

ISSUE 76 AUTUMN 2014

Lenovo Goes Global

China's most recognizable brand has plans to overtake Apple and Samsung.

BY WILLIAM J. HOLSTEIN

LENOVO

GERRY



GL



Lenovo chief executive Yang Yuanqing (top row, left); a technician subjects a Lenovo design to a vibration test (top row, right); Gerry P. Smith, head of Lenovo's enterprise business (middle row); Yoga Ultrabook



V



S

China's most recognizable brand has plans to overtake Apple and Samsung.

by William J. Holstein

BAL

William J. Holstein

bholstein2011@gmail.com
is a contributing editor to
strategy+business and author
of *The Next American Economy:
Blueprint for a Real Recovery*
(Walker & Company, 2011) and
*Why GM Matters: Inside the Race
to Transform an American Icon*
(Walker & Company, 2009).

IN the beginning, it was cultural and managerial chaos. When Chinese computer company Lenovo dispatched a team to New York in 2004 to discuss acquiring the personal computer division of IBM, only one member of the team—the company’s chief financial officer—spoke English. Lenovo was an offshoot of a Chinese government research institute, and none of the leadership team had operated outside Chinese-speaking Asia. Yet they were dealing with executives from IBM, a sophisticated multinational active in 160 markets. Gina Qiao, who was a member of the Lenovo team representing human resources, recalls that she was completely baffled by IBM’s compensation and pension system. Nothing like it existed in China.

Once Lenovo acquired the much larger but unprofitable PC division on May 1, 2005, for US\$1.75 billion, the two sides discovered that they truly didn’t understand each other. Lenovo executives decided that English would be the official language of the new company and started learning it. But the challenges went beyond vocabulary. Words could be translated from one language to another, but underlying assumptions couldn’t. “We had two rivers of culture,” recalls Qiao.

For example, the two sides did not know how to disagree with each other. When the U.S. executives spoke in a meeting, the Chinese often said, “*Shi, shi, shi*,” which means “yes, yes, yes.” The U.S. group took this as a sign of agreement, but the Chinese were really just saying, “We hear you; please continue.” It was only after the meeting that the Chinese explained privately that they didn’t agree. They were trying to be polite, but the way they expressed disagreement after the fact infuriated the other side.

Another problem: Western managers expected their direct reports to push back and sometimes challenge their superiors’ decisions, but the Chinese tendency was to merely execute what a “great boss” had decreed. “In China, we have to respect the leaders,” Qiao explains. “If you ask me to do something, I just do it. If you make that decision, you know more information. You are above me. You are smarter than me.”

The Chinese decided they wanted a Western executive to be the chief executive officer of the combined company, so CEO Yang Yuanqing stepped into a non-executive chairman’s role. The first Western chief executive, Steve Ward, an IBM veteran, didn’t last long. Then William J. Amelio, a former Dell Inc. executive who had run that company’s operations in Asia, stepped in as CEO later in 2005, bringing many Dell people with him.

Amelio tried to impose the Dell way of operating the company. He commissioned a consulting firm to hammer out a common strategy document, but it was 15 pages long and too complex. Amelio managed to expand annual sales from \$13 billion to \$15 billion. But after global financial shocks knocked the company into a money-losing quarter, Amelio stepped down. On his way out, he publicly complained about the company’s “yes, yes, yes” culture. Yang returned as CEO in February 2009.

Around 2010, the company finally began to click. The worst of the cultural differences were getting resolved, and the Chinese had spent the period of upheaval learning about the capabilities needed within a multinational company. “They came to the United States ready to learn and absorb expertise,” says Yu Zhou, a professor at Vassar College and author of *The*



Left: A manufacturing facility in Wuhan, China
Right: Lenovo's Innovation Center in Beijing

Inside Story of China's High-Tech Industry: Making Silicon Valley in Beijing (Rowman & Littlefield, 2008).

Today, Lenovo has emerged as China's first true multinational, surpassing Hewlett-Packard Company and Dell to become the world's largest maker of PCs. Sales have grown to \$39 billion as of the fiscal year ending in March 2014, more than twice the level of 2008, thanks partly to several acquisitions. Its most recent deals, announced within the space of a week in early 2014, were the purchase of IBM's low-end server business in China for \$2.3 billion and the handset division of Google (once part of Motorola) for nearly \$3 billion.

