



Kyushu University

VISION 2030

Driving social change with integrative knowledge

VISION 2030

Message from the President

Driving social change with integrative knowledge

Kyushu University Vision 2030 outlines our path to transform Kyushu University into a “university that drives social change with integrative knowledge.” Developed in parallel with our application to become a Designated National University Corporation, this ten-year vision was crafted based on numerous discussions across the university, including many with the young faculty members who will lead us into the future.

Universities are selected as Designated National University Corporations by Japan’s Ministry of Education, Culture, Sports, Science and Technology (MEXT) with the expectation that they will boost their research and education capabilities to compete at the highest level in the world, and Kyushu University received this designation in November 2021.

Since its onset, the COVID-19 pandemic has greatly impacted our lives and restricted our everyday activities, and its tremendous economic and social costs have yet to be fully grasped. Kyushu University must contribute to the restructuring of society to be more sustainable in this new era with and beyond COVID-19. We will draw upon our substantial research achievements and knowledge accumulated over our history to play a leading role in providing solutions to difficult problems posed by this rapidly changing landscape, rise to the next level, and become a true driving force toward the

development of a sustainable society that prioritizes people’s well-being.

Kyushu University’s vision of itself in 2030 is one of a university that attracts excellent researchers, accelerates research and innovation that lead to new value creation, and uses integrative knowledge that fuses the entire spectrum of knowledge—from the natural sciences to the humanities and social sciences and even design—to solve social problems and forge new social and economic systems. In short, a university that drives social change with integrative knowledge.

To accomplish this, Kyushu University must become a hub for global talent circulation and establish itself as a world-class knowledge platform that attracts superb talent and citizens’ interests and creates new value through integrative knowledge. We will build this platform on curiosity-driven basic research, the cutting-edge research that these endeavors in turn spur, and education that cultivates inquisitive minds in students so that they can create the future.

Furthermore, we will make Kyushu University into the core of an innovation ecosystem capable of self-sustained growth by extending this wave of integrative-knowledge-driven reform in social and economic systems from Fukuoka outward to Asia and the world, reinvesting these achievements to further expand and develop the university’s research and education resources.

