

From Systems to Ecosystems: Operating a National CRIS as a Socio-technical collaboration

Hands-on workshop



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Who are you learning with today?



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Agenda

- **Get to know your peers – discussion exercise [5]**
- **Socio-technical collaborations in national/regional CRIS**
 - Landscape challenges – ecosystem resilience [10]
 - Typical tensions CRIS operators may sit in [10]
- **Case studies from national CRIS initiatives [20]**
- **Scenario-handling team exercise [30+10]**
- **Q&A**
- **Stakeholder ranking & mapping [5+Homework]**



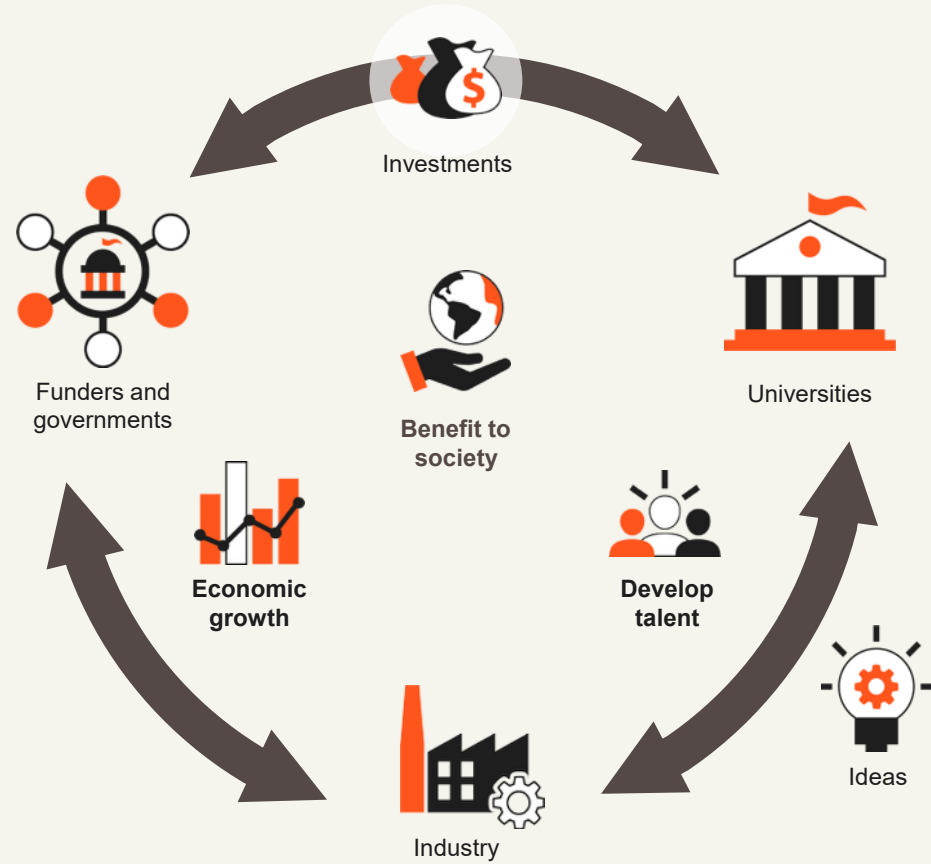


*In one word, what makes
collaboration hard?*

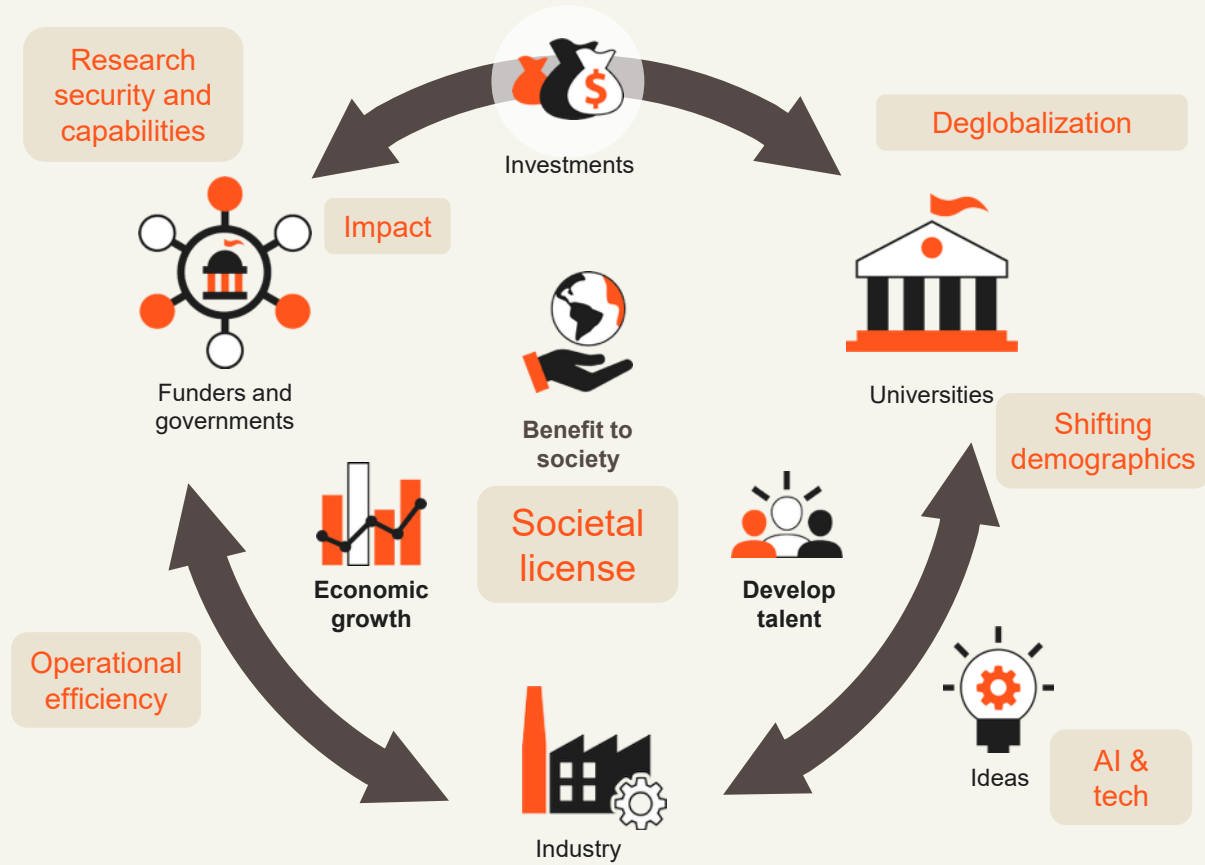


From landscape challenges to ecosystem resilience

Governments, the industry and research institutes continue to work together and invest in academia for the benefit of society



To progress their mission, universities must navigate key challenges and seize opportunities effectively



Real transformation isn't *just* a technology problem



Strategic vision

- Leadership
- Values
- Planning
- Investment



People

- Expectations
- Activities
- Experience
- Capabilities



Infrastructure

- Systems
- Data
- Networks
- Physical spaces



Core operational activities

- Workflows
- Processes
- Practices



Typical
tensions institutional
admins may sit in

Typical tensions

- Different policies on different levels (institutional vs government vs entities vs funding agencies): freedom versus transparency
- GDPR-issues versus openness eg use of ORCID
- Sharing the same goals: get everyone on the same page (within an accross organisations)
- Hidden agenda's: working against each other/no common goals
- Political influence/lobbying: get actions blocked via political lobbying
- Fear of transparency: actions with all the data?
- Fear of outcomes: less budget? Less freedom to act?
- Trust vs distrust: interpersonal or because of levels
- Other: knowledge, budget, planning,...etc.



