# THE CANON STORY

## 2017 / 2018

# Kyosei

Canon's corporate philosophy is *kyosei*.
It conveys our dedication to seeing all people,
regardless of culture, customs, language or race,
harmoniously living and working together in happiness
into the future. Unfortunately, current factors related to economies,
resources and the environment make realizing *kyosei* difficult.
 Canon strives to eliminate these factors
through corporate activities rooted in *kyosei*.
Truly global companies must foster good relations
with customers and communities, as well as with
governments, regions and the environment as part of
their fulfillment of social responsibilities.
 For this reason, Canon's goal is to contribute to global
prosperity and the well-being of mankind as we continue
our efforts to bring the world closer to achieving *kyosei*.

## Contents

The QR codes in this booklet are links to the Canon Video Square, a part of the Canon website. Scan any QR code to see a movie introducing the topic.

## Canon's Corporate DNA

Behind Canon's 80-year history and develop-ment as a business lies its corporate DNA: a respect for humanity, an emphasis on tech-nology, and an enterprising spirit that the company has consistently passed on since its foundation. The enterprising spirit on which Canon was started as a venture company, and the relentless drive to distinguish itself through technology, permeate the company, and have continued to provide society with new advances. These motivating factors are in turn supported by a respect for humanity, which encompasses meritocracy and an emphasis on good health. Canon is committed to passing its corporate DNA on to future generations to ensure the company grows for another 100, or even 200, years.

Respect for Humanity

Canon's Corporate DNA

Emphasis on Technology

Enterprising Spirit
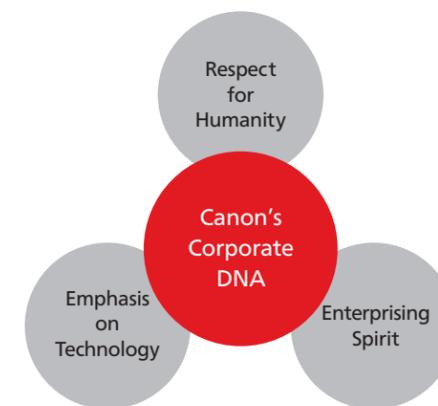
## The San-ji (Three Selfs) Spirit

The Three Selfs, the foundation of the company's guiding principles that have been passed down since Canon was founded, are self-motivation, self-management and self-awareness. For Canon, which strives to be a truly excellent global corpo-ration while maintaining the legacy of its corpo-rate DNA, the Three Selfs continue to serve as the company's most important guiding principles.

[Self-motivation]
Take the initiative and be proactive in all things
[Self-management]
Conduct oneself with responsibility and accountability
[Self-awareness]
Understand one's situation and role in all situations

# Pursuing a grand strategic transformation to accelerate growth as we commemorate our 80th anniversary

Last year, the first in Phase V of our Excellent Global Corporation Plan (2016 – 2020), was fruitful as we established a strong foundation in four new business domains: commercial printing, network cameras, healthcare and industrial equipment. This year, Canon's 80th anniversary, we will accelerate growth even further for each of these businesses.

In commercial printing, we are stepping up product development based on Canon and Océ technologies. In network cameras, our collaborations are progressing with Axis, which has overwhelming sales power, and Milestone Systems, which boasts a top share in video management software. Working with these two innovative companies, we see the potential to significantly expand our network camera operations, proposing tailored system solutions for cities, commercial facilities, transportation facilities, and many others. In healthcare, on one front we are collaborating with Toshiba Medical Systems, which joined the Canon Group last year, to offer innovative equipment and services, and on a second front we are expanding business into new areas, including biomedical genetic testing and medical IT solutions. In industrial equipment, we have begun to boost the production capacity of Canon Tokki's Organic LED (OLED) panel manufacturing equipment and are moving forward in the development of next-generation nanoimprint technology with an eye toward initiating mass production of semiconductor chips.

To succeed in the grand strategic transformation we have embarked on, we must recognize the importance of our existing businesses, including cameras, inkjet printers and office multi-function devices. While proceeding with ongoing reform aimed at unifying product development, procurement, production technology and manufacturing, we are introducing such innovations as robotics, AI and IoT, and furthering our in-house production capabilities. In sales, our aim is to cultivate highly skilled sales engineers, improve our e-commerce platforms, and establish a system that will better enable us to address diverse customer needs.

Achieving our Phase V reforms amid this unstable global economic environment will be challenging. But with Canon's entrepreneurial spirit and the San-ji, or "Three Selfs," Spirit that has been passed down since our foundation 80 years ago, the Canon Group will work as one to achieve this grand strategic transformation and from this turning point to embark on new business growth.

**Fujio Mitarai**
Chairman & CEO
Canon Inc.

Excellent Global Corporation Plan

# Phase V
## 2016–2020

Canon, seeking to become a truly excellent company that is admired and respected around the world, launched the medium-to-long-term Excellent Global Corporation Plan in 1996 and has successfully completed the first four phases of this plan. In Phase V, we are implementing seven key strategies as we embrace the challenge of new growth through a grand strategic transformation.

## 1 Establish a new production system to achieve a cost-of-sales ratio of 45%

Strengthen domestic mother factories by further promoting a higher ratio of production in Japan and the integration of design, procurement, production-engineering and manufacturing-technology operations. At the same time, pursue total cost reductions through the promotion of such advanced production-engineering technologies as robotics and automation.

## 2 Reinforce and expand new businesses while creating future businesses

Create and expand new businesses by accelerating the horizontal expansion of existing businesses. Additionally, concentrate management resources and make effective use of M&A to accelerate the expansion of promising business areas such as commercial printing, network cameras and life sciences.

## 3 Restructure the global sales network in accordance with market changes

Review existing sales organizations and reinforce omni-channel marketing that integrates online and brick-and-mortar sales routes while strengthening and expanding solutions-driven businesses with the aim of solving issues faced by customers. Additionally, continue focusing energies on cultivating markets in emerging countries.

## 4 Enhance R&D capabilities through open innovation

Discard the strict notion of self-sufficiency and construct an R&D system that proactively leverages external technologies and knowledge, promoting joint and contract research with various partners such as domestic and foreign universities and research institutes.

## 5 Complete the Three Regional Headquarters management system capturing world dynamism

Promote the acquisition of promising businesses through active M&A and complete the Three Regional Headquarters management system, under which Japan, the U.S. and Europe will each roll out businesses globally.

## 6 Cultivate globally competent human resources capable of performing duties while maintaining an all-encompassing perspective of the world map

Build a global management system targeting the optimal use of human resources in operations worldwide. Examine personnel worldwide to identify candidates for senior management positions and develop the skills of these future leaders by rotating them through key positions in Japan and overseas.

## 7 Re-instill the Canon Spirit as a foundation for new growth

Revitalize the enterprising spirit and San-ji (Three Selfs) Spirit at the heart of Canon's corporate culture.

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**Canon's Road to Phase V**

**Phase I** 1996–2000
To strengthen its financial structure, Canon transformed its mindset to a focus on total optimization and profitability. The company introduced various business innovations, including the selection and consolidation of business areas, and reform activities in such areas as production and development.

**Phase II** 2001–2005
Aiming to become No. 1 in all major business areas, Canon focused on strengthening product competitiveness along with the changing times, stepping up efforts to digitize its products. The company also conducted structural reforms across all Canon Group companies around the world.

**Phase III** 2006–2010
Canon moved ahead with such growth strategies as enhancing existing businesses and expanding into new areas while also thoroughly implementing supply chain management and IT reforms.

**Phase IV** 2011–2015
Responding to weakness in the global economy, Canon revised its management policy from a strategy targeting expansion of scale to a strategy aimed at further strengthening its financial structure. While actively pursuing M&A activities, the company restructured its business at a foundational level to introduce new growth engines for future expansion.

# Vision toward Growth

For 2017, Canon set the challenge of strengthening such existing businesses as cameras and printers, as well as making a leap forward in the development of new businesses. To turn healthcare, network cameras, commercial printing and industrial equipment into future key businesses, we are accelerating our reformation efforts while undertaking a grand strategic transformation. These initiatives are driving our progress towards achieving the goals of our Excellent Global Corporation Plan Phase V by 2020.

# Smarter, patient-friendly healthcare solutions are leading to healthier lives for people around the world

In 1940, not long after our establishment, Canon entered the healthcare business with the development of Japan's first indirect X-ray camera. This technology was used for the early detection of pulmonary tuberculosis, which at the time was an intractable disease. In the years since, we have continued to support medical professionals with such products as digital radiography equipment and ophthalmic equipment developed with our superior imaging technology.

Recently, Canon's healthcare business has taken a major leap forward by welcoming Toshiba Medical Systems Corporation, a leading manufacturer of medical equipment such as CT and diagnostic ultrasound systems, into the Canon Group.

To bring about a future of smarter and more patient-friendly healthcare that will lead to healthier lives worldwide and reduce the stress of examinations on patients, Canon is expanding our business to include diagnostic imaging, biomedical and medical IT.

Toshiba Medical's X-ray CT diagnostic systems have a high reputation for outstanding tomographic imaging

# Growing our healthcare business through synergies between Canon and Toshiba Medical

## Leveraging optical and image processing technologies for leading-edge medical equipment

Canon's first president, Takeshi Mitarai, was a doctor who held high aspirations that Canon would "become a company that contributes to society through the medical field." Eighty years since the establishment of the company, Canon has expanded its healthcare business based on its proprietary optical and image processing technologies. Canon's digital radiography systems improve examination efficiency by eliminating the need for film, retinal cameras detect a broad range of eye and lifestyle diseases, and optical coherence tomography (OCT) devices diagnose retinal disorders


The OCT-HS100 is known for its operability and image quality

three-dimensionally. Our healthcare business continues to support new areas of advanced medical care.

In December 2016, Toshiba Medical Systems Corporation joined the Canon Group. Founded in 1930, Toshiba Medical pioneered many medical diagnostic imaging systems, developing high-resolution devices such as X-ray CT scanners, diagnostic ultrasound systems for tomographic and blood flow imaging, diagnostic X-ray systems and MRI systems. The company boasts advanced technologies that have led to a number of "world's firsts" and a global sales network covering some 140 countries and regions. In the CT market, Toshiba Medical holds the No. 1 share in Japan and the No. 3 share globally.

