

Collaboration between Universities and Society, Business & Industry in Doctoral Training



2018 Japanese-German Symposium

Hitotsubashi University

President

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Plan of Presentation

- Missions of graduate schools in social sciences
- Situations of graduate schools in social sciences in Japan
- Recent changes
- Two initiatives of doctoral education at Hitotsubashi Univ.
- Brief introduction of Hitotsubashi Univ.
- Explanations of our new doctoral programs

➤ Missions of graduate schools in social sciences

Graduate schools in social sciences aim to foster

- ① Researchers (Master's and Doctoral Programs)
- ② Competent Professionals in Business, Law, and Public Policy (mainly Master's Programs in Japan so far)

➤ Situations of graduate schools in social sciences in Japan

- ① In Japan, not many undergraduate students majoring in social sciences enter Master's programs after graduation, and even a smaller number of them take Doctoral programs. Most of them intend to become researchers at universities.
- ② Most Japanese companies employ young graduates from undergraduate programs in social sciences and train them **within** the companies, assuming the **life-time employment system**.

➤ Recent changes

This Japanese system of human resources development is now getting less effective because:

- A) higher **mobility of professionals** in the globalized economy
- B) the **knowledge and skills** necessary for business management are expanded and **more sophisticated**.

➡ We see a large increase in the number of applicants for **MBA** and **Master in Management** programs at Hitotsubashi University recently.

Still small demand for **Doctoral programs** in social sciences currently, but new social needs arise for them.

- ① The need for **Evidence-Based Policy Making (EBPM)** has been emphasized recently. In government agencies and the central bank of Japan, there are a considerable number of officials who have obtained Master's degrees in economics or public policy from Japanese or overseas universities. They want to learn more advanced knowledge and skills for public policy-making in doctoral programs.

- ② Japan has a major shortage of high-skilled managers capable of connecting advanced technologies to business. We need to develop **management education designed for engineers.** Most engineers in Japanese major companies have Master's degrees in science or engineering. They need to acquire knowledge and skills for business management in doctoral programs.

➤ Two initiatives in Doctoral education at Hitotsubashi University

Responding to these new social needs, Hitotsubashi University initiates two new doctoral programs:

- ① **Evidence-Based Policy Making Program**
- ② **Business Innovation Management Program**

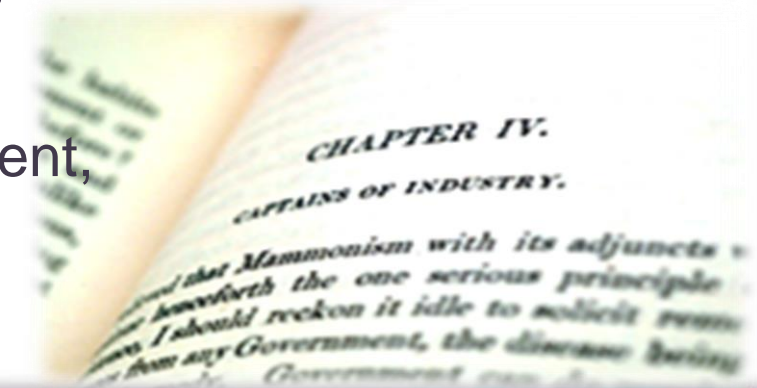
In both programs, **collaboration between universities and society, business and industry** is crucial.

➤ Brief introduction of Hitotsubashi University

One of Japan's leading research universities
specializing in social sciences

Brief History

- 1875 Founded as a private school of commerce and business by Arinori Mori
- 1920 Developed into the Tokyo College of Commerce (the 6th national university in Japan)
- 1949 Expanded and renamed as Hitotsubashi University
(Commerce and Management, Economics, Law, and Social Sciences)



Current Organization of Hitotsubashi University

4,400 undergraduate, 1,800 graduate students (850 overseas students)

Undergraduate Programs

Faculty of Commerce and Management
Faculty of Economics
Faculty of Law
Faculty of Social Sciences

Graduate Schools

Graduate School of Business
(**HUB**: Hitotsubashi University Business School)
Graduate School of Economics
Graduate School of Law
Graduate School of Social Sciences
Graduate School of Language and Society
Graduate School of International and Public Policy