Case studies from National CRIS projects

FRIS/FWO: researchers' report

Context & Ambition

- **Researchers need to report to funding agency FWO by giving info that is partially already available in FRIS** – reuse info that is already available, instead of filling in forms again and risk of mistakes. Systems already in place, just need to integrate.
- **Goal: Less administrative burden** - Implement a flow between FRIS & system funding agency + implement extras in the existing flow between institutions & FRIS.

Key Stakeholders

- Funding Agency FWO:
 - Policy
 - IT
- FRIS:
 - Policy
 - IT
- Research Institutions:
 - Policy: data stewards + management
 - IT
- Researchers

Critical Moments

Challenges:

- Explaining the goal & reassuring RI
- Change reporting flow researcher
- Defining new information (extra's)
- Not all stakeholders on the same plate
- Data quality

Successes:

- Data quality gets better over all systems
- Info flows automatically between systems
- Better understanding of workflows, challenges & opportunities
- Less administrative burden for individual researchers

Research.fi: Introducing information on research facilities/infrastructures

Context & Ambition

- A research organization prepares to deliver facilities/infrastructure data to Research.fi to support a national, interoperable view of infrastructures.
- The goal is to improve collaboration, visibility, and impact assessment, using a shared data model, APIs, and persistent identifiers
- i.e. taking a new entity in use on a national level

Key Stakeholders

- **Research.fi team**
 - Maintains the national infrastructure data model and APIs and provides support for onboarding and data transfers
- **Finn-ARMA infrastructure expert network**
 - Co-develops definitions and curates data, identifies links between infrastructures over time
- **Research organizations (universities, institutes)**
 - Contribute their own infrastructure data, form part of the national infrastructure network
- **End users and third parties (researchers, companies, public sector actors)**
 - Use the data to discover infrastructures and services, co-develop new services

Critical Moments

- **Structuring & alignment**
 - Define infrastructures
 - Map data to the national model, handle data transfers
- **Operational use & ecosystem value**
 - Maintain and update data continuously
 - Link infrastructures into a network
- **Enable discovery, reuse, and collaboration**
 - Collaboration on Research.fi features
 - Engaging with third parties and companies to build on this data (may be external services, system integrations)

Building a National Research Portal in Austria (RIS Synergy Project)

Context & Ambition

- Austria features a highly autonomous university landscape where every public university has already established its own local CRIS
- This creates a vast, decentralised "treasure trove of data."
- The **RIS Synergy project (2020–2025)** was tasked with creating the conceptual and technical foundations for a national research portal
- The ambition was to merge this data according to the "Once-Only" principle to streamline administration and increase international visibility

Key Stakeholders

- **Ministry (BMFWF):** The political decision-maker
- **Research Institutions:** 22 Public Universities
- **Funding Agencies** Drivers of harmonisation and primary users of standardised data exchange
- **Researchers:** Intended to benefit from reduced administrative burden

Critical Moments

Challenges:

Mandate: Despite technical feasibility, the final **political decision** and formal **Ministry mandate** still missing

Prestige vs. autonomy: Fear of distorted representation due to the dominance of major players

Data trust: Concerns that merged data could be misused for restrictive rankings

Successes:

Technical foundation established: RIS Synergy implemented technical components (standardised interfaces)

Consensus building: 18 institutions successfully aligned on shared international standards

Infrastructure readiness: A neutral environment for technical operation was established ¹⁴

Across various initiatives....

- Where do misaligned incentives show up?
- Where do governance assumptions break?
- When do stakeholders lose a sense of control or visibility?
- What was framed as a “technical” issue that was actually social?

