

# **The various dimensions of impacts and of related stakeholders**

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# What types of RIs

## Two main types of RIs:

- **Resource-limited access (selection of access):**  
libraries, observatories, collections,  
environmental platforms (ships, airplanes,  
satellites, etc.), analytical (neutron-photon-  
electron probe-based, NMR, etc.),  
translational/high safety clinical-labs, synthesis  
(high pressure, MBE, PCR, .....), High Power  
Computing, etc.....
- **Resource-unlimited access (selection of upload):**  
data infrastructures, e.g. socioeconomic,  
biological, environmental, literary, etc...

# **Impacts driven by excellence, and excellence driven by “unbiased access”**

- **“Open-free access” to resource limited RIs produces:**
  - benchmarking of local researchers to best at global level
  - increasing scientific returns of national resources
  - structuring of research communities
  - Increasing effectiveness of local/national education, and technical and managerial training
  - Increasing quality and quantity of socioeconomic returns (impact on visitors, on methodologies and technologies, transfer to industries, territorial returns,...)

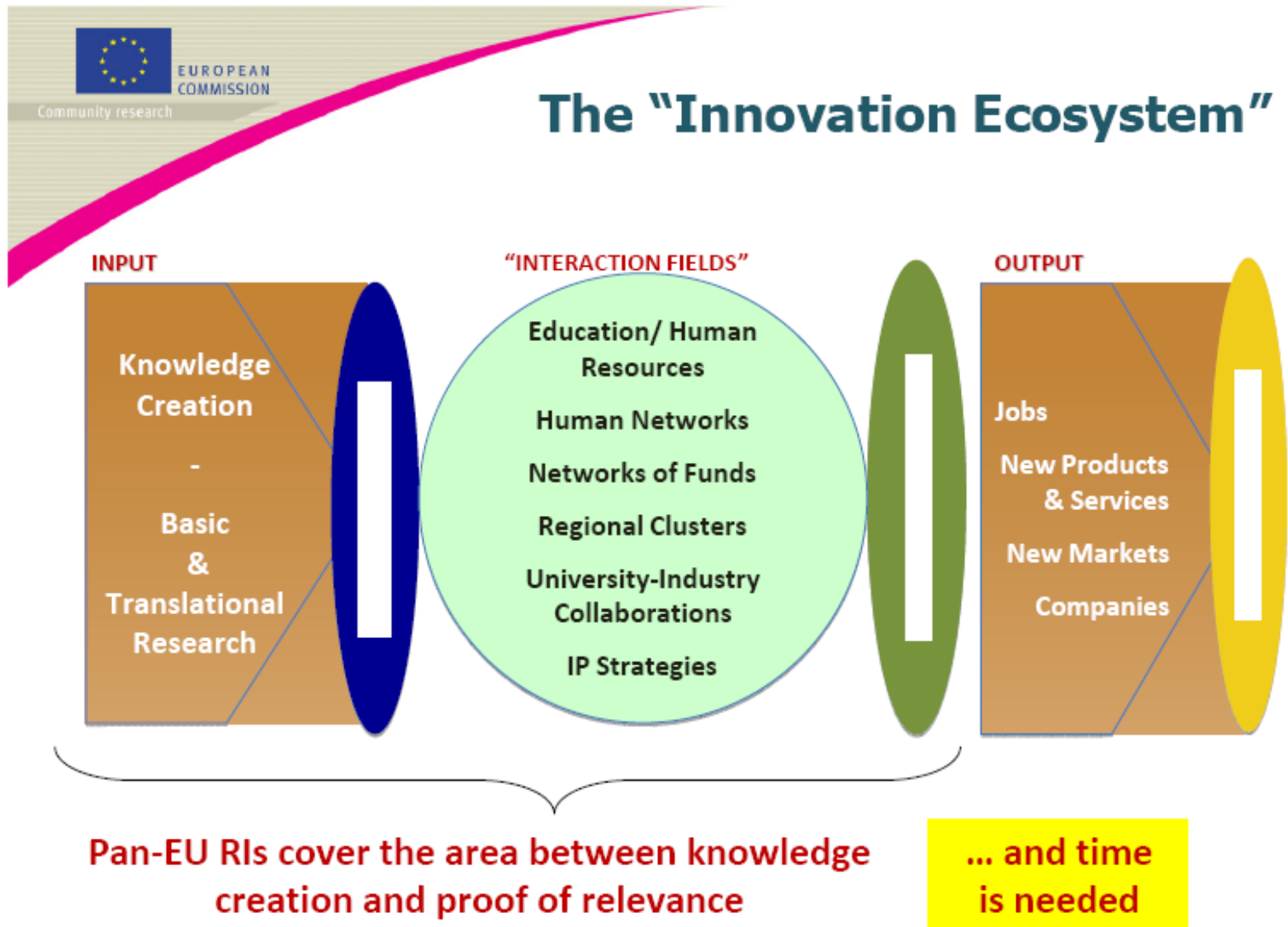
- **E.g. the DOE “contract”:**

<http://techtransfer.energy.gov/docs/NonProprietaryUserAgreementClassWaiver.pdf>

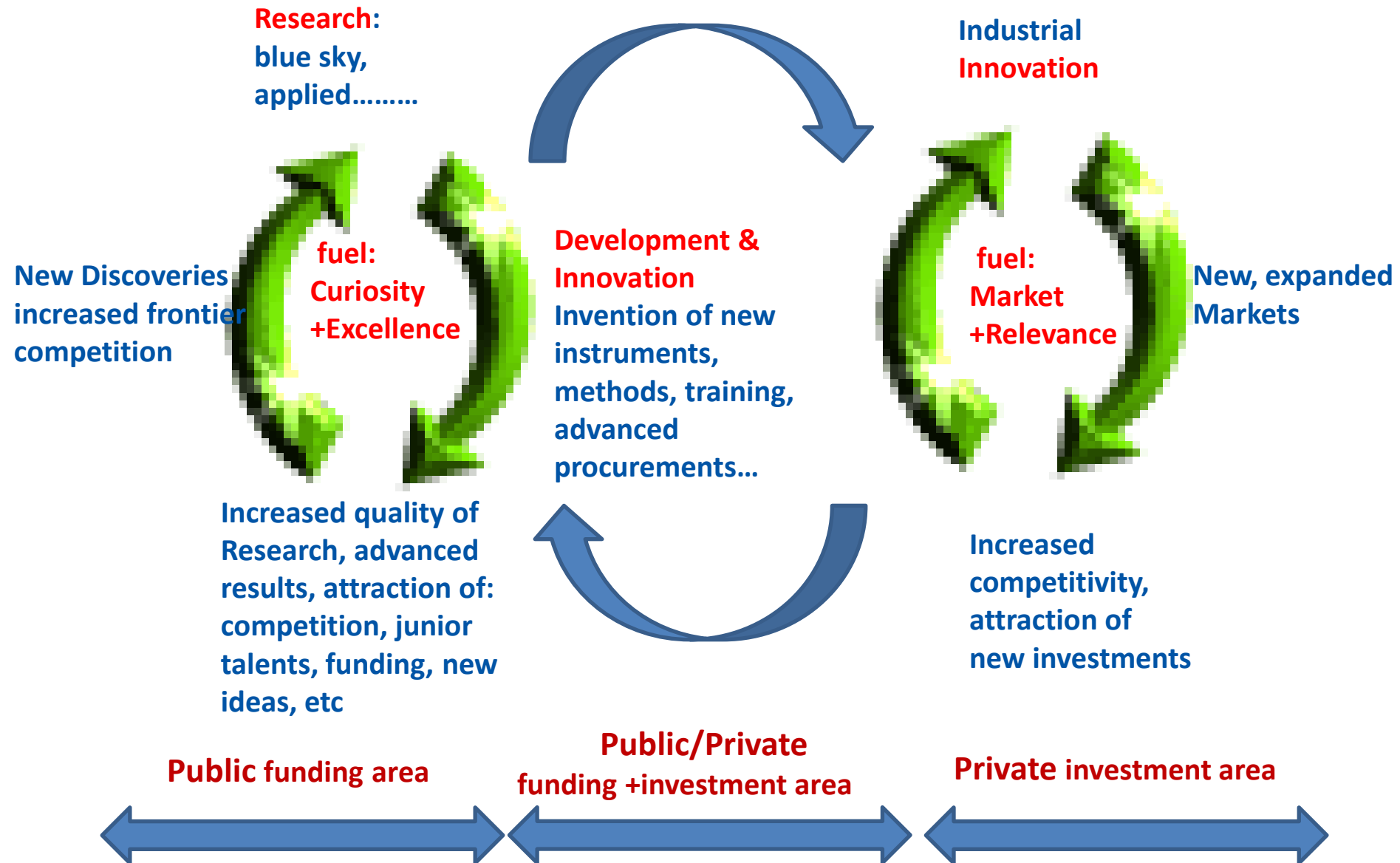
- Come for free, publish the “R”, but leave behind any “D”

