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Rebooting Japan's high-tech sector

Japan's once-storied high-tech sector has hit hard times. Only courageous management can restore its global competitiveness.

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For many decades, Japan's high-technology companies, nourished by innovative products and prominent consumer electronics brands, were the envy of the global sector. But that is rapidly changing. More recently, these companies have been losing ground around the world, undermined by a reluctance to make the aggressive moves and hard choices necessary to compete in new markets and against emboldened attackers.

Recent McKinsey research shows that Japanese high-tech companies lost a decade between 2000 and 2010 (Exhibit 1) and on current trajectory could see their global market share drop by 20 percent from 2008 to 2013. That represents a cumulative loss of more than \$30 billion in potential revenue. Japanese companies have a global presence and reputation, but most remain surprisingly dependent on Japan's domestic market for revenue, while struggling to capture a reasonable share of dynamically growing emerging markets. Our analysis shows that Japanese high-tech companies, as a group, still generate more than 50 percent of their sales in the home market, growing by a mere 1 percent annually, compared with growth of 5 to 10 percent in the developing world and 2 to 3 percent in other developed markets. As a result, Japanese companies will see their global market share decline rapidly even if they successfully defend their current share in each market.

But the situation is potentially worse. Japanese companies are also losing share in major products within key geographic markets. Between 2005 and 2009, these players' share of LCD-TV unit shipments grew to 100 percent, from 96 percent, in Japan but fell to 30 percent, from 40 percent, in North America. Also, total unit-volume growth in Japan during this period was very small relative to growth in North America and elsewhere. The pattern is similar for a number of other products, such as servers—success in Japan but failure abroad. For PCs and mobile phones, share declined even in the critical Japanese home market.

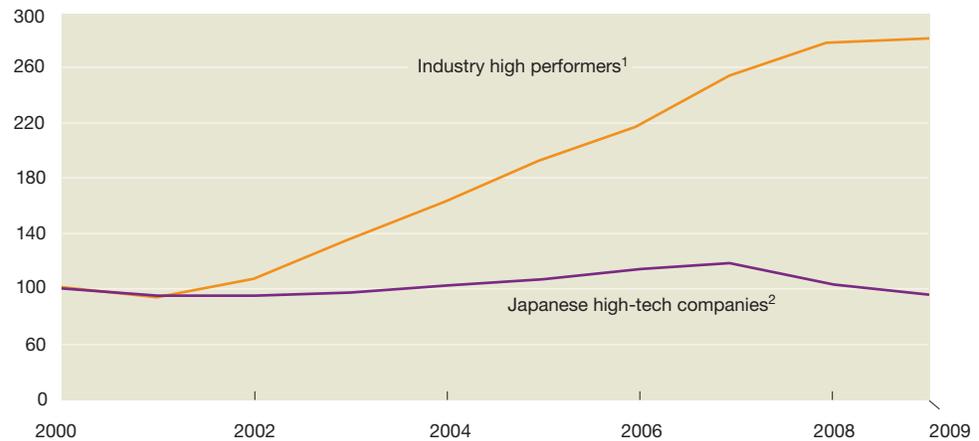
In addition, Japanese companies have almost no position in the critically important software and IT services markets outside of Japan. As a result, they will probably miss out on almost half of the absolute expansion in the global high-tech market between 2008 and 2013. Most of the growth will come from the United States and Europe, where Japanese companies have a limited presence. Market share changes little in these incumbent-dominated geographies, and most major movements that do occur reflect large-scale mergers and acquisitions. Unless Japanese companies join the party, they will be locked out of some of the most attractive growth and profit opportunities.

As a result of focusing on the wrong geographic markets and losing share within many of them, Japanese companies are sliding down the ranks of the leaders in units sold across a range of product sectors. In 2004, these companies held the number-one and -two spots in LCD TVs, but by 2009 their South Korean rivals Samsung and LG had taken a commanding lead. Similarly, Japanese companies occupied three of the top five slots