## The merging of two corporate cultures is already producing new value

Toshiba Medical is known for technology that reduces the stress of medical examinations— for instance, advanced CT technology that minimizes patient exposure to radiation, MRI

systems that do not require the use of contrast agents and therefore reduce health risks, and anti-noise technologies that contribute to a relaxing exam environment. Toshiba Medical's corporate philosophy, *Made for Life*, under which such technologies were developed, is a perfect match to Canon's corporate philosophy of *kyosei*. Our shared values have played a large role in building bonds between us and strengthening our Group. In under a year, we have made large strides in integrating each other's technologies and product development strengths to great synergistic effect. Currently, the plan is for Toshiba Medical to adopt the name Canon Medical Systems in early 2018. Through the chemistry of Canon's design precision and manufacturing technology and Toshiba Medical's Global R&D and sales networks, we are ready to make valuable contributions to medical care.


CT system development to ensure patient comfort


Prototype genetic testing platform in development at Canon BioMedical

# Solutions based on the ideals we have cherished since our foundation

## Our U.S.-based biomedical business is leading to more efficient product development

Canon has positioned itself at the forefront of the rapidly advancing healthcare field by establishing a biomedical business in the United States. Product development is optimized when conducting all R&D, manufacturing and sales operations in the nation at the vanguard of advanced medicine. Canon BioMedical launched Novallele™ genotyping assays for research use in 2015. Now, DNA testing systems to research human biology and diseases are being developed by utilizing CMOS sensors found in Canon DSLR cameras and technology developed for manufacturing our inkjet printers. Our deep well of proprietary imaging technologies serves as a powerful advantage to invent innovative medical equipment.

## Collaborating with hospitals to integrate leading-edge optics with diagnostic technologies

Canon conducts research with Massachusetts General and Brigham and Women's Hospitals, both of which are teaching affiliates of Harvard Medical School, to develop products* such as endoscopes and medical robotics. These partnerships led to the establishment of the Healthcare Optics Research Laboratory in Boston, where we promote an open approach to R&D. Among our pursuits is the development of ultra-miniature endoscope technology. The optical system, which is being produced

with Canon's micro-optics fabrication technology, is less than 1 mm in diameter. Despite being extremely thin, the endoscope is expected to be robust enough to resist breaking when inserted into a patient's body, enabling its use in anatomies previously inaccessible, such as inside the finger and wrist joints. The unit's flexibility offers the potential for new uses in orthopedics, such as imaging inside the spinal vertebrae, and in otorhinolaryngology for imaging the nasal cavity and paranasal sinuses.

*Products described herein are under development, have not been shown to be safe or effective for any intended use, and have not been evaluated by the U.S. Food and Drug Administration.


Development of an ultra-miniature endoscope

## From diagnosis to testing and treatment, Canon's healthcare business is growing

At the cutting edge of medical robotics, Canon is developing a device that assists with the insertion of needles in patients. Motor- and sensor-equipped robots and image guidance navigation software will guide a needle to a precise depth and position. Unaffected by

magnetic fields, it would be used alongside MRI systems. It shows promise for improving the precision of biopsies, for cancer ablation therapy, and for reducing treatment times. Expectations are high for practical applications in the near future.

Canon's healthcare business is advancing through synergies with Toshiba Medical and integrated medical operations spanning from R&D to sales in the United States. The rising global population and aging of societies is increasing healthcare needs. In response, the scope of our business is expanding to encompass testing, treatment and medical IT system development. We are pursuing total solutions for today's medical facility needs and smarter patient-friendly healthcare.


Development of a guided needle insertion system

### ▮ Using open innovation to accelerate technological innovation

To create new value and achieve breakthroughs in healthcare, Canon extends our vision beyond our own technologies and resources and engages in open innovation with a diverse range of partners. Open innovation involving industry, government and academic partners brings new perspectives and advances to our own R&D activities—for example, photoacoustic tomography developed in cooperation with Kyoto University and a genetic testing system developed with an American university, which is in the process of being commercialized. Looking ahead, Canon will continue to pursue collaborations that can accelerate technological innovation.


Open innovation gives rise to creative ideas

# Rain or shine, Canon watches over a safe environment that keeps children smiling

Outside the doors of Singapore International School in Aberdeen, Hong Kong, the happy cries of students echo across the schoolyard.

From the entrance gate to the elevators inside the buildings, the feeling of security stretches all around the school. Canon network cameras have been installed in 60 locations, including the indoor pool, around the perimeter and the surrounding area, to watch over the children. This monitoring system provides a profound sense of safety throughout the school.

Worldwide, the network camera market has grown rapidly in step with the rising awareness of the need for security. For Canon, the demand has opened a door into a valuable new field of business. In response, we are developing superior-quality surveillance products that employ our proprietary optical and image-processing technologies.

In Hong Kong, Canon network cameras are favored not only for their high image quality, but also for their tough impact resistance and anti-fog technology, which is valuable in places like Hong Kong where temperatures and humidity run high.

24/7, rain or shine, Canon has the trust of parents and school officials for keeping a protective eye over their children.

Canon network cameras in use at the Kitchee Football Academy in Hong Kong


The AXIS Q1659 combines leading-edge Canon and Axis technologies

# Network cameras that feature AI technology are becoming the eyes of the IoT

## Beyond surveillance, network cameras as tools for advanced visual solutions

### Canon's camera expertise is leading to new value-added solutions

Based on the camera and camcorder technologies Canon has cultivated since our foundation, we produced our first cameras for security and surveillance in the mid-1990s. Less than two decades later, in 2013, in response to the rising demand worldwide for safety and security, we formally established our network camera business.

Canon envisions the uses of network cameras expanding far beyond security and surveillance to encompass innovative network imaging solutions. However, these solutions go beyond the capabilities of cameras alone. In addition to


Evaluation of network camera performance

hardware and software for recording video, it is essential to provide applications tailored to the users' needs that will maximize the value of these images for their businesses.

Image analysis is one of the areas of value-added solutions we are pursuing. With this kind of technology, marketers can study consumer activity in retail spaces and monitor the status of the shelf stock of products.

### Partnership with Axis improves our efficiency in product development and services

With an eye toward expanding our network camera business to global markets, Canon welcomed the Swedish company Axis into the Group in 2015.

In 1996, Axis was the first company to develop network cameras for surveillance and has been an industry and market leader ever since. Their lineup includes such innovative products as modular cameras that can be installed inside ATMs and thermal cameras capable of capturing images in the dark by detecting heat radiation. An outstanding range of network image processing technologies

enables Axis to offer smart security solutions in 179 countries and regions through approximately 90,000 partner companies.

Canon and Axis collaborate in the areas of product development, service and support, striving to improve efficiency by maximizing our respective strengths. In addition, Axis is assuming management of European and U.S. sales channels for Canon and Axis's entire portfolio of network video products and solutions, which enables us to be more attentive to customer needs and provide first-class aftercare.

In April 2017, Canon and Axis launched our first collaboratively developed product.


Collaborative product development between Canon and Axis

### Introducing our first jointly developed interchangeable-lens network camera

The AXIS Q1659 interchangeable-lens network camera is the first product co-developed by

Canon and Axis. Featuring the same high-performance image sensor and image processor employed by Canon digital cameras, this network camera is capable of capturing approximately 20-megapixel color video at 8 frames per second to support high-resolution surveillance applications. Seven different EF and EF-S interchangeable lenses, ranging from wide-angle to telephoto, developed for use on EOS-series cameras can be used to satisfy surveillance needs in such environments as city streets, the areas in and around airports and at crowded stadiums. Axis's proprietary video-processing and image-compression technologies ensure that video surveillance operation is highly efficient. Through cooperation that leverages the respective strengths of Canon and Axis, our ongoing collaboration is expected to bring further advances in high-performance network cameras to the market.


High-performance optical component manufacturing at Nagasaki Canon

### Advancing network cameras from recording equipment to analytical devices for visual information

Integrating Axis's network image processing technology and Milestone's video management technology with Canon's proprietary imaging technology is opening the door to new solutions.

Thanks to advanced image analysis, network cameras are evolving for revolutionary new applications. Network cameras that utilize


Axis's network cameras provide surveillance over urban areas

### Milestone software expands the capabilities of network cameras

By coordinating multiple cameras, advanced network camera systems can monitor remote wide-spread areas as well as track a single moving subject across crowded spaces. To push these functions to the limit requires high-level video management software that provides centralized management of high-resolution images.

Denmark-based Milestone Systems, which joined the Canon Group in 2014, is the leading provider of open-platform video management software (VMS), which can perform centralized management of multiple videos on a server. Conducting business in 130 countries and regions worldwide, Milestone holds a top share in the VMS market.

Working together, Canon and Milestone are seeking to realize more advanced capabilities for network cameras and to develop new video analysis technologies for use in a wide range of fields.


Milestone's image management software enables centralized management of video

artificial intelligence (AI) and serve as the eyes of the internet of things (IoT) are expected to become a driving force in generating new demand. Another important application that continues to gain attention is the ability to search for and track a subject over a wide area.

The day is near when network cameras become an integral part of daily life, supporting a safe and secure future.

### Accurate, real-time search and tracking of individual targets

Canon is researching high-speed searching and tracking technology that traces a target person across a wide area, even as wide as a large city, using network camera imaging. This technology enables search by tracking not only using facial features, but clothing and other physical characteristics as clues, making identification possible even when the target's face is hidden from the camera view. Utilizing videos from multiple cameras dispersed over a wide area, the system can trace the target in real-time and visualize the moving path on a map. Expectations are high for the use of this technology to search and track suspicious individuals in airports and commercial facilities and to search for lost children.


High-speed search and tracking of target person

# Canon's technology is creating a vivid future for a printing industry with increasingly diverse needs

Today's analog-to-digital revolution in printing marks the industry's greatest transformation since Gutenberg introduced the printing press to Europe some 500 years ago. Alongside the rapid expansion of digital printing technology, a corresponding transformation is taking place as traditional business models continue to evolve.

