

Overall Activities of DUCR

The University of Tokyo emphasizes “Expanding Cooperation with Society and Taking on New Challenges: From Technology Transfer to Knowledge Co-creation,” one of the priority themes of the “University of Tokyo’s Action Scenario FOREST 2015,” which was put forward by President Junichi Hamada. Therefore, the University of Tokyo aims to step up its efforts to return the results of its research to society through industry-academia partnerships, develop Knowledge Co-creation to link the University’s knowledge to industry’s, and lead the results of such collaboration to innovations.

Its unique management structure is composed of the Division of University Corporate Relations (consisting of the three offices of Collaborative Research Development, Intellectual Property, and Science Entrepreneurship and Enterprise Development); Today TLO, Ltd.; and the University of Tokyo Edge Capital Co., Ltd. Using this structure, it has established a system that enables it to provide integrated support ranging from the creation of collaborative research to the identification, evaluation, management, and utilization of the University’s intellectual property and the startup of businesses and industrialization. Using these, it has carried out a wide range of support activities.

1. Activities of the University Corporate Relations Network, the University of Tokyo

On January 17, 2005, with the cooperation of Nippon Keidanren (Japan Business Federation), the “University of Tokyo established the University Corporate Relations Network” as an interactive platform between industry and the University. Though there were 348 members at first, this had increased to 687 by the end of May 2010.

Major activities of the Network include the Advisory Board Meeting (ABM) and the Annual General Meeting.

ABM, which consists of top management personnel from industry and the University, provides a forum to exchange opinions about not only industry-academia partnerships but also the overall management of the University. The six advisors from industry are Mr. Sadayuki Sakakibara, Chairman of the Board and CEO, and Representative Director of Toray Industries, Inc.; Mr. Junichi Ujiie, Chairman of the Board of Directors of Nomura Holdings, Inc.; Mr. Toru Nishiyama, Senior Technical Advisor of Ajinomoto Co., Inc.; Mr. Kazuo Furukawa, Senior Corporate Advisor of Hitachi, Ltd.; Mr. Kazuo Tsukuda, Chairman of the Board of Directors of Mitsubishi Heavy Industries, Ltd.; and Mr. Mikio Sasaki, Chairman of the Board of Directors of Mitsubishi Corp. Advisors from the University comprise President Junichi Hamada, Managing Directors & Executive Vice Presidents, the Director of University Corporate Relations, and other officers. In its third term this year, the Advisory Board held its first meeting on September 2, 2009 and its second on March 10, 2010. At the second meeting, President Hamada explained the essential points of the “University of Tokyo’s Action Scenario FOREST 2015,” and representatives from industry expressed opinions and made requests about “Expanding cooperation with society and taking on new challenges: From Technology Transfer to Knowledge Co-creation,” “Creating a global campus,” and “Developing truly cultured tough students.” In addition, representatives from the University explained the “activities of the Todai Policy Alternatives Research Institute” and the “Green University of Tokyo Project” and received valuable opinions from the advisors representing industry.



The fourth ABM member (September 2, 2009)

The Annual General Meeting took place at the international conference hall on the second floor of the Keidanren Kaikan building on March 10, the same day that the Advisory Board held its second meeting, and some 250 members attended the meeting. After a report on the Network’s activities, the lecture by Mr. Kazuo Tsukuda (Chairman of the Board of Directors of Mitsubishi Heavy



Annual General Meeting of FY2009 (March 10, 2010)

Industries, Ltd.), one of the Network’s advisors from industry and Vice Chairman of Nippon Keidanren, which was entitled, “Industry-academia-government partnership aimed at creating a low-carbon society,” was read by Mr. Sunao Aoki, Director and Senior Executive Vice President of Mitsubishi Heavy Industries. This discourse was followed by a special lecture by Prof. Mari Oshima at the University of Tokyo Interfaculty Initiative in Information Studies and the Institute of Industrial Science, which was entitled, “The expanding foundation of engineers and engineering.” Some 150 participants attended a post-meeting get-together, actively exchanging views and opinions among themselves.

2. Eight National University Council of Executive Directors Related to Industry-Academia-Government Partnerships

Industry-academia-government partnerships have been placed in a difficult situation, with the government's decision to discontinue the Ministry of Education, Culture, Sports, Science and Technology's budgets related to industry-academia-government partnerships in the project sorting process. Under these circumstances, the Eight-University Council of Directors of Divisions Related to Industry-Academia-Government Partnerships held its first meeting in November 2009 to exchange information more closely among the divisions of university corporate relations at major national universities and facilitate mutual utilization of useful know-how and other initiatives.

Mr. Takashi Yanagi, Director of the Research Environment and Industrial Cooperation Division, Research Promotion Bureau, Ministry of Education, Culture, Sports, Science and Technology, gave a lecture entitled, "The present condition and future prospects of industry-academia-government partnership." In it, he described how industry-academia-government partnership policy had been developed and discussed the progress made in industry-academia-government partnerships in recent years, the future of such partnerships as they entered a new phase of development, and other subjects. This was followed by another lecture by Mr. Akito Tani, Director of the Academia-Industry Cooperation Promotion Division, Industrial Science and Technology Policy and Environment Bureau, Ministry of Economy, Trade and Industry, under the theme of "The industrial science and technology policy of the Ministry of Economy, Trade and Industry." He explained government budgets related to industrial science and technology and talked about measures for facilitating industry-academia-government partnerships, development of advanced innovation bases nationwide, and other topics.

Later, representatives from the participating universities showed the present condition of industry-academia-government partnerships and issues to be addressed in such partnerships. They also shared the recognition that the possession of intellectual property was becoming a growing strain on universities in terms of cost, requiring a review of intellectual property strategy.

As the number of students from overseas and resident researchers increased and the opportunity of joining international joint research and attending international academic meetings grew, the need for establishing a security export management system for technology and equipment owned by universities was also discussed, confirming that this was an issue to be addressed urgently.

A heated exchange of opinions by the directors of divisions related to industry-academia-government partnership from eight universities and other officers made the meeting a meaningful one.



Scene from the Eight-University Council of Directors of Divisions Related to Industry-Academia-Government Partnerships held on February 3, 2010

3. Activities to Promote International Industry-Academia Partnership

Since it became an independent administrative institution, the University of Tokyo has seen its collaborative research with private enterprises and other external organizations grow steadily, and the number of such research projects exceeded 1,300 in FY2009. In addition, collaborative research projects have been created steadily through Proprius21, a collaborative research creation scheme focusing on value creation. This scheme aims to not only match seeds of new technology with business needs but also develop research plans through collaboration between industry and academia, while having industry and academia share results expected at the end of collaborative research in advance.

