

Scientific Information

- authors

- want to publish more

- readers

- want to read less

**University
of Twente**

**The Research and HE
Information Market**

Hans E. Roosendaal

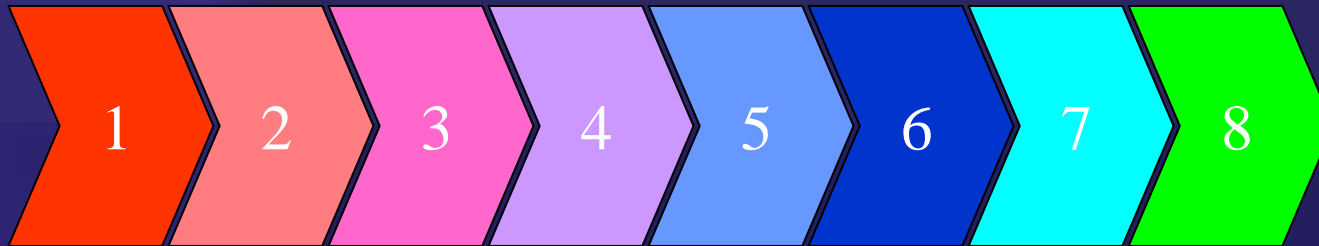


University of Twente
The Netherlands





Vision

- **global, federated network**
 - repositories of information
 - research and education
 - management information
- **market: research and HE community**
 - students, teachers, researchers
- **focus: open system**

Information value chain



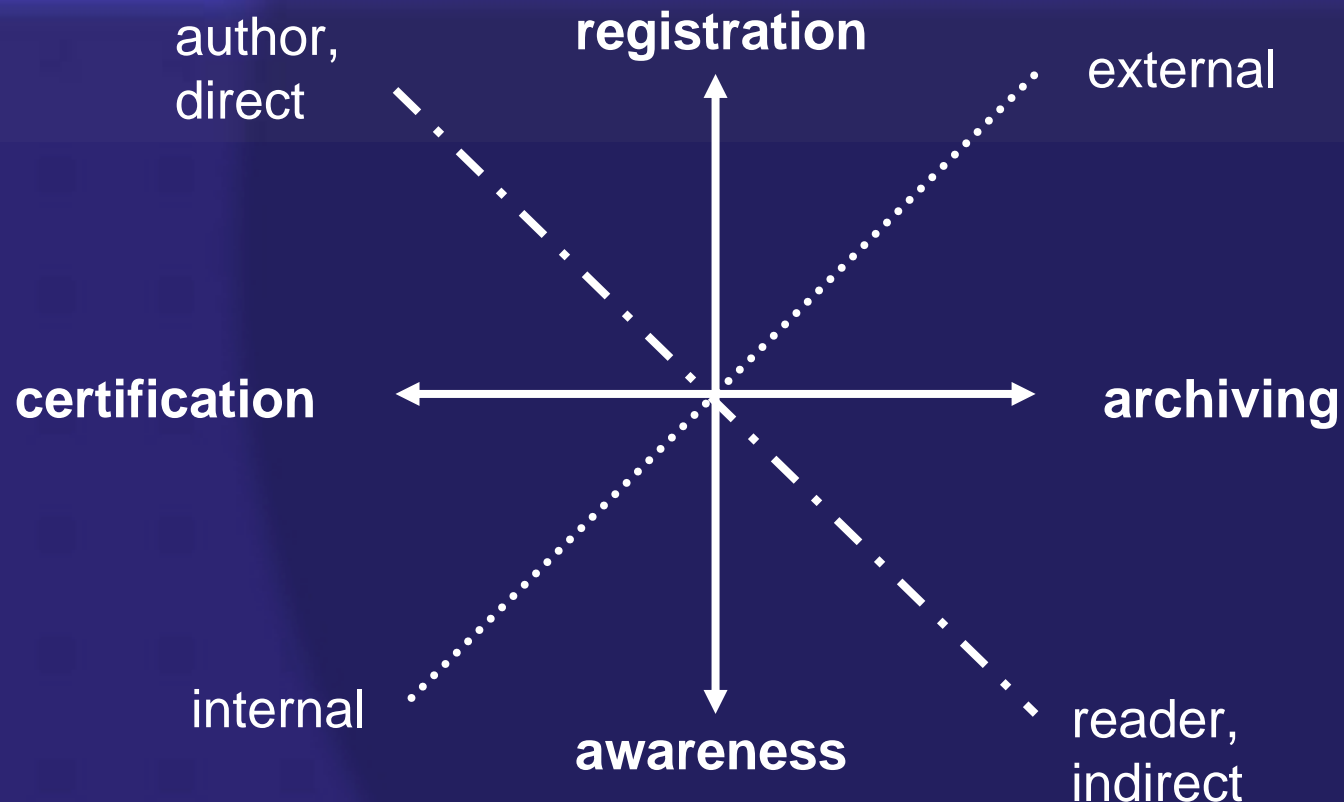
1:  creation
2:  acquisition
3:  certification
4:  disclosure

