



HU VISION 2030Novel<

HOUKIN Kiyohiro President

A number of successful cases in the U.S. and Europe have demonstrated that university-initiated innovation is a driving force for social change. Even at this very moment, university-initiated innovations are taking the world by storm. In contrast, Japanese universities, despite our excellence in research, have lacked a mechanism to implement the research results in society. Or rather, there may have been lack of structural reform in universities necessary to generate innovation. This is one of the biggest reasons for the so-called "lost 30 years."

I believe that innovation in universities consists of two elements: "Excellence" of education and research in the fields of science and technology, and "Extension," the ability to expand education and research into society and solve regional issues. While the Excellence of Japanese universities used to be comparable to our counterparts overseas in the past, our mechanism of Extension was weak. As a result, Japan has lagged in fostering a virtuous cycle and ecosystem in which the two driving engines of Excellence and Extension generate the fruits, outstanding people and profits, then that in turn create the next

CONTENTS

HU VISION 2030 Novel Japan University Model
About HU VISION 2030 02
"Excellence and Extension,"
HILVISION 2030 in diagram

01 Educatio

03 Co-Crea

04 Internati

About HU VISION 2030

Excellence and Extension.

- This is one of the reasons why Japanese comprehensive universities, including Hokkaido University, have fallen behind the universities in the world. Science, technology, and innovation are now identified as important growth engines in Japan's growth strategy. Society is calling for the creation of innovation through collaboration between universities and society, in other words, the integration of Excellence and Extension.
- The Future Strategy for the 150th Anniversary of Hokkaido University, established by Hokkaido University in 2014, has presented a vision for the university by setting the year 2026 as the target year. Based on our own analysis of university-initiated innovation as mentioned above and in response to the expectations of society, HU VISION 2030 sets the next target year for 2030, four years after of the Future Strategy for the 150th Anniversary of Hokkaido University. HU VISION 2030 definitively articulates Excellence and Extension and presents the university's medium-term vision for the creation of a virtuous cycle and ecosystem through the integration of Excellence and Extension.

			-
n	07	05 Diversity, Equity, and Inclusion 1	1
ח	08	06 Governance 12	2
ion with Society	09	07 Financial Base 13	3
onal Collaboration	10	08 Pursuit of Sustainability 14	4



The identity of Hokkaido University

When considering a vision, it is essential to understand our identity. One cannot conceive of a clear vision without understanding the starting point and in order to do that, revisiting the historical background and geographical characteristics is necessary.

The origins of Hokkaido University go back to Sapporo Agricultural College, which was founded in 1876. The College was established due to the strong resolve of the government of the time to develop agricultural technology in cold regions and to foster motivated young students, and this background is particularly distinctive among Japanese universities. Building on these characteristics, the university has developed as the only comprehensive university in the vast land of Hokkaido and has formed an unmatched individuality.

As a result, the university has developed unique strengths in the following areas: (1) field research exemplified by one of the world's largest research forests and extensive marine research, (2) numerous examples of worldwide leading-edge and innovative research, (3) the identification of problems and development of solutions for the resolution of regional issues, (4) a long-held history of sustainability since the university's inception that ties into SDGs.

At Hokkaido University, we view this identity in terms of two axes of coordinates, Excellence and Extension, and aim to create a virtuous cycle and ecosystem in order for the unparalleled identity nurtured over the 150 years of our history to make a giant leap forward into the next 150 years.

Novel Japan University Model

While there is some overlap between Excellence and Extension, we rather consider them orthogonal coordinate axes. Excellence in research, for example, is discipline-driven (in academic fields) and is measured by globally established research measurement indices, such as the ratio of the Top 10% research papers. On the other hand, Extension in research is issue-driven, and the results of such research are not necessarily measured by global research measurement indicators. Rather, the results are measured by their social impacts, such as their contribution to solving social issues and achieving SDGs, or increasing the number of startups.

HU VISION 2030 provides a guideline for pioneering efforts to create a virtuous cycle and ecosystem of Excellence and Extension.

By realizing HU VISION 2030, Hokkaido University aims to become a "Novel Japan University Model," a new model of Japanese university that generates significant social impact by solving global issues.

The Novel Japan University Model refers to a flagship university in Japan as a management entity, a new public asset that significantly strengthens partnerships with the international and local communities and creates social impact and innovation through collaboration, at a level far beyond the efforts of Japanese national universities in the past. The Novel Japan University





Model under HU VISION 2030 strives for well-being in society that can only be achieved when universities actively expand and promote education, research, and social co-creation for the pursuit of sustainability in the following three fields: (1) the earth, (2) society, and (3) people.

