

Canon Group¹

Few companies can claim to be truly global multinationals, but with sales, revenues, production and employees distributed across the world, the Canon Group of Japan comes as close as any to fitting that title. In 2010, Canon's sales grew 23 per cent compared to the previous year, to a record high of US\$42.225 billion. The company then seemed to struggle. By 2015 its revenues had dropped to US\$31.54 billion and they only slightly increased again by 2018, when revenues were US\$36.7 billion. These figures are partly the result of the declining popularity of cameras, as customers increasingly used their smartphones for taking pictures. Nevertheless, the firm's sales are spread evenly across the world's main markets, with over 80 per cent of its products sold outside Japan. In 2017, 27 per cent of its net sales were in the Americas, 25 per cent in Europe and 26 per cent in Asia and Oceania.

As of 2017, Canon operates in four business segments. The Office segment provides office network, colour network and personal multifunction devices, office, colour and personal copy machines, laser printers, large-sized ink-jet printers and digital production printers, among others. With a sales ratio of 45.7 per cent as of 2017, this business segment is Canon's major source of income. The Imaging System segment provides digital single-lens reflex cameras, compact digital cameras, interchangeable lens, digital video cameras, ink-jet multifunction devices, single-function ink-jet printers, image scanners and television lenses for broadcasting use, among others. The Industrial Equipment segment and the Medical System segment provide exposure equipment used in semiconductor and liquid crystal displays (LCDs), medical image-recording equipment, ophthalmic instruments, magnetic heads, micro motors, computers, handy terminals, document scanners and calculators, among others. Canon is dual listed on the Tokyo Stock Exchange and New York Stock Exchange.

The company had its beginnings in 1933, when Precision Optical Instruments Laboratory was established to conduct research into cameras in Roppongi, Minato-ku, Tokyo. In 1947 the company changed its name to Canon Camera Co., and only in 1969 did the company take on the name Canon Inc.

Canon's international expansion started in 1955 with the opening of a New York branch. Initially, the company relied on sole distributors and established some in Europe and Latin America in the late 1950s and early 1960s. The sole distributor system was abolished in 1963 to make way for company-owned subsidiaries under the direct control of the Japanese headquarters.

International expansion goes beyond marketing to include production, research and development. Taiwan became the site of Canon's first foreign production facility in 1970. Two years later the company opened a manufacturing plant in Germany. By 2001, the company had production facilities in all parts of the triad – Western Europe, the Asia-Pacific region and North America. Nevertheless, the vast majority of Canon's production facilities remain in Asia,

¹ Website: www.canon.com.

Source: Canon, <https://global.canon/en/ir/finance/highlight.html>; Canon, Annual Report, 2006–2017; 'Can Canon keep printing money?', *Business Week*, 5 September 2005; 'Hard to copy', *The Economist*, 31 October 2002; '(Still) made in Japan', *The Economist*, 7 April 2004; B. Bowonder and T. Miyake, 'R&D and business strategy: analysis of practice at Canon', *International Journal of Technology Management*, vol. 13, nos. 7/8 (1997), pp. 833–53; H. Perks, 'Exploring processes of resource exchange and co-creation in strategic partnering for new product development', *International Journal of Innovation Management*, vol. 8, no. 1 (2004), pp. 37–61; Thomson Reuters, OneSource, 2011. <https://asia.nikkei.com/Business/Canon-back-to-Made-in-Japan>.

including Japan. So in contrast to the global distribution of its sales, 37 per cent of its employees (73,665 in 2017) were based in Japan and just 12 per cent in Europe, 9 per cent in North America, and 40 per cent elsewhere, predominantly in Southeast Asian production centres.

From 1990 onwards, R&D centres were opened in the USA, Australia, France, Thailand and the People's Republic of China. Each R&D facility specialises in a specific product line and is coordinated by a centralised R&D lab in Japan. Together with its R&D strategy, this has made Canon one of the best world innovators and the largest holder of patents after IBM and Samsung.

Canon is organised regionally. Canon USA oversees operations in the Americas. The subsidiary has its own marketing, R&D and production facilities. Two companies oversee European operations. Together, they have two manufacturing plants in Germany and France, and R&D centres in the UK and France. Canon's operations in Asia and Oceania, excluding Japan, account for the largest number of employees in foreign countries. Region-wide activities for the Asian market are overseen by the Canon Asia Marketing Group, but marketing operations in this region are fragmented into sub-regional or national markets. The Southeast Asia region is the responsibility of Canon Singapore. Hong Kong has its own subsidiary that is also responsible for Taiwan and part of South Korea. The mainland Chinese market is the responsibility of Canon (China) Co. Japan's home market is still very important. Nearly half of Canon's employees are still working in Japan and company-wide R&D is still centralised there. Canon Australia is responsible for operations in the Oceania region.