Since there are still only a small number of collaborative research projects with overseas enterprises, however, the University of Tokyo recognizes necessity to promote industry-academia partnership with overseas enterprises and organizations in a global environment. In the second half of FY2008, it started to investigate the present condition of industry-academia partnerships at overseas enterprises, institutions, and other organizations and search for specific clues to improving industry-academia partnership.

In FY2009, the University of Tokyo began activities to realize several partnerships with overseas enterprises, institutions, and other organizations in earnest. Since then, it has striven to increase its visibility among overseas enterprises in the global arena by visiting the



research units of leading enterprises in the United States and Europe directly, introducing its researchers to these enterprises actively, and proposing the Global Proprius21 scheme as a feasible study program to realize specific partnerships.

The results of these efforts in FY2009 include laying the foundation for specific partnerships with a major Swiss food maker, a French telecommunications carrier, a German manufacturer, a U.S. aircraft manufacturer, and so forth.

List of Events Related to University Corporate Relations in FY2009

Date	Major activities and events outside the University	Major activities and events inside the University
2009		
April 16 (Thr.)	Official ceremony to commemorate the 5th anniversary of the foundation of the University of Tokyo Edge Capital Co., Ltd.	
April 22 (Wed.)	1st Industry-Academia Consortium Workshop on "Gerontology"	
April 23 (Thr.)	University Corporate Relations Network: 15th Science and Technology Forum "Food Safety"	
May 12 (Tue.)		Fifth-term course of the University of Tokyo Entrepreneur <i>Dojo</i> Explanatory meeting for research contract administration officers
May 14 (Thr.)		Explanatory meeting for research contract administration officers
May 29 (Fri.)	DUCR/Stanford University joint symposium on "Entrepreneurship in Japan"	
June 20 (Sat.) to 21 (Sun.)	Exhibition at the 8th Industry-Academia-Government Partnership Promotion Conference	
July 14 (Tue.)		Intellectual property training session
Sep. 2 (Thr.)	University Corporate Relations Network: 1st Advisory Board Meeting in FY2009	
Sep. 7 (Wed.)	University Corporate Relations Network: 16th Science and Technology Forum "Science and Technology for Complicated Systems—Toward Science and Technology That Challenge and Utilize Complicatedness"	
Sep. 10 (Thr.)	1st Seminar on Entrepreneurship and University Startups "University Startups in the Age of Open Innovation"	
Sep. 26 (Sat.) to 27 (Sun.)		Fifth-term camp training course of the University of Tokyo Entrepreneur <i>Dojo</i>
Sep. 30 (Wed.)		Establishment of the University of Tokyo's licensing policy
Oct. 17 (Sat.)		Final presentations of the student business plan competition of the University of Tokyo Entrepreneur <i>Dojo</i> 's fifth-term course
Oct. 22 (Thr.)	2nd Seminar on Entrepreneurship and University Startups "This Is What I Want to Hear about University Startups"	
Nov. 5 (Thr.)	Exhibition at the 10th Business Fair from Tama	
Nov. 5 (Thr.) to 7 (Sat.)		Entrepreneurship education program student exchange with Peking University (10 students from the University of Tokyo visit Beijing)
Nov. 26 (Thr.)	3rd Seminar on Entrepreneurship and University Startups "Thinking about the Exits of University Startups"	
Dec. 7 (Mon.)	FY2009 general meeting of the University of Tokyo Industry Activation Initiative	
Dec. 17 (Thr.)	University Corporate Relations Network: 17th Science and Technology Forum "The Future of Photovoltaic Energy Use—The Present Condition of and the Outlook for Technological Development for Large-Scale Photovoltaic Power Generation Systems"	
2010		
Jan. 19 (Tue.)	University Corporate Relations Network: 18th Science and Technology Forum "Ambient Electronics Brings about the Transformation of Information Society—Aiming at Human-Centric Information Society"	
Jan. 21 (Thr.)	FY2009 DUCR/Unify Research Inc. Joint industry-Academia Partnership Symposium and the 4th Seminar on Entrepreneurship and University Startups "Cloud Computing and University Startups"	
Jan. 27 (Thr.)		Award ceremony for the University of Tokyo Invention Contest
Jan. 27 (Thr.) to 30 (Sat.)		Entrepreneurship education program student exchange with Peking University (six students and four teachers from Peking University visit Tokyo)
Feb. 3 (Wed.)		Meeting of the Eight-University Council of Directors of Divisions Related to Industry-Academia-Government Partnerships
Mar. 4 (Thr.)	DUCR/Daiwa Institute of Research Joint Open Seminar "mixi—What Did President Kenji Kasahara Think and What Decision Did He Make at That Time?"	
Mar. 10 (Wed.)	University Corporate Relations Network: 2nd Advisory Board Meeting and the Annual General Meeting in FY2009	
Mar. 12 (Fri.)	Symposium co-hosted by DUCR and the Osaka University Office of University-Industry Collaboration and the 5th Seminar on Entrepreneurship and University Startups "Green Innovation by University Startups"	
Mar. 17 (Wed.)	Meeting to report on the activities of the Gerontology Consortium in FY2009	

Office of Collaborative Research Development

Projects implemented by the Office of Collaborative Research Development during FY2009 included “Proprius21,” which aimed to develop collaborative research with Japanese enterprises for value creation; “Global Proprius21,” which proposed feasibility studies to explore possibilities of cooperation with overseas enterprises; collaboration to contribute to future problem-solving through introduction of a membership consortium model; Science and Technology Forums, which aimed to expand the foundation of industry-academia partnership; the “University Corporate Relations (UCR) Proposal Project,” which communicated University researchers’ research seeds to the external world, including industry, through its website; and the “Technology Liaison Fellow (TLF) Educational Program” for personnel sent by local governments.

1. Proprius21

Proprius21, a scheme for developing collaborative research for value creation which was launched in the second half of FY2004, has grown steadily with the support of many enterprises. The number of collaborative research projects created through the Proprius21 scheme in FY2009 was 36 for Japanese enterprises and 7 for an overseas one. The cumulative number of projects that had been created since FY2004 was 130.

① Proprius21 with Japanese enterprises

The number of Proprius21 projects newly created in FY2009 or continued from the previous year was 27. A total of 36 new collaborative research projects were created as mentioned above, and in particular, Proprius21 projects with Nippon Telegraph and Telephone Corp. (NTT) contributed greatly to the creation of these projects.

