

Electronics: New Gadgets = New Growth

The once-flagging industry is **RECOVERING** with in-demand new products, global distribution resources, and cooperation between manufacturers.

By Cynthia Kincaid

After weathering layoffs and stagnant sales earlier in the decade, the electronics industry is recovering nicely. Most within the industry have seen improvement in manufacturing capacity and utilization of electronics products, a trend that is expected to continue throughout 2008. "Things are much better than they have been in the past," says Matthew Kazmierczak, vice president of research and industry analysis for the American Electronics Association (AeA).

Much of this recovery and growth can be attributed to the consumer electronics and semiconductor industries,

veritable proof of our seemingly insatiable demand for the newest electronic gadget. "Our latest industry projections demonstrate that consumers simply cannot live without their consumer electronics," says Gary Shapiro, president and CEO of the Consumer Electronics Association (CEA). "Just when we think we've reached the limits of our expansion, our industry continues to reach greater and greater heights."

Consumer Electronics

According to the CEA, the \$148 billion U.S. consumer



technology industry had an annual revenue growth of 14 percent in 2006. "The only year in recent history that trumps that growth rate was back in 1990 when revenues increased 28 percent," says Steve Koenig, senior manager, industry analysis for the CEA. Koenig says the industry is projecting that overall revenues will pull back to a more reasonable, but still very healthy, 8 percent in 2007. "In 2006, we had a lot of technologies hitting on all cylinders, including high-definition televisions, flat-panel televisions, new console introductions with the PlayStation 3, and notebook PCs," he says.

The CEA predicts accessories sales will reach almost \$9 billion, with more than 317 million accessories units shipped in 2007. The association also predicts \$20 billion will be spent on portable devices in 2007, an increase of 12 percent over 2006. Total factory-to-dealer sales of consumer electronics will surpass \$160 billion in 2007.

Semiconductors

In 2004, the semiconductor industry, now so intricately tied to the electronics industry, recorded an 18 percent growth rate. According to Joanne Itow, managing director for Semico Research, 2007's growth has been a bit on the slow side. "There are certain segments of the market that have been under pressure, primarily in the memory markets," she says. "Volumes haven't been reaching the levels that were expected, so there's been a bit of an overcapacity situation on the memory side. But, that is actually starting to recover."

Since September 11, 2001, Itow says the industry has tightened its belt and become more efficient in terms of response time and inventory control. She uses cell phones as an example. "There wasn't anything really new in the cell phone market in the second half of last year, so demand slowed down more than expected," she says. Apple's iPhone comprises only a small percentage of cell phones sold, but the overall impact to the industry has been positive, she says: "The hype around it was good because it gets semiconductor manufacturers ready for the next

generation of products, which includes videos and all kinds of new features on a cell phone."

Still, Itow says the fourth quarter of 2006 saw slower sales and the first half of 2007 has been "a bit disappointing" in not reaching expected revenue levels. She attributes this to companies "burning off" excess inventories. "But we do expect to see a pickup in the second half of 2007," she says. "We expect to see 2008 being a very good year."

Part of this growth, says Itow, will come from the semiconductor industry developing a broader base of products in both business and consumer arenas. "We are going to see more penetration in automotive, medical, and industrial applications," she says.

Employment Trends

Employment throughout the industry is also strong, particularly in the high-tech field. "Our employment data shows that manufacturing actually increased employment in the high-tech industry last year by adding 5,000 jobs," says Kazmierczak. "After the technology bubble burst in 2000-2001, the industry went in a lull in terms of employment. There were some 500,000 jobs lost on the tech side, but that has worked itself through the system." He approximates 150,000 jobs added to the overall electronics industry in 2006, compared to 87,000 jobs in 2005.

"The industry is growing at 3 percent, compared to a 2 percent national average, and wages are growing at 1 percent, compared to a zero percent growth in the national average," says Kazmierczak. "So things are looking positive."

California, Texas, New York, Florida, and Virginia lead the nation in high-tech employment in 2005.

Competitive Global Economy

Much of the credit for the growth in sales and employment can be credited to the global economy, where electronics exports alone are up 10 percent. "Technology is truly global," says Kazmierczak. "Your mouse and keyboard may have been made in China and your hard drive may have

been made in Singapore, Taiwan, or South Korea. Traditionally, these parts are then brought together in one place for final assembly."

Communication between countries is also more efficient, making the manufacture, sale, and distribution of products easier. "With the Internet and other tools that we have now, location becomes less important," says Kazmierczak.

One of the biggest factors in the import/export equation of electronics is China, both in terms of its own 1.3 billion-person population and its manufacturing capabilities. "China is an integral part of the technology supply chain because they are, by far, one of the largest importers of high-tech products," says Kazmierczak. "They grew 42 percent in exports of high-tech products, and they are the manufacturing center for much of the technology industry itself."

Itow agrees. "They are a treasure of potential markets, but they are also developing their own manufacturing capabilities, so some of our manufacturers are now becoming competitors with manufacturers in China," she says.