HU VISION 2030 defines the basic principles in the following eight areas with increased clarity and details, under which Hokkaido University's pioneering initiatives toward the year 2030 shall be created: (1) Education, (2) Research, (3) Co-Creation with Society, (4) International Collaboration, (5) Diversity, Equity, and Inclusion, (6) Governance, (7) Financial Base, and (8) Pursuit of Sustainability.

Through HU VISION 2030, Hokkaido University aspires to establish the Novel Japan University Model and move vigorously toward the year 2030 for the realization of "sustainable well-being in society," the world's common goal.

July 2023

Novel Japan Universit

Creation of Sustainable Well-being in Society

Pursuit of **Sustainability**

International Collaboration

Diversity, Equity, and Inclusion

Education

Fosters people who play an active role in global and regional societies by acquiring advanced expertise, broad knowledge, and skills through interaction with diverse groups of people

Research

Enhances world-class research capabilities by leveraging the vast and diverse geographical fields and the wide range of scientific research that HU excels in

Co-Creation with Society Promotes the resolution of issues

Foundation of Activities Governance

Achieves the proper university operation generally recognized by society by ensuring fair and transparent decision-making

Financial Base Pursues sustainable growth through autonomous administration and a "virtuous cycle of people, knowledge, and funds"



Education & Research Excel in Science and Technology

Technology

Kcellenc

Ability to Expand Education and Research into Society and Solve **Regional Issues**



Core Values of Hokkaido University

Four Basic Philosophies

Global Perspectives Frontier Spirit

Co-creates with education, research, and society and with "SDGs" as a common language and contributes to the resolution of global issues by maximizing the vast and rich field assets along with the campus environment

Creates an international campus in addition to promoting collaborations with partners and people from various countries, regions, and organizations

Supports university operations through transverse initiatives

Fosters education and research environments to ensure diversity, equity, and inclusion

for the future on both the local and global level and contributes to the achievement of sustainable development and well-being

All-Round Education

Practical Learning

06

To accept a wide range of excellent students, we analyze and review the admission process, and work to **devise and improve the selection methods** and selection-related matters, such as expanding the admission of students with diverse backgrounds and the use of multifaceted evaluations. We establish a new liberal arts education program linked to undergraduate specialized education to cultivate communication, teamwork and leadership, creativity, and a bold and adventurous spirit as well as social ethics and social contributions, as common competencies to be acquired in undergraduate programs.



In order to objectively and multidimensionally present the results of student learning to society, we introduce a new achievement evaluation to **visualize the abilities acquired** by students, by accumulating and analyzing their various learning histories from before admission to after graduation or completion. This simultaneously promotes a virtuous cycle of verifying the effects of education and implementing preform.

Education

Hokkaido University fosters human resources who play an active role in global and regional societies by acquiring advanced expertise based on cutting-edge research and broad knowledge and skills necessary to co-create a diverse future society, including Society 5.0, through interaction with a diverse group of people in a rich natural environment.

In addition to enhancing the financial aid system to allow students to study comfortably, we are developing an academic support structure for students to balance their mandatory studies and extracurricular activities on a campus filled with nature as well as a student counseling system that supports diverse students to study and work together with respect and trust.



Through consistent career education from undergraduate to doctoral programs and exchange opportunities with companies and other organizations, we draw out interest in and motivation for a wide range of career paths. We also develop and implement education programs to foster social implementation skills that contribute to collaboration with others and the creation of a new society and industry, thus cultivating "innovation front runners," highly skilled doctoral candidates who lead societies undergoing major changes. To develop outstanding people who take into account national policies and regional community needs, we provide advanced recurrent education programs on knowledge and technology in cooperation with companies and local governments, as well as programs that create a new cycle of knowledge by leveraging those who lead in innovation, creation, and problem-solving.

> We develop international education programs that help students proactively cultivate international communication, problem identification, problem resolution, and interdisciplinary field development skills, and establish a system to visualize the skills acquired through diverse learning and exchange opportunities.

We contribute to the **sustainable** development of diverse research conducted with free thinking and the university's strength to create an environment that accelerates our research excellence. We also implement university-wide measures to promote interdisciplinary research and strengthen collaboration with researchers inside and outside of Japan.