Institute of Economic Research

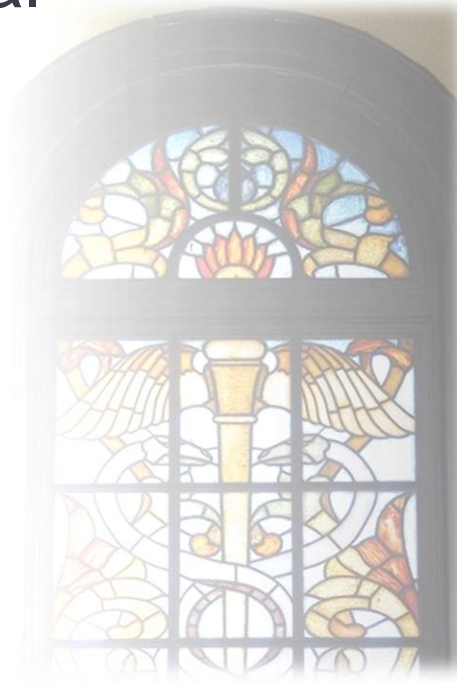
Hitotsubashi Institute for Advanced Study



Located in the western
suburbs of Tokyo

Hitotsubashi University aims to ...

- 1) Conduct research in the social sciences with an emphasis on contributing to improvements in social and economic systems, the legal system, and business administration
- 2) Produce globally competent professionals in business, law, and public policy.



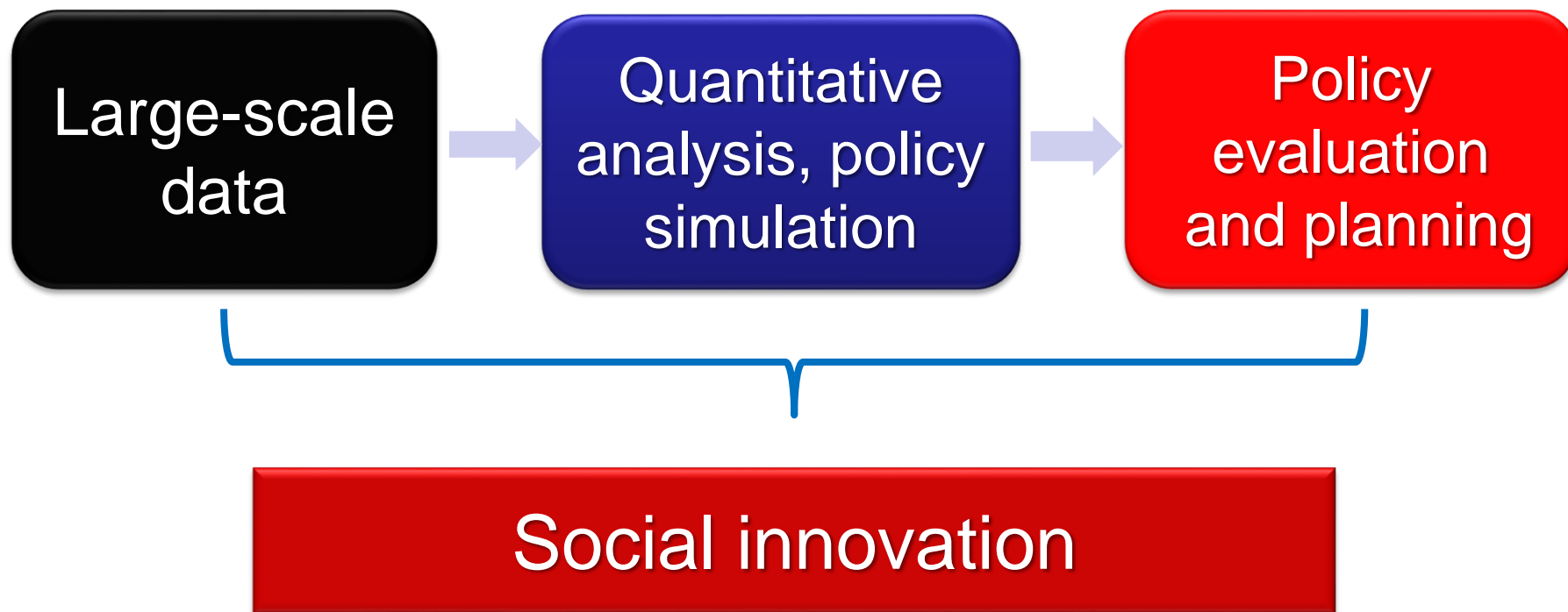
Initiative in Research and Education for Evidence-Based Policy-Making (EBPM)