Drawing upon our wealth of experience and rich portfolio of original technologies accumulated from our pioneering developments in home and office printing, Canon has become a leading force in the evolution of digital printing and an innovator striving to meet the growing demand for high-image-quality and high-speed, small-lot printing. Today, we are pioneering new markets in commercial printing.

Digital printing solutions such as variable data printing, which enables users to change the content of individual printed sheets, and direct mail and in-house production of POP materials and posters, is revolutionizing the printing business, supporting a richer and more convenient lifestyle for those in the printing industry and beyond.

Welcoming Océ, a leader in commercial printing, into the Canon Group has enabled us to pursue new possibilities in digital printing with a wide-ranging lineup of products that will contribute to a vivid future for business and society.

Assembly of the Océ VarioPrint i300 sheet-fed inkjet color press

# High-precision printing technologies support Canon in a changing commercial printing market

## Demand for various small-lot jobs spurs the shift towards digital printing

Commercial printing is a broad field encompassing newspapers, magazines and books, promotional catalogs and flyers, financial statements, invoices and other documents that are the lifeblood of businesses.

Offset printing has long been the dominant process in this field, boasting such advantages as superb quality, low cost and the high speed needed for printing large-volume publications. However, in the 1990s a shift occurred in consumption patterns as well as market segmentation, leading to an increase in demand for various small-lot jobs. Ever since, the field of digital printing has continued to expand.

In offset printing, color images are separated into four colors, each of which requires printing plates, which in turn raises the unit cost of small-lot printing. Digital printing does not require the labor-intensive use of plates; instead, printing is done straight from data. By overcoming a key weakness in offset printing, digital printing has brought about a technological revolution.

## Core technologies from printer development support the digitalization of printing

Digital printing is lauded for its ability to facilitate quick turnaround of small-lot jobs. In addition, it provides such added-value advantages as variable printing, enabling the professional printing of such documents as invoices and delivery statements in which the content varies by sheet, and on-demand printing of customized low-volume orders. Supporting Canon's advances are the experience and expertise cultivated through the development of such core technologies as inkjet and electrophotography.

With the development of the copy machine


Variable printing is possible on various types of paper

in the mid-1960s, Canon made its full-fledged entry into the office equipment industry. In 1973, we introduced a full-color plain-paper copier, bringing new power to business documents. Later, we launched our revolutionary office multifunction devices which continue to receive high acclaim worldwide.

Our wealth of experience and innovative technology enabled us to continuously refine our products, resulting in the development a high-precision, high-image-quality digital printing press. In 2006, we opened a new path into the digital commercial printing market.

## Welcoming Océ has helped us achieve growth in the commercial printing business

To expand Canon's share of the digital commercial printing market and create new avenues of growth, we welcomed the Dutch company Océ into the Canon Group in 2010.

Océ is a leading manufacturer of digital printers with a history spanning 140 years. The company's high-productivity printers are highly regarded for such black-and-white printing jobs as invoices, direct mail and in the publishing field. Océ's high-speed continuous-feed printers

make it a strong contender in European and U.S. markets.

Océ prioritizes not only speed, but also reliability and productivity—for instance, the ability to maintain consistent color and image quality even when operated non-stop for a full week. Today, Océ is developing and commercializing high-end printing equipment for the professional printing industry.


Océ offers attentive customer support and service

# Canon continues to explore new business fields and pursue innovation in manufacturing
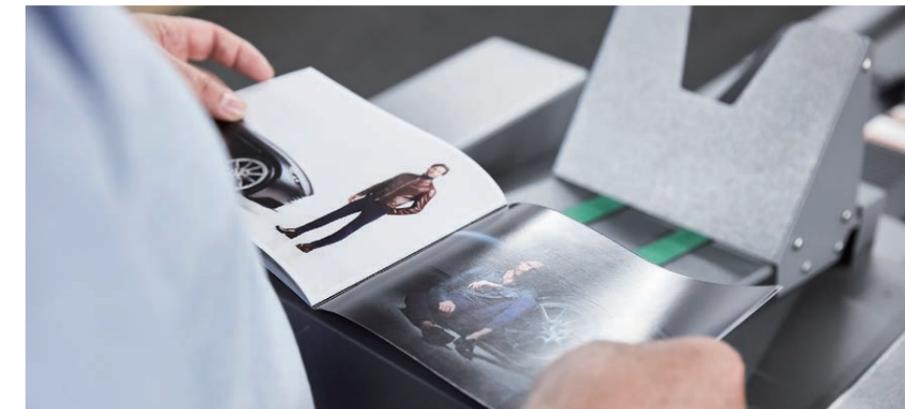

Graphic arts printing of a sales promotion catalog

## As "One Canon," we are expanding into new fields of commercial printing

Starting out in the industry as a maker of innovative office and home use printers, Canon has expanded into the field of commercial printing, and is now a leading brand in high-image-quality color printing, output services for businesses and in-house on-demand printing. Indeed, our collaboration with Océ has enabled us to expand into various fields of commercial printing. As "One Canon," we continue to provide high-quality products and services while creating new synergies for growth. For instance, making Océ's PRISMAsync print controller available for Canon printing systems realizes enhanced operability, which in turn

enables balanced workloads through seamless schedule management of multiple presses and more efficient allocation of printing jobs. This combination of Canon and Océ technology has earned significant praise from the industry for its effectiveness in streamlining workflows and boosting productivity.

## Expanding in the graphic arts market with high image quality and productivity

In the graphic arts (GA) market, once dominated by offset printing, such items as catalogs demand high image quality. Aiming for this growing market, Océ launched the continuous feed printer Océ ProStream 1000 in February


The next-generation Océ ProStream 1000 digital printing press

2017. This digital system attracted global attention for providing the same high level of image quality and productivity as offset printing. In addition to its impressive functionality and productivity, the ProStream 1000 also received a prestigious design award. Expectations are high that Océ's new flagship model will challenge offset printing in the competitive GA market.

## With an eye on new growth markets, we see a bright future

With products ranging from small printers to large commercial-use printers, Canon, in collaboration with Océ, aims to become the world's No. 1 printing company. Digital printing is expected to encompass various fields from IT to pharmacy, including industrial printing, which involves such non-paper materials as resin and cloth. With an eye on new markets, Canon will continue to pursue innovation in the manufacturing process and the development of advanced digital printing technologies.

### New Customer Experience Center for commercial printing

In April 2017, Canon opened the Customer Experience Center Tokyo (CEC Tokyo) at our Shimomaruko headquarters. This facility allows commercial printing businesses to experience Canon's leading digital printing solutions. In addition to equipment demonstrations and media and data inspections based on individual customer needs, we offer training for staff who will operate our systems. In the future, we aim to create a community in which customers can share their know-how and experiences with each other, and grow as a community.


Opening of CEC Tokyo in April 2017

# Industry

Canon supports the growth of manufacturing and industry by applying the proprietary optical and image processing technologies that we have developed over many years to the creation of industrial equipment. From commercial–use printers to OLED panel manufacturing equipment, Canon continues to pioneer next-generation technologies that meet the needs of a wide range of industries.

## Commercial-use Printers

The printing industry continues to evolve towards digitalization, and Canon is there to support it with commercial-use printers that provide quick turnaround of small-lot print jobs. High print quality and high productivity are imperative in the commercial printing business. In addition to ensuring reliability and quality, Canon offers workflow software that optimizes printing from the receipt of orders to post-production. Through our collaboration with Océ, we offer a comprehensive lineup of commercial-use printers. Meanwhile, we are also developing new technologies that explore possibilities in the fast-growing field of package printing.

## Network Cameras

The network camera industry has grown rapidly as a result of rising security concerns worldwide. Network cameras are also being used for the monitoring of sports and other events, at manufacturing sites, and by marketing companies that accumulate information for innovative solutions based on big data analysis. Canon's leading-edge network cameras combine advanced imaging technologies cultivated through our renowned optical equipment with the network video processing technologies of Axis and the video management software of Milestone Systems. This enables us to provide just the right solutions to meet our customers' needs.

## 3-D Machine Vision Systems

Capable of high-speed, three-dimensional recognition of the position and orientation of objects, Canon 3-D machine vision systems serve as the "eyes" of robots. Until recently, picking through piles of randomly arranged parts required a human eye. Now, this work can be automated by integrating a Canon 3-D machine vision system with a robotic arm. Our systems increase manufacturing productivity in such industries handling small parts as electronics, automotive, resin and chemicals. As we pursue solutions on the front lines of manufacturing, expectations are high for the application of 3-D machine vision systems in assembly processes and for automated defect inspections.

## Semiconductor Lithography Equipment

Semiconductor chips are now used in everything from computers and smartphones to televisions, household appliances, automobiles and even railroad systems. Chip performance has been dramatically improved by technology that enables the miniaturization of semiconductor circuit patterns. Canon develops and manufactures state-of-the-art semiconductor lithography equipment for imprinting circuit patterns, achieving gains in miniaturization and raising productivity. Currently we are undertaking R&D on next-generation semiconductor manufacturing equipment for nanoimprint lithography technology, which will enable further miniaturization and cost reductions.

## Commercial Photo Printers

Retail photo businesses receive orders from customers in-store and online for such services as printing and photo album creation, making it easy to enjoy printing and organizing photos. Canon develops commercial photo printer systems designed to assist businesses in the retail photo industry. Thanks to technologies born from our expertise in inkjet printers and multifunction devices, such as high-density print head technology, our printers realize superior image quality and high productivity. Producing the same beautiful colors one would expect from silver halide images and clear, high-definition text, Canon commercial photo printers earn high acclaim from printing professionals.

## Organic LED Panel Manufacturing Equipment

With advantages such as thinness, light weight and low power consumption, Organic LED (OLED) is fast becoming the next-generation choice for smartphones, televisions and other digital devices. OLED panel production requires advanced manufacturing equipment, including vacuum evaporation equipment for depositing organic material onto panel substrates and automated supply lines for glass substrates. Canon Tokki has unrivaled technology for both. In addition to boosting production capacity to match growth in the global market, Canon Tokki is strengthening its product capabilities for manufacturing larger and higher-resolution panels.