Lenovo's experience thus has broad implications for the future of China's economy and its outreach into the world. Cash-rich Chinese companies are currently engaged in a wave of mergers and acquisitions around the world, in entertainment, agriculture, real estate, energy, and automobiles. If they stumble and fail to absorb technology and management expertise, China may still become the world's largest economy—but not a particularly sophisticated one.

However, if Lenovo's success can be duplicated by others, its emerging multinationals could one day compete toe-to-toe against the world's incumbents. "Lenovo is the test case of whether the Chinese can acquire foreign or U.S. technology at an innovative company and really make the best of it—or will they lose the capability?" says Oded Shenkar, a business professor at Ohio State University and an expert on Chinese companies.

The Networked Enterprise

Lenovo is publicly listed in Hong Kong, ensuring that it operates with a degree of transparency that many other Chinese companies do not have. Its board has interna-

tional representatives and operates on the basis of global management principles. The company's top management committee consists of nine people (including Qiao) from six different countries, who all have extensive international experience with the company's products, markets, and functions. Below them is a leadership team of 100 "high potential" executives, representing 17 countries. Because its footprint is so big, the company has developed human resources practices that apply uniformly regardless of market (including China). Pay scales have been standardized as well; there is little difference in working for Lenovo in China or Switzerland or the United States.

Lenovo also has evolved its decision-making process. Instead of demanding fealty based on titles and seniority, the current approach combines the best of the Chinese long-term focus on strategy with the West's intense focus on meeting quarterly targets. "People think Chinese companies are autocratic and have a chairman or CEO who makes decisions—everybody salutes him and marches out," says William O. Grabe, a former IBM executive turned private equity maven who helped broker and finance Lenovo's purchase of IBM's personal computer unit. (Grabe's New York-based firm, General Atlantic, remains an investor, and he currently sits on the board.) "That couldn't be further from the truth at Lenovo." It may help that CEO Yang Yuanqing, who is known as "YY" internally, is a relatively young 49 and reflects a new generational attitude toward the traditional Chinese top-down management style.

In another key respect, Lenovo has distinguished itself from other Chinese companies; it has created a brand name that is recognizable in markets around the world. No other Chinese company that competes

LENOVO'S U.S. WORKERS ARE CROSS-TRAINED TO PERFORM DIFFERENT FUNCTIONS, WHEREAS CHINESE WORKERS ARE TYPICALLY TRAINED TO PERFORM JUST ONE.

internationally (including Huawei and ZTE in telecommunications, BYD and Geely in autos, and Haier in appliances) has been willing to spend hundreds of millions of dollars annually to achieve that. In addition, unlike many other rising Chinese companies, Lenovo is not competing solely on the basis of low manufacturing costs. Its products, such as the ThinkPad laptop and Yoga four-position ultrabook, offer cutting-edge design and command premium positioning in their respective categories.

Internally, Lenovo executives say they have created a new type of global enterprise that is network oriented, rather than hierarchy oriented. Some outsiders agree. “They have done an exceptional job in melding East and West into a new organizational approach,” says Dave Ulrich, a business professor at the University of Michigan who has coached Lenovo executives.

In several respects, that approach has already allowed Lenovo to leapfrog some Western multinationals. For example, it runs a few lines of business and functions from North Carolina, the location of the former IBM PC headquarters. The company considers this, along with Beijing, one of two dual headquarters. Lenovo has created this structure at a time when many established multinationals are wrestling with how to decentralize and place local decision-making power in important markets. Some incumbent players find it difficult to recognize and redeploy innovation that occurs outside the home country, yet Lenovo is able to harvest new ideas from the United States, Japan, and China.

The company’s ultimate goal now is to compete against two of the world’s most innovative companies in the Internet era: Apple and Samsung Electronics, which dominate the markets for smartphones and handheld

connected devices. That will be a true test of Lenovo’s ambitions.

When Yang returned to the CEO job in January 2009, he articulated a “protect and attack” strategy that encapsulated how the company would build on its strong base in the Chinese PC market and in the corporate and education sectors in the United States—thanks to IBM’s ThinkPad—while going after new geographies and new product areas, such as smartphones and related devices. “The ‘protect and attack’ strategy got all 30,000 employees on the same page,” recalls Gerry P. Smith, who had formerly run Dell’s display business in Singapore before joining Lenovo in 2006. This was a crucial moment in breaking down silos within Lenovo and helping it build a consistent methodology around the world. Yang also built critical capabilities in three major areas that all multinationals must excel in: supply chain management, technology development, and marketing.