Team exercise

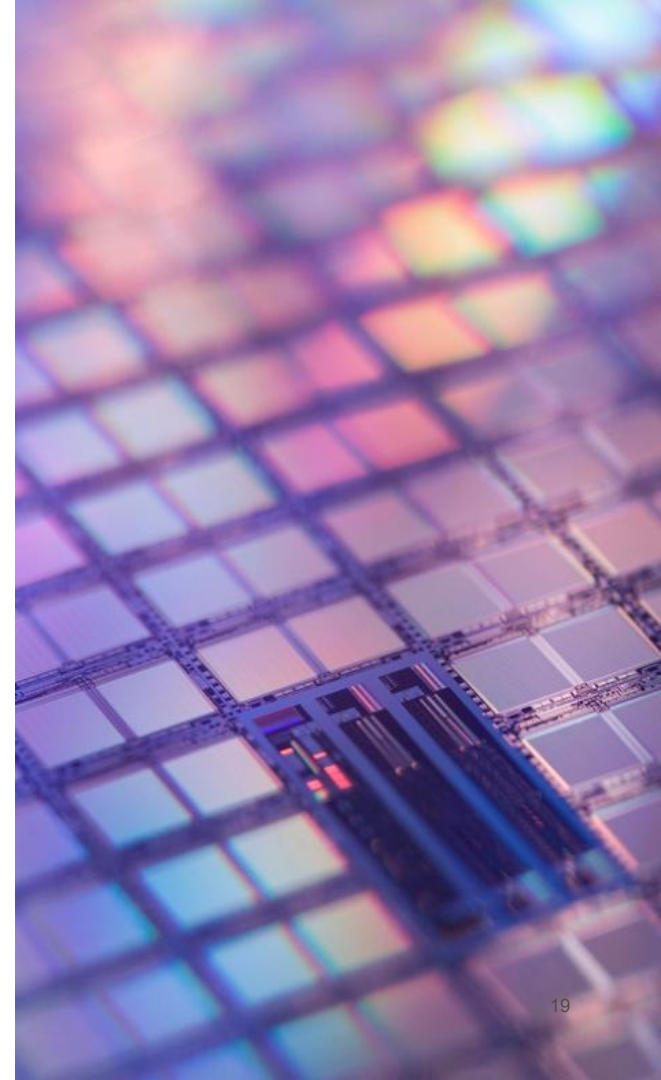
Based on your team's scenario

- Identify:
 - underlying tensions
 - stakeholders likely to escalate or disengage
- Discuss:
 - possible response strategies
 - trade-offs and second-order effects

Stakeholder mapping

Why map stakeholders?

- In the **socio-technical collaboration** context **stakeholder mapping** is a *strategic systems-design activity*. It helps ensure that the *social* side of the system is as intentionally engineered as the *technical* one.
- Structured techniques help **visualizing and analyzing the roles**, influences, and interconnections of stakeholders.
- These techniques prioritize stakeholders by **strategic engagement needs and help communication and action plans**.



Your scenario



1. Who are the key stakeholders involved (e.g., researchers (VC of research), IT, funder (ministry), research offices)?

2. What are their main *shared* pain points?

3. What *shared* benefits could they anticipate from this project?

4. Where might conflicts or misalignments emerge?

Stakeholder grid

Use the stakeholder grid to identify and map key stakeholders for your project. Be concise — aim for 1–2 sentences or short ratings per cell.

Column	What to Include
Name	The stakeholder's full name.
Role	Their job title or function in the project (e.g., Research Office Lead, Librarian, IT Manager).
Dept / Group	The department, unit, or research group they belong to.
Power	Their level of decision-making authority (e.g., High / Medium / Low).
Interest	How affected or invested they are in the project's success (High / Medium / Low).
Influence	Their ability to shape opinions or decisions across other stakeholders (High / Medium / Low).
Support level	Their current stance toward the project (Supportive / Neutral / Resistant).
Comms channel	Preferred way to communicate (e.g., email, 1:1s, steering meetings, Slack).
Notes	Key insights, risks, or actions (e.g., "Needs clearer ROI", "Potential champion", "Influenced by Director").



Name	Role	Dept / Group	Power	Interest	Influence	Support level	Comms channel	Notes



*After this session what will you do
differently in your role?*

Thank you!



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