Focal Themes

- ✓ Interdisciplinary research and education
- ✓ Inter-departmental and inter-institutional programs
- ✓ International collaboration
- ✓ Societal impact of research and human resource development

What is EBPM?

Policy evaluation and planning
based on analysis using large-scale data



The three components of EBPM research and education

1. Accumulation
and provision
of rich large-
scale data

2. Policy-
oriented
empirical
analysis

3. Industry-
academia-
government and
international
collaboration

Initiatives to develop and expand
EBPM research and education even further

Graduate School
EBPM Program

1. Accumulation and provision of rich large-scale data

Institute of Economic Research

MEXT Joint Usage / Research Center
“Center for Empirical Analysis on
Japanese and Global Economy”
(since 2010)

- Rich archives of government statistical microdata and support for their usage by researchers
- Joint research projects with other institutions
- Government Statistics Anonymized Data Usage Promotion Program

1. Accumulation and provision of rich large-scale data

Graduate School of Economics

Joint research center for corporate data analysis with Teikoku Databank

- Rich sets of corporate-level microdata made available **in close collaboration with a leading information company** in Japan
- Promoting **joint research projects** on corporate behavior with **partner companies**

2. Policy-oriented empirical analysis

Hitotsubashi Institute for Advanced Study (HIAS)

Inter-departmental research unit
under the direct control of the President

Research Center for Health
Policy and Economics

Center

Center

Research Center for Economics and Social
Risks, Institute of Economic Research

E.g., Creation of consumer purchase indices based on POS data and
their use in policy analysis

Institute

Center

3. Industry-academia-government and international collaboration

Collaboration with other research institutes and partner companies

National Institute of Advanced Industrial
Science and Technology

Economic and Social Research Institute

Research Institute of Economy, Trade
and Industry

National Institute of Population
and Social Security Research

Institute for Monetary and Economic Studies,
Bank of Japan

Teikoku Databank

Personnel exchanges with central government agencies

Research units on intergenerational issues

Ministry of Finance

Cabinet Office

Ministry of Economy, Trade and Industry

Ministry of Health, Labour and Welfare

Bank of Japan

National Institute of Population and Social Security
Research

3. Industry-academia-government and international collaboration

International academic
exchange and cooperation

Europe: 65; Asia: 61,
North America: 28; Other: 16

SIGMA

Societal Impact and
Global Management
Alliance

GNAM

Global Network for
Advanced Management

Global
collaboration
in research and
education

Promoting international research projects

- Multi-country studies
- Mutual usage of databases
- International conferences/seminars
- Visiting researcher programs

Promoting collaboration in education

- Double degree programs
- PhD student exchange programs
- Short-term visiting programs
- Lecture series