② Proprius21 focusing on organizational cooperation

Launched in FY2007, Proprius21 with NTT focuses on organizational cooperation. An industry-academia promotion committee was established between the company and DUCR to make the existence of unified collaborative research agreements between the two organizations known to all employees in the company. This dramatically increased the number of collaborative research projects created therein. In June 2009, DUCR worked with NTT to apply for participation in national projects sponsored by the Ministry of Internal Affairs and Communications and undertook the project “Research and Development of Cloud Service Cooperation Technology” on contract. The Proprius21 that focused on organizational cooperation also contributed greatly to the winning of this large national project. In FY2010, DUCR will continue to establish even closer cooperation with NTT.

③ Global Proprius21

DUCR explored the possibilities of specific industry-academia partnerships by visiting overseas enterprises and institutions directly and proposing to their senior managers in charge of R&D and business strategy Global Proprius21, a feasibility study program that aims to find possibilities of international cooperation between such organizations and the University of Tokyo. In FY2009, as part of the Global Proprius21 agreements, a total of fifteen feasibility studies were carried out overseas: six in the United States (electronics, information, and aerospace industries), two in Switzerland (food and control equipment manufacturing), one in Germany (manufacturing), one in France (information and communications), three in South Korea (electronics and materials), and two in the Middle East (petroleum). Under this program, a total of seven collaborative research projects were created during the year if those continued from the previous year are included.

2. Industry-Academia Partnership Scheme Using a Consortium Model

DUCR initiated a fee-charging membership consortium project as a forum to discuss future social issues through industry-academia partnership. It chose “gerontology” as the project’s first subject and established the Gerontology Consortium, which is operated by the University of Tokyo’s Institute of Gerontology (Prof. Minoru Kamata: Director General), an organization set up under the Office of the President’s Supervisory Committee in April 2009. A total of 35 companies from diverse industries, including Japanese subsidiaries of overseas corporations, participated in the consortium. It began its operations aiming to identify issues that faced a superannuated society, which is sure to come around 2030, put together a vision of an ideal superannuated society to solve the issues, and develop a roadmap to realize the vision. Current plans call for the consortium to continue its work for 2 years.

Each month, over 100 people from the participating companies attended a meeting of the Gerontology Consortium that lasted for more than 4 hours. In July and November, camp training was provided. Divided into five groups, the participants listened to 23 lectures during the year and held discussions by subject, and at the end of the year, they put together a vision of an ideal superannuated society as their first-year goal. The meeting held on March 17, 2010 to make an interim report on activities in FY2009 attracted about 230 people, including representatives from non-member companies.

In FY2010, the Gerontology Consortium will continue its activities to hold more in-depth discussions about each subject and develop a roadmap showing what should be done after the termination of the consortium.

3. Science and Technology Forums

In FY2009, four Science and Technology Forums were held as shown in the table below. The number of Forums that had been held since the autumn of 2005 reached 18. These forums aimed to allow researchers at the University of Tokyo and from industry to cooperate in a cross-sectional way to cope with future social issues and communicate with each other to find specific solutions to those issues. After each forum, a get-together was held to promote direct exchange of opinions between participants and lecturers.

Participants' replies to questionnaires were carefully analyzed so that research groups and consortiums were organized as a specific approach to new industry-academia-government partnership through feedback to researchers, and this was always kept in mind when planning Science and Technology Forums. A new collaborative research project has emerged from the 17th Forum "The Future of Photovoltaic Energy Use." Meanwhile, since the 18th Forum "Ambient Electronics Brings about the Transformation of Information Society" there has been a move for industry and academia to work together to organize a solid research group.

April 23, 2009	15th Forum	Food Safety: Developing Food Safety Science to Support Secure, Healthy Life
September 7, 2009	16th Forum	Science and Technology for Complicated Systems—Toward Science and Technology That Challenge and Utilize Complicatedness
December 17, 2009	17th Forum	The Future of Photovoltaic Energy Use—The Present Condition of and the Outlook for Technological Development for Large-Scale Photovoltaic Power Generation Systems
January 19, 2010	18th Forum	Ambient Electronics Brings about the Transformation of Information Society—Aiming at Human-Centric Information Society



Scene from the 15th Forum held on April 23, 2009



Scene from the 17th Forum held on December 17, 2009

4. University Corporate Relations (UCR) Proposal Project

The Office of Collaborative Research Development operates a website (<http://proposal.ducr.u-tokyo.ac.jp/>) called "University Corporate Relations Proposal (UCR Proposal)," which collects collaborative research and other proposals from University researchers and releases them to the public. This system allows people outside the University, including industry, to freely access the website and search such proposals there. If visitors wish, DUCR can arrange primary meetings or make other arrangements with researchers. In releasing proposals to the public, program officers with extensive experience in industry hold interviews with researchers individually and create collaborative research and other proposals. This feature distinguishes the website from mere booklets of new technology seeds and websites introducing University laboratories. Another feature of the system is that it is updated almost every day so that it provides the latest information at all times.

During FY2009, a total of 292 interviews were held, and 340 new proposals were posted on the website, resulting in over 1,800 up-to-date proposals. The website gave rise to 94 industry-academia partnerships, including collaborative research in FY2009.

In addition, as last year, some 600 proposals for University Corporate Relations, already posted on the Japanese version of the site, were translated into English. After the content of the English version of the site, including the translated proposals from last year, was adjusted, the total number of proposals for University Corporate Relations at the English site in FY2009 reached 940.

5. Technology Liaison Fellow (TLF) Educational Program

Another important initiative for helping create industry-academia collaborative research and returning its results to industry and society is to train and educate people involved in industry-academia partnerships.

The TLF Educational Program targets personnel of local governments and other public entities, and develops experts who promote and administer industry-academia-government partnership. It is an unparalleled system under which young personnel sent from local governments receive one year of training on a full-time basis so that they become key persons of cooperation between local industry and universities. A total of 65 personnel from 31 local governments nationwide have received training since FY2000, and having completed the training courses, many of them are playing an active role in industrial and regional promotion in their respective governments. In FY2009, six people from Aomori, Kanagawa, Yamanashi, Nara, and Kagawa prefectures as well as Bunkyo-ku in Tokyo were trained under the program.

