

Industri, Inovasi, dan Infrastruktur

Industry, Innovation, and Infrastructure



Jumlah staf akademik di Rumpun Ilmu Sains dan Teknologi
Number of academic staff by subject area: STEM

277

Jumlah staf akademik di Rumpun Ilmu Kesehatan
Number of academic staff by subject area: Health Sciences

435

Jumlah staf akademik di Rumpun Ilmu Sosial dan Humaniora
Number of academic staff by subject area: Social Sciences and Humanities

692

Sejak tahun 2015, Universitas Indonesia (UI) telah melakukan upaya hilirisasi dan komersialisasi Kekayaan Intelektual (KI) hasil riset yang telah dilaksanakan oleh seluruh dosen UI. KI adalah hak yang timbul dari hasil olah pikir yang menghasilkan suatu produk atau proses yang berguna untuk publik. Selama rentang tahun 2015-2021, UI telah menghasilkan 3.890 KI. Hingga saat ini, terdapat 10 perjanjian kerja sama komersialisasi dengan royalti berkisar 2-20 persen dari harga jual.

Since 2015, Universitas Indonesia (UI) has encouraged the efforts to downstream and commercialize any Intellectual Property (IP) of research outputs produced by UI lecturers. IP refers to the rights associated with the intellectual activity to create a valuable product or process for the public. From 2015 to 2021, UI has created 3,890 IP and to date, there have been ten commercialization partnership agreements, resulting in a royalty of around 2-20 percent of the selling price.

Spin-Off Universitas

UI mendorong peningkatan inovasi dan kewirausahaan secara internal untuk menyelesaikan masalah nasional dan global. Salah satunya dengan membentuk badan usaha di luar perguruan tinggi yang mengomersialisasikan hasil riset dan inovasi (*spin-off*).

Upaya tersebut dilakukan di bawah naungan Direktorat Inovasi dan Science Techno Park (DISTP) UI, yang sebelumnya bernama Direktorat Kerjasama dan Inkubator Bisnis (DKIB). Tugas dan peran DISTP UI adalah untuk menjalankan kebijakan dan pengembangan inovasi, pengelolaan inkubator bisnis, proses hak atas kekayaan intelektual, serta pengembangan materi kurikulum guna mendorong inovasi dan pengembangan kewirausahaan.

DISTP UI telah mengelola lebih dari 500 jenis invensi yang terbagi ke dalam sembilan bidang prioritas riset nasional, meliputi bidang pangan, energi, kesehatan, rekayasa teknik, transportasi, kemaritiman, sosial humaniora, multidisiplin, dan pertahanan keamanan. Mayoritas invensi terkait bidang kesehatan dan rekayasa teknik, dengan jumlah yang terpaut jauh dengan bidang-bidang lainnya.

Hingga akhir 2020, terdapat 22 tenant DISTP UI yang juga merupakan *spin-off* UI, yaitu Meetchange, Poci, Sikomo, Nano Biotek Indonesia, Mora, Signifier Games, Telehealth, PT Belimbing Island Indonesia, eClis, Travelia, utKliq, PT Matahari Nusa Kreasi (Cozora), Indves, Superjamu Herbachic, Weston, Instan Indonesia, Dattang, inFishta, Regen, Juragan Kapal, dan Flip.

University Spin-Off

UI boosts innovation and entrepreneurship among its community members to help solve national and global problems. UI has developed some independent business entities to commercialize research and innovation outputs (called spin-offs).

This work has been managed by the Directorate of Innovation and Science Techno Park (DISTP), initially named the Directorate of Cooperation and Business Incubator (DKIB). Its primary roles are implementing policies and innovation development programs, managing business incubators, handling intellectual property rights, and developing curriculum content that encourages innovation and entrepreneurial development.

DISTP UI has managed over 500 inventions, divided into nine priority areas of national research: food, energy, health, engineering, transportation, maritime, social humanities, multidisciplinary, and security-defense. Most inventions came from the health and engineering areas, with a significantly different number of inventions compared to the other fields.