Supply Chain: The Best of All Worlds

The problem with Lenovo’s supply chain was that it was not well integrated, partly because it had resulted from a merger between two dissimilar companies. When Smith arrived, he says, he found “different distributors in different regions of the world, with different customers and different business models.” Employees had 150 key performance indicators (KPIs) they needed to meet, leading to lengthy internal delays when they responded to orders for specialized products. The supply chain also was not built to accommodate the volumes that the company began to achieve. Deliveries were often unacceptably late.

Part of the challenge in fixing the situation was that Smith’s team numbered some 15,000 employees, about

half the company at that time. The reason he oversaw such a high percentage of the company's workforce was that, with Yang's concurrence, Smith applied a more comprehensive definition of the supply chain compared with the prevailing logic in Western companies. His mandate included procurement of parts, manufacturing, logistics, sales channels, and even the customers' "out of the box" experience as they opened the packaging and began operating the devices.

To turn things around, Smith added veterans from Dell, DHL, Flextronics, and HP and slashed the number of KPIs to five, creating a much more flexible organization. He subjected his top 50 managers to intensive training in business skills, such as how to make a presentation and how to read a P&L statement. "They're now the younger element of our management team," he says. "I always believe that in an organization built to win, it's not the generals you have to get to. You have to get to the captains and the lieutenants who are leading the charge up the hill."

Smith also adapted Workout, the group-based improvement technique that General Electric originally developed, in which all key decision makers on a tough issue are brought into a room—and left there until they agree on a solution. In some cases, he was able to double the productivity of a manufacturing line.

The result was a cohesive, much more focused supply chain culture that combined the best ideas from the different nationalities and company backgrounds of the team. "When you live overseas for a while," says Smith, "you recognize that there's the U.S. way of doing things, and then there's a more global approach. The beauty of our culture is that we all moved to a new common ground."

In 2010, Lenovo did not make research company Gartner's annual ranking of the world's top 50 supply chains, but by 2013, it ranked 20th, ahead of such companies as Nestlé SA and Ford Motor Company. More broadly, the philosophy surrounding the supply chain has become an advantage for Lenovo, because the company stressed vertical integration (at a time when competitors were outsourcing) and manufacturing near tar-

get markets (when competitors were still shipping large numbers of machines across the Pacific). When Smith first took over Lenovo's supply chain, he heard demands from Wall Street to change course. "There was a lot of external pressure saying, 'You guys need to outsource. You need to follow HP and Dell's strategy,'" he recalls. "I was actually accosted at a Hong Kong analyst meeting. They basically laughed at me and asked, 'What are you doing? You actually own factories in China?'"

But Smith had a more realistic understanding of the total costs "per box" than the analysts because he included manufacturing, logistics, excess materials, overhead, and labor in the total. "Analysts look only at manufacturing cost, but that's not the real cost," he says. "The cost is the total end-to-end delivery cost of a product."

At Smith's urging, Yang agreed to zig while others were zagging, to vertically integrate the procurement of some parts, while still relying on partners for others (such as Intel for semiconductors and Microsoft for operating software). The key was to achieve enough scale so that the company could drive down prices, giving it a structural cost advantage over its competitors.

That overarching philosophy is one reason that Lenovo began experimenting in 2013 with reestablishing electronics assembly in the United States, an activity that had disappeared long before. In a cavernous, 242,000-square-foot testing and distribution facility in Whitsett, N.C., about an hour north of Raleigh, the company is using U.S. workers to assemble ThinkPads. Customers include the World Bank, the New York City Department of Education, the United Nations, and the U.S. Air Force.

Workers in the United States still cost more per hour to employ than their Chinese counterparts. But the gap is narrowing, and it requires smaller teams of U.S. employees to do the work: just 22 per line, compared with 60 in China. One reason is that Lenovo's U.S. workers are cross-trained and can perform different functions, whereas Chinese workers are typically trained to perform just one. When transportation costs are added in, the gap becomes even smaller. "The costs



Left: Lenovo technicians at work
Right: Yoga Ultrabook



are starting to equal out,” says operations manager Jeffrey Benes. Looking around at the ThinkPads moving down the assembly line, he adds: “This is ground zero for onshoring.”

Smith argues that the trend could deepen. “For some customers, it gives us a huge advantage to bring more local manufacturing into the fray,” he says. “You could see Lenovo going even more local over time.” Thus a Chinese-based company is ahead of Apple in figuring out how to make products in the United States. Apple relies on third-party outsourcing in China, and although it has announced it will spend \$100 million to launch some type of assembly function in the United States, it has yet to do so.

