far as individual states are concerned, California, New York, and Florida host the highest income earners. These three states, in that order, also claim the largest proportion of respondents.

Reader Poll

Management Experience

A number of interesting trends appeared in the data with respect to management experience. First, 40% of respondents are department/division or corporate managers. The latter respondents comprise the largest concentration of big money-makers. Most of the respondents who are in management oversee from six to 20 employees.

Tenure

Is employee loyalty/tenure rewarded in the printed circuit board industry? Table 4 gives some clues to this question. To begin with, a fairly hefty percentage of survey respondents who've only been with their current employer from one to five years has already reached the middle-income mark. On the other hand, a relatively small proportion of longtime employees has been

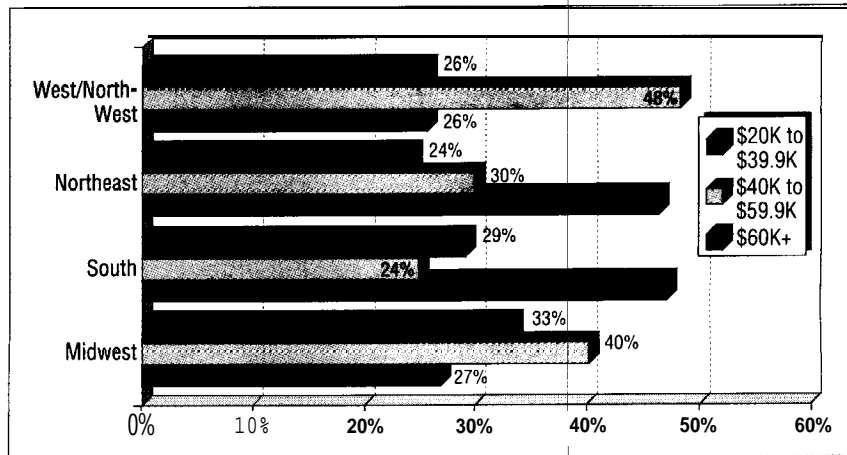


Figure 4. Current gross income by region

bumped up into the highest-income category.

Morale

Finally, let's take a look at overall job morale as it relates to income (Table 6). The average rating is 2.7. A majority of those

respondents with the lowest morale (a value of 5) are in the middle-income category. Most of those with the highest morale (a value of 1) are in the middle- and upper-income categories. Most respondents, however, fell somewhere in the middle.

Table 4. Income by years with present employer.

| Years with present employer | Total | \$20,000-\$39,999 | \$40,000-\$59,999 | \$60,000 and over |
|-----------------------------|-------|-------------------|-------------------|-------------------|
| 1-5 | 33% | 30% | 36% | 24% |
| 6-10 | 32% | 25% | 28% | 44% |
| 11-20 | 26% | 40% | 28% | 20% |
| 21-plus | 9% | 5% | 8% | 12% |

Benefits/Salary

In addition to income from salary, a number of respondents receive other benefits. The average

respondent earns about \$5,000 in bonuses, overtime, or other professional income. A bonus plan is a more likely offering for the highest-income sector.

Seventy-six percent of respondents indicated that they receive annual salary reviews. This was one of the most consistent factors among the three income groups. The average most recent salary increase was 6%. When asked to specify what factors they believe raises are based on, 80% indicated performance/merit.

Sixty percent of respondents reported their company doesn't pay overtime. Not surprisingly, a large proportion of workers who don't get overtime are in the highest-income category. (As a baseline for comparing the overtime data, the survey

The IPC on Salary

Elizabeth Clark

Though a number-for-number comparison with PC FAB's salary survey results would present a scenario, data recently released by the PC provides an interesting historical perspective (industry salaries, which does not include benefits, compares wage rates for the period of 1978 to 1992). Different positions are included in the breakdown.

As shown in Table 5, the total percentage change in earnings from 1978 through 1992 in terms of dollars per hour was 115%. The average annual change was 8%.

The two-stage total percent change from 1978 through 1992 in terms of monthly salary was 108%. The average annual change was 4%.

The [PC conducts biannual wage surveys for the RX manufacturing and assembly industry association member. The surveys track wage rates of numerous positions as well as company]

an "apples to oranges" comparison on this issue. The study on wages through 1992. A number of

of dollars per hour was

4%. The average annual **FAB**

Participation is free to all members and geographic region.

Table 5. Selected average wage rates (1978-1992).

| | Dollars per hour | | | | | Total percent change | | Annual change | |
|--------------------------|------------------|---------|---------|---------|---------|----------------------|-----------|---------------|-----------|
| | 1978 | 1982 | 1985 | 1987 | 1992 | 1978-1992 | 1987-1992 | 1978-1992 | 1987-1992 |
| Artwork technician | \$4.24 | \$6.37 | \$6.80 | \$7.48 | \$9.39 | 121% | 20% | 9% | 4% |
| Screen printer | \$4.50 | \$6.51 | \$6.98 | \$7.03 | \$9.18 | 104% | 23% | 7% | 5% |
| Electroplate | \$4.19 | \$6.10 | \$6.52 | \$7.01 | \$8.74 | 109% | 20% | 8% | 4% |
| Inspector, electrical | \$4.07 | \$6.45 | \$6.48 | \$6.53 | \$8.35 | 105% | 22% | 8% | 4% |
| | Monthly salary | | | | | Total percent change | | Annual change | |
| | 1978 | 1982 | 1985 | 1987 | 1992 | 1978-1992 | 1987-1992 | 1978-1992 | 1987-1992 |
| Drafting/tool design | \$1,135 | \$1,756 | \$2,407 | \$1,951 | \$2,359 | 108% | 17% | 8% | 3% |
| Methods/process engineer | \$1,420 | \$1,984 | \$2,168 | \$2,435 | \$3,264 | 130% | 25% | 9% | 5% |
| Plating dept. foreperson | \$1,286 | \$1,660 | \$1,976 | \$2,308 | \$2,634 | 105% | 12% | 7% | 2% |

Source: IPC

The average industry employee appears to be relatively well-compensated and content.

revealed that the average respondent works roughly 50 hours per week.)

This average survey respondent receives about nine paid holidays and three weeks of paid vacation, with a fair number of the highest-income respondents receiving four weeks.

Ninety-five percent of respon-

| Table 6. Income relative to job morale (rated 1-5; 1 = good, 5 = bad). | | | | |
|--|-------|-------------------|-------------------|-------------------|
| Morale rating | Total | \$20,000-\$39,999 | \$40,000-\$59,999 | \$60,000 and over |
| 1 | 13% | 5% | 15% | 15% |
| 2 | 34% | 30% | 39% | 39% |
| 3 | 23% | 35% | 19% | 23% |
| 4 | 25% | 30% | 19% | 19% |
| 5 | 5% | | 8% | 4% |

dents indicated that their company provides medical insurance, 81% life insurance, and 66% dental insurance. Sixty-seven percent reported that they receive a professional-education allowance, and 66% have access to a 401 K plan. Profit-sharing and retirement plans both came in at 45%.

Conclusion

The results of our survey point

toward an industry-wide income scale that's affected by a wide range of variables. And, of course, the more variables in the equation, the more difficult it is to balance out. But one trend is clear: The **average** industry employee appears to be relatively well compensated and content. As employers become increasingly aware of the importance of the human element in the manufacturing environment, this trend should continue.

FAB