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# Winning the global challenge

The Japanese  
electronics companies'  
race to innovate

Electronics



## **IBM Institute for Business Value**

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# Winning the global challenge

## The Japanese electronics companies' race to innovate

By George Bailey, Wendy Huang and Shinji Misono

*In the past, Japanese electronics companies (JECs) were able to maintain their competitive advantage in the global marketplace by focusing on product innovation. However, competitors in other parts of the world are now outperforming JECs in terms of productivity, financial performance and brand value. To win the global challenge, JECs need to race toward becoming global innovators and focus on a five-pronged transformation.*

### Introduction

For decades, Japanese electronics companies have dominated the global electronics industry. Their brands were hallmarks for quality, style and especially innovation. In fact, looking back over the top ten US patent holder lists since 1999, at least five of the ten companies recognized each year have been JECs.<sup>1</sup>

Unfortunately, technological prowess in product innovation alone has not been enough to keep JECs ahead of their global competitors. Globalization, electronics industry trends such as product commoditization, and increased global competition are reshuffling the industry's leading contenders, with fewer JECs remaining in the top tier.

Though this situation is obviously difficult for the JECs involved, its impact may reach much further – upstream to suppliers as well

as across the national and global economies. Currently, electronics is the leading contributor to Japan's gross domestic product – even higher than the automotive industry; the Japanese economy, in turn, is the second largest in the world.<sup>2</sup> The ripple effect of a continued decline could be staggering.

JECs face a tremendous global competitive challenge. Rivals in other parts of the world are currently outperforming them in terms of productivity, financial performance and brand value. Although some companies continue to perform well in isolated areas, JECs as a group are losing to the rest of the world. To regain their competitive advantage, JECs need a dramatic shift in focus as well as a fundamental change in how they approach change itself.



# Winning the global challenge

*The Japanese electronics companies' race to innovate*

**JECs lag behind global competitors across a wide variety of financial measures; for instance, revenues of rivals in other parts of the world are growing four times as fast.**

## Lackluster performance

In industry circles, analysts and observers have discussed the JECs' dilemma for some time. To assess the urgency of the situation, we recently conducted an industry study that compared the performance of JECs as a group against their industry peers in the rest of the world (ROW).<sup>3</sup>

While we anticipated lower performance in some areas, we were surprised by the widespread nature of the JEC shortfall. Across each measurement area we examined – including productivity, financial performance and brand value – JECs trailed their counterparts in other parts of the world.

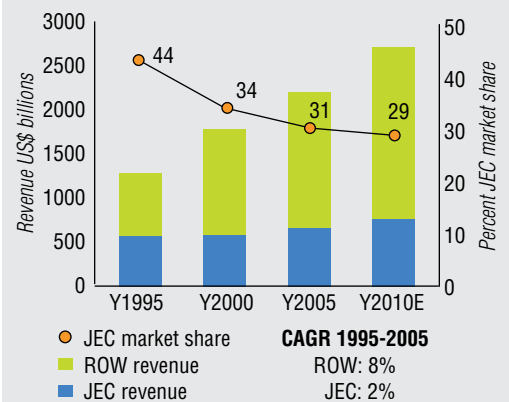
We first examined productivity and financial performance – barometers such as return on invested capital, revenue, profit and the like – by analyzing Thomson financial data for the electronics companies in the 2005 Forbes 2000 list.<sup>4</sup> Among this global group, the JECs' revenue per employee trailed the worldwide average by US\$44,000 – a sizable gap that is 16 percent of the total. Productivity based on operating profit per employee lagged as well, with a JEC average of US\$14,000 as compared to US\$38,000 worldwide. This suggests competitors in other parts of the world are nearly three times as productive as JECs.

JECs are also generating a much lower return on invested capital (ROIC) than competitors in other parts of the world. Conversely, the South Korean electronics companies have now moved ahead of the ROW average.

There's a ray of good news in that JEC revenue continues to grow incrementally year to year. But that is quickly snuffed out by the fact that the ROW's revenue is growing four times as fast (see Figure 1). That means, JECs' share of the global electronics market is shrinking, falling 13 points over the last decade.

Despite increased attention to controlling costs over the years, JECs' profit margins remain significantly lower than their global peers – an average net profit margin of 4 percent versus 10, and operating margin of 8 percent versus 14.

FIGURE 1.  
**ROW revenue is growing four times faster.**



Source: IBM Institute for Business Value analysis of Thomson financial data.

Note: Y2010 forecast based on 1995-2005 CAGRs.