Research

Hokkaido University further enhances its world-class research capabilities through innovation and resolution of issues by leveraging the vast and diverse geographical fields and a wide range of scientific research that it excels.

We strengthen the URA organization and develop advanced and meticulous research management. We also systematically promote the succession and expansion of knowledge and technology accumulated by the technical staff who support research.



inside and outside of Japan who are potential future leaders of research hubs, by utilizing a seamless human resource development system for doctoral students to professorships.

In addition to sustainably developing the Institute for Chemical Reaction Design and Discovery (ICReDD) and the Institute for Vaccine Research and Development (IVReD), we create new bases for excellence in science by utilizing their expertise and **develop a group of world-class** research hubs.

We aim to contribute to solving regional and global issues with the convergence of knowledge and establish a virtuous cycle that connects the knowledge gained to new research.

We develop an advanced, internationally competitive information environment and

accelerate the reform of research methods that maximize the use of digital technology, such as high-performance AI and machine

learning, and data-driven research.

We acquire and foster excellent young researchers

HU VISION 203

08

We provide quality healthcare, foster excellent medical professionals, and contribute to society by developing and providing advanced medical care. We also create a progressive medical system and play a central role in sustainable medical care in the region.

We facilitate the revitalization of the community and society by enhancing lifelong learning opportunities that help people lead fulfilling lives, and by utilizing the university's social assets to implement initiatives that contribute to the exchanges in the region for broad age groups and social partnerships.

To respond to the needs of the region and the world, we strengthen our collaborative framework with local governments, companies, and other universities. accelerate the creation of knowledge and human resource development that contributes to solving issues, and expand collaboration from the region to the world.

Co-Creation with Society

Hokkaido University promotes the creation of research results, social implementation, and the resolution of issues for the future of the region and the world through co-creation with society and contributes to the achievement of sustainable development and well-being.

We establish industry-academia collaboration hubs inside and outside of Japan and promote dissemination and social implementation of research results centered on these hubs.

We provide students with practical entrepreneurship education that leads to startups and foster human resources capable of taking on the challenges of starting a business or creating a new business We also extend these activities to local elementary, junior high, and high school students.



We expand a startup ecosystem throughout Hokkaido to create a number of new startups and develop the international competitiveness of the startup companies.

We further elevate the profile of HU and gain the support of diverse stakeholders inside and outside of Japan by strategically communicating our distinctive education and research activities through the website, SNS, and media relations.

To attract excellent international students to the degree programs we develop a structure and environment to promote a "virtuous cycle of knowledge," in which graduates with doctoral and other degrees obtain jobs at universities and institutions around the world to educate future generations, and the next generation of students come to study at HU.

We raise HU's international presence

by actively communicating our innovative international initiatives that contribute to the resolution of issues ranging from the regional to the global scale. We develop actions that lead to the increase of outstanding international students in degree programs and the recruitment of young researchers from overseas.

By enhancing partnerships

with strategically desirable

and students.

partner institutions in both quality and quantity. we promote joint research for a sustainable society and create synergy in education and research, such as increasing the number of international co-authored papers and promoting the international exchange of researchers

To develop globally minded individuals, we provide all students with various international learning opportunities including study abroad programs. We create a multicultural campus. an inclusive and engaging international collaborative environment for all faculty and staff.

To recruit excellent international students. we centrally disseminate information, conduct appropriate qualification screening, and enforce security export control. We also expand online recruitment activities for international students along with conventional methods, in accordance with the strategies by priority region and country.

International Collaboration

Hokkaido University creates an international campus where students, researchers, faculty, and staff of diverse backgrounds thrive and contribute to solving global issues in partnership and collaboration with people from various countries, regions, and organizations to lead a sustainable and prosperous society of the future.

To ensure diversity, equity, and inclusion at Hokkaido University, the university fosters its education and research environment, contributes to the development of human resources, and strives to fulfill the Hokkaido University **Diversity Statement.**

We build and raise

university-wide awareness of diversity, equity, and inclusion to inspire all university members to take action to understand and reduce conscious and unconscious bias and discrimination, as well as to strive for their study, education, and research with the mindset of valuing diversity and inclusivity.

To foster a research environment that allows all researchers to overcome gender disparities and maximize their abilities. we continue our efforts for equal opportunities and further promote human resource development and support to increase the ratio of female researchers in higher positions.

We create a learning and work environment and various support systems that allow all university members to fully realize their abilities without being hampered by life events or other personal circumstances.