Itow also admits that China has had an economic advantage for years because they have had lower labor rates and a supportive government interested in developing and subsidizing an electronic and technology industry. "Eventually all that begins to level out," she says. "As they become more involved in world markets, their labor rates have to increase and their government will realize they don't have to provide as much subsidy anymore, so we will begin to see those disappear." Ultimately, she says, China is a region that is providing both opportunity and as well as challenges for the worldwide market.

India, while not a manufacturing powerhouse, brings credible and powerful technical expertise to the global table, as well. "The Indian Institute of Technology is world-class and on par with our Massachusetts Institute of Technology," says Kazmierczak. "If they continue that trend, the competition they can bring to bear in the world marketplace will be a force to be reckoned with." However, he

underscores India's competitive advantage in the form of wage differentials is weaker than in the past. "The wage differential that used to make them an attractive location is no longer as attractive," he says. "Companies are no longer going to India for software developers based solely on wage."

Distribution Channels

A vastly improved worldwide distribution network — thanks to technology — has played a huge role in the overall health and growth of the electronics industry, according to Koenig. "The time to market for our products is definitely shrinking because of distribution logistics, just in time inventory systems, computers and software, satellite downloads, and broadcasts between the factories and distribution centers," he says. "We have incredible distribution mechanics and logistical systems that are helping us get products from the factory and into consumer's hands very quickly."

Additionally, Koenig says a shift away from traditional dealers to "big box" superstores, such as Best Buy and Circuit City, was a major trend in the late 1990s. The industry, he says, is seeing another shift into the "mass merchant channel" of stores like Wal-Mart, Target, and Costco. Consumer buying in smaller chain stores, like Walgreens, is also on the rise, he says. "It's about making the sale where your customer is," says Koenig. "The big question with this is to what degree will it affect other channels in the mix?"

Strong online sales are also another factor affecting the industry. Electronics manufacturers can now sell directly to the consumer through their websites and have products shipped right to the home or office. However, Koenig warns that this has created "channel conflict," as manufacturers try to please their customers and support their dealer channels and partners at the same time. "Manufacturers have had to watch that very carefully," he says.

Continuing Collaboration

Much of the growth and stability in the electronics industry in recent years has occurred because of collaboration, says Koenig. "The spirit of collaboration and partnership has grown proportional to the growth in competition," he says. "Companies are realizing they have to come back to their core competencies, and they can't really do and be everything to everyone." Therefore, the idea of partnership, acquisition, or merger has become a viable alternative. "The players in this chess game have had to be smarter about the moves they are making by focusing on core competencies, maximizing efficiencies, and outsourcing," he says. "It's that kind of smart business thinking that has become necessary because it's a global economy, a global marketplace, and a global manufacturing community."

Such was the case for the creation of the Xbox. "Microsoft went to IBM for the Xbox," says Itow, "and IBM helped them figure out how to get where they wanted to be. That was all part of the collaboration." Itow says the reason the product was so successful is that both companies listened to each other and worked together from day one,

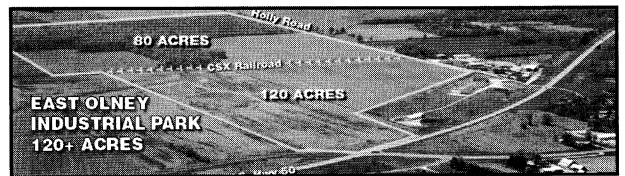
understanding the needs on both sides. "Companies are finding that getting to the market quickly with a product that will be very satisfying to the customer is a win-win situation for all of the players in a whole chain of activity," she says.

Kazmierczak emphasizes that collaboration is viable, but patent challenges can and do arise, particularly where electronics are concerned. "Something as 'simple' as a microchip has tens of thousands of patents that go into it," he says. "If you run afoul of just one patent, that can hold up the whole process. Many times companies are not [patent infringing] for nefarious reasons, it's just tough to keep track of that many patents."

As for the future of the electronics industry, Kazmierczak sees a pickup in capital spending, in terms of both equipment and technology. In the early part of the decade, he says, businesses had purchased systems that far exceeded their capacity, and it took a few years to work through that capacity to a point of needing upgrades or changes to their electronic and computing systems. "Those things are beginning to happen now," he says.

The increasing demand for newer and better technology, as well as newer and better consumer electronic innovations, should continue driving the industry into the black for the foreseeable future. **AREA**

Olney *Serving North America from Southeast Illinois*



120+ Acre Site CSX Rail • U.S. Hwy 50

• ALSO AVAILABLE •

105,000 sq. ft. Facility Distribution/Manufacturing

- Mfg. Whse Space 102,182 sq. ft.
- 28' to 35' at peak • 13 dock doors
- 7 Acres • Constructed 1995

Additional buildings
and sites available



Quality Counts
Quality Labor
Quality Training
Quality Community Life
Quality Incentives



Olney, Illinois

is home to a food distribution center for one of the world's largest retailers along with several manufacturers.

Named One
Of The
Top 100
Small Towns
in America

Contact: Richland County Development Corporation

www.rcdc.com Phone 618-392-2305
email: marych@verizon.net

Request 1761 on Executive Inquiry Card