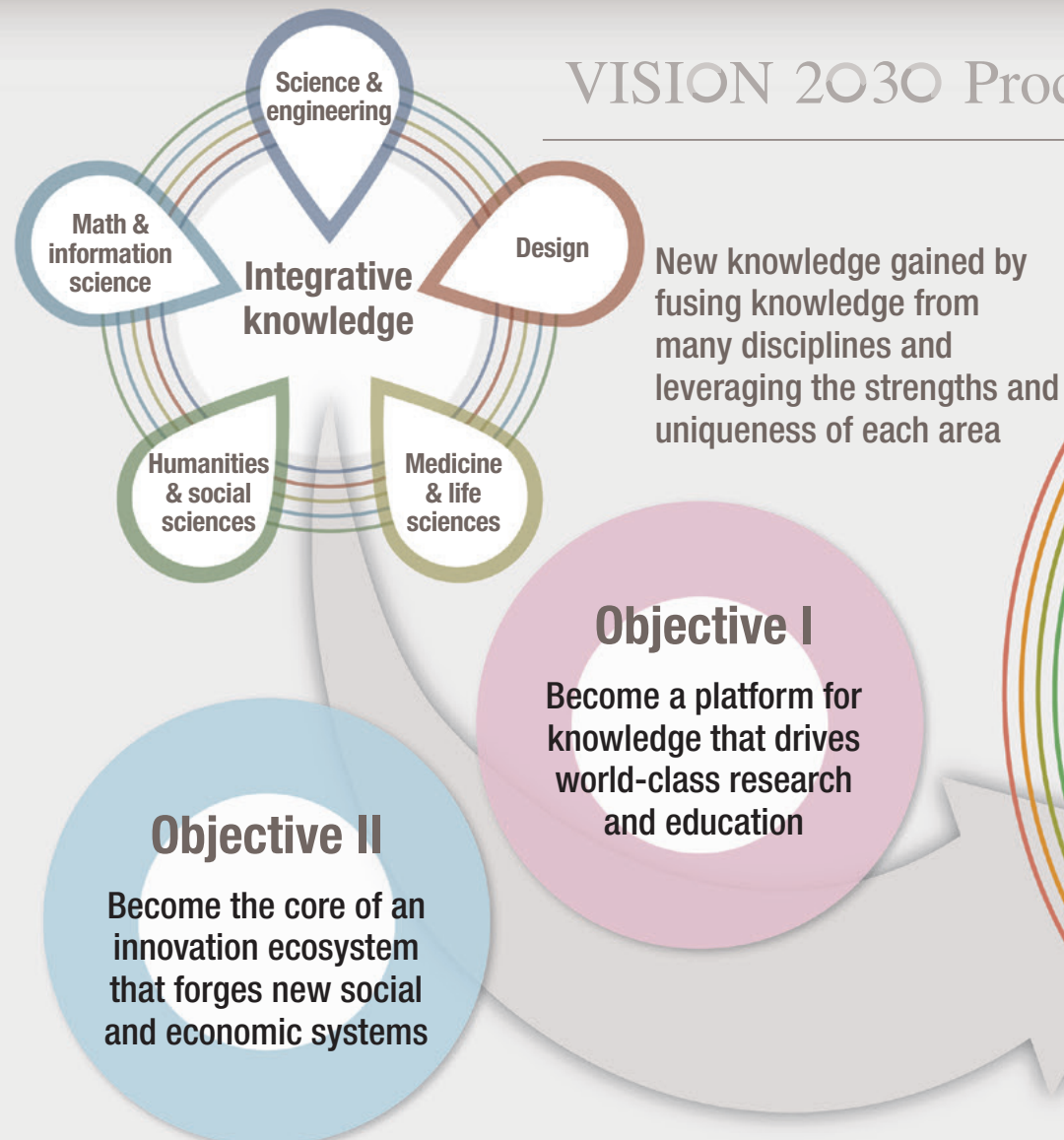
In conclusion, we are committed to Kyushu University Vision 2030 to further build upon the knowledge accumulated through our history and transform into an institute of higher education that offers and advances world-class research and education that appeal to students and researchers everywhere.

Tatsuro Ishibashi

President, Kyushu University
November 2021



VISION 2030 Process



8 Visions toward Realization

VISION 1	Governance	Shift toward sustainable, business-conscious management led by autonomous and diverse governance
VISION 2	Digital Transformation	Expand data-driven education, research, and medicine that continuously create new value and work toward realizing a future society that enables true well-being for all people
VISION 3	Education	Educate globally competent, value-creating professionals capable of designing a new society and solving social issues
VISION 4	Research	Strengthen research capabilities in both basic and applied research to compete in the world and provide solutions to problems in society
VISION 5	Co-Creation with Society	Contribute to people’s well-being and sustainable social development through research and education by co-existing and co-creating with society locally and globally as a hub for knowledge
VISION 6	International Collaboration	Become a hub for international talent circulation through institution-level international collaborations to tackle global issues and foster future leaders
VISION 7	Medicine	Strive for top medical care fulfilling the public’s expectations by developing cutting-edge medicine, providing high-quality clinical practices, and training ambitious and exceptional medical professionals
VISION 8	Finance	Realize sustainable, autonomous management by securing and effectively managing funds from diverse and robust sources

VISION 1

Governance

Shift toward sustainable, business-conscious management led by autonomous and diverse governance

Enhance evidence-based, strategic decision-making

Gather and analyze data pertaining to various research, education, and outreach activities at the university and use this evidence for guiding university management decisions, planning, evaluation, and resource allocation to achieve self-sustainability.

Strengthen stakeholder engagement

Expand opportunities for diverse stakeholders to provide new perspectives and advice for use improving university management and strengthen industry-academia-government-citizen collaboration to contribute further to development of the local region.