The training curriculum consists of “lectures” and “practical exercises.” In FY2009, the trainees learned a wide range of areas, including technical knowledge of industry-academia partnership and the latest information on regional industrial promotion, through “lectures” given by leading authorities from both inside and outside the University.

In “practical exercises,” they actually ran the University of Tokyo’s schemes for creating collaborative research. In particular, they became involved in the operation of the “UCR Proposal Project” (see page 11), and acquired the ability to implement industry-academia partnerships, by identifying subjects for partnership proposals through interviews with researchers, and also by participating in the research planning process frequently. In addition, in the “individual problem-solving course,” each trainee set a specific issue taking into account the circumstances of the local community from which he or she came, studied for half a year while receiving advice from instructors, and presented the results of his or her studies at a DUCR meeting held in March.

The 65 trainees who experienced the training courses have formed a nationwide network of industry-academia partnership promoters, which is a precious asset for local government units when they exchange information and conduct research. At the FY2009 general meeting of the “University of Tokyo Industry Activation Initiative,” which comprises those who completed the training courses and University teachers, participants actively presented research results and exchanged views with “tourism and regional promotion” as a key phrase.



Six trainees who completed the training courses in FY2009 and DUCR personnel pose for a group picture.

Invitation to the University Corporate Relations Network, the University of Tokyo

In 2005, the University of Tokyo established the “University Corporate Relations Network” as a platform for promoting industry-academia partnership that emphasizes interactive communication between the University and industrial circles. It positions the network as a basis for the University to work with industry to create various forms of new value and knowledge so that it contributes to society. Any corporation interested in partnership with the University of Tokyo is invited to become a member of the network free of charge, and specific benefits of membership include:

- ◆ Members are invited to make requests and proposals for partnership with the University through the network.
- ◆ Members can receive information on research seeds directly from researchers with whom they wish to do collaborative research.
- ◆ Members receive information on DUCR-hosted Science and Technology Forums and other events earlier than others.
- ◆ Members directly receive information on various events held at the University of Tokyo.
- ◆ Members can work with the University of Tokyo to make strategic proposals to society through industry-academia partnership.
- ◆ Members can exchange information on and opinions about industry-academia partnership with one another.

Information on the University of Tokyo becomes familiar to members. It is also useful in expanding exchange and networking with researchers through such opportunities as attending DUCR-hosted forums and other events as well as participating in the annual general meeting of the University Corporate Relations Network. Members also receive a copy of the University of Tokyo magazine *Tansei*, the Outline of the Division of University Corporate Relations, and other publications.

Based on the Network’s platform, DUCR hosts Science and Technology Forums, holds meetings to propose the commercialization of seeds of new technology or new research projects, and provides opportunities for policy recommendations. Thus it works to further expand the foundation of industry-academia partnership.

During FY 2009, in close cooperation with the University Corporate Relations Group, TODAI TLO, and legal advisors as necessary, Office of Intellectual Property continued to be engaged in the operations shown in the figure below. In particular, as the number of notifications of inventions handled, and of contracts reviewed and concluded grows, the Office aims to have accurate and prompt processing. The following section explains the results of the Office's operations in FY 2009.

Judgement on succession of invention reports (TLO)

Consideration of patentability, contribution to society, profitability, costs, and other factors within ten business days.
[648/636 invention reports]

* Individuals and organizations in parentheses indicate those which the Office works with.

* Figures in square brackets show results for FY 2008 and 2009 in the stated order.

Management of patent application, registration and maintenance (TLO)

Decisions on, and the application of, the policy for patent application, registration and maintenance, and the management of intellectual property [431/423 applications filed in Japan]

Technology transfer (TLO)

Promoting utilization of rights, posting patents on DUCR's Web site, and compensating inventors for their inventions [238/238 patents permitted for implementation; 172.6 million yen/95 million yen earned in patent revenue]

Response to legal affairs such as agreements and conflicts (Legal advisors)

Concluding agreements to promote collaborative research, registration of intellectual property, and protecting it as a right. Other legal support and response related to intellectual property [1,214/1,302 collaborative research projects with the private sector, etc.]

Establishment of intellectual property-related rules

Establishment of the University's in-house rules, guidelines, contract templates, etc. (Copyright, trademarks, know-how, tangible deliverables, etc.)

Financial management

Management from a financial viewpoint and strategy for patent applications

Consulting on the handling of intellectual property, education, etc. (TLO)

Determination of inventors, policy for job-related inventions, meetings to give explanations to offices for handling confidential information, etc.

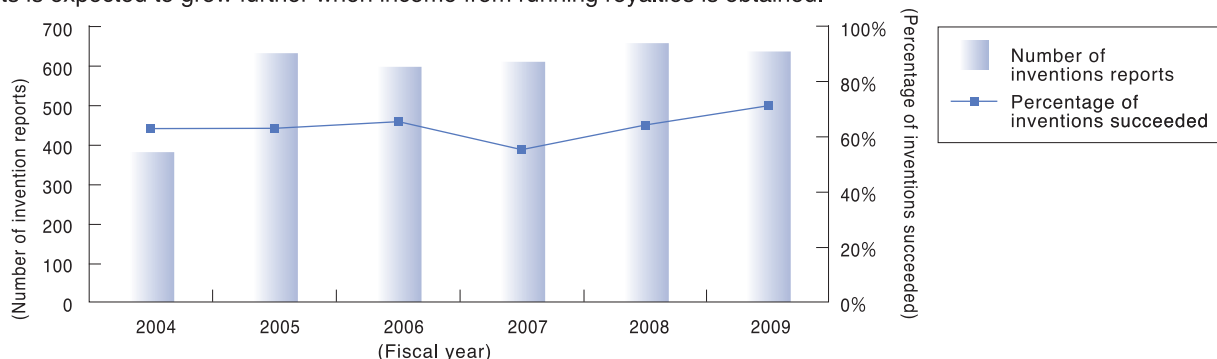
Management and Utilization of Intellectual Property

1. Handling of Invention Reports and Utilization of Rights

The number of inventions reported in FY2009 was 636, the second largest after FY2008 (when it grew significantly), as shown in the chart below. In FY2009, independent inventions accounted for 37% of the total, slightly lower than in FY2008, but the number of joint inventions with external organizations remained almost on the same level as in the previous year. In FY2009, inventions reported using the online invention reporting system, which was introduced in early 2007 on a university-wide scale, represented about 38% of the total.

While more than 60% of inventions were succeeded to the University of Tokyo in FY2008, both the percentage of independent inventions and of joint inventions succeeded to the University in FY2009 were higher than in FY2008, boosting the overall figure of inventions succeeded to the University to more than 70%.