Technology Development: The Innovation Triangle

Yang engineered another crucial shift beginning in 2010, by recognizing the emergence of smartphones, tablets, and similar devices. In Lenovo’s view, this was another benefit of vertical integration—it kept its design in-house, whereas HP and Dell had both outsourced many of their design functions to Taiwan-based firms. (“They outsourced their brains,” says Smith.) By contrast, Lenovo was able to see how consumer technology was evolving, away from desktops and toward smaller and more mobile devices.

Yang called this the “PC Plus” sector. In line with his “protect and attack” strategy, the company would protect the PC sector but attack the PC Plus sector. His ability to articulate a strategy was once again key in refocusing management and increasing spending on key technologies.

The result has been a blitz of innovative new laptops, tablets, phones, and other products. The company

has developed 18-hour batteries for tablets, along with rapid-charge batteries for laptops that can be recharged up to 80 percent in 35 minutes. Some models have spill-proof keyboards that can survive being doused with 16 ounces of liquid. In the industry’s ongoing pursuit of thinner, lighter, and faster products, the company has also come up with super-light, carbon-fiber laptop bodies; for example, its X1 Carbon ThinkPad, with a 14-inch screen, weighs less than three pounds. That product uses the owner’s fingerprint to wake up the system. No passwords are necessary.

The company also was early to recognize the emergence of “convertible” products that could be used in different ways. Several versions of the Yoga Ultrabook, for example, can function as a conventional laptop, a tablet (by flipping the screen over), a viewing screen to watch videos (by flipping the screen backward), and a demonstration panel (by folding the device into a tent shape and standing it upright, so that, for example, someone could refer to a recipe while cooking).

The Yoga illustrates how the company can leverage what it calls its “innovation triangle,” which refers to its R&D and engineering activities in three locations—China, Japan, and the United States. For instance, when creating the Yoga, designers struggled over what to do with the keyboard when the device was turned upside down on a hard surface. That could create false keystrokes or damage the keyboard itself. It was the company’s Japanese engineers, who have been the creative center of the ThinkPad since IBM developed it, who came up with a solution. They devised an ingenious way to automatically retract the keys of the keyboard into the Yoga’s body so that they would no longer be exposed to possible damage.

This ability to tap into different geographies for technological solutions is key. “If you have only one central point of innovation, you start adopting the market characteristics of the region where that development occurs,” says Smith. “It’s great to have development in multiple areas, because you get a different global perspective.”

Because of such innovations, Lenovo has grabbed 40 percent of the U.S. market for laptops that sell at \$900 or more, such as the X1 Carbon ThinkPad. The company won 55 awards at the 2013 Consumer Electronics Show in Las Vegas, a competition that it has dominated for the past three years. And it is now working on new products such as its IdeaCentre Horizon, a 27-inch monitor that lies flat and becomes an interactive table for games and group activities. It retails at around \$1,600. Through products like these, Lenovo has begun to compete on the basis of innovation, not just price.

Marketing to “Those Who Do”

Lenovo was a sponsor of the 2008 Olympic Games in Beijing, which helped Yang and the company get their first lesson in marketing. “It was China’s introduction to the world,” says chief marketing officer David Roman, an Australian who previously worked for HP. “The Olympics showed the value of making a big statement, and YY loves making big statements.”

Yang brought Roman into the company in 2010 because he wanted to escape the trap of competing on the basis of price alone. Yang wanted a brand that would allow him to charge higher prices. “You can’t become a premium player unless you have a brand, and YY was very conscious of that,” Roman says.

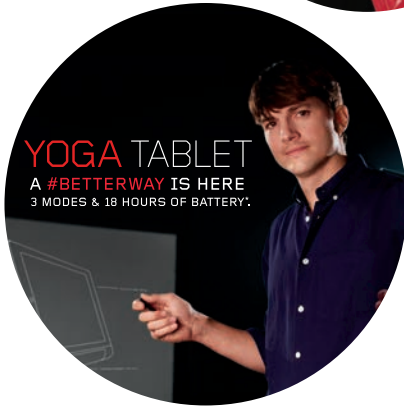
The company launched many of the usual marketing efforts. It struck a three-year deal as the official PC sponsor of the National Football League. And it turned to basketball star Kobe Bryant to be the face of its smartphone products in Asia. But as the company shifted into trendier mobile products, it realized it needed to do more. “As we moved into smartphones and tablets, we had to be driven by our relationship with our audience of consumers,” says Roman. “We had to become a

relevant and interesting global consumer brand. A lot of our focus has been on becoming relevant to the youth audience, which is consistent around the world. They listen to the same music and watch the same videos.”