**Open-free access (if well managed) is a good investment**

# A linear model



# RIs as Innovation Motors

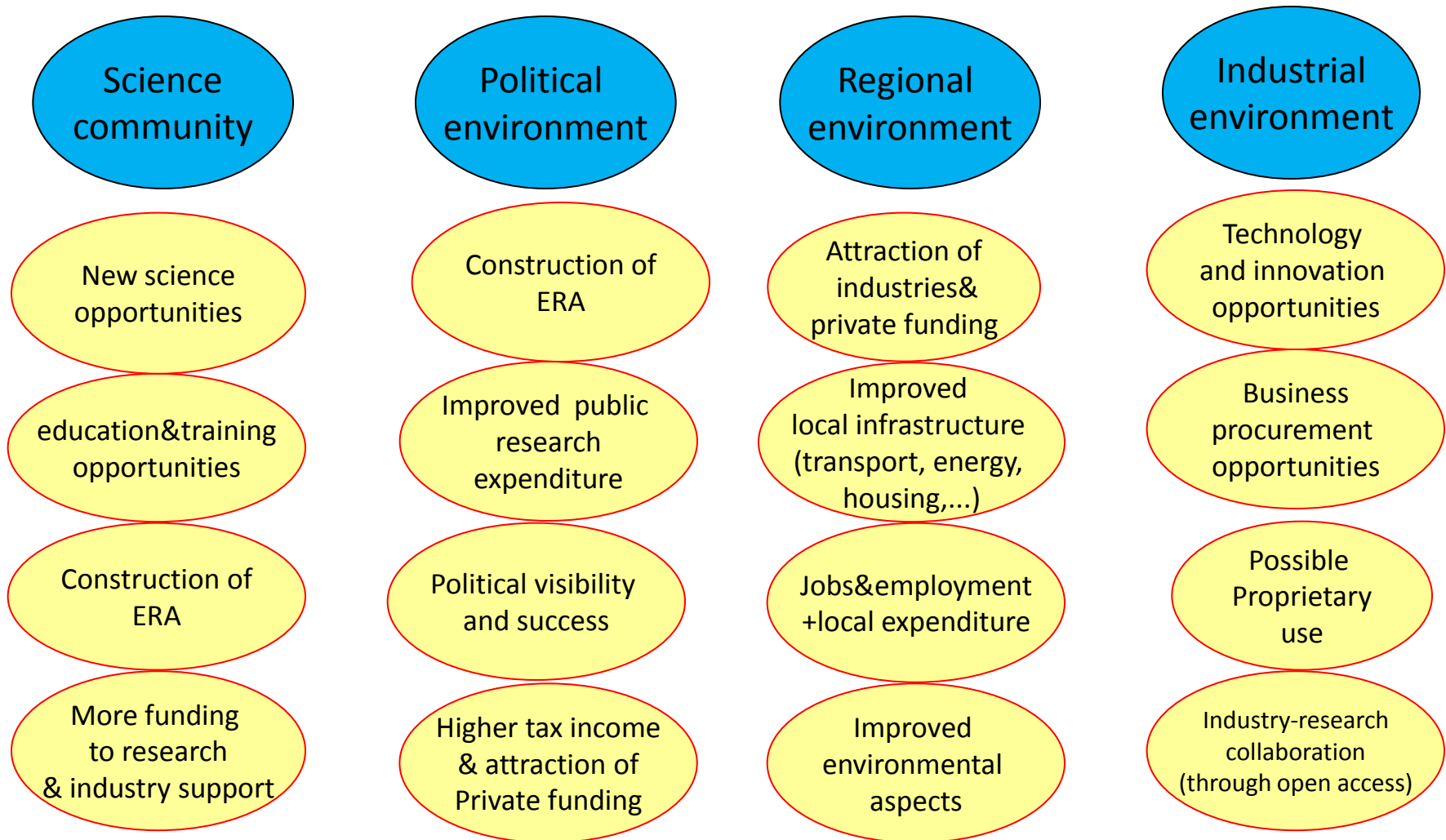