# Office

Canon supports business environments by providing devices with high-image-quality output to meet office needs and a wide range of solutions software to make work easier and more efficient. Delivering outstanding cost performance, environmentally friendly operation and such advanced networking features as smartphone and tablet connectivity, Canon products bring added value to offices large and small.

## Office Multifunction Devices

Copying, printing, scanning, faxing—a single Canon office multifunction device can handle all document management work. In addition to speed, ease of use and easy maintenance, our systems optimize workflow through total network connectivity. Comprehensive information security features, including protection from unauthorized access of a company's network and safeguards against information leakage, provide peace of mind in environments where users handle confidential information. Canon office multifunction devices feature space-saving designs, low energy consumption and quiet operation, helping offices run more smoothly.

## Laser Printers/ Laser Multifunction Printers

Canon's smart and compact laser multifunction printers meet the rising demand for space-saving printing solutions. A popular choice at offices, schools, restaurants and other businesses, these devices offer improvements in such basic functionality as image quality, speed and ease of use, while also providing advanced features, including direct printing and scanning from smartphones and tablets. What's more, Canon's on-demand fixing technology enables quick recovery from energy saving mode, realizing reduced power consumption. Since 1990, Canon has undertaken numerous initiatives to lower the environmental impact of our products, including the recycling of used toner cartridges.

## Multimedia Projectors

Thanks to improvements in image quality and resolution, multimedia projectors are more widely used than ever before. Building on proprietary optical technologies, Canon has developed a compact, lightweight 4K projector offering unparalleled ultra-high resolution. Our wide lineup includes projectors with interchangeable lenses that can be used in various environments and short-throw models that project large and bright distortion-free images, even in small rooms. Today, businesses are devising cutting-edge applications for our multimedia projectors including digital signage, projection mapping and driving simulators.

## Large Format Inkjet Printers

Canon large format inkjet printers serve a wide range of printing needs, from CAD applications to posters, proofs and photographs. Featuring ultra-high-density nozzle print heads, our printers achieve both high-speed printing and exceptional print quality, producing sharp lines and text, vivid colors and smooth gradation. Many models feature hot-swap ink tanks, which enhance productivity by enabling the exchange of ink tanks during a print job if a device runs out of ink. What's more, our large format inkjet printers come standard equipped with Canon software for print cost management, which contributes to improved business efficiency, operational speed and cost reduction.

## Business Inkjet Printers

Capable of copying, printing, scanning and faxing, Canon's compact, feature-rich business inkjet printers support a wide range of SOHO needs. The simple designs of our printers blend beautifully with store and office interiors. At the same time, they deliver serious performance that enhances the quality of business materials thanks to high-speed output and pigment inks that produce vivid photos, sharp graphs and clear documents. Our large-capacity ink tanks not only lower running costs, but also raise work efficiency thanks to less frequent replacement. By reducing power consumption during standby, Canon business inkjet printers even help lower electricity costs.

## Calculators

In 1964, Canon introduced the world's first 10-key electronic calculator. This began a tradition of technological innovation that continues today at Canon Electronic Business Machines (H.K.), which develops, manufactures and markets such personal information products as calculators and electronic dictionaries. The extensive lineup includes printing calculators, high-performance business calculators with intuitive designs and large displays, antibacterial calculators for use in medical facilities and restaurants, desktop calculators with one-touch cost-sell-margin calculation functions and scientific calculators that display and perform fraction and function calculations.

# Professional

Professionals in the fields of imaging place their trust in products not only for the quality of performance and ease of operation they deliver, but also for their reliability under demanding work conditions. Canon's innovative imaging technologies, which we develop through continuous R&D, incorporate feedback from exacting professionals in a wide range of fields, including movie production, photography, graphic design and healthcare.

## Digital Cinema Cameras

For a wide range of professional film makers, involved in everything from major Hollywood productions to independent short films, Canon's Cinema EOS System has a sterling reputation. Since their introduction in 2011, our cinema cameras have breathed new life into the film industry by providing the flexibility of a compact design and outstanding image quality. Today, the pairing of our digital cinema cameras and exclusive EF cinema lenses enables ultra-high-resolution 4K recording. To maximize performance, Canon remains committed to in-house production of our core technologies, including CMOS sensors, image processors and lenses.

## Professional Digital SLR Cameras

In 2017, the Canon EOS series of DSLR cameras—whose name was inspired by the Greek goddess of the dawn—celebrates its 30th anniversary. The EOS system enjoys the overwhelming support of professional photographers, especially in the fields of sports and journalism. Featuring Canon's proprietary large-format CMOS sensors and DIGIC image processors, our DSLR cameras offer an outstanding balance of speed, ease of use and image quality, and continue to evolve with advanced new video features. Equipped with such industry-leading, innovative technologies as Ultrasonic Motors (USM) and Image Stabilization (IS), our diverse EF lens lineup offers unrivalled performance.

## Broadcast Equipment

Canon broadcast lenses are renowned for their outstanding optical performance and exceptional reliability. Their compact and lightweight designs ensure easy mobility and operability, making our lenses a leading choice for news reporting, television program production and sports broadcasting around the world. Features such as our Optical Shift Image Stabilizer ensure smooth framing and high-precision lens operation. As the world's broadcasting formats move from full HD to 4K and beyond, Canon's broadcasting lenses are keeping pace and continue to evolve with sights set on 8K.

## Professional Displays

Fine-tuning colors and tones to achieve a desired appearance is an essential process for professional video production. Canon's reference displays, which achieve faithful color reproduction demanded by professionals, support video confirmation to make possible high-image-quality output in a wide range of 4K and HDR video production situations, from on-location shooting to use in broadcasting vans and studios. Canon's professional 4K displays are the result of pushing our R&D prowess to the limit for video, from input to output.

## Professional Photo Inkjet Printers

Canon professional inkjet printers deliver accurate color reproduction as well as stunningly rich black tones and smooth gradation in dark shadows. The high-quality output meets the strict demands of professional photographers and graphic designers. Canon's latest advances in core technologies, including print heads and inks, raise the bar in productivity and color reproduction consistency. Our large range of professional inkjet printers gives customers a choice of ink systems—from eight color dye inks to twelve color pigment inks—and paper sizes from A3 to 60 inches. Additionally, printing is now possible on a wide selection of paper types.

## Digital Radiography

Digital radiography allows radiographers to confirm captured images instantly on a monitor. Compared to conventional film X-ray systems, patient exposure to radiation is dramatically reduced. This contribution to comfort and safety makes digital radiography the preferred method for many types of medical imaging. Canon introduced the world's first digital radiography system in 1998 and continues to lead the field with a lineup that extends from lightweight portable wireless models to fluoroscopy-compatible models. High-value-added upright and supine imaging functions meet a wide range of needs from treatment at disaster sites and remote locations to medical care at home.

# Home

A magical unexpected encounter.
A lifetime of family memories.
Everyday experiences and emotions become irreplaceable treasures.
Canon offers an extensive lineup of imaging products that allow anyone to easily record, print and preserve their most precious moments in life.
Canon's ever-evolving imaging technology brings color to daily life and brings people closer together.

## Interchangeable Lens Digital Cameras

Our enduring policy of making the best possible cameras with our own hands is the foundation of the Canon EOS series of interchangeable lens digital cameras. We continue to pursue such ideals as the ability to shoot exactly how you want to, when you want to, and the power to express your vision all the more beautifully. Our extensive range of lenses provides unlimited possibilities for capturing different scenes and subjects, while providing ease of use that allows beginners to enjoy photography like professionals. With our latest lineup of mirrorless cameras, Canon is bringing advanced photographic experiences to photo lovers everywhere.

## Digital Compact Cameras

To answer the call for cameras that are ideal for grab-and-go shooting, yet still provide the power to capture beautiful photos, Canon continues to develop digital compact cameras with high image quality and a wealth of features. With high-sensitivity large-size sensors, our cameras can produce beautiful blurs, delicate gradations and other expressive tones. And we continue to introduce touch panel improvements that enhance intuitive operation. Compact and lightweight, our cameras are loaded with such features as powerful zoom capabilities and high-precision image stabilization. Our latest connectivity functions allow users to easily upload photos to social media.

## Compact Photo Printers

Canon's Selphy compact photo printer allows users to quickly and easily print photos directly from a camera or smartphone via Wi-Fi. The superb-quality prints preserve memories on paper specially coated to protect against water and dirt. Printing can also be done directly from memory cards and USB flash drives. The Selphy is compact and portable and, using a battery pack, even makes printing outdoors possible. Photos can be output in various sizes, including as postcards and business cards or as stickers, which can be used to decorate notebooks and diaries or be given as presents to share the joy of photos.

## Inkjet Printers

Canon's inkjet technology is constantly evolving. Our pursuit of ever more stunning and vivid photos and sharper text never ends, and we will not compromise in our commitment to make printing easier. Users can easily connect their smartphones and tablets to wirelessly print directly from their device without the use of a computer, even from a distance, for more convenient printing. The space-saving designs of our printers are stylish and blend beautifully with contemporary décor. Large touch screens enhance ease of use and large-capacity ink tanks contribute to low running costs.

## Connect Station

The Canon Connect Station is a hub for keeping, organizing and sharing photos and videos that families can use to manage their precious memories in one place. SD/CF cards, USB and dedicated smartphone and tablet applications are some of the easy ways that users can upload their photos and videos. What's more, NFC-equipped cameras and camcorders can upload files simply by tapping them against the Connect Station. With the Connect Station, users can enjoy their photos and video on their TVs, share them with friends through social media and directly print photos via Wi-Fi without the use of a computer.

## Binoculars

A conventional problem with binoculars is that when magnification is increased, the effects of hand shake also increase and the sharpness of the image decreases. Canon's proprietary optical Image Stabilizer (IS) resolves these issues. One-touch IS technology compensates for binocular shake, bringing clarity to such scenes as wild birds in the distance. Canon binoculars are compact, lightweight and highly durable. Designed for rugged outdoor use, they feature a shock-resistant body and an ergonomic grip design that contributes to keeping a steady hand.