5:  production
6:  distribution
7:  dissemination
8:  usage

Engines for change

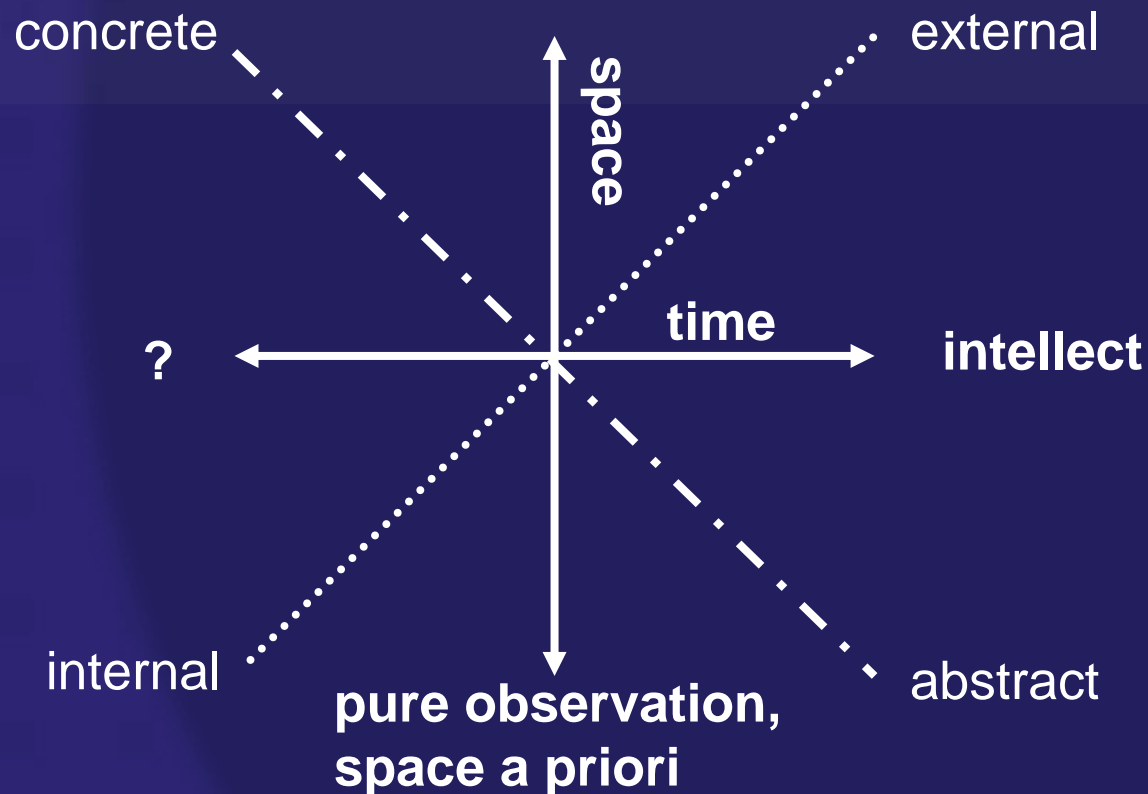
- **ICT in scientific communication**
 - availability \Leftrightarrow use
- **broad developments in**
 - research
 - education
- **functions in scientific communication**