# Impacts and Stakeholders



# ....with different motivations

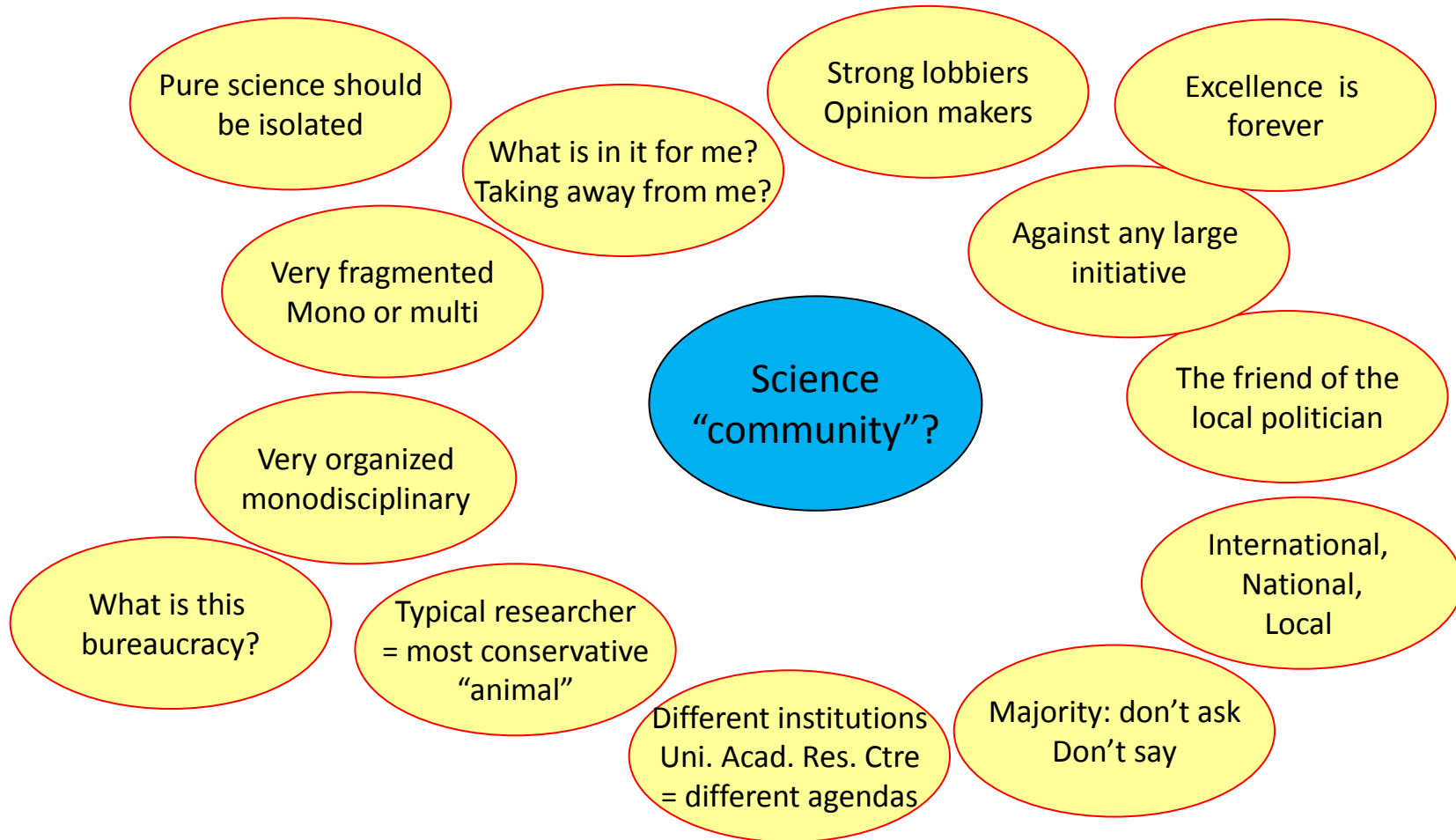
(anthropology of the stakeholders)