Owing to TODAI TLO's energetic efforts for technology transfer, revenue from patents permitted for implementation and other uses of patents in FY2009 was approximately 95 million yen, almost the same as in FY2007, though it rose sharply in FY2008 compared with a year earlier due to contracts that involved huge one-off payments. In the future, revenue from patents is expected to grow further when income from running royalties is obtained.



Changes in the Number of Invention Reports and the Number of Inventions Succeeded

2. Contract-related Services to Collaborative Research Agreements and Others

During FY2009, the University of Tokyo accepted 1,302 collaborative research projects, about 90 more than in FY2008, when it approved 1,214. The Office of Intellectual Property assisted in concluding collaborative research agreements, as well as in entering into agreements on the joint filing of applications and signing non-disclosure agreements and agreements on tangible deliverables. In FY2009, the number of cases involved in contract reviews reached 1,440, even higher than in FY2008, when it registered a record high. In addition, the Office worked with the University Corporate Relations Group to conduct contract reviews efficiently. In order to ensure that collaborative research agreements were entered into swiftly and properly, the Office developed different model agreements according to partner companies and research organizations, and notified administration offices of the University of agreed model agreements in order to make operations related to research agreements efficient.

Furthermore, the Office strove to obtain the understanding of individuals and organizations in the University about its operations and achieve greater operational efficiency. It also strove to promote mutual understanding with industry by holding direct meetings with, and exchanging information with, partner companies. Moreover, it held meetings to explain to administrative officers in the offices of the University about the handling of collaborative research agreements and tangible deliverables and imparted to them knowledge of intellectual property in general.

3. Promotion of International Industry-Academia Partnership

As in the past, under the leadership of TODAI TLO, the Office established closer cooperation with overseas technology transfer agencies and promoted technology transfer, including the presentation of invention technology at overseas exhibitions. It also strengthened its function of handling international legal affairs, took various measures to prevent international conflicts, and achieved greater efficiency in promoting international industry-academia partnership.

Specifically, the Office accumulated results in negotiations about individual projects with overseas enterprises. In FY2009, members of the Office visited universities, enterprises, and other organizations in Europe to investigate the actual situation of industry-academia partnerships in the region and the real condition of collaborative research schemes and lawsuits related to intellectual property. From the viewpoint of conflict prevention, the Office reviewed its licensing agreements in English through consultations with U.S. lawyers and developed a number of optional draft agreements.

Furthermore, in order to make negotiations for collaborative research agreements with overseas enterprises more efficient, the Office prepared an English version of explanations for overseas enterprises, which include the stipulations of model collaborative research agreements and the University's basic intellectual property policy, as well as of explanations about the provisions of collaborative research agreements, including related rules and guidelines. In order to ensure smooth negotiations for agreements with overseas institutions concerning the provision of tangible deliverables, it drafted model agreements on the provision of tangible deliverables in English.

4. Establishment and Revision of Industry-Academia Partnership-related Rules, Etc.

For the 2009 edition of model collaborative research agreements, the Office analyzed and examined issues to be addressed in negotiations with enterprises for collaborative research agreements. It then decided to reflect simple amendments often proposed by enterprises in the 2010 edition and consider amendments proposed for the important articles and clauses of the agreements and so forth in FY2010 as the 2010 edition was planned to be revised. In addition, the Office held meetings to examine administrative procedures for the handling of tangible deliverables in order to make them more efficient. Taking into consideration requests made by administrative officers from the offices of the University at these meetings, it produced a manual for agreements on the transfer of tangible deliverables, which includes the purpose of systems related to and a series of administrative procedures for, the transfer of tangible deliverables.

The Office established a licensing policy to promote appropriate and smooth technology transfer to industry so that inventions and other contrivances belonging to the University of Tokyo are widely utilized in society. This policy clearly defines the University of Tokyo's basic approach to licensing, and it was published inside and outside the University's organization.

1. University-originated Venture Incubation

- The University of Tokyo Entrepreneur Plaza
- UCR Plaza Incubation Rooms
- Komaba Campus Corporate Relations (CCR) Building's Incubation Rooms

"The University of Tokyo Entrepreneur Plaza opened in June 2007 and is a seven-storied building with a building area of about 530 m² and a total floor area of about 3,650 m², having 30 rooms with an area of about 58 m² each." It maintained a high operating rate throughout FY2009, and became an indispensable facility for the incubation of venture businesses that are expected to achieve rapid growth. About 3 years had passed since it started operation. While some businesses outgrew and "graduated" from the Plaza, new ones moved into it—some of them were "relocated" from the UCR Plaza to the Entrepreneur Plaza to aim for even higher growth. As of July 1, 2010, 14 companies, including biotech venture firms equipped with wet laboratories, had moved into the Entrepreneur Plaza, and all of its 30 rooms are occupied.

Meanwhile, the incubation rooms at the UCR Plaza and the Komaba Campus Collaborative Research (CCR) Building, which had started full-scale operation at the end of FY2008, received new occupants, providing an important place for incubation to venture businesses that had just been established.

For details of firms that are being incubated at the three facilities, see Chapter 3 "Facts and Data" (page 25).

2. The University of Tokyo Entrepreneur Dojo Continuing Student Exchange with Peking University and Advancing Internationalization of Entrepreneurship Education

Since FY 2005, the Division of University Corporate Relations has been operating the University of Tokyo Entrepreneur *Dojo* (training school) jointly with the University of Tokyo Edge Capital (UTEC) and TODAI TLO. The *Dojo* was in its fifth year in FY 2009, and 826 students had registered with the *Dojo* during the past five years. The *Dojo*, which targets the undergraduate and graduate students of the University as well as its postdoctoral researchers, is a six-month-or-so program, which provides opportunities of education and training through lectures and seminars to students and researchers who wish to develop their original ideas into a business or start a new business based on intellectual property rights obtained from research results. In this program, teams of students propose business plans, and judges examine them and recognize excellent teams. If students actually intend to start a new business on condition that they further improve the plans they put forward, UTEC may finance its establishment.

The student exchange between Peking University and the University of Tokyo entered its second year. The exchange of teams of students who win in the business plan contests in the respective universities is expected to contribute to development of students who plan business from a global perspective.

In November 2009, 10 students from the University of Tokyo (who were members of the selected top teams in the fifth-term Entrepreneur *Dojo*'s business plan competition) visited Peking University, and in January 2010, six students (plus four teachers) from Peking University visited the University of Tokyo.