Functions

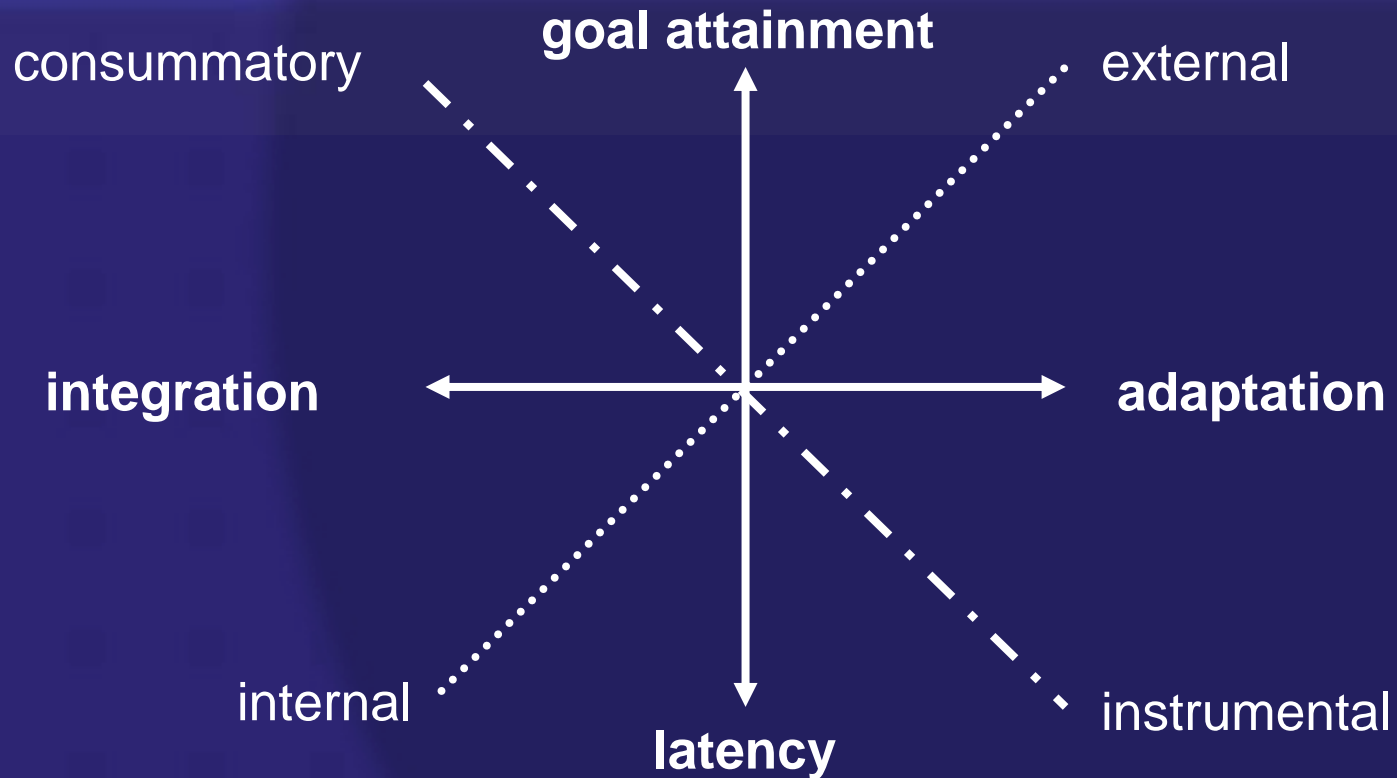


Kant

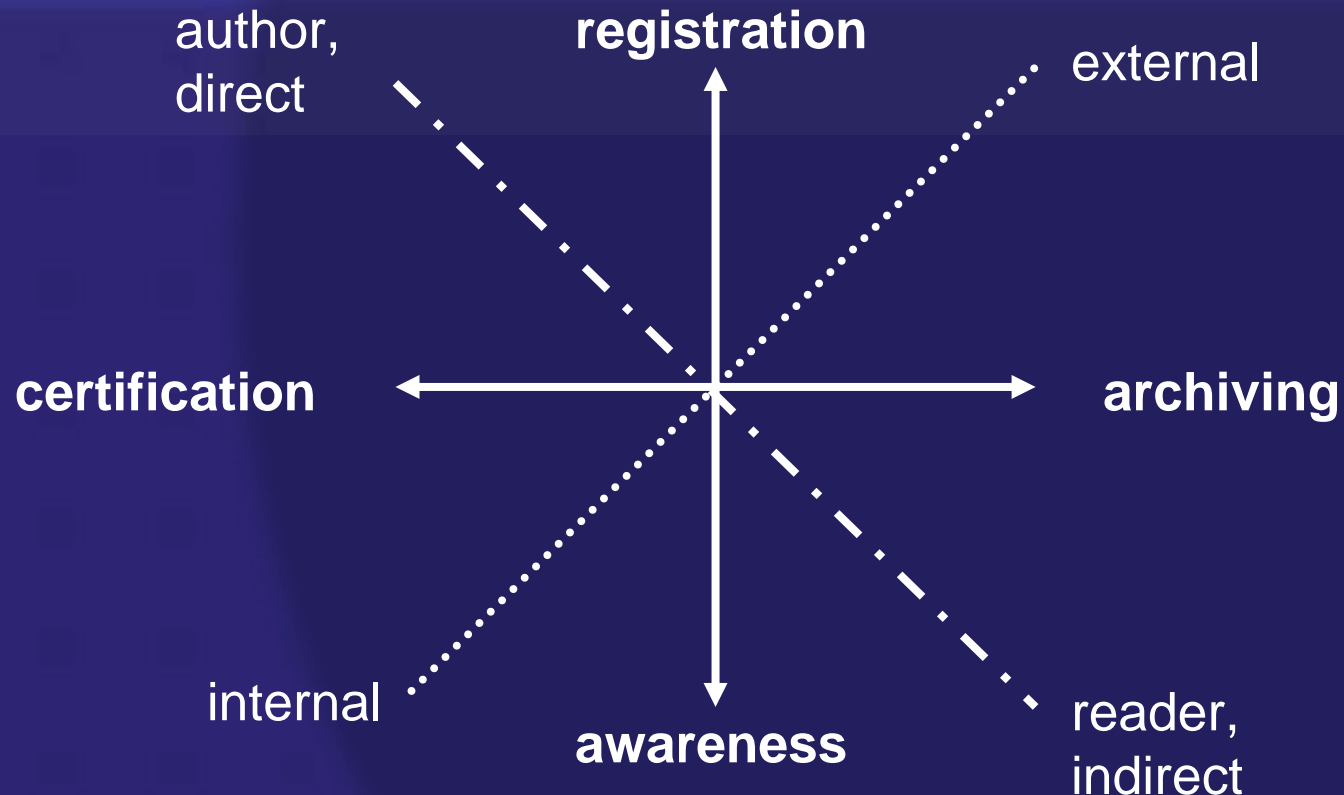
empirical observation,
space a posteriori



Parsons



Functions



Vision

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Observations

- **institutional repositories**
 - research and HE institutions
 - knowledge-intensive organisations & companies
- **coherent user access**
 - shared information environment
- **federating**
 - repositories
 - libraries