Soon after he arrived, Roman conducted a competition among the world’s advertising agencies to win the Lenovo account. Saatchi & Saatchi’s New York office won for coming up with the slogan “For Those Who Do.” It was conceived of as a way to demonstrate that people who buy Lenovo products are risk takers and achievers. Banners with outtakes from the campaign can be seen throughout the company’s complex in North Carolina. “Get Off Your Mental Ass,” reads one. Another proclaims: “Impossible Is Only a Figment of Your Un-Imagination.”

The campaign launched in 2011 and included such innovative features as a short film titled *The Pursuit*, which depicted a mysterious young woman using the IdeaPad Yoga 13 to stay ahead of her evil pursuers. The film was shot by Martin Campbell, who works on action movies and James Bond films. (He directed *GoldenEye* and the remake of *Casino Royale*.) The campaign showcased how Lenovo’s “convertible” products fold, twist, and separate in useful ways. Although some of this marketing may seem standard for a global consumer goods manufacturer, Lenovo was the first company from China to adopt such an approach—and to invest accordingly.

More recently, Lenovo announced a collaboration with Ashton Kutcher to promote the new Yoga Tablet. (Outside his acting career, Kutcher has made VC investments in tech companies such as Skype, Airbnb, and Foursquare.) In late 2013, Lenovo signed Kutcher to a multiyear deal as product engineer, wherein he will



Celebrity endorsers
Kobe Bryant and
Ashton Kutcher

LENOVO'S STEEP LEARNING CURVE IN THE U.S. GAVE IT THE CULTURAL AND MANAGERIAL EXPERIENCE NEEDED.

help Lenovo design products that appeal to his contemporaries; financial terms were not disclosed.

Like other companies, Lenovo doesn't disclose how much it spends overall on marketing and advertising. It does receive some support from Microsoft and Intel, whose products it relies on. Roman says the company spends roughly in line with the industry average of 1.5 percent of sales, which would be about \$500 million a year, dwarfing the known spending of any other Chinese company. The investment appears to have worked. In March 2011, the company's "unaided brand awareness" among U.S. PC buyers was 4.3 percent, and only nine companies were ahead of it. Early in 2014, its research showed that Lenovo was at 26.3 percent awareness and ranked fourth in the minds of U.S. shoppers.

Taking on the World

The momentum that Yang's strategic bets created allowed Lenovo to undertake a rapid-fire series of acquisitions starting in 2011. The company bought NEC's PC operations in Japan and is now the PC market leader in Japan, with its name-branded products widely displayed in consumer electronics stores in Tokyo. Lenovo bought a controlling interest in Medion, a German PC maker, and used that to establish itself as the top German PC brand as well. In Brazil, which is a tricky market because of government controls, Lenovo bought CCE, the leading maker of PCs and mobile devices, in 2012. The company expects to use that acquisition to dominate there too, not only in PCs but also in mobile devices.

Most cross-border mergers such as these fail because the acquiring company imposes its culture and management practices, driving out or smothering key innovators at the acquired company. But Lenovo's steep

learning curve in the United States gave it the cultural and managerial experience needed to leave local management teams in place while working behind the scenes to improve supply chains, spur innovation, and reduce costs. "We're buying local focus," says Smith, the former supply chain head, who was promoted to run Lenovo's Americas business. "But we're also using the scale and cost advantages and the cultural advantages of Lenovo."

The company works hard to integrate the management of each acquired company into a larger whole. A small M&A team is in charge of tracking how well the integrations are going. Once a year, the company invites the management of its acquired companies to come to a meeting of its top 100 high-potential executives. There, in meetings conducted in English, Lenovo explains the company's global strategy and how the new executives fit in. So far, the strategy has worked well, with only a handful of departures by acquired executives.

The net result is that Lenovo is expanding its lead in PCs globally, with a 17.7 percent share in the first quarter of 2014, at the same time that it gains global market share in mobile devices. In results announced late in 2013, the company ranked third globally in overall sales of PCs, smartphones, and tablets.

Meanwhile, Lenovo's revenue in the first quarter of 2014 was \$9.8 billion, a 13 percent increase over the same quarter in 2012, and profit grew even faster, increasing 30 percent year over year.