Promote diversity, equity, and inclusion

Build an environment that encourages the recruitment of talented people from diverse backgrounds and lifestyles, regardless of nationality, gender, race, and age, in all positions throughout the university and introduce corporate, international, and equity points of view into university management.



Peer support students working to improve accessibility (in the background is a mural on campus created by an artist with disabilities)

Current initiatives

- Vision Co-Creation and Collaboration System to allow leadership to directly discuss the future of the university with department heads and early-career researchers
- University Reform and Revitalization System to allocate resources including personnel and funds to faculties and departments toward realizing this vision

VISION 2

Digital Transformation

Expand data-driven education, research, and medicine that continuously create new value and work toward realizing a future society that enables true well-being for all people

Develop and promote new models for society

Fuse knowledge from multiple disciplines to devise new models for realizing a people-centered society utilizing digital transformation (DX) and disseminate and share the outcomes of this research with society.

Train data-literate professionals

Establish a research and learning environment that is flush with opportunities to acquire math, data science, and AI skills such as by utilizing open data and train students and researchers to be able to incorporate these skills in their own research fields.



Development of new electronic education resources using education DX

Promote DX-led projects with high potential for social impact and implementation

Create new value that enables social and economic system reform through data-driven education, research, and medicine and share and utilize the output of these efforts in various regions through collaboration with local governments and the private sector.



Virtual-reality experiment at the School of Design

Current initiatives

- Accumulation, analysis, and use of big data in education and introduction of math and data science education in all curricula
- Training of data scientists and cybersecurity professionals capable of leading the age of big data

VISION3

Education

Educate globally competent, value-creating professionals capable of designing a new society and solving social issues

Incorporate problem-solving and value-creation education in all curricula

Introduce perspectives and thinking for identifying and solving problems and creating value into all undergraduate and graduate curricula and train professionals who can design a new society and create new value with integrative knowledge.

Introduce integrative, cross-disciplinary doctoral degree programs

Train highly skilled knowledge professionals with multifaceted skills and perspectives by introducing integrative, cross-disciplinary doctoral degree programs.

Strengthen industry connections and entrepreneurship training

Boost collaboration on education with the private sector to further diversify career path options upon graduation and introduce system-wide entrepreneurship education to train human resources who will take the challenge to create new value.

Enhance student support for diverse needs

Enrich the campus and research environment to accommodate the diverse needs of all students to help them succeed and enhance not only financial support, such as with fellowships, but also comprehensive student support.



Problem-solving curriculum implemented in the classroom

Current initiatives

- **KIKAN education**—Kyushu University's core undergraduate curriculum—to teach active learning and the School of Interdisciplinary Science and Innovation, which is implementing an issue-based, interdisciplinary curriculum

VISION4

Research

Strengthen research capabilities in both basic and applied research to compete in the world and provide solutions to problems in society

Boost research strategizing and support toward creating integrative knowledge

Bolster the university's functions for strategizing and coordinating research efforts and focus research support through effective resource allocation to reinforce our platform for creating integrative knowledge that advances technology and solves social issues.

Strengthen cutting-edge research and discovery of new fields

Strategically allocate funds and personnel to accelerate our leading research in key areas for society such as decarbonization, medicine and health, and environment and food and unlock and grow new research areas to continue contributing to society.

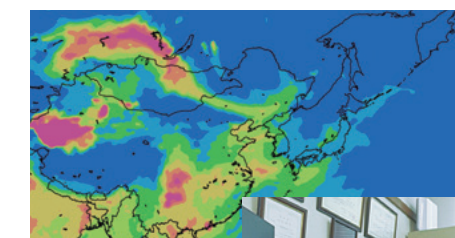


Creation of a new insect industry using silkworm bioresources

Recruit excellent early-career researchers and enrich the research environment

Introduce a comprehensive support system to recruit, train, and retain excellent early-career, female, and international researchers and make the research environment even more conducive to exploring new ideas through systems such as for a Free Quarter for Research (FQR)* and research equipment sharing.

