

R&D Activities and Intellectual Property Activities

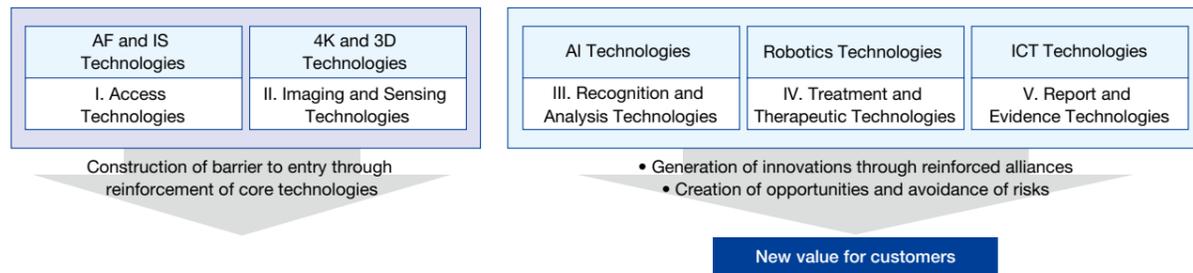
Product innovation at Olympus, and the eventual commercialization of all Olympus products, is rooted in the Company's policy of developing advanced technologies with the next 10 years in mind. New ideas and new technologies from Olympus lead to brighter futures for individuals and society.

R&D Activities

Basic Policy

Olympus provides value in the form of early diagnosis and minimally invasive therapies through the supply of endoscopes, microscopes, digital cameras, and other proprietary developed products. We refer to the differentiated technologies that allow us to create such value for customers as "core technologies," and these core technologies arise from our core competencies in optical technologies, electronic imaging technologies, precision technologies, and biological-based technologies. It is the goal of the R&D Group to support Olympus in creating value that exceeds customer expectations into the future and in constantly providing competitive products and services. We will therefore continue striving to enhance and develop new core technologies.

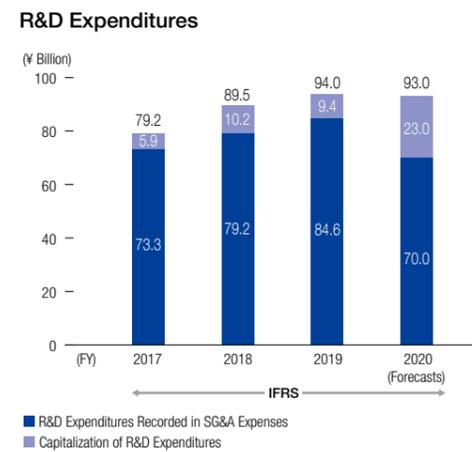
Core Technology Groups Arranged from the Perspective of Workflows to Create Customer Value



Approach toward R&D Expenditures

In order to leap ahead as a truly global medical technology company, it is critical for Olympus to quickly provide competitive products to the market. Shifting from our traditional "all by ourselves" approach to R&D to one focused on alliances and open innovation will enable the active pursuit of initiatives to secure required technologies, in turn resulting in shorter development times and a reduction in overall costs. Further, efforts will be made to optimize R&D expenditures by placing priority on R&D themes based on return on investment (ROI).

Olympus aims to reduce selling, general and administrative (SG&A) expenses in fiscal 2020 to the level of fiscal 2018 and a key point will be improving efficiency in R&D to achieve this. With the adoption of International Financial Reporting Standards (IFRS), capitalization begins during product development, so it is important to appropriately manage these expenditures, which includes product lifecycle management. Under the responsibility of the Chief Technology Officer (CTO), we are monitoring progress in capitalization.



X (cross) INNOVATION Activities

Olympus has announced three futures that it would like to realize led by the Technology Innovation Office, a structure that drafts and executes innovation strategies, based on analyses of the operating environment and risks of the overall medical industry. For example, we will look to reduce the burden on healthcare professionals and support the simplification of processes in the endoscopic examination workflow by utilizing artificial intelligence (AI) and information and communications technology (ICT). We refer to these activities as X (cross) INNOVATION, in which we collaborate with other companies through open innovation that extends beyond our walls. We will challenge initiatives for innovation in step with new technological advancements based on unprecedented new ideas and bold strategies and policies.

