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Outsourcing Micron? Industry analysts say the company must do more production abroad to survive

Three years ago, Steve Appleton said Boise was in the running for a big new Micron manufacturing plant. Today, the Micron chairman and chief executive is laying off Boise-area workers and preparing his struggling company for an increasingly foreign-centered future.

Change comes fast in the brutally competitive world of computer memory manufacturing.

Founded in the basement of a dentist's office 29 years ago, Micron Technology today is Idaho's largest publicly traded company and a fixture on the Treasure Valley's economic landscape. But as Micron struggles with low prices and aggressive competition for its products, some experts say Micron must cut costs and deliver its computer chips to overseas manufacturers faster.

Appleton says the company must look at outsourcing more of its production to be competitive. More than half of the company's production is in the United States, yet more than 70 percent of its products are sold to overseas customers, including cell phone makers and computer manufacturers like Dell that produce products in China.

Analysts say Micron must aim to make its products closer to where it sells them. That would not only save Micron money, but would shorten the supply chain and make it easier for Micron to interact with customers, said Bill Dezelle, president of Tieton Capital Management in Yakima, Wash.

"You don't want your parts to become world travelers," said Jim Peters, a partner with the business-restructuring consulting firm Alix Partners.

Prices for most memory products shift dramatically, so a manufacturer must make sure its products get to a buyer quickly before prices drop, Peters said.

"The rule of thumb is that every day you shorten the supply chain, you save \$3 a wafer," he said.

Above all, Micron must bring its costs down to compete with Korean memory giants Samsung and Hynix, said Nam Hyung Kim, an analyst with San Francisco-based iSuppli, which monitors the semiconductor industry.

"Micron used to be the lowest-cost supplier several years ago, but now it stands as one of the highest-cost suppliers after diversification strategies took place and the company lost its market share," Kim wrote this month in a report on the worldwide market for dynamic random-access memory — Micron's No. 1 product.

Kim and Smith said Micron's efforts in the past few years to diversify beyond DRAM have had mixed results. Kim urged Micron to dump its CMOS image-sensing business, which makes sensors for cell phone cameras and medical products. Micron hasn't said whether it may do that.

Memory prices have recovered slightly in the last few weeks, but April through June brought the worst market conditions in recent history, Kim said.

Appleton said more packaging and testing of chips will be moved to Asia. He said other companies are better than Micron at developing software and delivering information technology services. Otherwise, he hasn't said which operations may be outsourced. Micron officials said the layoff of 875 workers in late June and early July will be permanent. Appleton also has said he expects to reduce the Boise work force an additional 5 percent over the next six to eight months.

George Haley, director of the Center for International Industry Competitiveness at the University of New Haven in Connecticut, said U.S. companies started outsourcing in earnest a decade ago. He is surprised Micron has held out as long as it has.

The year began on a more hopeful note. Demand for DRAM, the primary memory used in computers, was supposed to have increased, given the memory requirements of Vista, Microsoft's new operating system.

But the Vista system didn't take off as quickly as Micron and other memory and PC manufacturers expected. Prices fell. To compound the problem, prices also dropped for NAND flash memory, used in digital cameras and music players like iPods.

About half of Micron's revenue comes from DRAM and the other half from NAND flash and CMOS image sensors. In its latest quarter, Micron lost \$225 million.

Micron is no stranger to swings in the memory market. In 2003, when Micron laid off more than 1,000 people in Boise, the company had been losing money for more than two years.

It isn't just costly American workers causing the trouble. Haley said one of the biggest misconceptions about outsourcing is that companies do it solely to save labor costs.

"Labor costs are normally about 10 percent of manufacturing costs, so it's not hugely significant," Haley said.

The bigger challenge is finding the money to build new production plants, he said.

Haley said foreign countries are more apt than federal and state governments in the United States to offer companies like Micron government incentives.

"Singapore will provide tremendous benefits to companies that move research and development there," he said.

But Billie Blair, president and CEO of Los Angeles-based Leading and Learning, a firm that consults with companies when major restructuring or reorganization is required, said Micron still has an obligation to the Boise area and the company's work force.

"The work force they have in Boise is what got them to where they are today," she said.

Appleton is adamant that the company will maintain a major presence in the Boise area — and not just for research and development. Most of Micron's local jobs now are in manufacturing.

"Let me make it clear: We will continue to have thousands of jobs in the Treasure Valley," he told KTVB-TV (Channel 7) in early July.

"We will continue to be a semiconductor manufacturer. Which means we make wafers. It means we develop technologies. We develop products. All that will continue to be done here."

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ADDITIONAL INFORMATION

Micron hits a rough patch

It's been a rough four weeks for Micron.

On June 28, the company announced disastrous financial results for its latest quarter. Then it announced layoffs: 975 people in Boise from late June through early July, plus 5 percent of the work force in the next six to eight months.

In mid-July, Micron's longest-serving board member, Gordon Smith, called for CEO Steve Appleton to step down. Smith said Micron hasn't moved aggressively enough to restore profitability. Micron's future depends on a more aggressive strategy that includes hiring cheaper workers abroad, he said.

"If you can hire an engineer, a top-notch engineer that maybe has even been trained in the United States for, say, \$25,000 to \$30,000 a year, and you pay the same guy here maybe \$175,000, that's tough competition," Smith said July 18 in an interview with the Idaho Statesman.

Others on Micron's seven-member board didn't take kindly to Smith's comments. On Wednesday, Smith quit — for "personal reasons," Micron said in a news release. In an interview, Micron cofounder Joe Parkinson — no longer on the board — praised Smith: "I have nothing but the greatest admiration for him." No word yet on a successor.

Micron Ranks 5th for DRAM market share

Micron is far behind DRAM giants Samsung and Hynix, though it gained market share in the second quarter, up from 9.1 percent in the first quarter.

Q2 Rank Company Q2 '07 Revenue Q2 Share

1 Samsung 2,083.8 28.4 %

2 Hynix 1,518.0 20.7 %

3 Qimonda 988.0 13.5 %

4 Elpida 885.0 12.1 %

5 Micron 741.8 10.1 %

Source: iSuppli Corp.