Increasing economic motivation

# Picture a bit more complex

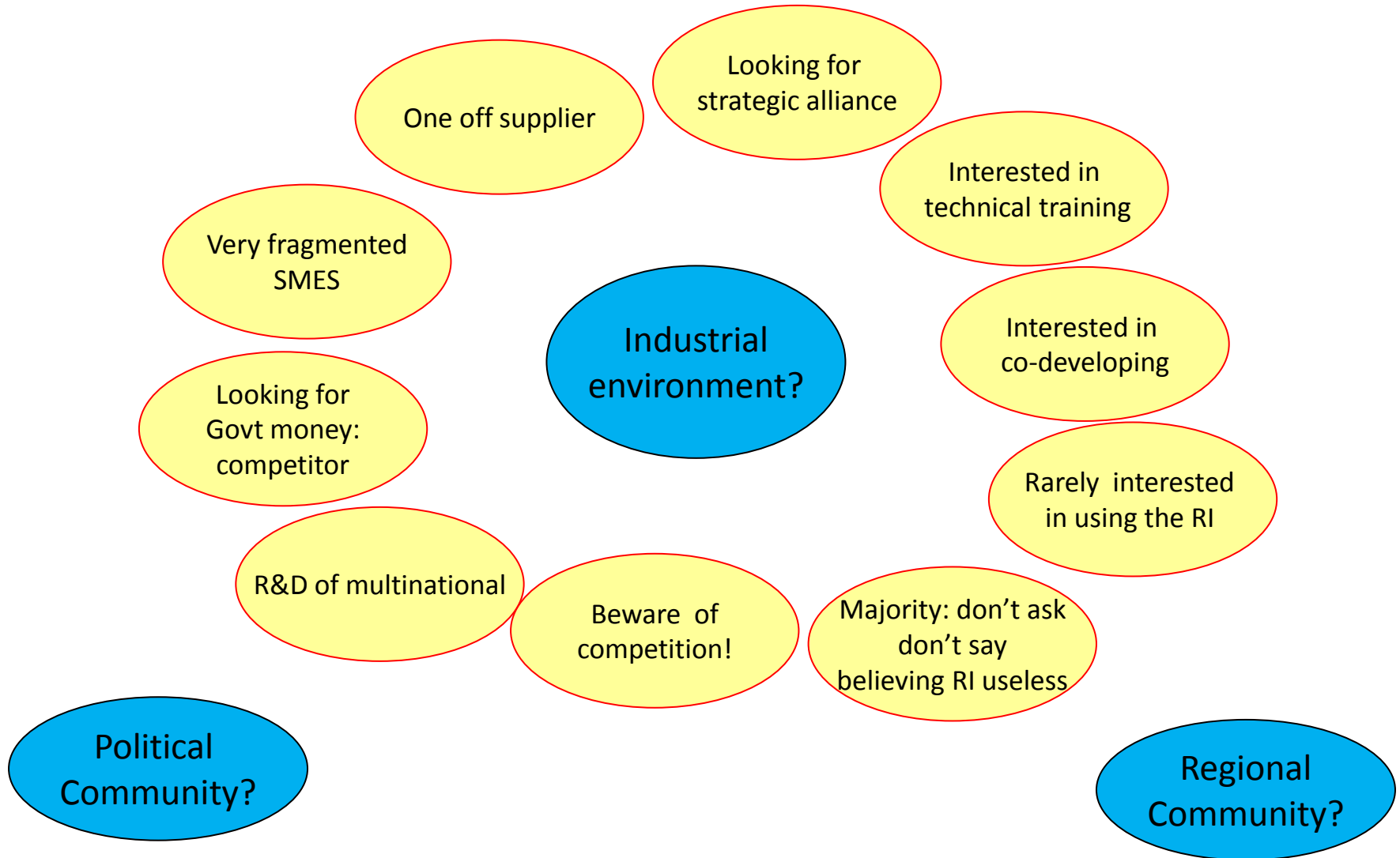
## Science....."community"?