**JEC brands are also falling behind.**

JECs are also slipping in terms of brand value. Among the electronics companies included in the Best Global Brands reports produced by Interbrand and BusinessWeek, three out of the five largest declines in ranking between 2001 and 2006 were JEC brands (see Figure 2). German electronics company Siemens had the largest gain, moving up 54 places to be ranked number 44. South Korean electronics giant Samsung rose 22 spots to become number 20, a higher ranking than Sony, which was described as “the best-known brand in consumer electronics” back in 2001.<sup>5</sup> Also of note, LG – another South Korean competitor – made its first appearance in the global top 100 list in 2005 at number 97, followed by a number 94 ranking in 2006. Other well-recognized JECs have yet to make it on the top 100 list.

Using the data from Fortune’s Global Most Admired Company rankings for 2006, we compared the ratings of JECs against the rest of the industry.<sup>6</sup> On each of the nine attributes evaluated (including traits such as






“globalness,” innovation, financial soundness and quality), the JECs scored below the worldwide average.

During our analysis, we observed instances where an individual JEC was outperforming its global peers. However, when evaluated as a group, JECs are clearly losing their edge.






The top spots vacated by JECs leave room for competitors – often South Korean ones – to surpass JECs, taking on more prominent positions in the industry. With the power of JECs declining, industry analysts grow bolder in their predictions about industry restructure in Japan.<sup>7</sup> In addition, Japan’s new corporate law, due to come into effect in May 2007, will allow foreign companies to acquire Japanese firms through stock swaps, making JECs prime acquisition candidates for private equity firms like Silver Lake Partners that specialize in large technology firm buyouts.<sup>8</sup> And given JECs’ comparative weaknesses, the threat of takeover by foreign competitors is not that far-fetched.

FIGURE 2.  
**JEC brand values are falling behind.**

**Top five largest gains among electronics companies**

		2001	2006	Change in rank	
1	Siemens	#98	#44	+54	
2	Samsung	#42	#20	+22	
3	Apple	#49	#39	+10	
4	Dell	#32	#25	+7	
	Philips	#55	#48	+7	

**Top five largest declines among electronics companies**

		2001	2006	Change in rank	
1	Nintendo	#29	#51	-22	
2	Xerox	#45	#57	-12	
3	Sony	#20	#26	-6	
4	Panasonic	#72	#77	-5	
5	Motorola	#66	#69	-3	

Source: Interbrand in cooperation with BusinessWeek, “Best Global Brands 2001” and “Best Global Brands 2006;” IBM Institute for Business Value analysis.

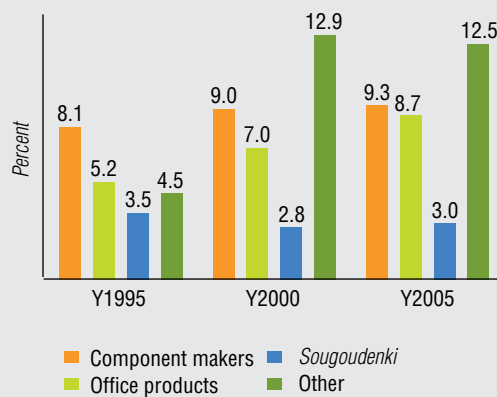
### The *sougoudenki* story: Is the conglomerate still the best model?

The Japanese electronics market is composed of four primary subsegments: *component makers*, *office products* companies, *sougoudenki* companies (mainly large conglomerates with products that span multiple electronics product categories) and *other* more specialized electronics makers.<sup>9</sup>

As a subsegment, *sougoudenki* makers are underperforming all other JEC segments in terms of operating margin (see Figure 3). Reputed to be a solid investment that insulates investors from the ups and downs of the market, the conglomerate business model may not be living up to its reputation. For the last decade, *sougoudenki* companies have provided a lower average return than the Standard and Poor's (S&P) 500.<sup>10</sup>

Interestingly, our analysis also shows that lowering selling, general and administrative (SG&A) costs is not the only way to improve profitability. For instance, Canon – with an SG&A to sales ratio greater than 30 percent – is also the JEC with the highest operating margin. Therefore, it is not just a matter of cost savings, but also optimizing how and where to invest.

FIGURE 3.  
Operating profit by JEC industry subsegment.



Source: IBM Institute for Business Value analysis of Thomson financial data.

Note: See Reference number 9 for list of companies by subsegment.