"We're growing like crazy, but we're not sacrificing profitability to grow," says Smith. The fact that the company is gaining ground in PCs is key because the overall market, although huge at about \$200 billion a year, is stagnant. Lenovo is thus defending its 37 per-

cent of the PC market in China, as well as its strong position in ThinkPads in the U.S. government and education sectors.

It was ambitious enough to go up against HP and Dell in the United States; it will be a greater challenge still to take on Apple and Samsung. For a period of time, it appeared that Lenovo would seek to compete against Apple and Samsung only in emerging markets, but its acquisition of Motorola Mobility from Google is a clear signal that it aims to compete aggressively in the U.S. mobile phone market as well. “This will be a good start to challenge the big players in smartphones,” Yang told the *Wall Street Journal* in January 2014. The acquisition will make Lenovo the third-biggest U.S. player in smartphones by the end of 2014.

Lenovo will continue to sell smartphones in the United States under its own brand name, but it will also sell Motorola phones that use Google’s Android mobile operating system, making Lenovo a key Google ally. Motorola Mobility is losing money, and many analysts are skeptical that Lenovo can turn it around, but Yang dismisses those worries, pointing out that his company was able to achieve the near-impossible goal of absorbing IBM’s PC division years ago.

The same week that Lenovo made the IBM server and Motorola acquisitions, it announced a reorganization that hinted at the company’s ambitions. In the new structure, Lenovo will have four main business groups: PCs, mobile, enterprise, and cloud computing. Gerry Smith will take on added duties: running the enterprise group and managing the integration of IBM’s server business. The announcement that the company would also have a division concentrating solely on mobile devices sends a clear signal that Lenovo is seeking to greatly expand into the turf dominated by Apple and Samsung.

It’s impossible to predict how long it will take Lenovo to absorb its latest acquisitions, or to know whether the company might stumble for a period of time. But by buying the money-losing divisions of major companies, Lenovo has clearly arrived as a global competitor in some of the IT industry’s hottest sectors. In doing so, it

serves as a model for other Chinese companies. “At the moment, Lenovo is unique,” says Vassar’s Zhou. Chinese companies, as a whole, are still preoccupied with their vast home market and have not started globalizing in earnest.

If growth continues to slow in China, however, and its companies begin to look outward, Zhou argues that they will copy Lenovo, rather than going through the agony of spending years learning how to manage global enterprises. “Lenovo’s success is going to inspire other companies because it shows it can actually work,” she says. “It will be easier for other Chinese companies to learn from Lenovo than from anyone else.” In that sense, Lenovo’s success offers a definitive answer to the question of whether Chinese companies can compete globally. If they seek to mesh cultures, and focus on winning capabilities, they clearly can. +

Reprint No. 00274

Resources

William J. Holstein, “China’s Long Road to Innovation,” *s+b* (online only), Nov. 18, 2008: An inquiry into China’s challenges in creating true technology-based innovation.

John Jullens, “Why Haier and Lenovo May Soon Be Household Names,” *s+b* (online only), Sept. 23, 2013: A look at China’s branding challenges.

Chuck Salter, “Protect and Attack: Lenovo’s New Strategy,” *Fast Company*, Nov. 2011: A detailed on-the-scenes account of Lenovo’s origins.

Oded Shenkar, *Copycats: How Smart Companies Use Imitation to Gain a Strategic Edge* (Harvard Business Review Press, 2010): An argument that China can copy, or acquire, the Western management skills and technologies it needs.

Yu Zhou, *The Inside Story of China’s High-Tech Industry: Making Silicon Valley in Beijing* (Rowman & Littlefield, 2008): One of the most authoritative surveys of China’s technology aspirations.

For more thought leadership on this topic, see the *s+b* website at: strategy-business.com/global_perspective.

strategy+business magazine
is published by PwC Strategy& Inc.
To subscribe, visit strategy-business.com
or call 1-855-869-4862.

For more information about Strategy&,
visit www.strategyand.pwc.com

- strategy-business.com
 - facebook.com/strategybusiness
 - <http://twitter.com/stratandbiz>
- 101 Park Ave., 18th Floor, New York, NY 10178



Articles published in *strategy+business* do not necessarily represent the views of PwC Strategy& Inc. or any other member firm of the PwC network. Reviews and mentions of publications, products, or services do not constitute endorsement or recommendation for purchase.

© 2014 PwC. All rights reserved. PwC refers to the PwC network and/or one or more of its member firms, each of which is a separate legal entity. Please see www.pwc.com/structure for further details.