Graduate School EBPM Program

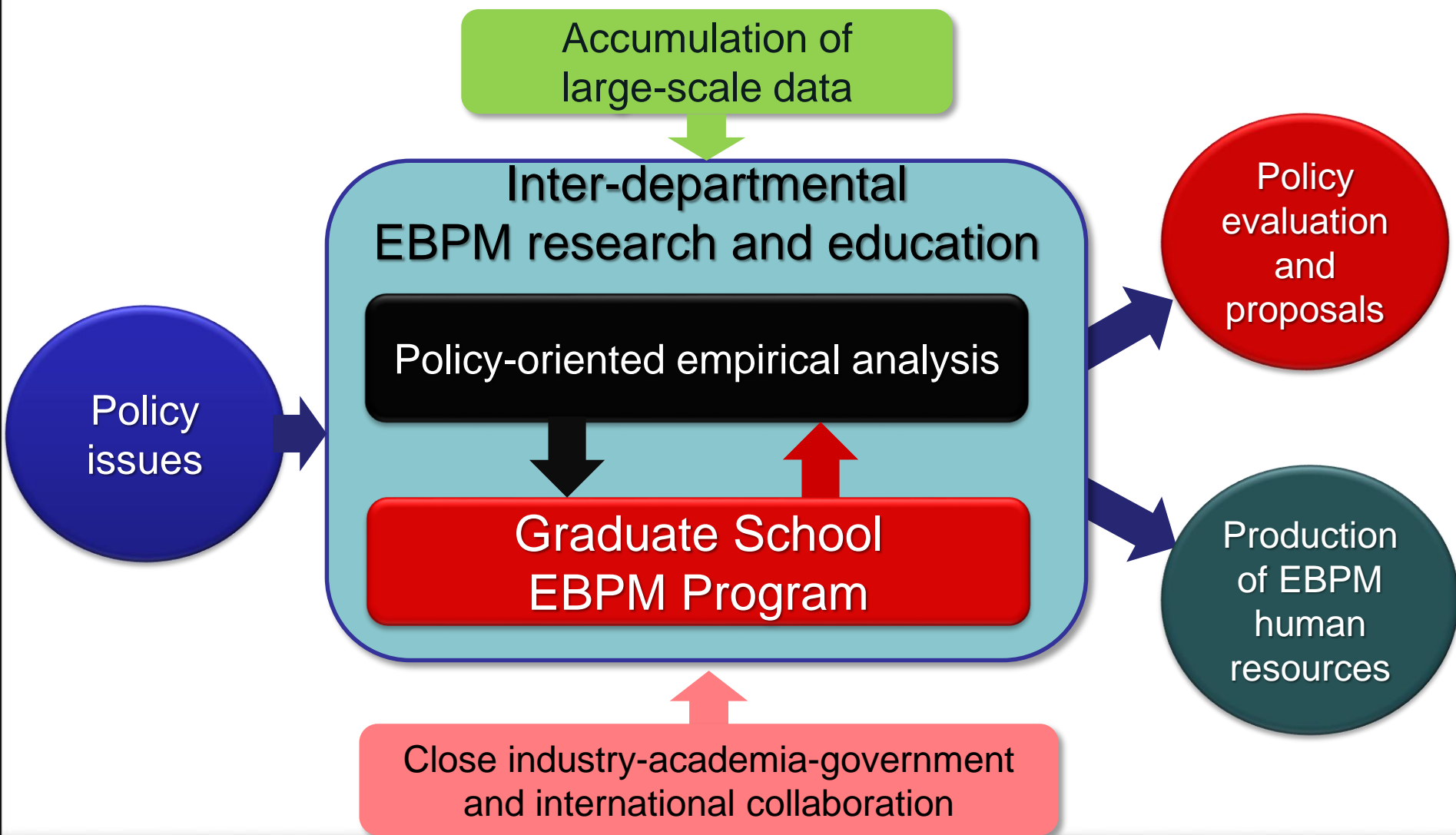
- Inter-departmental 5-year integrated MA/PhD program centering on EBPM.
- Curriculum aiming to equip students with practical skills for advanced statistical analysis.
- Educational programs which encourage graduate students to participate in research projects.
- Special arrangements for part-time students, such as civil servants working for government agencies.

Graduate School EBPM Program

International collaboration to make the Program more effective and beneficial to both students and academic partners

- ✓ Short/long-term visiting programs and credit transfer systems for graduate students
- ✓ Enhancement of academic exchanges (e.g., visiting researchers and cross appointments)
- ✓ Facilitation of mutual access to rich databases to promote multi-country studies