### Alternative futures

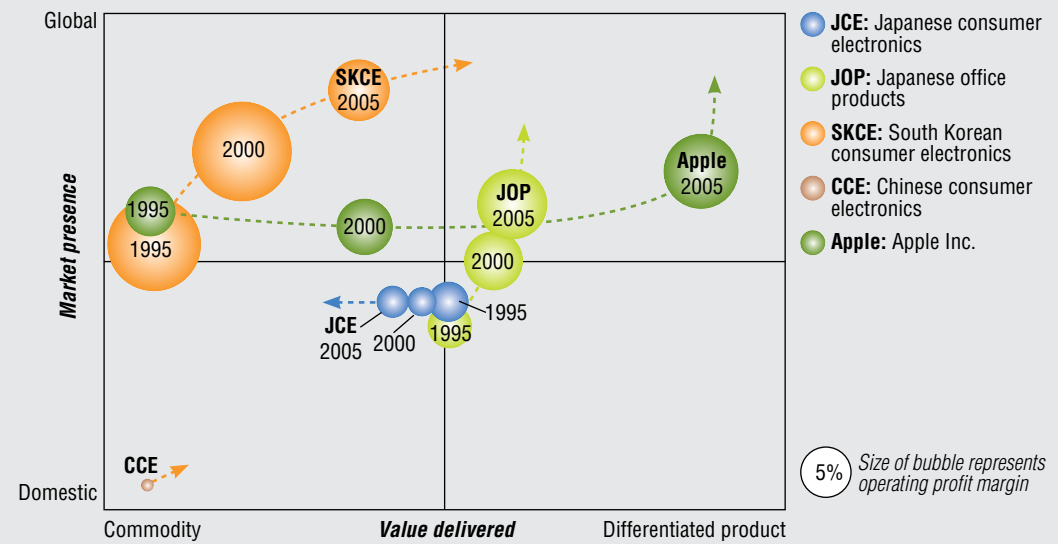
As part of our analysis, we assessed the industry along two dimensions: *market presence* – whether global or primarily domestic, and *value delivered* – whether a company's or subsegment's products are highly differentiated or commoditized. As shown in Figure 4, we plotted the average operating margin of different industry segments over time (as represented by bubble size) and evaluated, based on our industry comparisons, the movement of these segments along the value and market continuums.

Based on this analysis, we can see that different subsegments of the global electronics industry have decidedly different trajectories. The Japanese office products segment is trending in a positive direction. It is under substantially less commoditization pressure than the consumer electronics segment. In this space, solutions and delivery capabilities tend to be more difficult for competitors to replicate. Japanese office products makers continue to outshine ROW competitors and display market leadership in this subsegment.

However, unlike the Japanese office products makers, Japanese consumer electronics makers have been losing ground, pushed aside by increasing competition and commoditization. Although we feel Japanese consumer electronics companies as a group are still ahead of their South Korean competitors in terms of differentiated, innovative products, their lead is tenuous. Low profit margins, which inhibit them from making continuous growth investments, put them at a serious disadvantage.

Though Japanese office products companies have a positive influence on overall JEC averages, their upbeat performance is negated by downward trends in consumer electronics.

FIGURE 4.  
JECs are being pushed toward commoditization.



Source: IBM Institute for Business Value analysis of Thomson financial data.

South Korean consumer electronics companies started out with a more global focus since their domestic market presented limited growth opportunities. Though their margins are under pressure as well, they are investing heavily in innovation (as well as branding and marketing), often spending twice as much as their Japanese competitors. As a result, they have steadily become more global and increasingly differentiated.

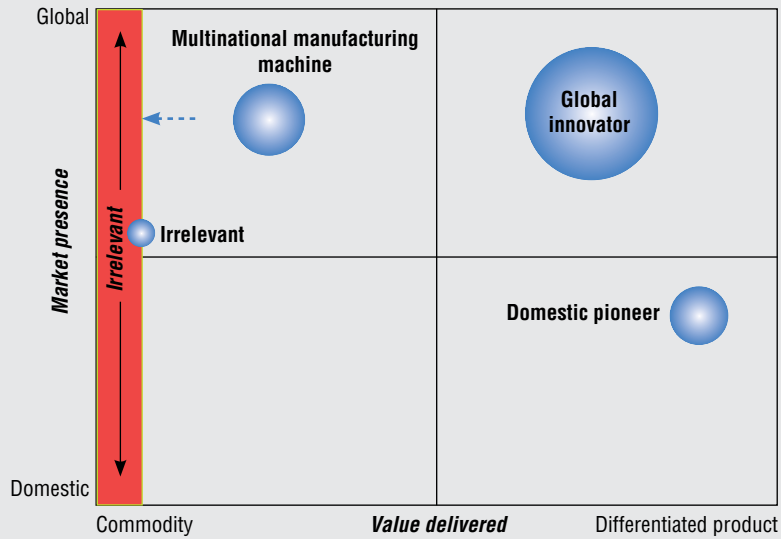
Chinese consumer electronics companies do not have much of an industry presence – yet. But the Chinese government is investing aggressively in the electronics segment with the hope of seeing at least four of its leading electronics firms within the Fortune 500 as soon as 2008.<sup>11</sup> Given the ample domestic opportunity, these companies will likely

