

“The Flu” Strikes Silicon Valley

Achoo! sneezed the semiconductor industry. It's got the flu—the Asian flu—as many in Silicon Valley refer to the Pacific Rim financial crisis.

Almost a year ago, everything looked positive for the industry. It seemed to have recovered from the oversupply of DRAMS, which in some cases had resulted in chips being sold for less than the cost of production. Stories abounded of a return to the 20% and greater annual growth rates of the boom years, and of current and upcoming shortages of highly skilled employees. Then, Asia's financial crises worsened, and sales of both integrated circuits and semiconductor manufacturing equipment started to fall. Although total equipment revenue for February 1998 exceeded that in February 1997, it is smaller than that in December 1997 by more than 10%, according to Dataquest, which tracks semiconductor industry trends. Most estimates of annual industry growth

have dropped from about 10% to between 4% and 8% for 1998.

Most observers, however, see a recovery in 1999. (In my view, the 1999 estimates verge on pure speculation. They're based on the assumption that Asia will start a serious recovery in one to four months, which seems unlikely.)

At Semicon West, the American Mecca for the semiconductor business, the mood in July was very

different from last year's. The percentage of Asian attendees was greatly reduced, and a common phrase was: “Customers? Where?” One barometer of the industry's mood is the lavishness of the hospitality suites and hosted parties. No one rented the San Francisco Yacht Club this year, and access to the few large functions held was strictly controlled. Although the show was well attended as always, a friend of mine looking for work found only two companies (out of several hundred) that had positions posted. Most of the others he talked with said that they had job freezes or layoffs until growth returned. Yet, despite the downturn, the demands of competitive forces are still at work. New technology exhibits drew well, especially those featuring copper-based techniques for forming metal lines and interconnects.

Here in Silicon Valley, your mood really depends on the sector in which you work. If your company bet big time on Asia for growth, things don't look good now. Lam Corp., a semiconductor equipment manufacturer, announced two layoffs in the first half of 1998 affecting up to 25% of its workers, with most of the cuts apparently coming in its Asian operations. National Semiconductor, Applied Materials, Motorola, Seagate,

Intel, Western Digital, Komag and StorMedia (the last three are involved in manufacturing hard drives) have all announced layoffs this year.

Applied's wasn't really a lay-off, as the company explained it, but rather an “incentive-based work force reduction.” That is, workers got an incentive to leave, typically six months to a year of salary.

Some sectors, such as the new copper-based technologies, deep ultraviolet lithography, and chemical mechanical planarization (a technique used to buff wafer surfaces smooth) continue to grow rapidly. Companies banking their futures on the growth of in situ metrology and advanced process-control technologies currently find the market mixed, with some prospering and other faltering.

While the current climate has made it more difficult to find employment in the semiconductor industry, it is not impossible. Some Silicon Valley headhunters will pay for the names of those leaving during a layoff or downsizing, indicating that there's still a demand for highly skilled workers. Many companies will still hire exceptional candidates, even during downturns. What the current climate does mean is more competition for the remaining positions.

For job hunters, having a friend on the inside is a definite advantage. Using one's contacts is more important than ever. All the other intangibles take on more importance as well: networking to find opportunities; arriving promptly for appointments; doing your homework to learn about a potential employer's products and markets (Web pages and industry magazines are excellent sources for such information); and following up on every meeting, even if it's just a note saying “thank you for your time.”

All is not lost, of course. European and the U.S. semiconductor markets are growing, and as soon as Asia gets its financial house in order, rapid growth of industry and a demand for more skilled labor will return in force. Although it is currently difficult to find a job in semiconductors, if one wants to

The semiconductor capital equipment market has been shrinking over the last 12 months. A year ago, explosive growth in 300-mm fabrication was anticipated; today, many starts have been delayed, some indefinitely.

work in the industry, now is the time to start looking. Now is when to meet the people who will be making the hiring decisions so that you're a familiar face when positions become available. This industry has traditionally been cyclical, and some work now will ensure that you're at the head of the line when jobs are more plentiful.

As for the other industries in the San Francisco Bay area, they seem less affected by the Asian financial crises. The tech-heavy NASDAQ stock exchange stood in record territory this summer, indicating that the markets were satisfied with technology-industry fundamentals. Real estate prices continued to climb to stratospheric levels (the median home price was over \$330,000), driven in part by the growth in networking and information technologies. Internet companies seem to be doing well, and biotechnology continues to grow. Apple Computers announced its third straight profitable quarter, surprising almost everyone.

Interestingly, high-tech career shows in Silicon Valley are well attended by both employers and potential employees, even in this time of varying prosperity. The Santa Clara WESTECH Career Expo, held in June, had over 370 companies participating, and the Softech Career Expo registered more than 130 companies well before the mid-August job fair. Unemployment in Silicon Valley has risen to 3%, but this is still lower than the national average of 4.7%. In the Bay area, it's still an employees' market, but finding jobs in the semiconductor industry won't be that easy for a while. ■

B I O G R A P H Y

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