Form and substance
in the management of an RI

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The general frame (substance)

- Research Infrastructures (RIs) are “non economic” (Research is not a financially self-sustaining activity)
- RIs need special qualities to be attractive and, to get support, need to please many “stakeholders”, each expecting a different part/taste of the “pie”
- Managing RIs requires to understand and communicate with all stakeholders….building & keeping trust.
- And continuously “develop”, “innovate”, “educate”, (i.e. invest)
- RIs are powerful drivers of quality in Management!
Stakeholders

- Researchers
- Universities and Research Institutions
- Industry
- Policy makers
- General Public
Stakeholders and expected returns

International RI

- Industry-University collaboration (by joint access)
- Attraction of private funding
- Political visibility and success
- Attraction of students to Science
- Brain exchange Instead of brain drain
- Higher tax income
- Improvement of Regional resources
- Improved local infrastructure (transport, energy, housing,...)
- New scientific Knowledge new science opportunities
- Improved public research expenditure
- Improved education & training opportunities
- More funding to research (structural&industl)
- Improved technology and innovation opportunities
- Construction and competitiveness of ERA
- Possible proprietary use
- Business opportunities Attraction of industries Spin off companies
- Improved environmental aspects Scientific tourism
- Jobs and employment, Local expenditure
- Improved education & training opportunities
....with different motivations

(anthropology of the stakeholders)

Science community
- New science opportunities
- education&training opportunities
- Construction of ERA
- More funding to research & industry support

Political environment
- Construction of ERA
- Improved public research expenditure
- Political visibility and success
- Higher tax income & attraction of Private funding

Regional environment
- Attraction of industries & private funding
- Improved local infrastructure (transport, energy, housing,...)
- Jobs&employment +local expenditure
- Improved environmental aspects

Industrial environment
- Technology and innovation opportunities
- Business procurement opportunities
- Possible Proprietary use
- Industry-research collaboration (through open access)

Increasing economic motivation
The picture is a bit more complex
the industry

Industrial environment?

- One off supplier
- Looking for strategic alliance
- Interested in technical training
- Interested in co-developing
- Rarely: interested in using the RI
- Majority: don’t ask don’t say (believing RI useless)
- Beware competition!

R&D of multinational

Looking for Govt money: competitor

Very fragmented SMES

Political Environment?

Research academic Environment?

Regional environment?
The management perspective; mission and expectations

• Commit to excellence and new knowledge
• Serve users: provide open access
• Operate at the scientific and technological forefront
• Promote innovation
• Manage the data, offer remote access......

But also
• Operate with often not secured (long-term) funding
• Keep all stakeholders as a friend
• Have to commit also to non core objectives
Summary

Manager’s problems are:

• How explain? (not always data available)
• How obtain? (fund raising, and best use)
• How ensure results? (and get sustainability)
• Managing a complex environment... and conflict resolution
• Attract, hire, train, retain... good personnel
• How achieve something very different from “normal” economic culture?
• How to improve continuously?
Accounting and contradictions

• Research infrastructures are often managed within an economic legal frame (consortia, share societies, etc.)
• Management is required to prepare a yearly budget and account in which, however, the scientific value is rarely expressed in financial numbers.
• The real «product» does not appear in the budget or in the income/cost representation.
• Auditors do not help (yet), nor scientific advice.
• Research is useful only if openly accessible (no patents)
• Supporting Development and Training activities allow some commercial activity, but margins are limited.
Completing the accounts

• RIs are international «in kind trading posts».
• Users bring their ideas and requirements whose value can be estimated by the funding of their research.
• In exchange the RI provides access whose cost is known.
• This exchange gives an added value.
• The added value extends also to the local and national environment.
• If this type of accounting is developed with enough detail, a balance between outgoing and incoming values is possible.
• The open question is the incomplete development.
The role of narratives

• When economists are unable to develop a financial accounting for the lack of data, they revert to «narratives»
• The development of narratives for RIs is still evolving
• Managers have this alley as one of the major defense approaches, ......but beware!......
• Narratives should still be based on enough quantitative evidence.
• A good development ground is provided by «open days» when the narrative is tested with visiting citizens