continue to dominate their domestic market by manufacturing lower-priced products. Furthermore, according to 2006 projections from the Organization for Economic Cooperation and Development, China, for the first time, will spend more on R&D than Japan to become the second highest investor in R&D behind the United States.<sup>12</sup> Therefore, it is very likely that Chinese consumer electronics companies will be introducing new *differentiated* (versus just “me too”) products in their home market as well.

Apple provides an interesting example of a company that has consistently bucked the commoditization trend. Consequently, its operating margins have grown over the past decade. Importantly, much of Apple’s success can be attributed to business model, not technological, innovation.



FIGURE 5.  
We see four possible outcomes for JECs.



Source: IBM Institute for Business Value analysis.  
Note: Size of bubble represents forecasted operating profit margin relative to one another.

**JECs could become irrelevant if they stay on their current course.**

Examining the industry along these dimensions, we see four possible future scenarios that could play out for JECs both collectively and individually (see Figure 5).

JECs could become *Multinational manufacturing machines*, *Domestic pioneers*, *Global innovators* – or if they persist on their current course, *Irrelevant*. Though the marketplace and economy play a part, which scenario comes to fruition depends primarily on the decisions, innovation strategies, and actions of individual companies.

**Irrelevant**

This scenario describes a state where JECs have lost their influence in the global electronics industry; they no longer stand out. In our context, irrelevant means “of little significance,” “pushed aside” in the global electronics industry.

Their brand value has continued to decline relative to the rest of the world. Competitors have flooded the global market with lower priced substitutes, and JEC market share has plummeted. As their vulnerability increases, a domestic industry restructure and/or foreign acquisitions seem imminent.

Unless JECs make an overt effort to move in another direction, we believe this is their default course. Strong industry trends – namely, increased competition and product commoditization – will push JECs toward this outcome.

### ***Multinational manufacturing machine***

In this alternative, JECs use their core competency as product manufacturers to expand their global consumer base. As they focus on their core strengths in technology, manufacturing and product development, JECs continue to innovate in these areas and invest aggressively in their foreign subsidiaries to improve their multinational infrastructure and channels. Competition, at least initially, will remain fierce since rivals in other parts of the world have more experience serving a global consumer. Here, JECs are still vulnerable to forces pushing them toward irrelevance. Constant innovation will be required to combat these trends.

### ***Domestic pioneer***

Under this scenario, JECs would focus almost exclusively on the domestic Japanese market, the second largest economy in the world, where they have enjoyed much success in the past. Because of their deep understanding of the Japanese consumer, they are able to develop innovative product and service solutions tailored to the domestic market. Unable to compete, global competitors slowly

abandon the Japanese market and focus elsewhere. Over the long term, however, this alternative handicaps the growth potential for JECs, given the instability of the domestic market and the lost opportunities in the burgeoning BRIC (Brazil, Russia, India and China) markets and the West.

### ***Global innovator***

Here, in this “best case” scenario, the JECs invest to transform their global operations and to expand globally. This enables them to capture growth markets by leveraging their multinational infrastructure. They take advantage of lower cost global talent to increase operational efficiency. And they improve profitability by exiting unsuccessful businesses and investing in ones with high growth potential. JECs also undertake aggressive innovation agendas that focus not only on product innovation, but also on service, business model, business process, management and organizational culture innovation. As global innovators, they offer products and services that cannot be easily imitated, driving up their brand value and market share.

### ***A choice to be made***

Unlike the “Irrelevant” scenario – which could be a point of no return – the “Multinational manufacturing machine” and “Domestic pioneer” paths are not dead ends or mutually exclusive. For instance, a company might decide to pursue the role of domestic pioneer first and, then, after it has established greater differentiation, it could move more aggressively into the global market. Conversely, a multinational manufacturing machine could shift directions and begin pursuing greater differentiation to become a global innovator. JECs must move forward aggressively in a selected direction based on their innovation agendas or risk regression into irrelevance.