*The Free Quarter for Research (FQR) system aims to reduce the burden of teaching and administrative tasks and allow researchers to secure at least one quarter dedicated solely to research by taking advantage of the quarter system for educational courses; streamlining and integrating class subjects through the use of digital technology; setting a three-month period during which administrative meetings of the university as well as departments will, in principle, not be held; and reducing the number of participants in and the frequency of such meetings.



Research toward predicting the effects of PM2.5 on climate change



Current initiatives

- **Establishment of research platforms that leverage Kyushu University's strengths**, such as the Platform of Inter-/Transdisciplinary Energy Research and the Institute for Asian and Oceanian Studies

VISION5

Co-Creation with Society

Contribute to people's well-being and sustainable social development through research and education by co-existing and co-creating with society locally and globally as a hub for knowledge

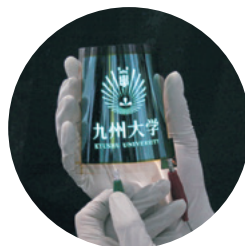
Identify issues and make visions by collaborating across sectors

Encourage collaborative projects with industry, academia, government, and citizens by forming a platform for collaborations that cross organizational boundaries and identifying and creating mid- to long-term goals and visions through backcasting.

Implement research output in society

Quickly capture outstanding research findings that can generate innovation and bring these new technologies to society starting in Fukuoka and Kyushu and extending out to Asia and the world by growing collaborations with society and boosting the creation of intellectual property and startups.

Innovation using revolutionary organic materials and devices



Promote community outreach and citizen science

Expand community outreach activities to promote research and innovation that are socially responsible and involve the local community in research and educational activities related to social experiments.



Field tests of next-generation fuel cells through industry and academia collaboration

Current initiatives

- Institutional partnership agreements with large companies
- Acceleration of open innovation through industry-academia-government-citizen collaboration and startup support in collaboration with the regional private sector

VISION6

International Collaboration

Become a hub for international talent circulation through institution-level international collaborations to tackle global issues and foster future leaders

Expand and deepen strategic international partnerships

Lead international consortia of higher education institutions to showcase Kyushu University's strengths and unique features and select and refocus existing and new strategic partnerships to expand and deepen international collaboration.



Strengthening partnerships with institutes abroad such as by hosting QS-APPLE 2019

Establish a robust collaboration network for early-career researchers

Become a hub for international talent circulation that attracts early-career researchers from home and abroad across disciplines and generations and build a robust research and education network.

Build a global environment

Improve financial support and the living and work environment for international students and researchers through collaboration with the private sector and encourage exchange and collaboration among Japanese and international students and researchers.



Improving international exchange and collaboration through an enhanced support system

Current initiatives

- International contribution through development cooperation in higher education and international cooperation projects

VISION7

Medicine

Strive for top medical care fulfilling the public's expectations by developing cutting-edge medicine, providing high-quality clinical practices, and training ambitious and exceptional medical professionals

Provide treatment and train specialists for infectious diseases

Provide clinical care for emerging and re-emerging infectious diseases such as COVID-19 and train medical specialists for supporting these efforts to contribute to ensuring safety and protection of local communities against infectious diseases.

Become a hub for genomic cancer medicine and for clinical research

Provide cutting-edge medical care in the local community such as through cancer treatment guided by genome analysis and act as a hub for clinical research that contributes to the development of pharmaceutical products and medical equipment.



Teleconferences with medical institutes around the world

Develop personalized healthcare

Develop cutting-edge personalized medicine by collecting clinical data and samples from regional and disease cohorts, analyzing them with newly developing technologies, and revealing the molecular origins of diseases for each individual patient.



Contributing to regional medical care by providing cutting-edge medicine

Current initiatives

- Provision of high-quality medical care that is safe and secure and development of advanced diagnostics, treatments, and pharmaceuticals
- Expansion of telemedicine programs in collaboration with overseas medical institutions

VISION8

Finance

Realize sustainable, autonomous management by securing and effectively managing funds from diverse and robust sources

Increase external funding through institutional agreements

Increase institutional collaboration agreements with the private sector to accelerate research that leads to social impact and application and secure external funding such as through large-scale research collaborations and commissioned research to further advance the university's research and education resources.