# Picture a bit more complex

## Industrial....."community"?



# RESOURCES

**Financial resources**

- What are the current and potential sources of revenue for our activities?
- What is the agenda of the funders?
- What do they expect from our activities?
- How to reach and convince them?

**Non-financial resources**

- Do we have sustainable access to technology / scientific know-how do we need?
- What is our training strategy? Is it adapted to the phases of our activity?

# ACTIVITY

How can we evidence the outputs and the relevance of our activities?

Do we have sustainable access to the non-financial resources we need?

**Partners**

- Do we need partners? What for?
- Do they share our strategy?
- Are the partners sustainable?
- How strong is our partnership?
- How much do we depend on them?

**Research infrastructure**

- What is the RI's 'mission'?
- What is the timeframe for that mission?
- What is the institutional and legal framework?

**Competitors**

- Who are they?
- How are they positioned in the field?
- How can we compete against them? How can we differentiate ourselves from them?

# USERS & BENEFITS

Our offer - What content? What process of definition, monitoring and promotion?

Can we disseminate our results and generate extra revenues?

**Direct beneficiaries of our services**

- Who are they? How large is our user community?
- What do they expect from a research infrastructure like ours?
- What is needed to ensure their satisfaction?

**Other benefits of our activities**

- What other benefits could our activities potentially generate?
- What channels would be necessary to disseminate these benefits?
- Do we have a strategy to put these channels in place?

# Blue sky.....and Returns

Research Infrastructures: sometimes self sustaining by socioeconomic returns



- Abbey-libraries: Centres of Excellence in Research, attracting world level scholars and researchers
- But also Technology development and transfer centres, developing technologies and economy: construction and agriculture, food and drinks (beer-almond sweets), protochemistry-biology-medicine

# How to evolve from “unintended returns” to better understanding and planning them?

- Abbeys producing techniques and industries
  - CERN producing the Web
  - Astronomy producing the CCD
  - But we need to disentangle and understand many other returns and “communities of stakeholders”, and, if possible, quantify and improve, based on clear examples
- .....and this, possibly, will come in the sessions