*“We have two years to act before we become irrelevant.”*

*– JEC Senior VP of Corporate Planning*

### **Five focus areas for winning the global challenge**

For those JECs that choose to pursue the path of global innovator, we believe five areas of focus will be key:

- *Customer focus* – Develop a deep understanding of both the domestic and international customer to create strong value propositions.
- *Business model innovation* – Implement new or updated business models that help them achieve greater value propositions.
- *Global business portfolio management* – Establish the ability to shift resources among lines of business (LOBs) and enter/exit businesses fluidly.
- *Global governance and communication* – Make decisions efficiently and communicate clearly with stakeholders.
- *Global human resource management* – Attract and retain top global talent at a competitive price.

Because these are not typically areas of strength for JECs, they are often competitive advantages for the rest of the world. To remain competitive and win the global challenge, JECs must not only shift their focus here, but also overcome some inherent obstacles in each area.

**Customer insight and differentiated solutions invariably trump product innovation alone.**

### **Customer focus**

As customer focused enterprises, global innovators have processes and systems capable of capturing, organizing and applying customer insights. Marketing and Research and Development (R&D) are localized to better understand the needs and preferences of end users outside the domestic market. In an industry increasingly plagued by commoditization, these companies create customer-centric solutions that add differentiated value rather than depend on product innovation alone.

Unfortunately, the overarching belief that a JEC's power resides in R&D and production can sometimes hinder a company from becoming more customer focused; in the traditional *monozukuri* culture, Japanese engineers and product developers determine what and how many to manufacture. The old "if we create, they will buy" days are gone. The accurate and thorough assessment of consumers' current and future needs becomes increasingly significant as consumer demand becomes more unpredictable. Since consumer preferences vary greatly, relying solely on domestic talent to accurately assess global market needs may cause JECs to misread trends and miss growth and innovation opportunities. It may also be necessary for JECs to integrate marketing and *monozukuri* more closely to create a more market- and consumer-driven enterprise.

*"Since the Japanese market is different from the global market, continuing to meet the expectations and needs of these two very distinct markets will be a challenge."*

*– JEC Senior VP of Corporate Strategy*

### **The global market is not a mass market**

When UK vacuum cleaner maker Dyson began marketing to the Japanese back in 1999, the product innovation that had helped it enthrall US and European consumers made little impact in Japan.<sup>13</sup> Even though Dyson was well-known for its suction technology, *monozukuri*, or how the product was made or engineered technologically, was not enough to woo Japanese consumers.

To turn the situation around, Dyson studied the Japanese market intently. The company interviewed many consumers across different segments (not just middle-aged housewives). Armed with these insights, Dyson developed a new vacuum cleaner, with a sleek, eye-catching design tailored to the specific needs and preferences of the Japanese market (such as the need to clean Japanese woven straw *tatami* mats). The DC12 was half the size of the company's original product with three times the motor speed (making it five times faster than a race car engine). To promote its new product, Dyson relied on local Japanese talent with expertise in locally accepted marketing methods.<sup>14</sup>

The results have been remarkable. In 2005, the new vacuum was number one in single-item sales across Japan. Overall, Dyson captured 14 percent of the market, placing it third in market share, behind only Matsushita and Hitachi. The company's Japanese revenue nearly doubled year to year to US\$86 million in 2005.<sup>15</sup>

**Business model flexibility and innovation are important traits of global innovators.**

### ***Business model innovation***

Global innovators not only pursue product and operational innovation, but also business model innovation. They have formal programs that nurture and support emerging business opportunities. And they use process and management tools to track progress and continuously assess whether to adjust or abandon new businesses. Global innovators have the ability to modify their business models as the business environment changes – and they do so regularly. For example, Apple modified its business model from being a provider of innovative products to a provider of lifestyle with its introduction of the Apple iPod. The iPod not only changed why consumers buy MP3 players (for fashion and status rather than just to play music), but also how music is sold and delivered.<sup>16</sup>

Because JECs have tended to focus on serving the domestic market, they may need to cultivate a better understanding of the global market, investigating business models used in other nations and tapping into resources available outside of Japan. Additionally, the prevailing consensus-building culture of JECs may slow the implementation of business model changes.

*“Because we have exhausted our domestic resources due to intense Japanese market share competition based on cost and quality of goods, we are being forced to change our business model to start operating at a global capacity.”*

*– JEC Chief Financial Officer*

### **Business model innovation requires room for experimentation**

The culture, financial management approach, and organizational structure inherent in large companies are typically not conducive to entrepreneurship. This can prevent new businesses from being launched, smother the ones that do start and cause companies to abandon promising businesses too soon.