By the end of 2021, there are 22 tenants of DISTP UI who have also been the UI spin-offs: Meetchange, Poci, Sikomo, Nano Biotek Indonesia, Mora, Signifier Games, Telehealth, PT Belimbing Island Indonesia, eClis, Travelia, utKliq, PT Matahari Nusa Kreasi (Cozora), Indves, Superjamu Herbachic, Weston, Instan Indonesia, Dattang, inFishta, Regen, Juragan Kapal, and Flip.

Pendampingan Start-Up

Beragam rumpun ilmu pengetahuan di Universitas Indonesia telah dikenal dengan reputasi yang diakui secara nasional maupun internasional. Tersedianya sumber daya UI yang besar telah tercermin dari perkembangan bidang penelitian dan inovasi pada pendidikan dan pengajaran di UI dan perguruan tinggi lain di Indonesia.

Setiap tahun, DISTP UI melalui Subdit Inkubator Bisnis menyelenggarakan program inkubasi bisnis perusahaan rintisan (*start-up*) dari mahasiswa, alumni, maupun peneliti UI yang telah terpilih melalui proses seleksi. Program ini berupa pelatihan di bidang pengelolaan keuangan, pemasaran, pengembangan bisnis, *mentoring*, pameran, hingga *business matching*.

Selain memberikan fasilitas berupa pelatihan untuk peningkatan kualitas *start-up*, DISTP UI juga menyediakan fasilitas co-working space yang berada di Gedung ILRC UI Lantai 2, UI, Depok. Hingga akhir tahun 2021, DISTP UI telah memberikan program inkubasi kepada 98 *start-up*.

Start-Up Assistance

The knowledge clusters at UI have been recognized with a well-earned reputation on the national and international levels. UI has excellent resources to develop research and innovation in learning and teaching across UI and other universities in Indonesia.

Therefore, the Business Incubator Sub-Directorate of DISTP UI annually organizes a business incubation program for start-ups founded by students, alumni, and researchers of UI who have passed the selection process. This program offers various training related to financial management, marketing, business development, mentoring, exhibitions, and business matching.

Besides managing training programs to improve start-up quality, DISTP UI also provides a co-working space on the 2nd Floor of the ILRC Building at UI Depok Campus. By the end of 2021, DISTP UI facilitated incubation programs for 98 start-ups.

Inovasi untuk Negeri

UI senantiasa berupaya memberikan solusi atas berbagai permasalahan bangsa. Terlebih, dalam situasi pandemi yang penuh ketidakpastian, banyak perubahan yang menuntut manusia untuk sigap beradaptasi dengan inovasi.

Pada tahun 2020, UI menghasilkan sejumlah inovasi yang membanggakan, seperti COVENT-20: Ventilator Transport Darurat Lokal Portabel, Implant: Biomaterial Titanium, Bus Listrik, dan Sistem Peringatan Dini dalam mendeteksi longsor.

Bekerja sama dengan Badan Meteorologi, Klimatologi, dan Geofisika (BMKG), Departemen Geosains FMIPA UI mengembangkan teknologi pemantau curah hujan yang dinamai Pantir. Alat ini mampu mengukur intensitas curah hujan, tinggi muka air tanah, suhu, dan kelembaban lingkungan di area pemasangan.



FMIPA UI memasang Pantir, teknologi pemantau curah hujan di Kecamatan Sumedang Selatan, Jawa Barat.

FMIPA UI installs Pantir, a rainfall monitoring system, in South Sumedang Regency, West Java.

Innovation for the Nation

UI continues to provide solutions for various national problems. Moreover, in an uncertain period during the pandemic, there are many changes that require people to quickly adapt through innovation.

In 2020, UI made some great innovations, such as COVENT-20: Portable Local Emergency Transport Ventilator, Implant: Titanium Biomaterial, Electric Bus, and Early Warning System in detecting landslides.

In collaboration with the Indonesian Agency for Meteorology, Climatology, and Geophysics (BMKG), the Department of Geosciences, FMIPA UI developed a rainfall monitoring system called Pantir. This device can measure the rainfall intensity, groundwater level, temperature, and environmental humidity in the installation area.



Bus listrik yang dikembangkan oleh UI turut mendukung pelaksanaan Presidensi G20.

The electric bus developed by UI supports the G20 Presidency.