How Japan Lost Its Electronics Crown

# Sony, Sharp and Panasonic Fixated on Hardware Breakthroughs; 'Sometimes, It's Easier to Run From Behind'.

By DAISUKE WAKABAYASHI

TOKYO—During a business trip to Japan in 2004, technology analyst Michael Gartenberg caught a glimpse of Sony Corp.'s 6758.TO -2.94% Librie, the first e-book reader with an electronic ink display.

Mr. Gartenberg was impressed. He saw it as a harbinger of a new wave of products that would hit the U.S. But there were problems. The software was in Japanese. It required a computer to download a book and selection was limited.

From Sony's Walkman cassette player, which changed the way people listened to music, to Apple's iPad, which forged a new category of computing, see some of the biggest trendsetting electronic devices.

Today, Amazon.com Inc.'s AMZN +0.85% Kindle dominates the e-reader business and the Librie is little remembered. Sony is playing catch-up with a successor device, which ranks a distant third in the global market.

It is a story that has played out repeatedly over the past 20 years for Japan's once-world-dominant electronics firms. Japanese companies have beaten rivals to the market with hardware breakthroughs—from flat-panel televisions to advanced mobile phones.

But in each case, foreign rivals have cashed in by delivering faster improvements, integrating the products with easy-to-use software and online services, and delivering a smarter marketing message.

That has left one of Japan's prized electronics manufacturers, Sharp Corp., IT +0.10% teetering, as it grapples with an acute cash crunch and plunging stock price. Sony is in the midst of another restructuring after four years in red ink. And Panasonic Corp. is pulling back from consumer electronics.

"Japanese firms were too confident about our technology and manufacturing prowess. We lost sight of the products from the consumer's point of view," said Panasonic President Kazuhiro Tsuga at a news conference in June upon taking over as the company's new leader after it posted the biggest annual loss in its 94-year history.

Sony, Sharp and Panasonic combined to lose about $20 billion in the past fiscal year. That is a contrast with the glory days of the late 1970s and early 1980s, when Japan started to dominate the world of consumer electronics. As the Japanese economy surged, the electronics conglomerates ruled the market for memory chips, color TVs, and videocassette recorders, while their research labs gave birth to gadgets that would define an era: the Walkman, CD and DVD players.

Now, Japan's device makers are an afterthought to Apple Inc., AAPL -0.40%Google Inc. GOOG -0.51% and South Korea's Samsung Electronics Co. 005930.SE +1.51%

Japan's current weakness is rooted in its traditional strength: a fixation with "monozukuri," or the art of making things, focused on hardware advances.

This concept, a source of national pride, pushed Japan's electronics firms to strive for products that were often the world's thinnest, smallest, or delivered other incremental improvement—while losing sight of factors that really mattered to people such as design and ease of use. In the case of the e-reader, Sony was focused on selling devices, while Amazon was focused on selling books. As a result, the Kindle was more in tune with the raison d'être for purchasing the device: to buy and read books.

"Even though the first device definitely pointed the way to the future, it's a market that got away from Sony," said Mr. Gartenberg, research director at Gartner Inc. "Others have far more successfully capitalized."

To compound matters, the strong yen has made it more difficult to follow up new innovations with the requisite cost reductions to appeal to the mass market. For cutting-edge products, Japanese firms often rely on domestic production and then sell the goods abroad. The strong yen, near record levels, has narrowed the profit margin of Japanese goods sold abroad—a problem that Korean manufacturers have avoided with the relatively weaker won. The erosion in earnings has also made it difficult to invest in future products and technologies.

In the latest example of the country's lose-the-lead affliction, Japanese companies are falling behind in the race to develop what is likely to become the dominant technology format for next-generation televisions: OLEDs, or organic light emitting diodes. The new displays are thinner and require less energy. Samsung, Korea's top TV maker, already dominates the market for smaller-size OLED displays featured in smartphones and other mobile devices. Now Samsung and domestic rival LG Electronics Co. 066570.SE +0.76% each plans to launch a 55-inch OLED television later this year.

It is a major step forward compared with the Japanese firms—Sony, Panasonic, Sharp, and Toshiba Corp. 6588.TO -1.23%—that have spent years developing the technology while struggling with how to commercialize it.

In an attempt to close the gap on their Korean rivals, Sony and Panasonic, once bitter rivals, agreed to an unprecedented alliance in June to develop OLED production technology together.

That is a poignant comedown for Sony, which five years ago became the first manufacturer to sell an OLED television. At the time, company executives hailed it a "symbol of Sony's comeback." The 11-inch model—with a screen about one-tenth of an inch thick—was a technological marvel. But at $2,500 a pop, the OLED TV was a financial flop.

The OLED stumble came just a few years after a similar setback in the last generation of TV technology. In 2004, Sony was the first company to introduce LCD televisions that replaced the TV's fluorescent backlight with brighter and more energy efficient light-emitting diodes, or LEDs. It also introduced the first TV that arranged the LEDs around the edges in 2008 to allow the screens to be thinner.

When Samsung came out with its models a year later, the company called them "LED TVs," a moniker to distinguish the new TVs from existing LCD models. The marketing strategy was a success and Samsung was able to get consumers to pay a premium for the new LED models, helping to slow the sharp decline in TV prices. According to research firm NPD, Samsung accounts for nearly half of all the LED televisions sold in North America while Sony didn't rank among the top five sellers in the first half of 2012.

After years of missed chances, Sony has now officially shifted gears, deciding recently that it actually makes more sense to let Samsung and others take the lead in developing innovations. For all its pains of delivering groundbreaking technologies first, Sony executives concluded they were only creating targets for competitors to pursue and possibly imitate at a cheaper cost.

"The first runner has to face the wind—sometimes, it's easier to run from behind," said Tadashi Saito, who took over in April as Sony's chief strategy officer.

Another official familiar with Sony's thinking said the losses at its television business made it harder to take a "gamble" on aggressively pursuing OLED.

That is a far cry from the early days of Sony when founders Akio Morita and Masaru Ibuka nearly bankrupted the company in order to build a new type of color television. After unveiling prototypes in 1964, Sony struggled to develop the technology for mass production as the company burned through money. It took four years of development before Sony unveiled the Trinitron, a product that would underpin the company's success for the next three decades.

These days, the feeling is: "Financially, the Japanese firms can't take the risks," said Yuji Fujimori, a Tokyo-based electronics analyst for Barclays.

But the choice not to take risks has its own risks: the danger of falling into a downward spiral. Losses can lead to smaller investments in future technologies or new products.

Better-funded rivals can gain a leg-up with new products or developing new technologies that may make gadgets from Japan less competitive and ultimately lead to more losses for the Japanese firms.

The danger is evident in the gap in research and development spending between the Japanese and Korean leaders. Historically, Sony and Panasonic outspent Samsung on R&D, but starting in 2009, the Korean firm surpassed its Japanese rivals and the gap has widened.

In 2011, Samsung spent about $8.7 billion on R&D, compared with $5.5 billion for Sony and $6.6 billion for Panasonic in their fiscal years.

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