

,	World politics	Business & finance	Economics	Science & technology	Culture	The World in 2012	Blogs	Debate	Multimedia	Print edition

Technological change The last Kodak moment?

Kodak is at death's door; Fujifilm, its old rival, is thriving. Why?

Jan 14th 2012 | NEW YORK AND TOKYO | from the print edition

LENIN is said to have sneered that a capitalist will sell you the rope to hang him. The quote may be spurious, but it contains a grain of truth. Capitalists quite often invent the technology that destroys their own business.

Eastman Kodak is a picture-perfect example. It built one of the first digital cameras in 1975. That technology, followed by the development of smartphones that double as cameras, has battered



Kodak's old film- and camera-making business almost to death.

Strange to recall, Kodak was the Google of its day. Founded in 1880, it was known for its pioneering technology and innovative marketing. "You press the button, we do the rest," was its slogan in 1888.

By 1976 Kodak accounted for 90% of film and 85% of camera sales in America. Until the 1990s it was regularly rated one of the world's five most valuable brands.

Then came digital photography to replace film, and smartphones to replace cameras. Kodak's revenues peaked at nearly \$16 billion in 1996 and its profits at \$2.5 billion in 1999. The consensus forecast by analysts is that its revenues in 2011 were \$6.2 billion. It recently reported a third-quarter loss of \$222m, the ninth quarterly loss in three years. In 1988, Kodak employed over 145,000 workers worldwide; at the last count, barely one-tenth as many. Its share price has fallen by nearly 90% in the past year (see chart).

For weeks, rumours have swirled around Rochester, the company town that Kodak still dominates, that unless the firm quickly sells its portfolio of intellectual property, it will go bust. Two announcements



on January 10th—that it is restructuring into two business units and suing Apple and HTC over various alleged patent infringements—gave hope to optimists. But the restructuring could be in preparation for Chapter 11 bankruptcy.

While Kodak suffers, its long-time rival Fujifilm is doing rather well. The two firms have much in common. Both enjoyed lucrative near-monopolies of their home markets: Kodak selling film in America, Fujifilm in Japan. A good deal of the trade friction during the 1990s between America and Japan sprang from Kodak's desire to keep cheap Japanese film off its patch.

Both firms saw their traditional business rendered obsolete. But whereas Kodak has so far failed to adapt adequately, Fujifilm has transformed itself into a solidly profitable business, with a market capitalisation, even after a rough year, of some \$12.6 billion to Kodak's \$220m. Why did these two firms fare so differently?

Both saw change coming. Larry Matteson, a former Kodak executive who now teaches at the University of Rochester's Simon School of Business, recalls writing a report in 1979 detailing, fairly accurately, how different parts of the market would switch from film to digital, starting with government reconnaissance, then professional photography and finally the mass market, all by 2010. He was only a few years out.

Fujifilm, too, saw omens of digital doom as early as the 1980s. It developed a three-pronged strategy: to squeeze as much money out of the film business as possible, to prepare for the switch to digital and to develop new business lines.

Both firms realised that digital photography itself would not be very profitable. "Wise businesspeople concluded that it was best not to hurry to switch from making 70 cents on the dollar on film to maybe five cents at most in digital," says Mr Matteson. But both firms had to adapt; Kodak was slower.

A culture of complacency

Its culture did not help. Despite its strengths—hefty investment in research, a rigorous approach to manufacturing and good relations with its local community—Kodak had become a complacent monopolist. Fujifilm exposed this weakness by bagging the sponsorship of the 1984 Olympics in Los Angeles while Kodak dithered. The publicity helped Fujifilm's far cheaper film invade Kodak's home market.

Another reason why Kodak was slow to change was that its executives "suffered from a mentality of perfect products, rather than the high-tech mindset of make it, launch it, fix it," says Rosabeth Moss Kanter of Harvard Business School, who has advised the firm. Working in a one-company town did not help, either. Kodak's bosses in Rochester seldom heard much criticism of the firm, she says. Even when Kodak decided to diversify, it took years to make its first acquisition. It created a widely admired venture-capital arm, but never made big enough bets to create breakthroughs, says Ms Kanter.

Bad luck played a role, too. Kodak thought that the thousands of chemicals its researchers had created for use in film might instead be turned into drugs. But its pharmaceutical operations fizzled, and were sold in the 1990s.

Fujifilm diversified more successfully. Film is a bit like skin: both contain collagen. Just as photos fade because of oxidation, cosmetics firms would like you to think that skin is preserved with anti-oxidants. In Fujifilm's library of 200,000 chemical compounds, some 4,000 are related to anti-oxidants. So the company launched a line of cosmetics, called Astalift, which is sold in Asia and is being launched in Europe this year.

Fujifilm also sought new outlets for its expertise in film: for example, making optical films for LCD flat-panel screens. It has invested \$4 billion in the business since 2000. And this has paid off. In one sort of film, to expand the LCD viewing angle, Fujifilm enjoys a 100% market share.

