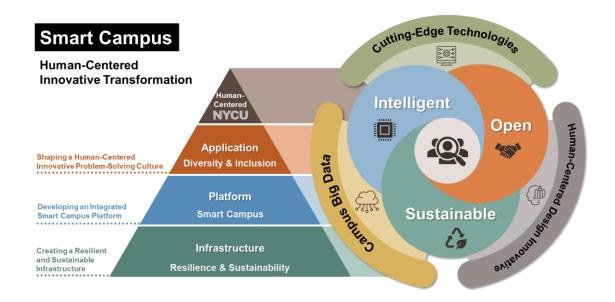


Innovative Smart Campus

Driving University Governance through Digital Transformation

In response to the post-pandemic era, the government is actively promoting digital development initiatives, significantly increasing projects related to 5G, artificial intelligence, and enterprise digital transformation. NYCU, leveraging its strengths in cutting-edge technologies, big data, and artificial intelligence, is actively planning and promoting digital transformation in many aspects. This issue of the newsletter focuses on 'Innovative Smart Campus.' In addition to introducing our university's objectives and strategies of digital transformation, it also highlights the development and various applications in the Center for Institutional Research and Data Analytics (CIRDA).



The university's goal is to cultivate students who can think innovatively, take the lead in addressing the future's global challenges, and, at the same time, work towards an inclusive and sustainable future. Three main areas will be focused in discussing innovative smart campus: foundational infrastructure development, data integration and service platforms, and the development of innovative application services.



Resilience & Sustainability

Infrastructure

To ensure the continuity of teaching, research, and administrative activities, and to respond swiftly in times of adversity while pursuing sustainable campus development, this objective places resilience and sustainability at its core, strengthening the foundational infrastructure for campus digital transformation.

- Enhancing information and communication infrastructure and information security, and deploying smart 5G applications across the campus.
- Promoting digitization and mobile office practices to enhance the accessibility of campus services.
- Utilizing IoT smart technology to safeguard campus security and environmental health.

 Continuously promoting campus energy sustainability, progressing toward achieving net-zero carbon emissions.





Smart Campus

Platform

Leverage emerging technologies to enhance intelligent digital applications. This objective aims to build a data-driven big data application platform for educational administration, offering personalized and adaptive services to both faculty and students, while also serving as a basis for decision-making in campus development.



- Combining NYCU e-Porfolio with study profile and artificial intelligence to enhance personalized learning.
- Developing remote mobile learning, digital content, and extended immersive learning environments.
- Establishing practical domains to promote research and development applications while diversifying the areas for teaching and research practices.
- Integrating IoT application platforms and developing a digital twin smart campus.
- Enhancing data governance for creating a datacentric application decision ecosystem.



Diversity & Inclusion

Application

The rapid development of emerging technologies such as big data, artificial intelligence, the Internet of Things, cloud computing, and immersive experiences in the metaverse is set to significantly transform lifestyles and bring about profound changes in the educational landscape. This objective emphasizes a people-centric, open-minded approach, embracing change, and fostering a culture of diverse and innovative problem-solving.

- Leading service innovation through the application of information technologies to develop new forms of campus services.
- Promoting campus well-being through cloud-based smart healthcare systems.
- Enhancing smart campus experience using human-centered design thinking approach to redesign service processes.