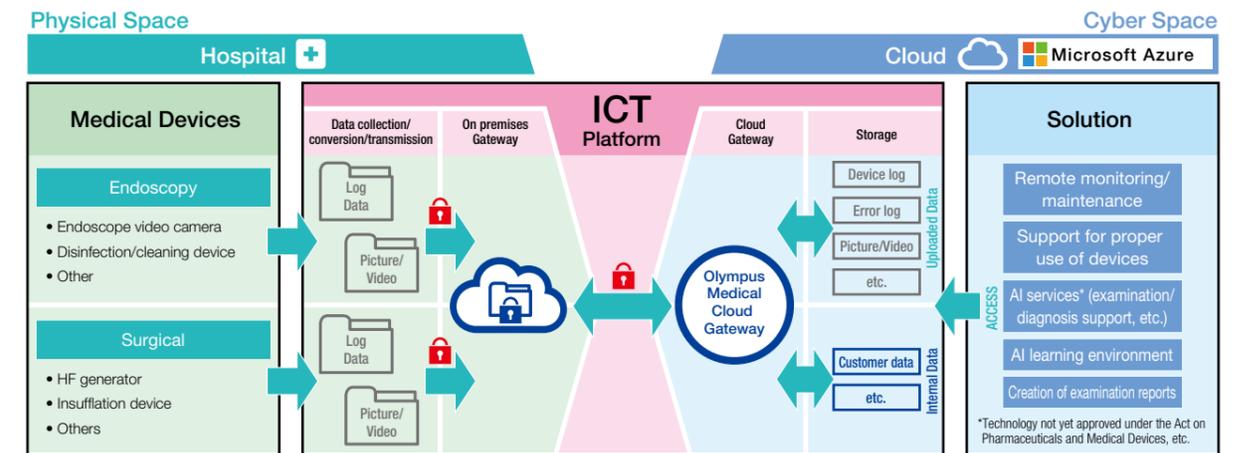
X (cross) INNOVATION
<https://www.olympus-global.com/technology/crossinnovation/>

ICT-AI Platform Technology Strategy

Olympus provides solutions to customers by helping to increase their business efficiency and enhance satisfaction through the use of ICT and AI technology. These solutions are integrated and offered in the form of our ICT-AI Platform.

In hospitals, we plan to offer an environment that enables the collection and utilization of information by linking various devices. Further, by continuing to increase the sophistication of our solutions by leveraging external networks and clouds, such as remote monitoring and maintenance of equipment and advanced analysis of operating conditions, we can improve the operational quality and work efficiency of healthcare providers. In addition to strengthening earnings through the effective utilization of our products, we aim to maximize the advantages that come with the use of these products through solutions that support operations based on AI and other technologies.

ICT-AI Platform Medical



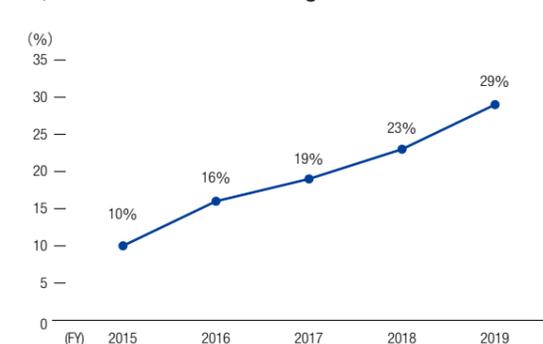
Intellectual Property Activities

Management of Intellectual Properties for Core Technologies

Olympus' core technology management practices are designed to provide balanced support for five technology groups with regard to intellectual properties. In addition to acquiring intellectual property rights for technologies developed by Olympus, we implement other initiatives for creating a more diverse and stronger patent portfolio and ensuring greater freedom in product development, which includes incorporating technologies developed by other companies. Of the five technology groups, we recognize that strengthening technologies related to groups from III to V will be of particular importance to future growth. Accordingly, we are stepping up patent applications in these groups while advancing intellectual property strategies that coincide with the growth of our business.

In recent years, we are moving ahead with the replacement of our patent portfolio with a focus on new patents that will generate synergies when considering the Company's strategies. By sustaining a sound patent portfolio while maintaining upkeep fees for intellectual property rights at an appropriate level, we aim to support innovative R&D activities by Olympus. In addition, we are improving the quality of our patents through careful selection of patent applications and choosing the countries in which to file patents, thereby securing the patents required to drive sustainable development for Olympus.

Ratio of Total Applications Accounted for by Groups III, IV, and V That Must Be Strengthened



Share of Patent Applications by Business Portfolio