Summary: EBPM research and education



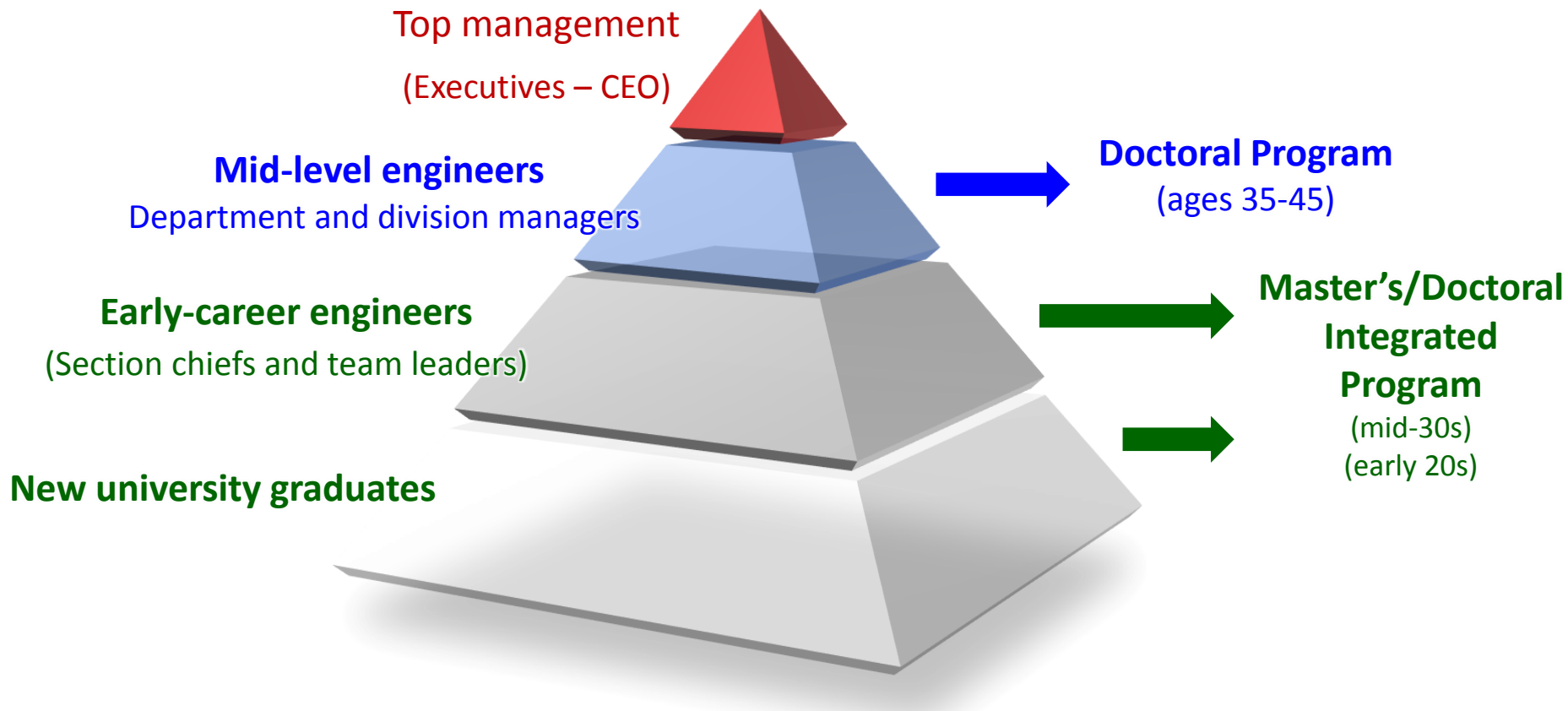
Initiative of Business Innovation Management Program

Essential Problems Behind Japan's Innovation Hiatus

Major Shortage of Highly-Skilled Managers

- The slowdown in innovation in Japan is due to **a critical under-supply of managers** capable of turning advanced technologies into business opportunities.
- To cultivate highly-skilled managers to connect technology to business, we **need to develop superior-quality management education** designed for engineers.
- Important to reinforce education in science and engineering-oriented universities with **management education from social science-oriented universities**