Canon and Océ's extensive lineup of printing equipment was displayed at drupa 2016



Canon was a main sponsor of the 2016 Albuquerque International Balloon Fiesta

# Europe

## New customer-centric marketing initiatives are leading to B2B growth and further development in emerging markets

Canon Europe, the strategic headquarters for Europe, the Middle East and Africa (EMEA), is focusing on customer-centric marketing activities and organizational transformation. In 2016, the headquarters made strategic investments across EMEA to strengthen sales channels and enhance its solutions portfolio. Establishing showrooms in Morocco and Qatar and an office in Nigeria helped Canon expand into emerging markets. Canon also participated in the international drupa printing expo and Photokina photo and video trade fair, where our messages successfully reached key target groups. In 2017, Canon Europe will continue striving to transform its business, particularly in B2B fields, and has launched a new campaign platform called "Live for the Story" for its consumer-focused business, which celebrates the value of capturing, saving and sharing moments, both big and small.

# Americas

## Powering the growth of the Canon Group by pioneering new healthcare-centered businesses and strengthening sales structures

Canon U.S.A. oversees operations in North, Central and South America. This headquarters continues to strengthen the sales and services infrastructure of existing businesses while expanding into related business fields. With a commitment towards expanding growth in the South American market, Canon showcased its comprehensive support and technological capabilities in connection with the world's largest sports event, held last year in Brazil. Canon U.S.A., with a focus on healthcare, continues to pursue the development of new businesses. One such example is Canon's DNA testing systems business. Just one year after establishing Canon BioMedical in 2015, Canon U.S.A. continued its pursuit of new growth through such activities as investing in T2 Biosystems, Inc. Through efforts like these, Canon aims to strengthen its brand across the Americas.

Canon's Photokina 2016 booth featured online photo storage and photo book services; cameras and lenses



Unveiling of the Océ ProStream 1000, which realizes high image quality on various paper types



The newly opened showroom in Morocco helps expand Canon's African market presence



By lending cameras and maintenance assistance, Canon supports professional photographers at sporting events
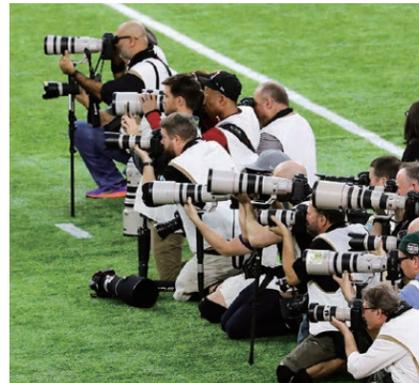


Canon expands its products' market presence with a new showroom installed by its Caribbean islands dealership



Canon BioMedical collaborates with U.S. medical institutions on cutting-edge healthcare R&D

At Canon EXPO Shanghai, new technologies were displayed alongside popular products and solutions

CEC Tokyo supports the implementation of digital production printing systems

# Asia & Oceania

## Restructuring sales operations in Asia for greater management efficiency and stronger growth while promoting photography and expanding B2B operations

The Canon Asia Marketing Group (CAMG) oversees operations in China, South Korea, South Asia and Southeast Asia. In addition to customer acquisition and pursuing regional market development, CAMG focuses on cultivating new businesses in such areas as commercial printing, network cameras and healthcare. The Group is also responsible for promoting the Canon brand image in Asia. In 2017, sales operations for Asia, excluding mainland China and South Korea, were consolidated in a centralized headquarters in Singapore to optimize management efficiency and stimulate new growth. Meanwhile, active M&A efforts in Australia have led to partnerships with companies specializing in IT solutions and BPO business, which are in turn facilitating the growth of Canon's B2B operations in the region.
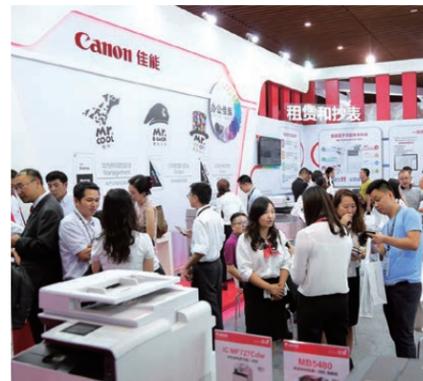
# Japan

## New beginnings for Canon powered by advanced Imaging and IT solutions that contribute to resolving social issues

Canon Marketing Japan Group is responsible for the brand's marketing activities in Japan. Beginning in 2016, Phase III of the Group's Long Term Management Objectives calls for providing solutions by combining Canon's strengths in imaging technology and IT. To do so, the company leverages the collective strength of the Canon Group. In 2017, Canon Marketing Japan Group will continue to pursue office document solutions, while also focusing on IT solutions to strengthen such high-growth businesses as network cameras, commercial printing, security and healthcare. Under the action guideline "The customer is our priority," Canon Marketing Japan Group is developing a new organizational structure that will better enable it to match services to customers' business types, better understand customer needs and enable the Group to grow together with customers.


Canon's unique Photomarathon photography contest spans the Asia region


The renewal of Canon's Hong Kong showroom has strengthened our connection with customers


Canon's first appearance at an office equipment industry exhibition in Guangzhou, China


Wide-ranging solutions offered with Canon network cameras enhance everyday safety and security


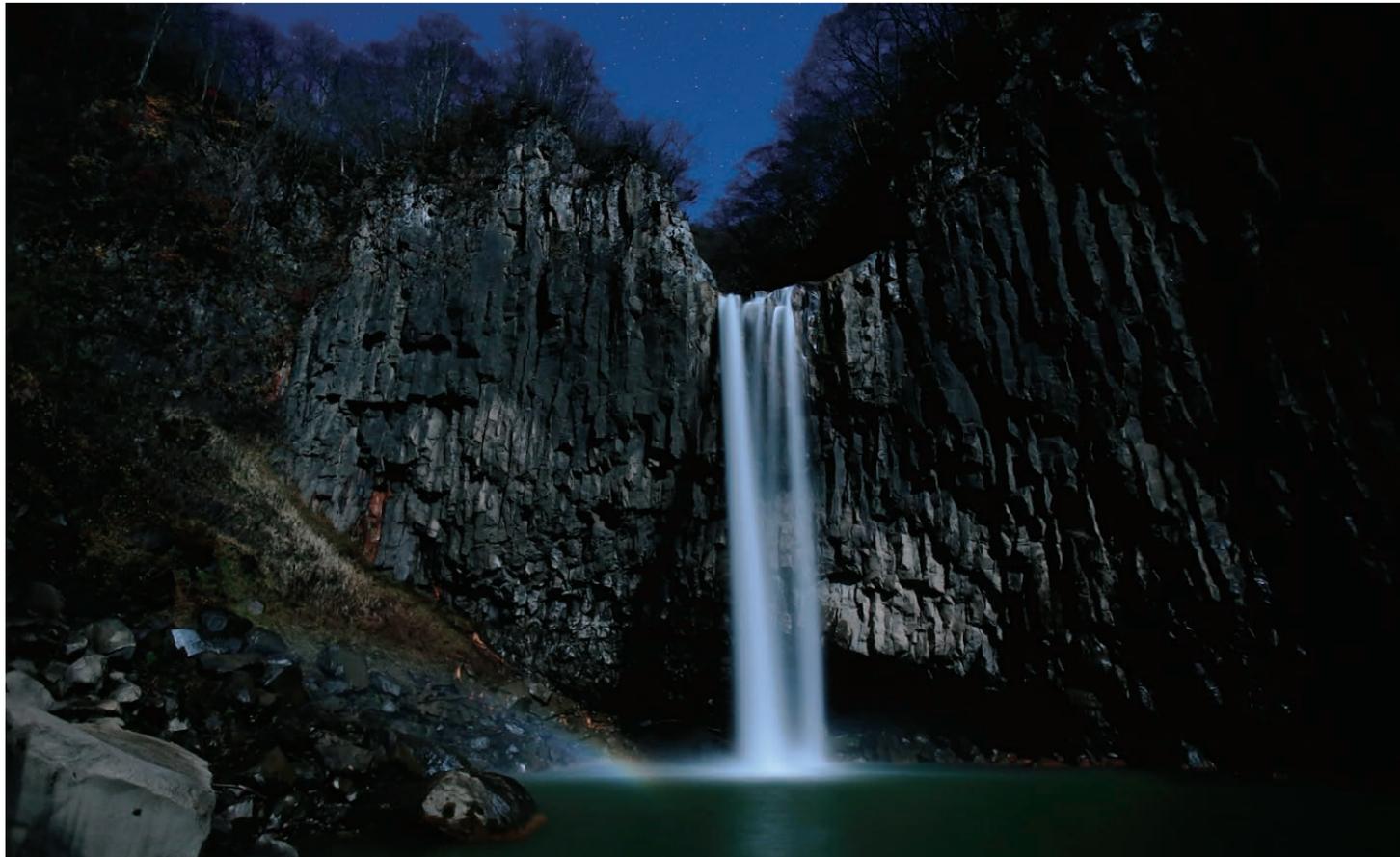Solutions backed by Canon's imaging technology support the work of various professionals


Cutting-edge IT solutions for healthcare provide added value to benefit hospitals and clinics
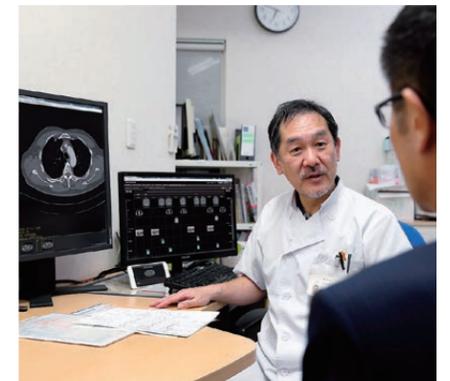
# Research & Development

Over the course of Canon's 80-year history, "prioritizing technology" has been at the heart of our corporate DNA. Today, Canon R&D continues to bring innovation to optical technology while pursuing new initiatives in healthcare, industry, and other fields. Through strong ties with leading universities and research institutes worldwide, we also pursue open innovation, which is leading to creative new applications for our proprietary core technologies and new solutions to enrich people's lives.
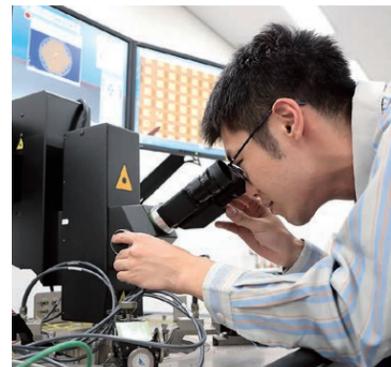


## CMOS Sensors

Canon develops CMOS sensors, a key device in DSLR cameras, pursuing higher levels of sensitivity and resolution. Based on proprietary technologies, we conduct everything from development to manufacturing in-house, amassing the expertise that keeps us on the leading edge. Canon's high-sensitivity CMOS sensors enable the shooting of clear color video in extreme low-light conditions. A moonlit scene, for instance, can appear as vivid as one shot in broad daylight. A Canon CMOS sensor has even captured a moonbow, a rarely seen natural phenomenon. Today, we are pursuing applications for security, dashboard cameras, healthcare and space observation.



