

# Develop Workforce Through Technology and Research & Upgrade the Industrial Sector's Capabilities

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

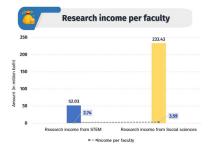




#### **RESEARCH**

## Harnessing technology & innovation for industrial advancement

NIDA conducts research that applies technology and innovation to enhance the capabilities of the industrial sector. The School of Applied Statistics and the School of Business Administration focus on producing leaders for the digital age.



NIDA's significant research contributions encompass projects like the "Design of Smart Retail 4.0 Technology Drive Using Data and Design Concepts," funded by the Office of Science, Research, and Innovation Promotion (FF). This project focuses on four key areas: (1) applying Geographic Information Systems (GIS) for business decision-making, (2) developing Smart Dressing Rooms for Smart Retail 4.0, (3) learning about robotics, and (4) enhancing Smart Inventory Management systems using Face Recognition-AI. Additionally, the project developed the course, "Technological Data-Driven Design: Design Thinking for Smart Retail 4.0 Initiatives," to build the country's workforce, equipping them with the ability to handle technological changes.

NIDA emphasizes developing technology and innovation in order to support job creation and prosperity and social stability. This is reflected in NIDA's income from research in STEM fields, which averaged 2.74 million THB per researcher in the 2023 fiscal year, while research income from the arts, humanities, and social sciences averaged 3.59 million THB per researcher.

#### **TEACHING & LEARNING**

### NIDA's innovative hubs for sustainable future

NIDA has several incubation centers like the Business Innovation Center, Data Analysis and Technology Center, Environmental and Climate Change Research Center, NIDA Design & Innovation Hub, and NIDA Al Innovation Hub. These units focus on research, information exchange, incubation, and technology and innovation transfer to the community, society, and the nation.

NIDA also established the Innovation Transformation Center to drive institutional transformation, led by young and creative thinkers. For example, the GSAS Sm@rt Lab at the School of Applied Statistics features technologies, such as Artificial Intelligence, Machine Learning, Smart Logistics, and Data Analytics. It functions as a training center for both short-term and long-term programs, providing spaces for students to relax and socialize.

NIDA Design & Innovation Hub and NIDA AI Innovation Hub serve as technology and innovation learning centers inspired by Stanford's d.school's Design Thinking principles. These hubs help organizations drive change by exploring advanced technologies like AI, Big Data, Smart Retail, and robotics, promoting hands-on experience and creativity to foster business innovation.





#### **TEACHING & LEARNING**

## Shaping future leaders through digital innovation & data-driven program

NIDA's core mission in education has been accomplished through the work of its Graduate Schools. The School of Business Administration focuses on producing modern leaders who can manage and strategize for organizations, particularly during the digital transformation era. Leaders must focus on digital strategy, exhibit digital leadership, and turn digital threats into opportunities. Programs include the MBA, Master of Science in Corporate Finance, Investment, and Risk Management (CFIRM), and Ph.D. in Business Administration.

The School of Applied Statistics develops skills and knowledge to meet societal needs and national policy objectives, focusing on creating professionals in statistics, data science, and information technology. Programs include Master of Science in Smart Logistics and Supply Chain Management (LSCM), Master of Science in Data Analytics and Data Science (DADS), Master of Science in Information Technology Management (ITM), Ph.D. in Smart Logistics and Supply Chain Management, Ph.D. in Computer Science & Information Systems, and Ph.D. in Data Analytics & Data Science.

Also, NIDA students from the School of Business Administration participated in the University Innovation Fellows (UIF) program, which was part of the UIF Networks at Stanford d.school, recognized as Stanford University's innovation hub in the United States.