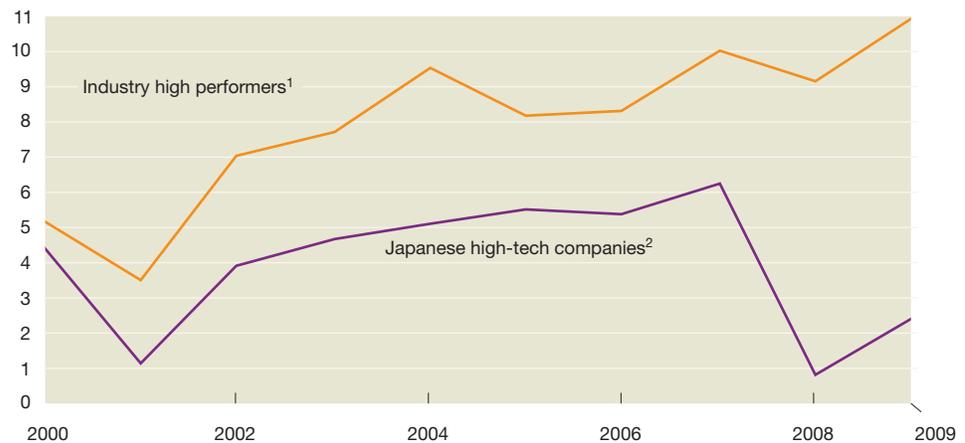
Exhibit 1

Japanese high-tech players experienced a lost decade between 2000 and 2010.

Revenue; index: revenue in 2000 = 100



Operating profit margin, %



¹ Average of revenues for Acer, Apple, Cisco, HP, Lenovo, LG, and Samsung.

² Average of revenues for Canon, Fujitsu, NEC, Panasonic, Sharp, Sony, and Toshiba.

Source: Annual reports; Bloomberg; Nikkei Financial QUEST

in the global PC market in 2004, but only one in 2008. This rapid loss of leadership in important product categories in consumer electronics may be disastrous in the context of the winner-takes-all dynamic of the high-tech sector, where the top one or two players in each submarket tend to capture all the value.

Models for success

So what can these Japanese companies do to regain their edge? We looked closely at more than 20 global high-tech leaders to understand the sources of their success—category growth, market share gains, or M&A. We found four distinct models that Japanese companies could pursue (Exhibit 2).

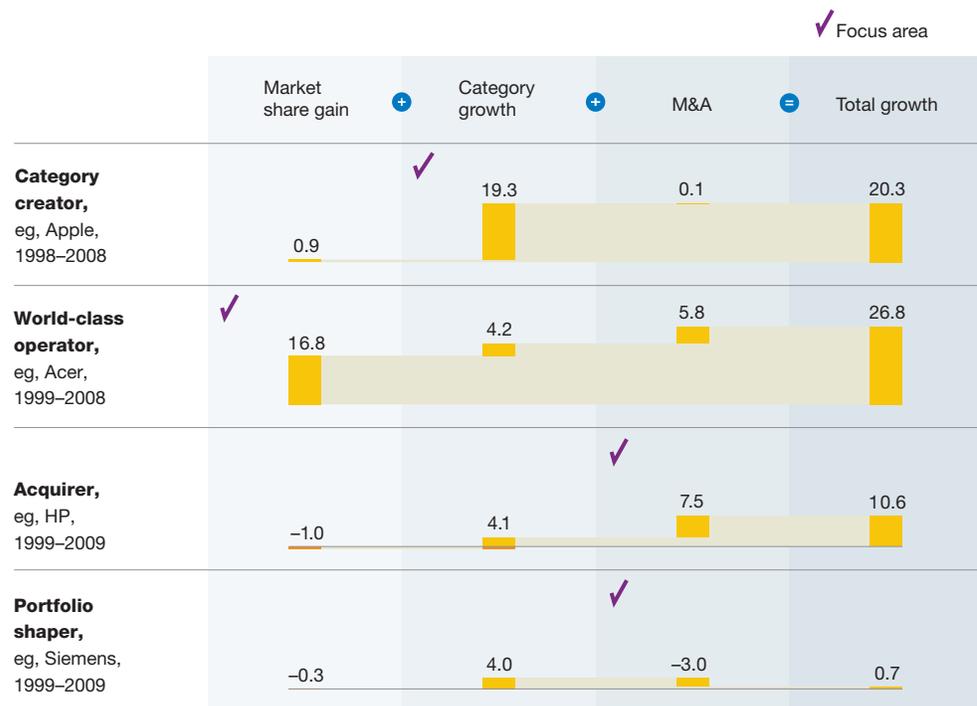
World-class operators

Some companies win by identifying fast-growing product categories and geographic markets and grabbing share through an intense focus on operational excellence. They constantly apply lean-production techniques to manufacturing, the supply chain, and go-to-market operations and move as much of the value chain as possible to local markets. They also pursue dominant scale in their target markets by investing massively in capacity (for example, in semiconductor manufacturing).

