

# As Rivals Outsource, Lenovo Keeps Production In-House

By [LORETTA CHAO](#)



Chinese PC maker Lenovo is trying to reposition itself as an innovator. But the company lacks name recognition in the coveted Western marketplace, something it hopes to fix with a range of new products. Video and reporting by WSJ's Loretta Chao.

BEIJING—In a modest factory on the outskirts of China's capital, electronics maker [Lenovo Group](#) Ltd. [0992.HK, +0.66%](#) displays its unusual approach toward capturing the top spot in the global computer market.

The factory, which assembles desktop computers and servers, resembles thousands of others across China. Robotic arms are in constant motion, moving parts and pieces around. Rows of workers clad in blue pop parts into place as computers make their way down the line. The factory can churn out about 25,000 machines in a day.



Lenovo

A worker on a Lenovo production line in Shanghai.

The difference: The facility, its equipment and its employees are all part of Lenovo. It is one of eight company-owned factories around the world with three more to be built in China and Brazil. That is a departure from the common industry practice, in which companies from [Apple Inc.](#) [AAPL +0.27%](#) to [Hewlett-Packard Co.](#) [HPQ -1.33%](#) increasingly outsource the assembly, and even design, of laptops and other gadgets to contract manufacturers.

Lenovo sees retaining all these functions as a key advantage. "Selling PCs is like selling fresh fruit," says Lenovo Chief Executive Yang Yuanqing. "The speed of innovation is very fast, so you must know how to keep up with the pace, control inventory, to match supply with demand and handle very fast turnover."

This came into play late last year when flooding in Thailand caused a shortage of some types of hard drives for the computer industry. The company had to first battle with other companies to procure more hard drives. But because Lenovo assembles many of its own computers, it was able to quickly shift the mix of products in its pipeline to focus on products for which the hard drives were available, and prioritize products that had higher profit margins, said Gerry Smith, Lenovo's supply chain senior vice president.

**Photos: Lenovo's Expanding Portfolio**

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Daniel Acker/Bloomberg News

Lenovo's IdeaPad Yoga

## The Rapid Rise of Lenovo

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Start Local, Go Global  
The rapid rise of Lenovo. Source: WSJ Reporting



"We gained a tremendous amount of share during that industry crisis" because "the speed of our supply chain," he said. Lenovo saw its market share climb above 14% in the fourth quarter as it shipped 13 million computers, up from 13.7% in the previous quarter, according to research firm IDC. H-P, the top computer vendor by unit sales for the past five years, saw its market share that quarter drop to 16% from 18% in the previous quarter. H-P declined to comment.

The in-house approach—combined with aggressively moving into fast-growing emerging markets—has helped Lenovo turn a declining business around. Its profit for the fiscal year ended March 31 grew 73% to \$473 million, outpacing most of its rivals. As recently as three years ago, Lenovo was still posting losses.

Lenovo didn't sell outside China until 2005, when it shocked the high-tech world by buying the laptop unit of [International Business Machines Corp.](#) IBM\_-0.36% Lenovo hired an American high-tech executive to run the company, but sales sagged during the recession. So, in 2009, Lenovo co-founder Liu Chuanzhi and Mr. Yang took control again and got the

company back on track, largely by boosting sales in developing countries like China, India, Russia and other markets where PC sales have surged.

Whereas Chinese manufacturers make huge numbers of computers and other devices sold by other companies, Lenovo is different because it sells under its own name. That makes it the first Chinese global consumer brand.

Now, Lenovo faces a bigger challenge than its recent turnaround. Demand for traditional PCs is slumping as hand-held gadgets like Apple's iPad gain popularity.



Mr. Yang is hoping that his approach to the PC business will aid a new push into new types of smartphones, tablets and Internet-connected televisions. Lenovo earlier this year unveiled its first Internet-connected television, the K91 Smart TV, now available for sale in China. Lenovo said it needs to line up deals with content providers before it can sell the TV in the U.S. and elsewhere, and doesn't know how quickly that will happen.

Later this year, Lenovo plans to begin selling its first smartphones powered by a chip designed by [Intel](#) Corp. [INTC](#) -0.79% It also is getting ready to start selling the IdeaPad Yoga, an ultrathin laptop with a keyboard that can swing behind the monitor to transform the gadget into an iPad-like tablet.