In January 2010, a group of students from Peking University who visited the University of Tokyo, personnel from the University of Tokyo's Division of University Corporate Relations, and students who participated in the fifth-term course of the University of Tokyo Entrepreneur *Dojo* posed for a group picture.

	College of Arts and Science Junior Division	Undergraduate major course	Graduate and postdoctoral	Total
Science	28	164	404 (48.9%)	596 (72.2%)
Humanities	29	121	80	230 (27.8%)
Total	57 (6.9%)	285 (34.5%)	484 (58.6%)	826 (100.0%)

* The number of students for "science & engineering" and "humanities" is obtained by dividing the undergraduate faculties and graduate schools into two major categories (science & engineering and humanities) and counting the number of students in each category (though it is understood that some undergraduate faculties and graduate schools cannot necessarily be classified as indicated above because they include both science and humanities courses).

Profiles of Students Who Participated in the University of Tokyo Entrepreneur *Dojo* (Total for the First to Fifth Term; Classified into Students in the Science or Humanities Courses)

Details of the Entrepreneur *Dojo* and the student exchange with Peking University are found in the “Story of the University of Tokyo Entrepreneur *Dojo*” section of DUCR’s website.

On March 4, 2010, as part of the Entrepreneur *Dojo*’s extra program, DUCR worked with Daiwa Institute of Research Ltd. to host an open seminar (open lecture) entitled, “mixi—What Did President Kenji Kasahara Think and What Decision Did He Make at That Time?” This lecture took up as its subject mixi, Inc., a social networking service provider established by Mr. Kasahara when he was a student at the University of Tokyo Faculty of Economics. This service provider is one of the specific case studies conducted jointly by Daiwa Institute of Research and DUCR for entrepreneurship education. During the seminar, President Kasahara himself took the podium, making the event a place for lively and stimulating discussions.

3. The Office Communicates Outside the University through the Symposium Co-hosted with Stanford University “*Entrepreneurship in Japan*,” and some other events, including seminars on entrepreneurship and university startups.

Through various events such as symposiums and seminars, the Office of Science Entrepreneurship and Enterprise Development actively poses relevant issues about university entrepreneurship and communicates useful information to university teachers and students who are interested in the fostering of entrepreneurial culture and the development of university startups, as well as professionals who are actually involved with university start-ups.

In May 2009, the Office worked with Stanford University’s Project on Japanese Entrepreneurship (STAJE), a group of researchers at Stanford University, to host an international symposium entitled, “*Entrepreneurship in Japan*.” This brought together researchers in entrepreneurship and professionals who are actively involved with entrepreneurial businesses in Japan and the United States. Externally, this symposium also served as a kickoff event for the project that Stanford University, a center for entrepreneurship in the world, and DUCR, which aims to develop entrepreneurs and university startups, had worked together since 2008. Some 240 people attended the symposium.

On January 21, 2010, the Office and Unify Research, Inc. co-sponsored an industry-academia partnership collaborative research symposium entitled, “Cloud Computing and University Startups.” Representatives from large corporations, venture firms, and University researches held lively discussions about the effects of cloud computing on the IT industry and issues to be addressed in this emerging form of computing.

On March 12, a symposium entitled, “Green Innovation by University Startups,” was held under the co-sponsorship of DUCR and the Osaka University Office of University-Industry Collaboration. Researchers at four venture firms associated with the University of Tokyo or Osaka University made presentations on such projects as turning *Euglena flagella* into food and developing a next-generation, low-cost biodiesel manufacturing process using non-edible raw materials. The symposium attracted much attention because its main theme was to innovate in environmental and energy technology and industries. About 180 people, including those from industry, academia, and government, who were involved in university startups and environmental businesses, registered with the symposium.

In addition, three Seminars on Entrepreneurship and University Startups were held during FY2009: the first Seminar under the theme “University Startups in the Age of Open Innovation” on September 10; the second “This Is What I Want to Hear about University Startups” on October 22; and the third “Thinking about the Exits of University Startups” on November 26.



International Symposium Co-hosted with Stanford University on May 29, 2009

The participants in the panel discussion “Can Entrepreneurship Be Taught?” were Prof. Ulrike Schaede at the University of California San Diego (moderator); Prof. Richard Dasher at Stanford University; Prof. Shigeo Kagami at the University of Tokyo’s DUCR; Prof. William Miller at Stanford University; and Prof. Takeru Ohe at Waseda University.

1. Action Policy

TODAI TLO operates to turn knowledge generated at the University of Tokyo into rights and transfer such knowledge to industry, thereby spreading useful knowledge to society as a whole. The company believes that *knowledge* will enable Japan to enhance its competitiveness despite being a country that lacks natural resources and whose society is aging. Universities play an increasingly important role in realizing a knowledge-based society. The role of TODAI TLO is to put the right “intellectual property” with high value added thereto in the right place as an agent that focuses on researchers.



Mascot character
“Mr.invention”

2. Developments and Results of Sales

In FY2009, although the number of inventions reported did not reach the figure seen in FY2008, when it registered a record high, the number of licensing agreements with overseas companies, an area in which TODAI TLO had concentrated its energies, exceeded the one in the previous year. In the field of life sciences, as in FY2008, TODAI TLO won several large licensing agreements worth more than 10 million yen each. Specific sales results at TODAI TLO are as shown in the table below.

Result for FY2009

		Number of patents permitted for implementation	Number of patents that generated revenue	Revenue (¥ 1,000)
Patents belonging to the University of Tokyo	Patents based on inventions generated before the University of Tokyo became a national university corporation	1	1	8,182
	Patents based on inventions generated after the University of Tokyo became a national university corporation	220	76	85,880
	Subtotal	221	77	94,062
Patents belonging to individuals	Individual patents handled by TODAI TLO	1	2	27,860
Total		222	79	121,922

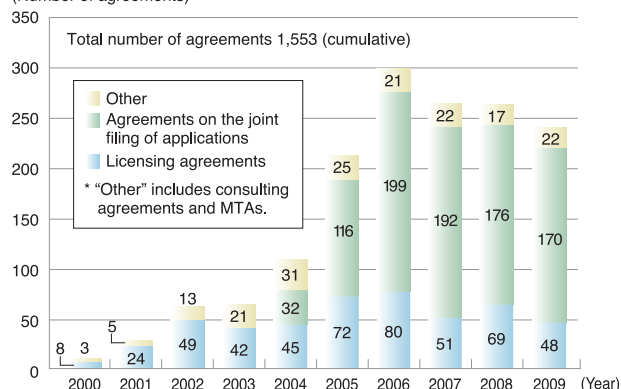
* The figures shown above do not include consulting on the licensing of copyrights, material transfer agreements (MTAs), and so forth.