The Need for a Advanced Business Innovation Education Program



The Need for a Advanced Business Innovation Education Program

Business innovation education program

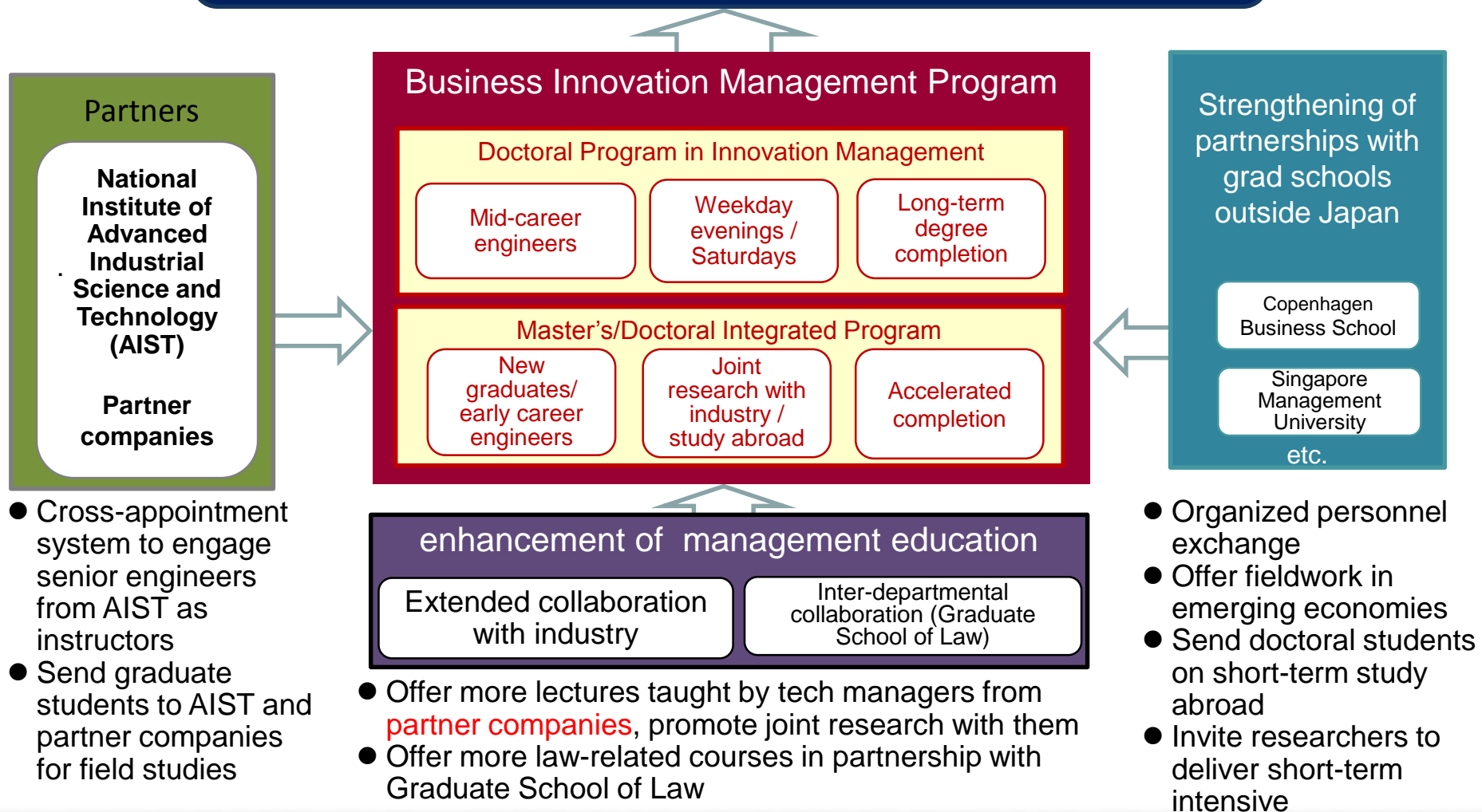
- Foster highly-skilled managers and advanced management professionals capable of connecting technology to business
- Offer dual pillars of a Master's/Doctoral integrated program for early career participants, and a Doctoral program for mid-level engineers
- Deliver systematic business innovation education hinging on Hitotsubashi University's management education curriculum, and in collaboration with the National Institute of Advanced Industrial Science and Technology, world top business schools, and partner companies.