Ultra-high-sensitivity CMOS sensor
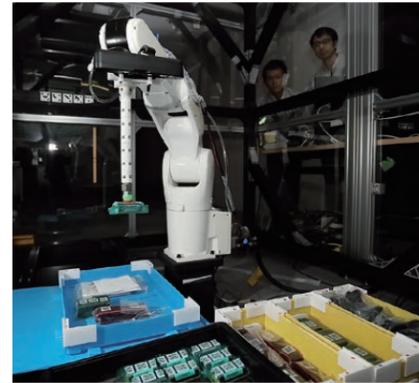(35 mm full-size)

Scan to see the video

Canon's leading-edge CMOS sensor development

## Technologies for Intelligent Robots



At the cutting edge of digital imaging, Canon is bringing together AI technology with 3-D measurement and object recognition technologies. Using Machine Vision, which recognizes the position and shape of objects, together with AI technology capable of self-learning and decision making, Canon is devising practical applications for intelligent robots, including applications for the automation of manufacturing assembly processes. Looking ahead, we are pursuing applications in such business domains as healthcare and safety and security.

## Nanoimprint Lithography



Unlike conventional lithography technology that uses light to expose circuit patterns, nanoimprint lithography fabricates nanometer-scale patterns by transferring the nano-pattern mask (mold) onto the coated resin on the wafer surface to form circuits. Nanoimprint lithography does not require special light sources or high-precision lenses, allowing it to produce minute circuit patterns at a reduced cost. Canon is pioneering next-generation semiconductor manufacturing technology to further advance the miniaturization of semiconductor chips.

## Diagnostic Imaging Support



Canon's research into image processing and AI technologies is improving diagnostic accuracy in the medical field. Our technologies, for example, enable computers to analyze CT scans, compare anomalies to historical cases and assess the probability of diseases. This wealth of information available to physicians should lead to higher diagnostic accuracy.

The medical image in the above photo is from the LIDC/IDRI database, which the National Cancer Institute and the Foundation for the National Institutes of Health (U.S.) have made public.

## Usability Design



Based on the concept of universal design, Canon takes the needs of the user into account during the design process to create accessible products equipped with the latest technologies. For example, we include a wide range of criteria — including subjective evaluation, observation and measurement data — in the design process to ensure that the visually impaired can easily operate our products. We also examine our customers' daily lifestyles to discover design solutions that will make our products even more appealing and enjoyable to use.

## Photoacoustic Tomography



Photoacoustic tomography enables physicians to "see" blood vessels without the use of X-rays or contrast agents. By exposing tissue to a pulse laser, the hemoglobin in the blood emits ultrasonic waves, which are reconstructed into 3-D images that show blood vessels. This makes possible the visualization of new blood vessels caused by cancer cells, which may contribute to early detection of cancer. Our research is a part of the Impulsing Paradigm Change through Disruptive Technologies (ImPACT) Program organized by the Cabinet Office of Japan.

### Our Microsatellite Challenge

Canon Electronics has undertaken the challenge of developing microsatellites as a new business. Using optical technologies originally developed for cameras and printers as well as ultra-precision processing technologies, we are targeting the development of a system that will be more efficient and less expensive to manufacture than today's large satellites. The greater promise is that images captured by these microsatellites will provide valuable information for agriculture and disaster response. Seeing amazing new potential for Canon technology, our dreams are growing beyond the stratosphere.
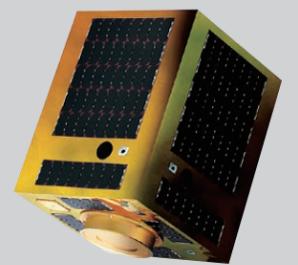
# Manufacturing & Quality

Canon is committed to globally optimized production and proprietary manufacturing processes. We are continuously striving to raise quality and reduce costs through the evolution of our manufacturing capabilities. Today, with our latest manufacturing technologies and IT, we are also focusing on eliminating waste. Canon pursues "quality first" to be a brand that is trusted in all aspects of development, procurement, sales, service and support.
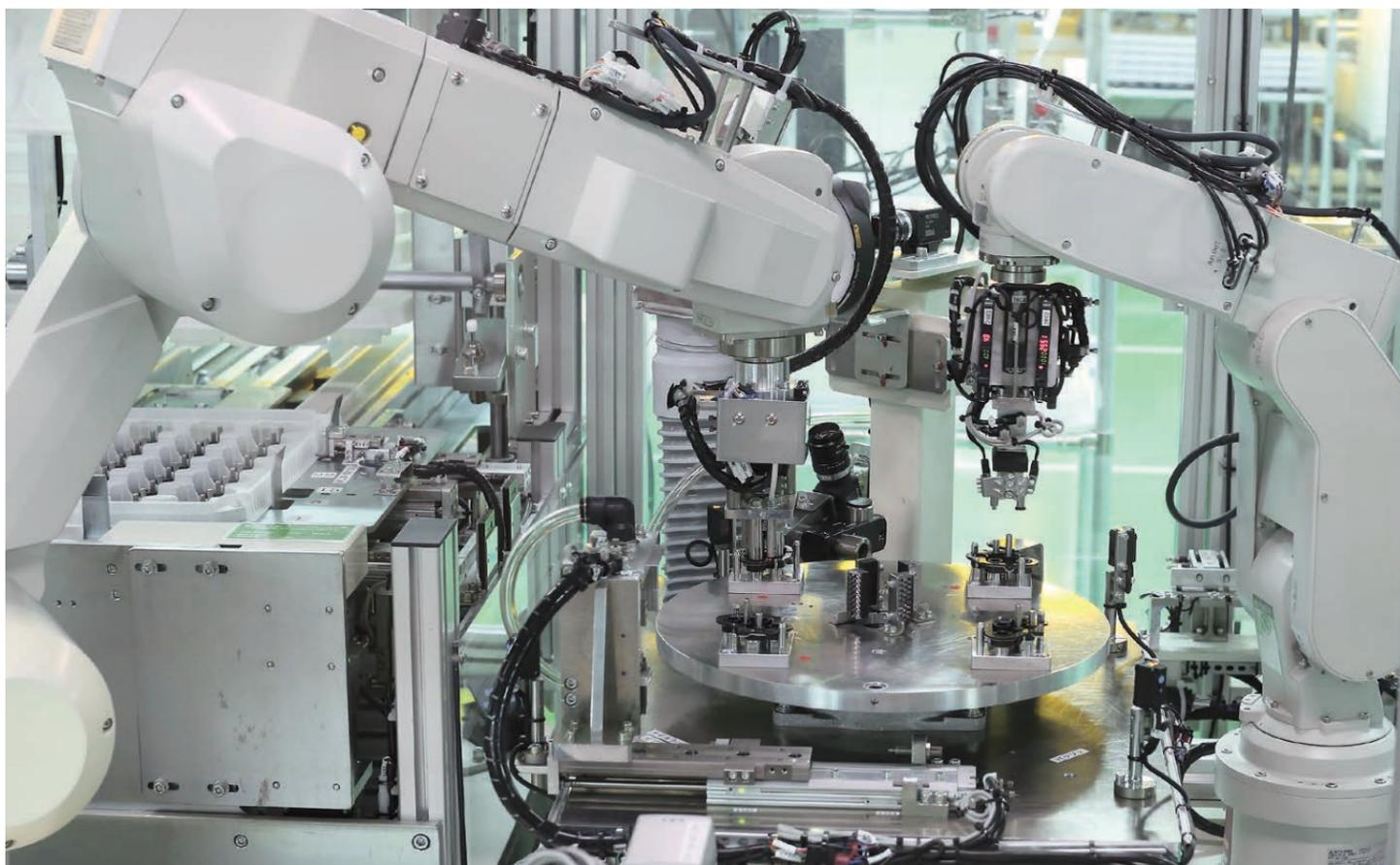


## Automation and In-house Production

Canon produces such key devices and components as CMOS sensors in-house. We also conduct in-house production of manufacturing systems— such as automated assembly machines and processing machines—and the molds that enable us to produce original products. To produce high-quality products at efficient costs, we align key aspects of product development and manufacturing technologies, enabling us to maintain highly reliable automated production lines that can operate 24/7, all year long. Previously, we introduced fully automated production for toner cartridges. Now, we are undertaking full automation for the manufacturing of our cameras, too.
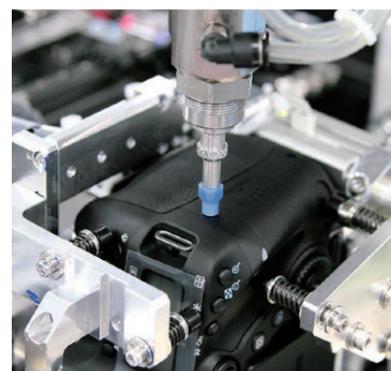


Automated technology for camera production

## Globally Optimized Production



Canon has established a globally optimized production system in which we determine production locations based on a comprehensive examination of costs, taxes, logistics, procurement, labor and other factors. In Japan, we are increasing production through automation. In the United States and Europe, we are accelerating the localized production of consumables. And in emerging markets, we are boosting productivity by honing our employees' skills. We aim to maximize the strengths of each region to produce high-quality products.