① Technology transfer (patent marketing, licensing, consulting on technology transfer, etc.)

* TODAI TLO settles accounts in December each year. The figures listed below show results for the period from January to December 2009. In 2009, a large number of technology transfer agreements, including 48 licensing agreements, 170 joint application agreements, and 22 consulting and other agreements, were concluded, and revenue from these agreements amounted to 141.86 million yen. Although sales results in 2009 were lower than in 2008 partly because the economy remained sluggish, several large licensing agreements were entered into in the field of life sciences in 2009 as in the previous year. This indicates that priority sales efforts in the field were bringing results steadily.

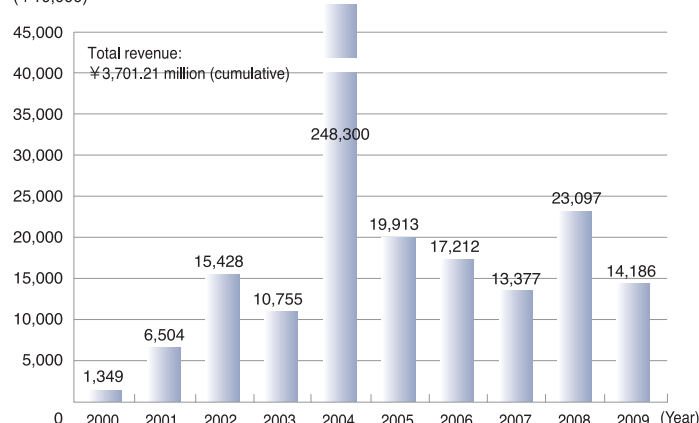
TODAI TLO will continue to work with DUCR at the University of Tokyo to actively transfer the University’s intellectual property to organizations in Japan and abroad.

(Number of agreements)



Changes in the Number of Agreements at TODAI TLO

(¥10,000)



Changed in the Amount of Technology Transfer Revenue at TODAI TLO

② Support for creation of University-originated businesses

In 2009, TODAI TLO implemented two projects (continued from FY2007) which had been chosen by the New Energy and Industrial Technology Development Organization (NEDO), an independent administrative institution, as its “research and development projects to create and commercialize university-originated businesses.” The policy of TODAI TLO is to discontinue these projects after they are completed in March 2010.

3. Bolstering the Organizational Structure

In FY2009, TODAI TLO worked to improve its organizational structure in an effort to precisely meet the need for applying for patents and turning them into rights, an area in which the company had steadily increased its sales results since the University of Tokyo became an independent administrative institution.

① Response to patents requiring joint applications

TODAI TLO changed the organization of sales teams and established a new group in charge of patents requiring joint applications. In the future, it aims to reorganize work flows for a more efficient operational system.

② Requests for patent examination and replies to office action

The number of patent applications filed has continued to grow since 2004, and TODAI TLO expects the submission of requests for examination of patent applications and replies to office action to concentrate on the next 2 to 3 years. With this in mind, TODAI TLO formed a special task team to consider whether its operation system was ready to handle such requests and replies properly. As a result, it plans to establish a new dedicated department and carry out operations to meet these demands under a new operation system starting FY2010.

4. Issues to Be Addressed by TODAI TLO

Major issues to be addressed by TODAI TLO in FY2009 and thereafter are as described below.

① Stepping up operations for patents licensed by the University

Through the reorganization of sales groups, TODAI TLO plans to make administrative work involved in patents requiring joint applications even more efficient, increase the amount of time that can be spent on patents that are applied for independently, and step up its marketing activities, thus striving to increase income from licensing by the University.

② Expanding overseas licensing

As in FY2009, TODAI TLO will continue to actively promote licensing to overseas companies. Under this policy, the company will step up its efforts to participate in overseas exhibitions and establish close cooperation with overseas institutions.

③ Identifying technology in the field of life sciences and strengthening licensing operations

Despite the harsh economic situation, in the field of life sciences where licensing revenue is anticipated to grow in the future, TODAI TLO will call on inventors to report their inventions to the University and its personnel to visit their laboratories more often, thereby discovering new technologies. In addition, the company aims to create licensing opportunities by actively presenting the University's technologies to companies in Japan and abroad.

1. Management Policy

Since its establishment, the University of Tokyo Edge Capital Co., Ltd. (UTEC) has been engaged in the virtuous cycle of new investment, management support, additional investment, and the liquidation of investments. Currently, the three major pillars of the company's management policy are as follows:

The first pillar of the management policy is to make additional investments in growing companies in which UTEC has invested, and in whose management it has participated, through the "UTEC Limited Partnership 1," its first venture capital fund, in order to further enhance the value of the companies; provide them with diverse forms of management support such as sending outside directors; and step up its efforts to liquidate its investments steadily.

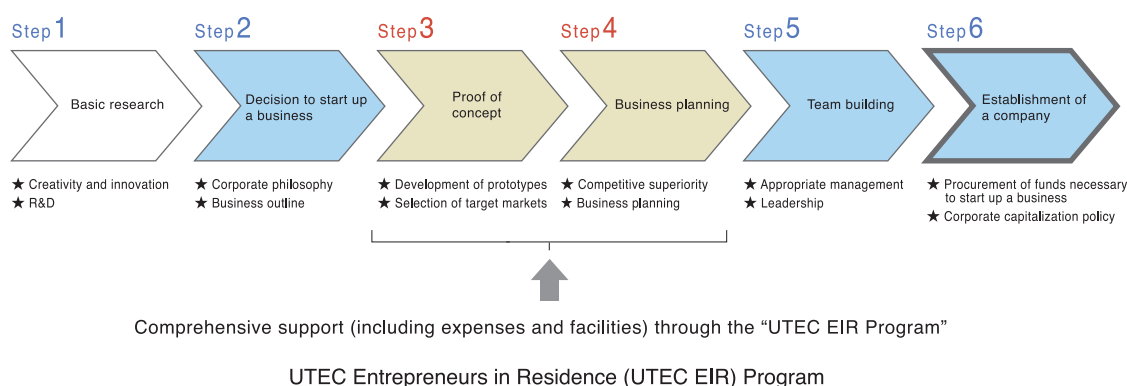
Second, following the establishment of the "UTEC 2 Limited Partnership," in order to ensure a sound, continuous investment cycle in the future, UTEC strives to identify new, promising investment targets to which UTEC can add unique value and over which it can be expected that it will display healthy governance.

