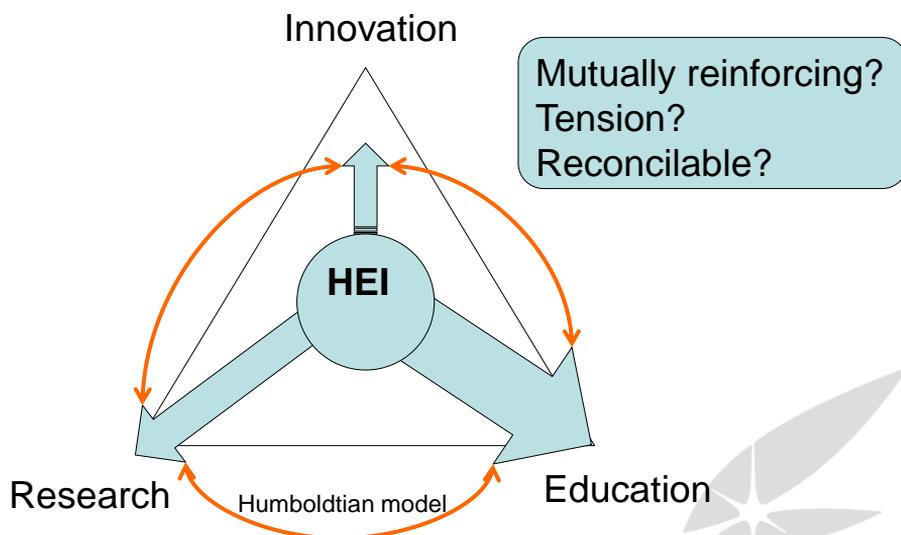


Knowledge Triangle or Education, Research & Innovation Nexus

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Higher Education Institutions



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HEIs boosting innovation?

- Training, empowering and connecting people
 - Different layers of professionals
 - Including “game changer”
- Through research activities
 - Collaborative works (enabling tech), tech-transfer, start-ups
- Taking advantage of high performance infrastructure
 - Space for collaboration and source of inspiration
- Diffusing the value of “innovation”
 - e.g. Stanford’s idea about the “community of engineers”, and d.school
- Experimenting new breed of innovation
 - e.g. Social innovation, Inclusive innovation,...



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Other stakeholders' expectations

- Industry
 - Alternative to “in-house” approach
 - Seeking for what’s next
 - Access to skilled human resources
 - Empowering its own human capital
 - Multiplier effect of R&D investment
 - ...
- Government
 - University as a driver of innovation (ultimately economic growth)
 - Better functioning innovation eco-system
 - Better equipped human capital
 - ...



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Implication for HEIs?

- HEIs able to respond to ever-increasing demands and expectations?
 - Core value of HEIs to be revisited
- “HEIs diverted from its fundamental mission of **education** and **basic research**”
 - Myth or Reality?
- Space for HEIs to act proactively?
 - Given exiting institutional framework, including state’s funding mechanism, governance structure, and shared values among faculties and staff

Are Students
winner or loser?

5

HEIs Reform!

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In the Japanese context

- Before 1998
 - Loosely coupled relationship between University and Industry
 - With its coherence and limits
- After 1998 ➔ Government’s initiatives
 - Technology Licensing Office
 - Japanese Bayh-Dole Act
 - Joint Research Lab
 - Internship, MOT programs
 - Incubators, Science and Industrial Parks,...
 - Deregulation to facilitate the mobility of people
 - Promotion of “University start-ups”
 - Promotion of “Open innovation”
 - ...

Mostly in terms of
University-Industry
linkages

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The 5th Science & Technology Basic Plan

1. Introduction: changing context and our goal
2. Preparing the next: Future industry and society
 - Society 5.0
3. Addressing socio-economic & global challenges
4. Investing in “fundamentals”: People and Excellence
5. **Better functioning STI systems** (→ p.9)
6. STI and society
7. Leading effective STI Policy implementation
 - **University reform**
 - **National R&D institutions reform**

<http://www8.cao.go.jp/cstp/english/basic/5thbasicplan.pdf>

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5. Better functioning STI systems

- Exploiting power of **open innovation**
 - Putting cross-sector, cross-institutional, cross-discipline collaboration into practice
 - Facilitating mobility of people and creating “spaces” for collaboration
- Innovation ecosystem driven by start-ups
 - Entrepreneurship and **University start-ups**
 - Revisiting “ecosystem” for new business creation
 - Mobilizing demand-side policies
- Strategic IP management
- Adapting regulatory environment
 - To the forthcoming new products and services
 - New approach for IP management to deal with ICT revolution
- New framework for empowering regional innovation system
 - Particular focus on “Global Niche Top companies (GNT)”
- Global strategy for innovation
 - Contributing to the global agendas (e.g. SDG)
 - Promoting inclusive innovation

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HEIs may consider...

- Stepping from “exogenous reform” to “endogenous reform”
- Mainstreaming student-centered approach
 - e.g. University of California San Diego
- Use of alumni network
- Working with stakeholder to formulate a shared narrative
- ...
- Responsibility as a social institution