Boost intellectual property income by accelerating startup creation

Develop multi-layered startup support funds and establish a systematic program to foster entrepreneurs to accelerate the creation of university startups and increase income from intellectual properties.



Shiiki Hall, which was built to commemorate the university's 100th anniversary using funds from a generous donation

Expand donation income by strengthening ties

Increase income from donations by strengthening ties with a wide range of stakeholders, such as alumni and international students, and by enhancing fundraising functions.



Support of outstanding undergraduate students through donation-funded Yamakawa Prizes

Current initiatives

- Establishment of a system for optimizing Kyushu University's ability to allocate resources and assets flexibly

Designated National University Corporation Proposal

Contribute to the creation of a society that achieves sustainable social development and diverse realizations of well-being.

Boost research capabilities to compete with the world

Enhance research strategy and identify new strengths via the Comprehensive Research Strategy Council

Promote the generation and implementation of integrative knowledge to advance research and solve social issues

Recruit, train, and retain excellent young, female, and international researchers

Driving Social Change with Integrative Knowledge

[Objective 1]

Become a platform for knowledge that drives world-class research and education

[Objective 2]

Become the core of an innovation ecosystem that forges new social and economic systems

Connect with society

Strengthen industry-academia-government-citizen collaboration to facilitate the solving of social issues and to accelerate the transfer of research output to industry

Promote university start-ups

Encourage citizen science through collaboration with local communities

Creation and utilization of integrative knowledge

Top priority

Initiatives to transform society by solving social issues

Entry Points

Social issues to be addressed by leveraging our strengths and unique features

Decarbonization

Medicine and Health

Environment and Food

Head Office for the Design of Future Society

Directed by the President

- Produce and utilize integrative knowledge that fuses the natural sciences with the humanities and social sciences
- Formulate strategies to achieve our vision in response to social changes
- Manage progress of initiatives and allocate resources strategically
- Act as a bridge for the Kyushu University Regional Collaboration Platform through coordination and recommendations

Top priority

Initiatives for DX-driven social reform

Promotion Office for Data-Driven Innovation

Directed by the President

- Research what a DX society should be and disseminate strategies to achieve it
- Develop data-driven education, research, and medicine
- Establish data management (DM) and data governance (DG)
- Contribute to innovation through DX

Enhance teaching to train professionals who create new value

Adapt problem-solving-oriented education programs and STEAM education into a campus-wide curriculum

Expand interdisciplinary degree programs that span across schools to develop versatile Ph.D. graduates

Internationalize education through Collaborative Online International Learning (COIL), double-degree programs, and joint-degree programs

Stimulate initiatives through strategic resource allocation

Strengthen university governance

Adopt business-conscious points of view for management and diversify campus

Strengthen our financial base

Secure diverse financial resources based on strategies for acquiring external funds

Strengthen international collaboration

Enhance international collaboration with strategic partners

Accelerate international talent circulation through expansion of joint research

Make the campus environment more conducive to globalization

Initiative 1

Three entry points for starting social reform

Uncover and develop new strengths and unique features based on curiosity-driven research

Contribute to tackling social issues by leveraging our strengths and unique features

Entry Points



Decarbonization

- Hydrogen for energy storage
- Carbon capture and utilization
- Models for local renewables
- Rethinking of energy society
- Regional collaboration



Medicine & Health

- Transomics protocols
- Telemedicine system
- Precision medicine disease panel
- Future medicine proposals
- DX utilization



Environment & Food

- Microplastics forecasts
- Mitigation of climate forcers
- IP strategies for bioresources
- Smart agriculture
- Insect resources and acceptance