Based on the history with Ainu people, we create a safe environment for students, faculty, and staff with Ainu heritage, and promote efforts for other university members to deepen their understanding of Ainu people inside and outside of the university.

We bolster diversity and inclusion education for all university members to nurture a strong sense of humanity and ethics.



We enhance efforts to increase the intake of students with diverse backgrounds on campus, such as female students, international students, and students with disabilities.

We enhance the effectiveness of the separation of duties and collaboration of the executive board, develop a structure that best suits the circumstances surrounding the university, and optimize the decision-making process for the next generation of university management.

Governance

Hokkaido University ensures fair and transparent decision-making through the separation of duties and strong collaboration of the executive board that supports the President's leadership. The university establishes the foundation on which all university members create values with pride, hope, and a sense of fulfillment and realizes university operation broadly recognized by society.

We create an environment in which diverse work styles are respected and every faculty and staff member strives for new roles that open the way to the future, by improving productivity through standardization and leveling of tasks and creating a "work-anywhere environment" with information and communication technologies.

We develop a system that enables the entire university to work together for improvement and betterment based on voluntary self-inspection and assessment and communicate the university's administrative structure and value-creation capabilities to society in an easy-to-understand manner to gain the support of a variety of stakeholders.

We improve evidence-based policy planning functions by effectively utilizing Hokkaido University Business Intelligence (Hokudai BI), the university's IR data visualization and

sharing platform.

We promote and enforce compliance in order to maintain fair and impartial operations anchored in high ethical standards and to enhance public trust in the university.

To motivate faculty and staff to proactively perform their duties, we ensure **partnerships** based on the appropriate separation of duties between faculty and staff as well as an organized system for collaboration and create a structure that enables motivated young faculty and staff to participate in university administrations.

In addition to maximizing the asset value of the vast and unique campus, we establish a new revenue model by actively developing recurrent and international education programs.

We greatly increase endowment funds such as the Frontier Fund by utilizing crowdfunding and strengthening networks with stakeholders and conduct strategic funds management with such funds as the source.

Financial Base

Through co-creation with society, we **expand administrative revenues** such as royalties from intellectual properties, indirect expenses, and fees for commissioned projects.

Hokkaido University pursues sustainable growth through self-sustained administration and a "virtuous cycle of human resources, knowledge, and funds" by expanding its diverse and robust financial resources.

To promote a "virtuous cycle of human resources, knowledge, and funds," we secure new sources of investment funds and implement reforms to the budget allocation system. We **increase revenues through social contribution** by providing high-quality, advanced medical care at the University Hospital and Veterinary Teaching Hospital.

Pursuit of Sustainability

Hokkaido University leads the social transformation to realize a sustainable society through education, research, and co-creation with society by maximizing its physical and intellectual assets developed on the campus environment with vast and rich fields.

We improve the ability to aggregate and disseminate information on our efforts to build a sustainable society, strengthen partnerships with stakeholders inside and outside of Japan who share our values, and effectively give back to society via continuous and multifaceted assessment of the various activities on our campus.

> To create an innovation commons (co-creation hub) that contributes to the achievement of the SDGs, we establish a campus master plan that includes the effective use of construction resources. By developing and extending the life of facilities with this plan, we **build a campus that is sustainable and in harmony with the surrounding environment**, pursuing the realization of well-being and increased productivity of all university members while inheriting and utilizing historical buildings.

We utilize our campus and field resources as a living laboratory that serves as a demonstration site for the resolution of social issues and contribute to the creation of a decarbonized society through energy conservation, energy creation, and efforts to improve the environmental performance of facilities and conserve biodiversity. We disseminate research results that contribute to sustainable development to the world

> In order for every university member to work with pride and dignity and maximize their abilities by challenging their potential, we provide every opportunity to **foster a sense of belonging and to instill a sense of ethics with the "SDGs" as a common language** and enhance our collective strength as a university.

To foster the creators of a

sustainable society, we **promote**

education to systematically

learn the basics of the SDGs

and to acquire the ability to

involve the society to

achieve them.



HU VISION 2030

Publisher: Planning Division, General Affairs and Planning Department, Hokkaido University Address: Kita 8, Nishi 5, Kita-ku, Sapporo, Hokkaido 060-0808, Japan Tel.: +81-(0)11-716-2111 Email: kikaku@general.hokudai.ac.jp Issue Date: September 2023