Third, in order to build, in close cooperation with the University of Tokyo, an "ecological" system that enables UTEC to continuously get excellent deals that bring future, promising investment targets, UTEC aims to identify and develop investment projects from the stage at which their seeds and ideas are newly generated in the University of Tokyo. In order to achieve this goal, it will carry out the activities described below.

① UTEC EIR

UTEC is implementing a comprehensive entrepreneurship support program called "UTEC Entrepreneurs in Residence (UTEC EIR)." This program offers offices at the University of Tokyo Entrepreneur Plaza and other facilities free of charge to budding entrepreneurs, researchers working to start a business, and so forth. It also examines intellectual property to ensure its effective utilization, verifies the concepts of technology to prove its feasibility, pays expenses required for market research and other undertakings to a certain extent, and helps draw up business plans with the support of UTEC's investment professionals. UTEC EIR collects ideas for entrepreneurship throughout the year.

Starting from Step 2 in which possibilities of industrialization are explored, UTEC responds to requests for advice on all matters related to starting up a business as a partner of the University's researchers, students, and graduates.



② UTEC Search

UTEC is also carrying out "UTEC Search," a program in which as part of UTEC's summer internship program, students, mainly graduate students at the University of Tokyo, work with UTEC's investment professionals to develop business plans based on seeds of business inside and outside the University. This program, too, continues to follow up on UTEC's projects and conducts additional research for them together with UTEC's investment professionals, providing UTEC with a source of excellent business deals.

③ Examination of inventions reported

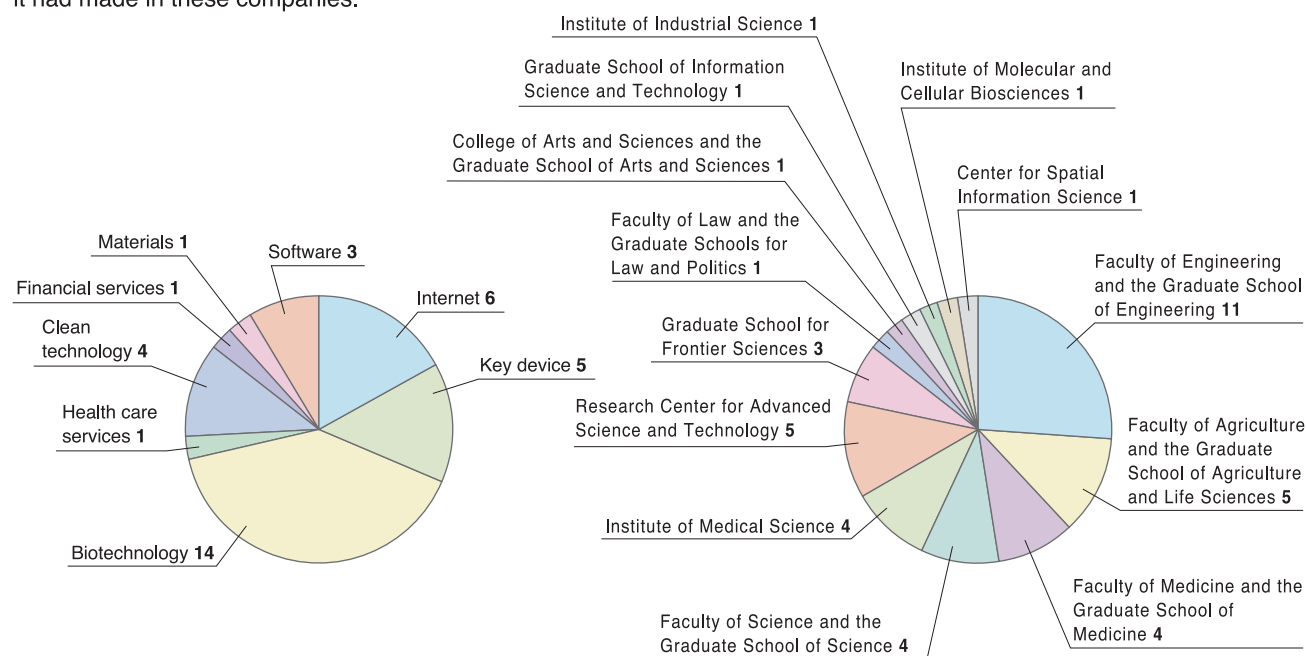
A system has been put in place in which UTEC's investment professionals work with University researchers, who have just reported their inventions to the University, to explore possibilities of industrialization prior to the filing of applications for patents.

These initiatives lay the foundation for UTEC to continue excellent investment activities in the future, and UTEC is active in advancing these initiatives mainly through close cooperation with the University of Tokyo.

2. Investment Results

By March 31, 2010, the "UTEC Limited Partnership 1" had invested in a total of 34 companies, and the "UTEC 2 Limited Partnership" had invested in 1. In FY2009 (Jan. 1, 2009 to Dec. 31, 2009), the Limited Partnerships gave priority to investments in areas that were expected to grow in the future and would enable them to liquidate the investments they made, and fund No. 1 invested in seven projects (one new investment and six additional investments) and fund No. 2 made one new investment. By industry sector, while fund No. 1 invested in two rounds for one IT-related company, four rounds for two clean technology-related companies, and one round for one software company, the fund No. 2 invested in one round for one clean technology-related company.

As part of its efforts to liquidate the investments it had made, UTEC sold shares in Tella, Inc., which went public in March 2009, and strove to closely examine the performance of companies in which it had invested and liquidate the investments it had made in these companies.



Breakdown by Sector of 35 Companies in Which UTEC Invests and Related Faculties/
Graduate Schools and Research Institutes and Centers at the University of Tokyo (as of March 2010)

3. Future Action Policy

UTEC will further step up its efforts to provide managerial support to existing, promising investment portfolios, liquidate the investments it has made, and discover new investment targets. While doing this, it will make the most of the University of Tokyo's industry-academia partnership framework to the full, as it enters the phase in which it is expected to bring steady results, and expand close cooperation with the two funds' investors further. The company will work with the University of Tokyo to help develop the industry-academia partnership in Japan by developing projects incubated through the UTEC Search and UTEC EIR programs into excellent investment portfolios and pursue the maximum return on investment as a VC fund.