In 2017, the firm spent 8.1 per cent of its revenue on R&D. Canon finds not only new technologies, but also new methods of manufacturing products. Canon has been reorganising its production facilities to take advantage of its global scope, selecting suppliers and production facilities across the world to minimise costs and decrease production time. As a result, product design data can now be sent to plants around the world via computer. Information is translated through an automatic translation system allowing faster communication between subsidiaries. The firm is now using simulation technology to minimise the costly process of prototype production.

At a time when other Japanese and many other, large electronic companies are struggling to remain competitive, Canon's profits are soaring. The firm has been able to remain competitive by selecting those business lines in which it can be successful, given its strength in R&D and production technology. The firm abandoned the markets for personal computers, typewriters and liquid crystal displays to concentrate on cameras, printers and copiers.

Studies suggest that one of Canon's key competencies is its global system for new product development. In particular, it has evolved a number of organisational mechanisms for linking R&D and customer requirements globally. This is partly done through alliances and joint ventures in which Canon invests over the long term to derive the benefits of co-learning and joint resource development. Canon contributes its technological capabilities and supplier links, and local partners bring expertise relating to local customer preferences, distribution and marketing.

On the plant floor, Canon's high productivity increases have been based on cell production technology. Here, a small number of workers have responsibility for the final assembly of the product. This type of production not only increases the amount of a product being produced per labour-hour, but also ensures quality as it is easier to backtrack the production process of a single product. It also saves floor space. Since 1998, Canon has decreased the length of its conveyor lines by 12 miles (19 km). However, the productivity increases of applying and

perfecting cell technology to its operations are reaching a limit and now Canon is seeking ways of integrating automation technology into its production process.

In 2002, Canon made the unlikely decision to establish a facility in Oita, Kyushu, Japan, to produce digital cameras. CEO Fujio Mitarai's explanation is that 'If we switch factories each time a place with lower labour costs is found, all investment in equipment is wasted. Instead, we should use our strengths in production, and manufacture products more cheaply than they could be manufactured in locations where the cost of labour is lower.' As of 2017, approximately 65 per cent of Canon cameras were manufactured in Japan. This number is expected to grow in the next years, as the company plans to return to a 'Made in Japan' strategy, where automation and robots will do most of the work in the Japanese plants. Nevertheless, the company's long-term plan is to reach a balance between outsourcing and Japanese production. Mitarai's position is that anything for which labour costs are more than 5 per cent of production costs can be outsourced to low labour-cost areas, such as China, and anything for which labour costs are less than 5 per cent of production – typically the more advanced technologies – can be produced domestically.

Questions for discussion

1. Explain why, over the course of Canon's internationalisation process, certain functions have been moved or expanded to certain global locations.
2. Why has it been important for Canon to internationalise its R&D activities?
3. Speculate as to why Canon is so unusual in its degree of independence from Japan's domestic market, compared to most other Japanese firms.
4. How is Canon still fairly dependent on Japan as a home base?

Answer

1. Explain why, over the course of Canon's internationalisation process, certain functions have been moved or expanded to certain global locations.

First, at the start of the internationalisation process, Canon moved marketing to be near its foreign customers by changing independent distributors with wholly owned marketing subsidiaries. This allowed more control as well as better knowledge flows about customer preferences. The firm then moved manufacturing to other locations. While it is not clear from the case, this could have been the result of cost savings, seeking inputs, a government contract, etc. Finally, R&D and FDI allowed Canon to tap into research across the world.

2. Why has it been important for Canon to internationalise its R&D activities?

Across the world there are points of innovation. By creating international R&D facilities, Canon has been able to tap into other sources of innovation.

3. Speculate as to why Canon is so unusual in its degree of independence from Japan's domestic market, compared to most other Japanese firms.

Operating predominantly in three business segments not only does Canon generate sales and revenue across the globe they also employ and produce products all over the world too. Although Canon has adopted a global system for new product development and R&D, Cannon is still observed to be relatively dependent on Japan. Reasons speculating this phenomenon will vary.

4. How is Canon still fairly dependent on Japan as a home base?

Canon still manufactures the vast majority of its products in Japan. Furthermore, group-wide decisions and coordinating efforts are made in Japan.