## Meister/Master Craftsmen



To advance our manufacturing structure, Canon honors our most skilled technicians. At our factories worldwide, we recognize employees who have contributed to Canon production through their skills and knowledge of assembly and component processing. These employees are awarded the title Meister. Employees who display transcendent skills earn the title Master Craftsman. These technicians are the vanguard of Canon's superior manufacturing and play the important role of passing on their skills to the next generation.

## Advanced Manufacturing Technology



Advanced manufacturing technology is essential to the creation of Canon's original products for markets worldwide. For our business, manufacturing technology has become as important as product development. To strengthen our manufacturing technology, we are developing more advanced and efficient production systems—such as automated assembly and high-precision processing machines—and new molds. With our in-house production of manufacturing systems and molds, we continuously strive to improve quality and reliability.

## Human Resources for Manufacturing



Canon conducts human resource training to nurture the skills of employees at our production sites worldwide. Our programs teach manufacturing techniques and craftsmanship— including hands-on practice—and educate employees with leadership potential in Canon management methods. To hone the technical skills of our employees in Japan, we participate in Japan's National Skills Competition. The spirit of challenge that we cultivate through such activities can be found at Canon manufacturing sites around the world.

## Canon Quality



Canon conducts stringent testing to ensure that our products are safe and can be enjoyed with peace of mind. Our Tamagawa Office, our hub for quality control, has one of the largest and most advanced semi-anechoic chambers in Japan, enabling us to conduct in-house testing on large products. Our testing facilities are officially certified for noise, fire resistance and electromagnetic radiation testing. Based on our policy of pursuing "no claims, no trouble" products, we strive to maintain customer trust by delivering "Canon Quality."

## Fully Automated Manufacturing

In 2016, we established the Techno Wing R&D facility at Oita Canon to introduce fully automated manufacturing for digital cameras. This facility is the new hub of Canon R&D, pursuing superior manufacturing and product technologies. We are in the process of applying this full-automation technology at other Canon digital camera production sites and have an eye toward adapting it for printer manufacturing. Our aim is to establish a highly efficient manufacturing system.

# Environment

Canon contributes to resolving environmental issues facing humankind today. Based on the Canon Group Environmental Charter, we strive to realize a society that supports both enriched lifestyles and the global environment. Our Mid-Term Environmental Goals are designed to uphold Action for Green, our environmental vision. With every high-performance, user-friendly product we create, Canon methodically addresses the need to reduce the environmental burden throughout the entire product lifecycle.

## ACTION for GREEN

### What is Action for Green?

Aspiring to a rich future for people and the earth, Canon's Action for Green environmental vision aims to achieve highly functional products with minimal environmental burden.

## Toner Cartridge Recycling

In 1990, Canon initiated the Toner Cartridge Recycling Program to reduce waste and ensure efficient use of resources. Today, this program, which involves collecting and recycling used toner cartridges from multifunction devices and laser printers, comprises activities in 21 countries and regions worldwide. Canon considers how a product will be recycled from the design stage, enabling us to give materials a second life in new versions of the product. Our latest automated closed-loop recycling system even addresses plastics, which are notoriously difficult to recycle due to degradation, and ensures a high level of purity, even after the recycling process.

Toner cartridges are designed for recycling

## Contributing to a Low-carbon Society

Canon's energy-saving technologies, such as induction heating and on-demand fixing for multifunction devices and laser printers, contribute to lower energy consumption in offices. From the development and design stages, we strive to reduce the environmental burden of our products by calculating $CO_2$ emissions and making improvements to realize a low-carbon society. We consider every stage of the product lifecycle, from material procurement to recycling, to reduce $CO_2$ emissions and tackle global climate change.

## Reducing Hazardous Substances and Preventing Pollution

In response to concerns about the release of chemical substances into the air, water and soil, Canon adopts measures to manage the chemical substances used in our products and production processes while curbing emissions. By reusing the chemical substances employed in lens-cleaning processes, we have reduced the amount of substances used as well as emissions generated. Our efforts also include improvements in coating and assembly processes which reduce the amount of paint, grease and chemicals used.

## Contributing to a Circular Economy

To ensure efficient resource use and reduce waste, Canon strives for maximum resource efficiency—greater value with fewer resources. At the product development stage, we prioritize compactness and light weight to conserve resources, all while ensuring recyclability. In addition to our collection and recycling programs for toner cartridges and ink cartridges, we produce remanufactured office multifunction devices containing recycled parts while maintaining the same quality standards as brand new products.

## Bird Branch Project

In 2015, Canon launched the Bird Branch Project to spread environmental awareness. Using birds to symbolize the cycle of life, this project promotes ecosystem conservation activities, such as bird watching, a monthly route census of wildfowl on the grounds of the Canon Global Headquarters in Tokyo and other events focused on ecosystem observation. Based on these activities, we are creating a model to introduce this project at all Canon Group companies.

## High Marks for Environmental Activities

Government agencies and environmental groups around the world have praised Canon's environmental initiatives and activities under our *kyosei* philosophy. We are committed to capitalizing on our greatest strengths—advanced technologies, global development and diverse, knowledgeable employees—to promote the sustainable progress of mankind in coexistence with the environment.

- Canon initiatives to tackle climate change have been recognized by U.K.-based international non-profit organization CDP (formerly the Carbon Disclosure Project), who included the Company on their Climate A List for the first time in 2016.
- Canon U.S.A. received the 2017 ENERGY STAR® Partner of the Year award for the second consecutive year in honor of their contributions toward reducing greenhouse gas emissions and raising awareness of energy conservation through the manufacture of energy-efficient products.

- Canon Europe won the People's Choice Award at The Circulars 2016 in recognition of Canon's Toner Cartridge Recycling Program, which had recently reached its 25th year.

- In 2016, Canon Inc. was declared a five-star green supply chain company by the Chinese Ministry of Environmental Protection's China Environmental United Certification Center.
- Canon Inc. was ranked first among manufacturing companies in the 2017 Nikkei Environmental Management Survey.

# CSR

Under our corporate philosophy of *kyosei*, the Canon Group undertakes a diverse range of activities for the betterment of society. Such activities include support for local communities, social welfare, humanitarian aid and disaster relief, as well as assistance for education and academic research, art, culture and sports. Contributing to societies around the world while enabling people to experience enriched lifestyles—we believe that this is our responsibility as a global corporation.



## Tsuzuri Project

Launched by Canon and Kyoto Culture Association (NPO), the Tsuzuri Project produces high-resolution facsimiles with the goals of preserving precious cultural assets and promoting the public display of the facsimiles. In 2012, we began reproducing the sliding door paintings from the Abbot's Chambers of Tenkyuin Temple. With the completion of the final 22 facsimiles in 2016, the project was successfully concluded and the originals have been safely preserved at the Kyoto National Museum. The facsimiles are now installed in Tenkyuin, which opens to the public in the spring and fall.

Facsimile of *Tigers in Bamboo Grove*

## New Cosmos of Photography



This annual contest, launched in 1991, is designed to discover, nurture, and support young photographers pursuing new realms of photographic expression. Open to the public, it accepts contestants regardless of age or nationality, and any number of works on any theme. The contest encourages contestants to push the boundaries of creativity and assists the development of winners via exhibitions, published collections of winning works, and publicity on the New Cosmos of Photography website.

## Young People Program



As part of a mission to build a sustainable society, Canon Europe actively promotes its Young People Program, which comprises a variety of activities that foster youth creativity and expression. Among such efforts, Canon UK provided organizational support in 2016 for the Creative Media Camp, a program that encourages teenagers to realize their potential by nurturing creativity and inspiring interest in photography, video, graphic arts and other creative fields.
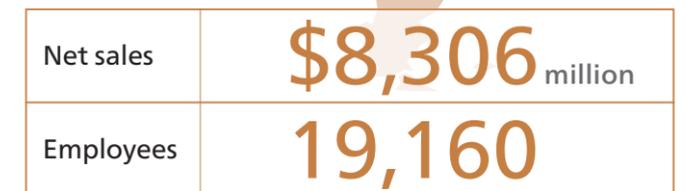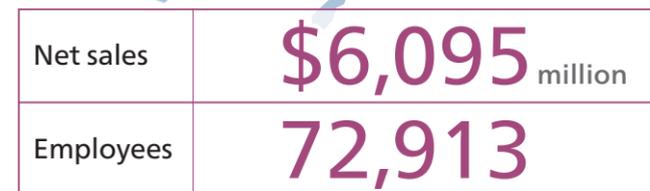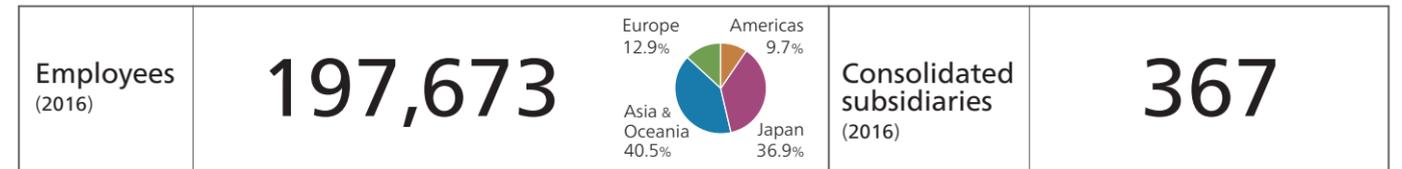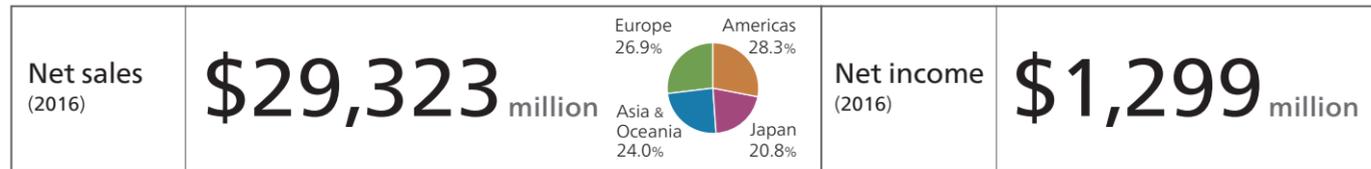
## Silk Road Cultural Heritage Project



Since 2014, Canon China has organized the Exploration of the Silk Road Cultural Heritage Project, an initiative which uses Canon imaging technology to capture, preserve and promote the traditional culture, scenery, architecture and craftwork of the Silk Road. In 2016, Canon China invited photographers to Xinjiang, where they captured images of cultural treasures in their full glory. The closing ceremony was conducted as part of the year's China-Eurasia Expo, helping to strengthen relations between governments.