Between 1999 and 2009, the companies in this group generated total revenue growth of 15 to 20 percent a year, on average. Roughly half came from underlying market growth in the categories in which they compete (portfolio momentum) and half from market share gains. There was limited M&A. This group's profitability fell over the period as competition

Exhibit 2

In pursuing growth, Japanese high-tech companies can look to any of four distinct models for success.



intensified and markets shifted to the developing world's more value-oriented customers, but the leaders continue to deliver operating-profit margins by 5 to 10 percent a year. Acer, LG, and Samsung are examples of leading companies in this category.

Category creators

The small number of companies in a second group shape new markets for themselves by developing and marketing innovative products and services. Above all, they emphasize creative design and engineering talent. From 1999 to 2009, these companies generated revenue growth of 20 percent or more a year, almost entirely through category growth. Successful category creators are also very profitable—those in our sample delivered an average of 15 to 20 percent annual operating profit during the period of our analysis. Many Japanese companies started out as category creators, but most were heavily hardware driven and had lost their innovative edge well before the period of our research. Today's category creator concepts emerge primarily from the nexus of hardware, software, and services, and Japan lags behind global competitors. Apple, Google, and Research in Motion (RIM) are well-known companies pursuing this model.

Acquirers

Another group of companies don't neglect underlying organic expansion but also aggressively pursue M&A to buy growth platforms in interesting product and geographic market segments. They do multiple deals each year and skillfully identify, acquire, and integrate promising companies both large and small. During the ten years from 1999 to 2009, these companies generated revenue growth of 10 to 12 percent a year, with the majority coming from acquisitions and the remainder from a mix of portfolio momentum and market share gains. Annual operating profits were relatively stable over the period, at 10 to 20 percent. This group includes many US companies, such as Cisco Systems and Hewlett-Packard.

Portfolio shapers

The companies in our last group emphasize profitability over growth and actively pursue both acquisitions and divestitures. They take a rigorous and disciplined approach to corporate-portfolio strategy, actively shaping their areas of business focus. Like the acquirers, they do multiple deals each year and have well-developed M&A-related skills and capabilities. Between 1999 and 2009, the companies in our sample generated revenue growth of only 1 percent a year, as the shrinkage of divestiture-related sales largely canceled out portfolio momentum and acquisition-related growth. Profitability grew substantially, however: over the period, most of these companies increased their annual operating-profit margins by five to ten percentage points. This group includes a large number of European and US companies, including IBM and Siemens.

What it will take to win

The leading Japanese technology companies in our sample appear to lack the strategic clarity and management willpower to pursue any of the winning strategies effectively,

so they are falling behind in every kind of growth. Most tend to rely on moderate category expansion, fail to streamline their business portfolios, lose market share in core businesses, and do only a few (and domestic) M&A deals (Exhibit 3). From 1999 to 2009, the Japanese companies achieved average annual revenue increases of only 2 percent, because market share losses cancelled out category growth gains. Profitability—already low at an average of 2 to 3 percent in 1999—fell further during the period. Most players ended up in the 1 to 2 percent range in 2009.

Senior managers of Japan's high-tech giants urgently need to break out of their current strategic and operational inertia and take the bold steps required to leave a legacy of healthy global champions for succeeding generations. All the success models that global rivals use are possible for Japanese companies, but each of them must make its own hard choices.

Seeking the operational edge

Japanese companies that pursue market share gains and operational excellence must shift focus to growth markets, cut costs, and increase efficiency across the value chain. McKinsey analysis shows a correlation between market success and commitment to

Exhibit 3

Most Japanese technology companies rely on moderate category growth and make few M&A deals.

Average annual revenue growth, 1999–2009, %



¹ Average for Canon, Fujitsu, NEC, Panasonic, Sharp, Sony, and Toshiba.

² Average for Acer, Apple, Cisco, HP, LG, Lenovo, and Samsung.

emerging markets (for example, the level of localization in value chains and product portfolios). Most Japanese companies operating in emerging markets have been content to take a passive go-to-market approach, relying on scaled-back developed-market products delivered through venerable but underperforming distributor networks.