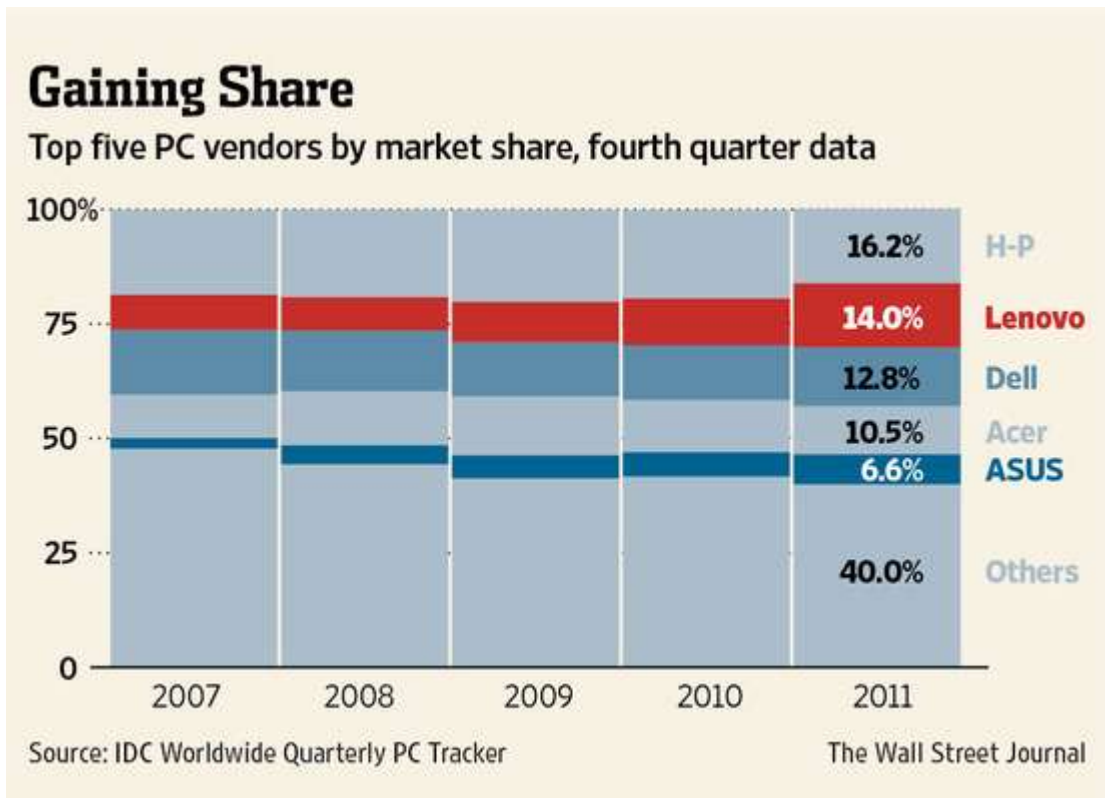
David Wolf, chief executive of Wolf Group Asia, a Beijing-based marketing strategy firm, said the challenge for Lenovo is "to develop products that are not just good products, but

that we can't wait to have." But "they recognize that there's a pathway and they need to be on it," he said.

Sales of Lenovo's newest products are small but growing. According to IDC, the company was the fourth-largest vendor of tablets in the first quarter with a 2.8% share of unit shipments, up from No. 8 in the fourth quarter of last year. Apple, meanwhile, garnered a 63% share of tablet shipments with its iPad.

Apple Chief Executive [Tim Cook](#) doesn't seem impressed with Lenovo's tinkering with tablets. In an earnings call in April, when analysts asked if he would consider making a device to provide optional keyboards to iPads, he said "You can converge a toaster and a refrigerator, but those things are probably not going to be pleasing to the user...you wind up compromising in both and not pleasing either user."

Mr. Yang spent a lot of time at the Consumer Electronics Show in Las Vegas in January looking at products from competitors. "Compared to Samsung, LG and these companies in terms of design, we still have space to improve," he explained later. "Their products are very fashionable, very stylish. This is a challenge for us."



Mr. Yang, 47 years old, started out at the predecessor company of Lenovo in 1988. As a salesman, he delivered computers by bicycle in the early days.

"In the U.S., the infrastructure is there to fulfill a company's every need. There are people who can help you do anything, people to help you do advertising," he said. "In China we had nothing, so we had to do it ourselves. Our first 'advertisement' was taped to the window of our office. We displayed it by turning the lights on at night."

Mr. Yang moved up the ranks after catching the eye of the company's co-founder, Mr. Liu. Mr. Yang became chief executive in 2001 at the age of 36.