## NCMEC


©The New York Yankees

Since 1997, Canon U.S.A. has provided support for the National Center for Missing & Exploited Children (NCMEC). The organization's mission is to locate and rescue missing children as soon as possible, while also working to prevent child abduction. Canon U.S.A. has so far donated over 2,500 products, including digital cameras, scanners and photo printers, to police agencies, the FBI and other investigative organizations that work to identify and rescue missing children. In 2016, Canon's donation was presented during an event at Yankee Stadium.

## Friendship School Chain Project



Aiming to improve educational environments in economically disadvantaged areas of Vietnam, this program supports the building and renovation of schools and includes the donation of such materials as desks, chairs, and bookshelves to pupils in need. So far, support has been provided for 55 schools in 22 provinces. In addition, Canon volunteers personally visit these schools to help build desks and renovate schools. By directly supporting schools, Canon staff builds stronger bonds with local communities and with each other.

## Supporting Girls Soccer



As part of our sports promotion efforts, Canon has held the Canon Cup Junior Soccer, a competition for primary school boys and girls in Japan, since 2001. Starting in 2014, we also joined hands with the Japan Football Association to support the development of future women's national team players. Through special corporate sponsorship for U-12 girls-eight tournaments, U-13 girls soccer training camps, and other activities, we are helping to promote girls soccer and the healthy development of children.

| Net sales (2016) | $29,323 million | | Net income (2016) | $1,299 million |
|---|---|---|---|---|

Europe 26.9%
Americas 28.3%
Asia & Oceania 24.0%
Japan 20.8%

| Employees (2016) | 197,673 | | Consolidated subsidiaries (2016) | 367 |
|---|---|---|---|---|

Europe 12.9%
Americas 9.7%
Asia & Oceania 40.5%
Japan 36.9%

Canon Europe

Canon China

Canon Headquarters

Canon Marketing Japan

Canon U.S.A.

Canon Singapore

**Europe***

**Asia & Oceania**

**Japan**

**Americas**

Canon Australia

**Major operational sites**
■ R&D and software
▲ Manufacturing
● Marketing
◆ Other

| Net sales | $7,875 million |
|---|---|
| Employees | 25,511 |

| Net sales | $7,047 million |
|---|---|
| Employees | 80,089 |

| Net sales | $6,095 million |
|---|---|
| Employees | 72,913 |

| Net sales | $8,306 million |
|---|---|
| Employees | 19,160 |

* Canon Europe presides over Europe, the Middle East and Africa.

Note: • Net sales and employee numbers are based on consolidated financial statements for the fiscal year ended December 31, 2016.
• U.S. dollar amounts are translated from yen at the rate of JPY 116 = U.S. $1, the approximate exchange rate on the Tokyo Foreign Exchange Market as of December 30, 2016, solely for the convenience of the reader.

**Top ten U.S. patent holders by company** (2016)

| Rank | Organization | Number of patents |
|---|---|---|
| 1 | IBM | 8,088 |
| 2 | SAMSUNG ELECTRONICS | 5,518 |
| 3 | CANON | 3,665 |
| 4 | QUALCOMM | 2,897 |
| 5 | GOOGLE | 2,835 |

| Rank | Organization | Number of patents |
|---|---|---|
| 6 | INTEL | 2,784 |
| 7 | LG ELECTRONICS | 2,428 |
| 8 | MICROSOFT TECHNOLOGY LICENSING LLC | 2,398 |
| 9 | TSMC | 2,288 |
| 10 | SONY | 2,181 |

• Canon has been ranked No. 1 in Japan for 12 years running. • Figures were based on preliminary data released by IFI CLAIMS Patent Services, a U.S. research company specialized in patent information.
• IBM is an abbreviation for International Business Machines Corporation. • TSMC is an abbreviation for Taiwan Semiconductor Manufacturing Company Limited.
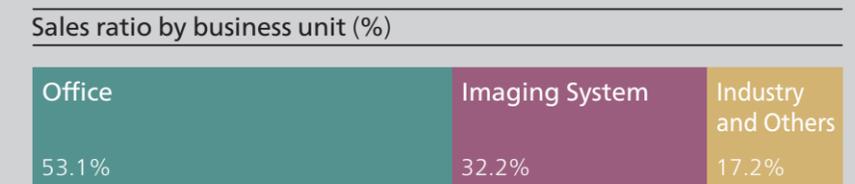
**Global ranking** (2016)

**FORTUNE Global 500***

Fortune July 21, 2016 issue

(Net sales) Global ranking **332** nd (334th in '15)
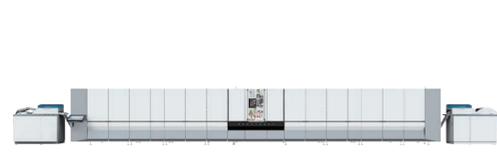
(Net income) Global ranking **236** th (208th in '15)

Evaluation of five performance measures for fiscal 2015, including net sales, net income, and total assets
*FORTUNE Global 500 is a registered trademark of Time Inc. in the United States.

**Business segments**

**Sales ratio by business unit (%)**

| Office | Imaging System | Industry and Others |
|---|---|---|
| 53.1% | 32.2% | 17.2% |

• Sales ratios do not total 100% due to sales between segments of 2.5%.

# Industry

**Continuous Feed Printers for Graphic Arts Market**
Featuring new ColorGrip and pigment-based polymer ink for high-quality printing on a wide range of media, these printers rival offset printing in productivity (max. 80 m/min) and image quality.

**Continuous Feed Printers**
Inkjet continuous feed printers serve diverse high-speed, high-volume printing needs—business statements, invoices, direct mail, books, newspapers and much more. Offers variable-data printing. Minimizes paper waste.

**Commercial-use Cut Sheet Printers (Inkjet)**
Inkjet cut sheet printers are used for small-lot printing of materials ranging from manuals to catalogs that require quick turnaround. Realizes high productivity with enhanced operational efficiency.

**Commercial-use Cut Sheet Printers (Electrophotographic)**
Electrophotographic cut sheet printers provide outstanding image quality, reliability and stability which play an important role in commercial printing. Canon offers various workflow software solutions to meet customer needs.

**Color Large Format Printers**
Proprietary Océ printing technologies produce instant-dry water-resistant prints. With water- and dirt-resistant paper, these large-format printers are ideal for printing color diagrams and posters for outdoor use.

**Commercial Photo Printers**
These photo printers realize color representation rivaling that of silver halide processing, delivering high-speed printing of high-quality photos and detailed text to support value-added output, from photo merchandise to print-on-demand offerings.

**Network Cameras**

**Video Management Software**

**Semiconductor Lithography Equipment**

**FPD (Flat Panel Display) Lithography Equipment**

**Organic LED (OLED) Panel Manufacturing Equipment**

**MRAM Sputtering Equipment**

**Industrial Cameras**

**3-D Machine Vision Systems**

**Die Bonders**

**Color Card Printers**

**MR Systems**

**Components/Measuring Devices**

**Handy Terminals**
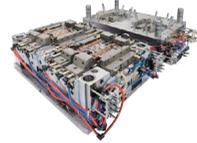
**Injection Molds**

# Office

**Office Multifunction Devices**

**Laser Multifunction Printers**

**Business Inkjet Printers**

**Laser Printers**

**Facsimile Machines**

**Document Scanners**

**Large Format Inkjet Printers**

**Multimedia Projectors**

**Calculators**

**Toner Cartridges**

**Cloud-Based Document Services**

**Solutions Software**

# Professional

**X-ray CT Diagnostic Systems**
These computerized X-ray imaging systems generate cross-sectional images, which are digitally combined to form a three-dimensional image with more information than a conventional X-ray. Used for cerebral aneurysm and cancer diagnostics.

**Diagnostic Ultrasound Systems**
Diagnostic ultrasound is a non-invasive diagnostic technique used to image inside the body. Produces tomographic images and shows blood flow in color. Can be used safely for examining vital organs and baby development.

**X-ray Angiography Systems**
State-of-the-art X-ray systems meet today's cardiology and radiology demands. The ability to produce detailed images in real time has expanded their use to cover a wider range of applications, including guidance for endovascular procedures.

**MRI Systems**
The use of a magnet and electromagnetic waves enables detailed images to be created on the vertical, horizontal, and diagonal planes. From one non-invasive examination, doctors and researchers can get an accurate image of the inside of the body.

**Professional Digital SLR Cameras**

**Professional Digital Video Camcorders**

**Digital Cinema Cameras**

**Broadcast Equipment**

**Multi-Purpose Cameras**

**Professional Photo Inkjet Printers**

**Professional Displays**

**Digital Radiography**

**Ophthalmic Equipment**

# Home

**Digital SLR Cameras**

**Compact System Cameras**

**Interchangeable Lenses**

**Digital Compact Cameras**

**Digital Camcorders**

**Inkjet Printers**

**Compact Photo Printers**

**Image Scanners**

**Connect Station**

**Binoculars**

# Canon