To compete effectively, these companies will need to build up their local organizational capabilities and become insiders in the markets they are targeting. At the top of the list is improved local R&D and product design to address the needs of customers in emerging markets at attractive price points more effectively. In addition, companies should strengthen relations with regulators and government officials to understand and navigate local constraints more successfully. Downstream, these companies must develop multichannel go-to-market models, including call-center and Web-based operations, and they will need to review, restructure, and better manage their distributor networks in the developing world.

Achieving sustainable cost-competitiveness will require Japanese companies to restructure their operations across the value chain by outsourcing and offshoring key functions and maximizing the efficiency of the remaining operations in Japan. In some cases, they should even consider offshoring the headquarters of business units to shorten decision-making processes and expose senior managers to local market conditions. All these changes will probably require headcount reductions in Japan, but they will be necessary to stay competitive with foreign rivals. Many Japanese technology executives we speak with understand the necessity for these measures. Some have begun to move quietly in this direction, but Japan's high-tech giants must do much more to get back in shape.

[Innovation renewal](#)

Companies seeking to regain innovation leadership and create new product categories must break free of their current hardware-centric models and find ways to collaborate within and outside the organization. The digitization of the electronics industry means that hardware is commoditizing much more quickly than in the past, while software capabilities are becoming more important than hardware-engineering ones. Today, successful and sustainable innovations usually originate in superior customer insights and creative business models rather than technical breakthroughs.

But ramping up software capabilities quickly will be a challenge, both in the time needed to reach scale and in gaining access to top talent. Here we believe acquisitions of companies offering software solutions or specific customer applications could make sense. Similarly, building a portfolio of alliances on themes such as “smart” electricity grids, health care supported by mobile devices, or cloud-computing services could help jump-start innovation. In addition, Japanese companies seeking a second wind in innovation

will probably also need to revamp their human-resources policies by introducing differentiated incentives and rewards to attract, motivate, and retain creative, talented staff.

Many Japanese high-tech companies have their roots in the category creator model. But they have moved far away from it in culture and mind-set and may find it difficult to recapture the magic organically. That's why we believe M&A will play a key role for companies choosing this path.

[A growing need for cross-border deals](#)

Japanese companies seeking growth through large-scale acquisitions will need a bolder approach to M&A, pursuing and completing deals that “move the needle.” To do so, it will be necessary to aim for bigger targets that would have a strong strategic, operational, and financial impact, as well as bid aggressively to win. Since most Japanese companies share similar strengths and limitations, most of these transformational deals will, by definition, be cross-border. To compete effectively for such high-profile deals, Japanese companies must upgrade their internal M&A skills, including faster decision making to enable quicker responses in the tricky world of deal negotiations.

Once a transaction closes, Japanese high-tech managers should act much more quickly and systematically than they have in the past to integrate the acquisition and actually capture synergies. Finally, Japanese acquirers will need to introduce more open and transparent governance structures and processes in areas such as the appointment and evaluation of C-level management to integrate world-class executives from acquired companies and to provide suitable incentives. The acquirer strategy will probably be a form of shock therapy for Japan's inward-looking giants, but successful serial acquirers such as HP have shown that significant rewards come with the risks.

[Profiting from active portfolio management](#)

Companies that choose to shape the portfolio for profitability rather than growth will need to rethink hypothetical but unrealized synergies between businesses and overcome internal resistance to divesting underperforming units. As a start, these companies should introduce a more rigorous performance-management culture, supported by world-class managerial-accounting systems and processes, to create clarity on expectations and actual performance across their businesses. Then they will need to use this transparency to break through the emotional and cultural barriers to identifying and selling noncore assets—for example, white goods or semiconductors, depending on the company.

Like the acquirers, the portfolio shapers must upgrade their M&A skills significantly to ensure that they can complete deals in a timely manner while simultaneously maximizing the value created. Although the portfolio shaper strategy could deliver a lot of low-hanging

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fruit to most large Japanese tech players, it is in many ways the most challenging model to follow, requiring hard-nosed leadership willing to break long-standing internal taboos and to part with old friends. In some cases, the early stages of this strategy could end up shrinking a company as large underperforming assets are converted into smaller emerging businesses with better returns.



We feel confident that Japanese companies still have the underlying assets and capabilities to compete globally. They can succeed under any of these models—provided that management sets clear strategic priorities and takes responsibility for making and executing hard yet necessary decisions. Competitors are moving very quickly, however, so the time to act is now. ○

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