That year, he led a team of 10 executives on a world tour of companies like [Cisco Systems Inc.](#), [CSCO -0.98%](#) Intel and H-P, which at the time were more than three times Lenovo's size by revenue. After Lenovo bought IBM's PC unit in 2005, Mr. Yang moved to the U.S. but stepped back from the CEO position and became chairman of the company, bringing American executives in to take his place.

The integration of the two companies was rocky, but Lenovo's profit was climbing sharply by mid-2008. However, the global economic downturn exposed huge vulnerabilities within the company. The IBM ThinkPad business was heavily reliant on commercial sales at a time when companies were reducing spending on technology, and Lenovo's consumer business was strong only in China. The company struggled to get its products on the shelves of major retailers in the U.S., and its global market share dropped to less than 7% world-wide by unit shipments, lagging behind H-P, [Dell Inc.](#) [DELL -1.14%](#) and Taiwan's [Acer Inc.](#) [2353.TW +0.19%](#)

Lenovo co-founder Mr. Liu decided to return as chairman in 2009 while Mr. Yang shifted from the chairman's seat back to the CEO. Mr. Liu has since stepped down, and Mr. Yang now is both chairman and CEO.

Mr. Yang had a four-year plan. He refocused the company on China as well as other emerging markets. He expanded its vast network of resellers around China so that customers even in rural areas would be close to a Lenovo store with customer service, and he made an aggressive push into India and Russia, where IBM's ThinkPads were well known but Lenovo's brand wasn't.

Others in the industry have been skeptical of this approach. Steve Felice, Dell's president, was asked in an earnings call last month about why it doesn't go after the market for competitively priced PCs, particularly in Asia. Mr. Felice said Dell has "backed off" of that

market. He added that Dell would watch the situation carefully, but he doesn't think that type of competition "is really something that's sustainable at an industrywide level."

As part of the plan, Mr. Yang sat down in 2009 with Mr. Smith, Lenovo's supply chain senior vice president, poring over charts and analyses of the costs and benefits of in-house manufacturing. They decided to increase the company's in-house manufacturing to 50% from less than 30%.

"Three years ago the whole industry was saying everyone should outsource, that's the future," Mr. Smith said. But Lenovo "came to the conclusion that even though all our other competitors are going in the other direction...we can move faster if we're more vertically integrated."

Lenovo Chief Technology Officer George He says the strategy is playing a key role in the development of new products. "If you look at the industry trends, most innovations for" PCs, smartphones, tablets and smart TVs are "related to innovation of key components—display, battery and storage," he said. "Differentiation of key parts is so important. So we started investing more...and working very closely with key parts suppliers" for things like bigger and thinner touch screens. He said consumers can expect to see some of these efforts embodied in new products from Lenovo by the end of the year, but gave no further details.

Lenovo already has had some misses in its recent efforts to branch out into new products. One of its earliest efforts to show the world its innovative abilities was its U1 Hybrid, a combination notebook and tablet with a detachable keyboard unveiled in 2010 that proved too costly to make and which missed its release date. Mr. Yang said eagerness drove Lenovo to show the U1 hybrid off before it was ready.

Still, the device, which was a novel idea at the time, did attract a lot of attention for the company, including from David Roman, formerly an executive at H-P and Apple, who signed up that year to become Lenovo's chief marketing officer. Mr. Roman says he joined the company because he was impressed by Lenovo's innovative efforts and Mr. Yang's determination, and saw its lack of brand identity as "an opportunity."

Mr. Roman said he wants to find ways to make Lenovo into a China brand considered to be cool and innovative rather than cheap by consumers around the world. But as it turned out, his task started from inside the company. "We had very emotional discussions in the beginning" about "actually having 'Lenovo' on the front of the ThinkPad," he said. "The logic was" the Lenovo name "would actually be damaging to ThinkPad."

"When I came in I said, 'Over my dead body do you put our best product out without our company logo on the front,' " he said.

Since then, Mr. Roman has launched an overhaul of the company's image, purchasing ad slots during hit prime-time TV shows such as "Glee" and National Football League broadcasts. One commercial shows a Lenovo laptop activating a parachute after being tossed out of a plane to show how quickly it boots. In the halls of Lenovo's U.S. offices, slogans from the campaign—Lenovo "for those who do"—are plastered everywhere.

Mr. Yang considers building a brand to be a crucial part of Lenovo's next phase of growth now that the PC business is on an upswing. "To have higher market share, you need to have a brand."

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*A version of this article appeared July 9, 2012, on page A1 in the U.S. edition of The Wall Street Journal, with the headline: As Rivals Outsource, Lenovo Keeps Production In-House.*