At IBM, the story was no different. In 1999, we decided to carefully examine the root causes hindering our ability to effectively identify and nurture emerging business opportunities. We identified six key challenges; all of which were tied to execution-related issues rather than idea generation. Using those insights, we put in place a formal, disciplined Emerging Business Opportunity (EBO) management system to nurture the development of major new growth opportunities across three domains: new markets, new business models and new disruptive technologies.<sup>17</sup>

Established criteria for EBO selection helps ensure that resources are applied to the most promising ideas, those with the potential to significantly impact our top-line growth. EBO projects include leadership teams with the experience needed to take the initiative from concept to commercial success. Corporate strategy staff also participate in the process to bring tools and techniques to support the strategy development process. Formal decision mechanisms force cross-company alignment. Actions are linked to critical milestones, which helps prevent premature cuts and overinvestment in unsuccessful areas.

Of the 25 new opportunities that have flowed through our EBO system over the past several years, some are still evolving, 3 were cut and several successful new businesses have been reintegrated into our core business. Last year, three of our current EBOs (Information-based medicine, Sensors and actuators, and Retail on demand) were responsible for producing approximately US\$1 billion in revenue.

**JECs must overcome significant obstacles to optimize their business investments enterprisewide.**

### ***Global business portfolio management***

To enable global portfolio management, global innovators standardize their financial metrics and establish consolidated financial reporting capabilities. This allows them to make sound decisions based on factual data and manage resources (such as financial assets, technical assets and intellectual capital) across lines of business. In addition to the ability to share and shift resources across their global portfolio, they are able to regularly reshape the portfolio itself. They have a process and methodology in place that facilitates divestitures, mergers, acquisitions and internal restructuring. As part of the process, they establish clear criteria for assessing lines of business (especially exit criteria). For global innovators, entering and exiting businesses is routine.

However, for JECs, the strength of their LOB silos can prevent headquarters from managing and optimizing the business portfolio as a whole. Influential LOB leaders often hoard resources in hopes of improving the performance of a particular business, even though that may cause the company to forego opportunities in another area. In addition, a lack of labor flexibility often forces JECs to continue investment in unsuccessful businesses. The inability to exit underperforming LOBs makes it extremely difficult for JECs to pursue new businesses in higher growth areas.

*“The historic power possessed by the LOB makes it difficult for headquarters to effectively execute truly global business portfolio management. This will require a shift of power back to headquarter management.”*

*– JEC Senior VP of Corporate Strategy*

### **Managing across the portfolio – not just what’s in and out**

Portfolio management is a much broader endeavor than deciding which businesses to keep or divest; it also involves managing resources across the portfolio, shifting and reallocating continuously to optimize the overall return. Samsung understands this well. Back in 1999, Samsung was hardly a household name. It had a sizable sum to invest in improving its image – but spreading its marketing budget across 476 country-category combinations presented a real challenge.<sup>18</sup> Was it investing enough in high-potential categories? Was it wasting money in countries unlikely to yield sufficient profits?

To answer those kinds of questions, Samsung created a robust repository of country and category data – information such as each country’s spending power per capita and target buyer population, as well as each category’s penetration rates, growth and market share. It also included historical information like previous marketing expenditures. Using sophisticated data analytics, the company was able to uncover major misalignments where it was over and under investing. Its initial analysis resulted in reallocation of US\$150 million in marketing spend.<sup>19</sup> The initial optimization effort, along with increased focus on branding and marketing, resulted in a 20-percent annual increase in revenue and a 51-percent rise in net income in 2001.<sup>20</sup>

From Samsung’s rise in brand value over the last few years, it’s clear the optimization efforts are paying off. Less than a decade ago, Samsung was considered a low-cost, little-known provider. Now, it is one of the industry’s most valuable and fastest-growing brands, ranked number 20 globally in terms of brand value.<sup>21</sup>

**Centralization strategies and integration sophistication often dictate the speed with which JECs can make and implement business decisions.**

### **Global governance and communication**

Global innovators make fact-based decisions – quickly. They have integrated their systems globally to facilitate data-driven decision making. For them, the centralization of particular functions is a carefully evaluated choice designed to optimize the results for the company as a whole. Because they standardize their decision-making approach, they can use workflow technology to accelerate the process. And for electronics makers, decision-making speed is directly correlated with product development speed. Global innovators also take advantage of the Web to foster greater collaboration and to improve communication.

Here again, within many JECs, the strength of the LOBs can overpower headquarters. Although it may appear that decision making is occurring at the global level, LOBs typically have more clout. Part of the struggle is related to which responsibilities remain with headquarters and which are controlled locally. Because JECs often centralize functions like R&D and Marketing – which require greater local insight and contribution, it creates increased tension in the governance process. It also means they might be missing out on efficiencies that could be gained by centralizing functions like IT that sometimes fall to local organizations by default.