Next Issues

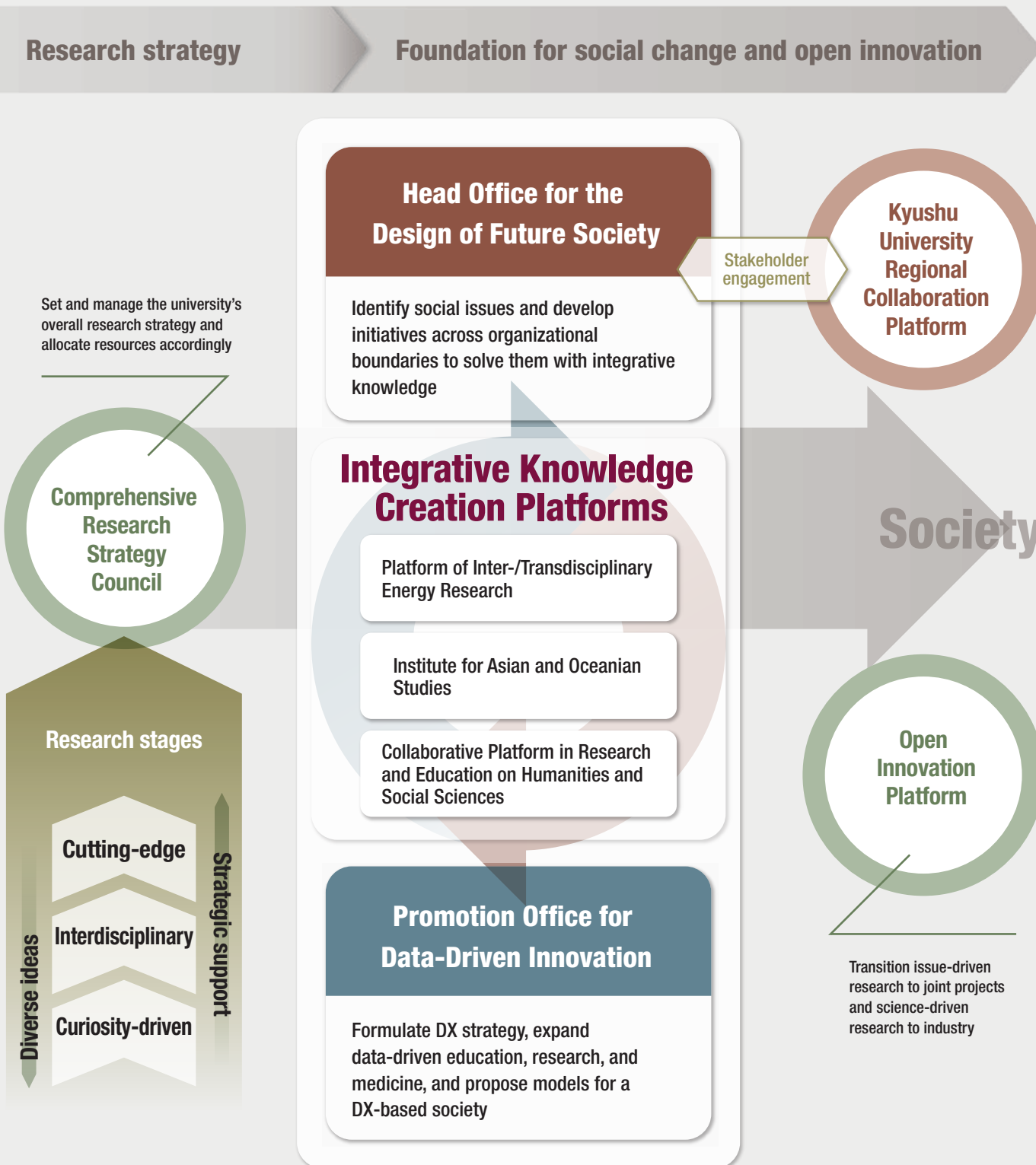
New strengths and features

Curiosity-Driven Research

Initiative 2

Two core offices for promoting innovation

Unify efforts from research strategy to social implementation under the president's leadership



Initiative 3

Open Innovation Platform for advancing social implementation

Facilitate social implementation through "Future Design"