Hitotsubashi University's Strengths

- Highest standard of management education in Japan delivered by faculty with expertise in business innovation
- Track record in training senior-level management personnel with technical backgrounds through executive education
- Know-how in fostering future executives through the MBA Program

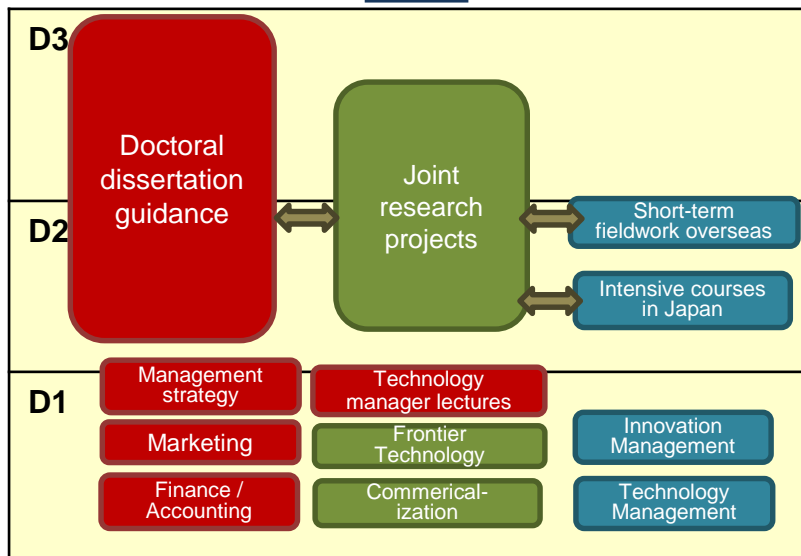
Overview of Business Innovation Management Program

Supply to industry of **highly-skilled managers** and **advanced management professionals** capable of connecting technology and business to generate innovation



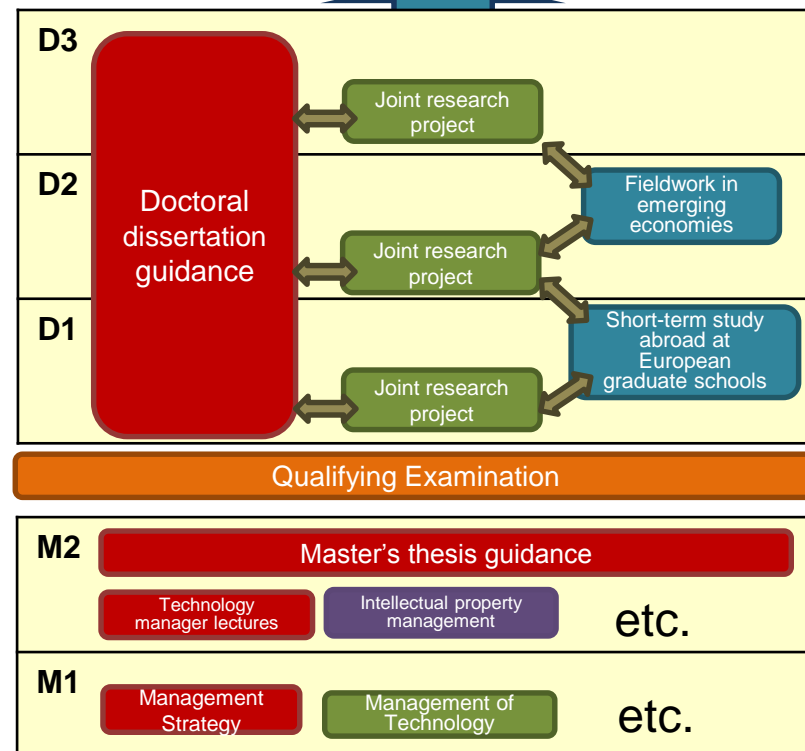
Doctoral Program in Innovation Management

Highly-skilled managers and advanced management professionals
capable of connecting technology to business and generating innovation



Partner companies send their mid-career engineers holding Master's degrees in science/engineering.
Joint research with partners

Master's/Doctoral Integrated Program in Business Innovation Management



Early-career engineers and new graduates holding Bachelor's degrees in science/engineering