*“We need to strengthen our current system to allow better collaboration between management and production in hopes of expanding our business.”*

*– JEC Senior VP of Corporate Strategy*

### **The power of local empowerment**

Many multinationals have tried to penetrate the promising Indian market, but few have experienced the level of success that Korean durable consumer goods maker LG Electronics has achieved. Across several products segments of the Indian marketplace, LG Electronics India (LGEI) leads in market share, despite intense competition from local players and other multinational electronics companies. Between 2000 and 2005, LGEI sales grew by 40 percent.<sup>22</sup>

Contributing to its success has been the company's commitment to local empowerment. Nearly 99 percent of LGEI's employees are Indian.<sup>23</sup> Though many multinationals elect to use India primarily as a production hub and make engineering decisions at headquarters, LGEI has taken a different approach. Almost all decisions are locally made, including R&D and Marketing. With 200 local employees, LGEI's R&D organization conducts research for the domestic market as well as for its Korean parent.<sup>24</sup> It has differentiated its products through technology features that appeal to the Indian market, such as air conditioners with the “Health Air System.”<sup>25</sup> The local influence is also evident in Marketing. For instance, LGEI established major marketing ties with the popular sport cricket. The company sponsored the 1999 and 2003 World Cup tournaments and featured product endorsements from four captains of the Indian cricket team in its marketing programs.<sup>26</sup>

**Global innovators  
expand their resource  
options beyond domestic  
talent pools.**

***Global human resource management***

Global innovators have a diverse workforce that reflects the global customers they seek to serve. Their delivery capabilities are spread around the world, with functions such as R&D, Manufacturing and IT strategically located to capitalize on economic and geographic advantages. They manage their workforce globally by standardizing human capital data and sharing knowledge. They have systems and processes in place that allow deployment of resources according to global priorities.

For JECs, human resource management is already a challenge – and will only become more so in coming years. The mass exodus of baby boomers from the workforce is expected to hit Japan particularly hard. Beginning this year, Japanese boomers will begin turning 60 and dropping out of the workforce. The Japanese call this their “2007 problem.” The nation’s vast workforce is already shrinking by 1 percent each year, and that rate is expected to climb in the coming decade. By 2050, Japan will have 30 million fewer workers, while its elderly population will have doubled.<sup>27</sup>

Given the magnitude of workforce shrinkage, it is highly unlikely that traditional university recruiting will yield sufficient skills for JECs, particularly with the steady decline in engineering graduates from Japanese universities. Continuing to rely on their own internal labor or even the broader domestic labor market is

dangerously shortsighted. To position themselves for the long term, JECs need to move more rapidly toward a globally distributed workforce. Although efforts have been made to utilize foreign resources in the area of manufacturing – engineering, marketing and even strategy development functions should take advantage of skilled workers found within local markets. JECs should also leverage global delivery capabilities by outsourcing more non-core, administrative work to low-cost labor markets, just as their competitors around the world are doing. For Japanese companies, attracting and retaining top talent may also involve new or modified career paths as well as expanded learning and development opportunities that cater to a more diverse global workforce.

*“There is no doubt that JECs have a less diverse workforce. Many Japanese executives lack global operations experience; therefore, they do not always understand global taste or culture.”*

*– JEC Chief Information Officer*



**We believe traditional steps will not move JECs fast or far enough.**

### **Globalizing a global workforce**

With operations in 60 countries, Lenovo, the world's third largest computer company, would certainly be considered a global enterprise – however, globalizing and unifying its employees' mindsets is a matter of concerted effort.<sup>28</sup> Indeed, it is no accident that Lenovo's senior leadership team reflects the diversity of its employee base and the markets it serves. Of the company's top 18 senior executives, 28 percent are Chinese, 11 percent are women, 11 percent are European, and 56 percent of the top senior managers have extensive work experience abroad.<sup>29</sup>

Lenovo is helping its employees understand its heterogeneous, worldwide customer set by focusing on cultural integration. For example, the company maintains key operational centers in Beijing, Hong Kong, Singapore, Raleigh and Paris. Creative initiatives help employees learn about each other's cultures. For instance, informal online discussions called "cultural discovery cocktail forums" allow Chinese employees to explore business protocol and conventions of their Western colleagues – such as how to interrupt or disagree on a conference call or how proactive or assertive to be in making decisions. Obstacles such as language proficiency and communication style differences are addressed through targeted training. Chinese managers, for instance, are taught confrontational management skills to improve negotiation capabilities with their Western peers.<sup>30</sup>

From the very top, Lenovo's executives model cross-cultural collaboration and trust. Chinese Chairman Yang Yuanqing and American CEO William Amelio work closely together, leading the company using a tag-team approach in which each specializes on the particular leadership tasks and responsibilities that play to his area of strength.<sup>31</sup>

### **Changing how change is done**

The Japanese are world-renowned for *kaizen*, or continuous improvement. And though they are quite adept at incrementally improving their business processes, the major shifts in focus that we've described will likely require some 90- or 180-degree turns. Consequently, JECs may need to reconsider their normal approach to change.