George Fisher, who served as Kodak's boss from 1993 until 1999, decided that its expertise lay not in chemicals but in imaging. He cranked out digital cameras and offered customers the ability to post and

share pictures online.

A brilliant boss might have turned this idea into something like Facebook, but Mr Fisher was not that boss. He failed to outsource much production, which might have made Kodak more nimble and creative. He struggled, too, to adapt Kodak's "razor blade" business model. Kodak sold cheap cameras and relied on customers buying lots of expensive film. (Just as Gillette makes money on the blades, not the razors.) That model obviously does not work with digital cameras. Still, Kodak did eventually build a hefty business out of digital cameras—but it lasted only a few years before camera phones scuppered it.

Kodak also failed to read emerging markets correctly. It hoped that the new Chinese middle class would buy lots of film. They did for a short while, but then decided that digital cameras were cooler. Many leap-frogged from no camera straight to a digital one.

Kodak's leadership has been inconsistent. Its strategy changed with each of several new chief executives. The latest, Antonio Perez, who took charge in 2005, has focused on turning the firm into a powerhouse of digital printing (something he learnt about at his old firm, Hewlett-Packard, and which Kodak still insists will save it). He has also tried to make money from the firm's huge portfolio of intellectual property—hence the lawsuit against Apple.

At Fujifilm, too, technological change sparked an internal power struggle. At first the men in the consumer-film business, who refused to see the looming crisis, prevailed. But the eventual winner was Shigetaka Komori, who chided them as "lazy" and "irresponsible" for not preparing better for the digital onslaught. Named boss incrementally between 2000 and 2003, he quickly set about overhauling the firm.

Mount Fujifilm

He has spent around \$9 billion on 40 companies since 2000. He slashed costs and jobs. In one 18-month stretch, he booked more than ¥250 billion (\$3.3 billion) in restructuring costs for depreciation and to shed superfluous distributors, development labs, managers and researchers. "It was a painful experience," says Mr Komori. "But to see the situation as it was, nobody could survive. So we had to reconstruct the business model."

This sort of pre-emptive action, even softened with generous payouts, is hardly typical of corporate Japan. Few Japanese managers are prepared to act fast, make big cuts and go on a big acquisition spree, observes Kenichi Ohmae, the father of Japanese management consulting.

For Mr Komori, it meant unwinding the work of his predecessor, who had handpicked him for the job—a big taboo in Japan. Still, Mr Ohmae reckons that Japan Inc's long-term culture, which involves little shareholder pressure for short-term performance and tolerates huge cash holdings, made it easier for Fujifilm to pursue Mr Komori's vision. American shareholders might not have been so patient. Surprisingly, Kodak acted like a stereotypical change-resistant Japanese firm, while Fujifilm acted like a flexible American one.

Mr Komori says he feels "regret and emotion" about the plight of his "respected competitor". Yet he hints that Kodak was complacent, even when its troubles were obvious. The firm was so confident about its marketing and brand that it tried to take the easy way out, says Mr Komori.

In the 2000s it tried to buy ready-made businesses, instead of taking the time and expense to develop technologies in-house. And it failed to diversify enough, says Mr Komori: "Kodak aimed to be a digital company, but that is a small business and not enough to support a big company."

Perhaps the challenge was simply too great. "It is a very hard problem. I've not seen any other firm that had such a massive gulf to get across," says Clay Christensen, author of "The Innovator's

Dilemma", an influential business book. "It was such a fundamentally different technology that came in, so there was no way to use the old technology to meet the challenge."

Kodak's blunder was not like the time when Digital Equipment Corporation, an American computermaker, failed to spot the significance of personal computers because its managers were dozing in their comfy chairs. It was more like "seeing a tsunami coming and there's nothing you can do about it," says Mr Christensen.

Dominant firms in other industries have been killed by smaller shocks, he points out. Of the 316 department-store chains of a few decades ago, only Dayton Hudson has adapted well to the modern world, and only because it started an entirely new business, Target. And that is what creative destruction can do to a business that has changed only gradually—the shops of today would not look alien to time-travellers from 50 years ago, even if their supply chains have changed beyond recognition.

Could Kodak have avoided its current misfortunes? Some say it could have become the equivalent of "Intel Inside" for the smartphone camera—a brand that consumers trust. But Canon and Sony were better placed to achieve that, given their superior intellectual property, and neither has succeeded in doing so.

Unlike people, companies can in theory live for ever. But most die young, because the corporate world,



unlike society at large, is a fight to the death. Fujifilm has mastered new tactics and survived. Film went from 60% of its profits in 2000 to basically nothing, yet it found new sources of revenue. Kodak, along with many a great company before it, appears simply to have run its course. After 132 years it is poised, like an old photo, to fade away.

from the print edition | Business

About The Economist	Media directory	Advertising info	Staff books	Career opportunities	Subscribe	Contact us	Site index	[+] Site Feedback
Copyright © The Econ	omist Newspaper I	Limited 2012. All ri	ghts reserved.	Legal disclaimer	Accessibility	Privacy policy	Terms of use	Help