A more traditional Japanese approach would focus on making smaller, more incremental adjustments. It would usually start with top executives setting a strategy. Taskforces would be established to research and make recommendations on how to implement that strategy. Decisions would slowly emerge from an ongoing progression of meetings.

To achieve the level of change necessary to restore JECs to a position of industry leadership, a different approach may be required. The target must be more transformational, as opposed to incremental. It will likely require an objective assessment of current performance issues. Addressing those challenges should be a collaborative endeavor – one that, in some instances, could even involve historical competitors (see sidebar, *For the good of all*). As part of the transformation, executives will need to make difficult decisions – ones that may go against the grain of current JEC culture. They will need to establish rigorous performance metrics that allow informed, fact-based decision making. And execution speed – in making decisions as well as implementing change – will be critical.

### **For the good of all**

Many of the obstacles faced by JECs are, in reality, challenges for Japan as a nation. They present an opportunity for domestic JEC competitors to address these challenges together. Through collaboration, JECs may be able to find solutions to thorny issues such as:

- Lack of workforce diversity
- Inadequate education and experience building and managing a global workforce
- Increased merger and acquisition pressure from foreign suitors
- Shortage of Japanese engineers
- Cultivation of a national innovation hub – a Japanese “Silicon Valley”
- Insufficient labor flexibility
- Aging workforce.

### **Your future: Bright or bleak?**

As you consider which areas of your business require the most immediate attention, it may be helpful to assess your current capabilities in areas where JECs tend to be most vulnerable. Think through the following questions as you contemplate your next steps:

- Does your company focus more on engineering and manufacturing or more on customer needs and solutions?
- How much customer insight and customer needs analysis do you incorporate as part of the product development process?

- Are you tailoring your products, as well as your product development and marketing approaches, based on the nuances of target markets outside of Japan – or do you look at the global market *en masse*?
- What processes and systems do you have in place to capture and analyze market information to assess business model performance and make needed adjustments?
- Have you analyzed your various businesses and product offerings and divested those that are not meeting your strategic business goals?
- How do you know whether your resources are spread optimally across lines of business and are focused on areas with the highest profitable growth potential?
- How long does it take to make a major corporate decision? Do you have an effective means of communicating information to all employees and stakeholders around the globe?
- How diverse is your workforce? What processes do you have in place to seek, utilize and retain employees outside of Japan? What approaches do you use to help your Japanese employees become more globally aware?
- Have you sourced talent around the world to effectively balance capabilities and costs?
- Is your approach to change bold, transformative and rapid or is it cautious, conservative and consensus-driven?

## Conclusion

Given their current condition in comparison to competitors worldwide, JECs face a challenging race ahead. Over the past few years, global competitors have learned from watching the strengths – and weaknesses – of their Japanese rivals. It is time for JECs to also learn from the strengths and weaknesses of their global competitors.

JECs have an important advantage over other companies in the electronics industry – their experience and track record in product, technological and manufacturing innovation. But they must build on this core strength. For those JECs that commit to the fundamental changes required to become Global Innovators – and take action now – we see a very bright future. They will be the ones that outpace their global competitors and maintain a formidable advantage in the continuous race to innovate.

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## About IBM Global Business Services

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- <sup>4</sup> Our financial analyses were based on Thomson Financial Data for the electronics companies listed in the 2005 Forbes Global 2000 list, with the following exceptions. Several companies were excluded from our analysis for various reasons: Guidant (acquired by Boston Scientific and Abbott Laboratories in 2006); Scientific-Atlantic (acquired by Cisco in 2006); LG International (described as the trading arm therefore we used LG Corporate data instead); Samsung (described as the trading arm therefore we used Samsung Electronics data instead). We also added Pioneer, since it is recognized as a leading consumer electronics company in Japan.
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  - *Office products* – Canon, Ricoh, Seiko Epson, Konica-Minolta
  - *Sougoudenki* – Fujitsu, Hitachi, Matsushita Electric, Mitsubishi Electric, NEC, Pioneer, Sanyo, Sharp, Sony, Toshiba
  - *Other* – Citizen Watch, Fuji Photo Film, Konami, Nintendo, Olympus, Sega Samy, Terumo, Yamaha.
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