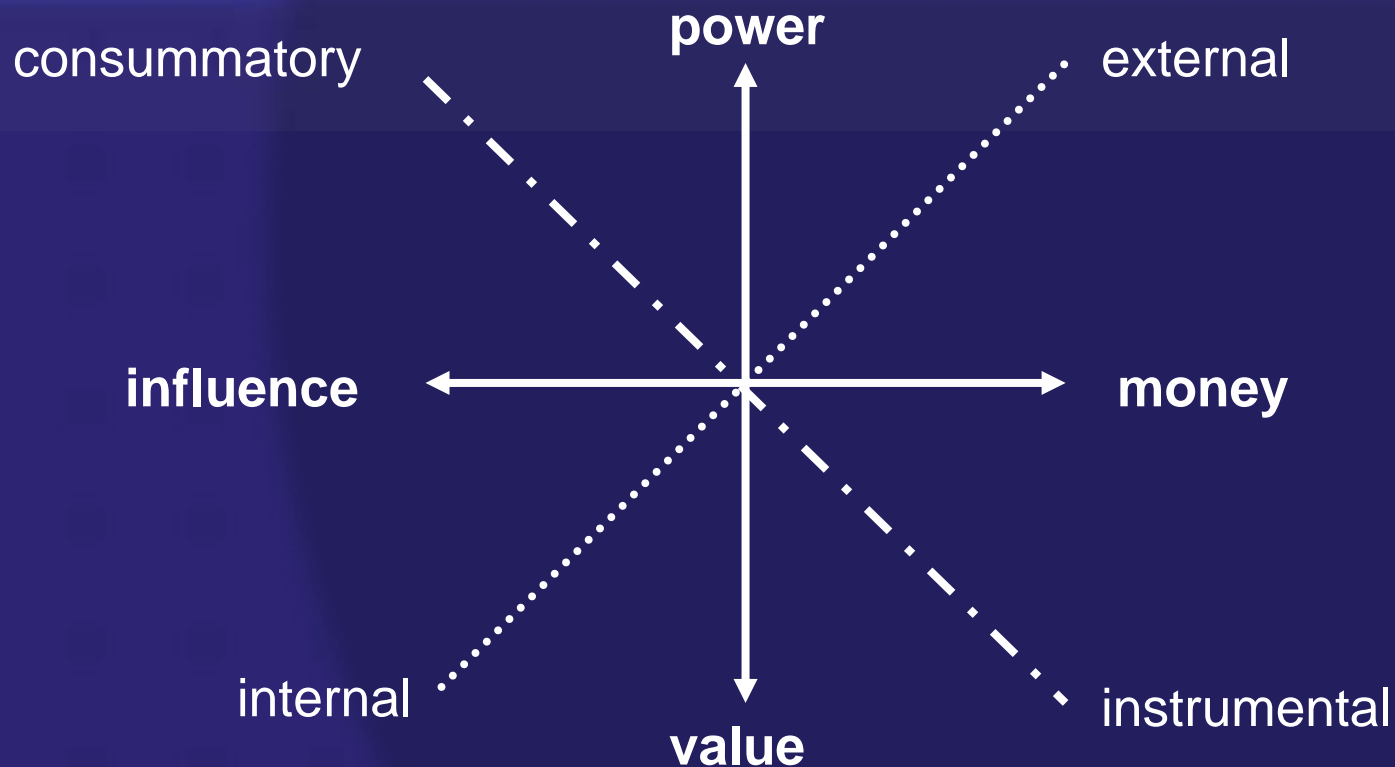
Acceptance

- sufficient critical mass
- different value chains possible
 - organisational models
 - legal models
 - business models
- cohesive and coherent network

Stakeholders

- return on investment
 - each stakeholder: own currencies of exchange

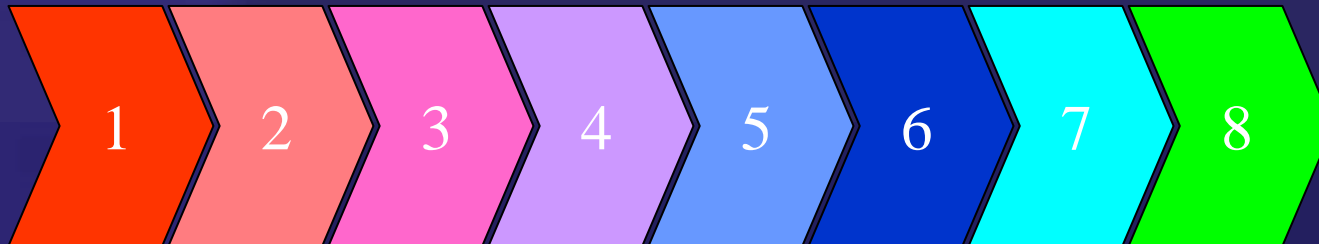
Currencies of exchange



Stakeholders

- **return on investment**
 - each stakeholder: own currencies of exchange
 - **strategy based on vision**
 - maximum flexibility
-
- **high level strategy**
 - **value chain**

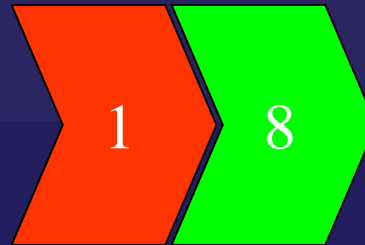
Value chain






1:  author
2:  publisher
3:  reviewer
4:  publisher

5:  agent
6:  university
7:  library
8:  reader

Ideally?




1:  author
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3:  reviewer
4:  publisher

5:  agent
6:  university
7:  library
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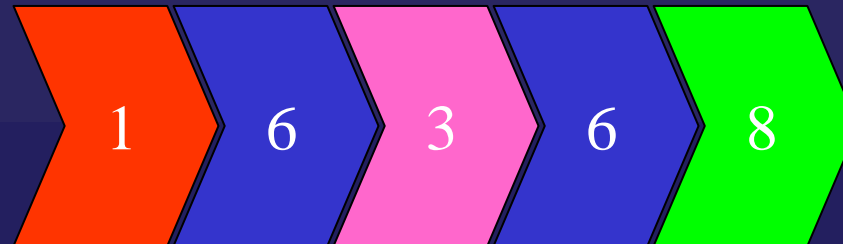
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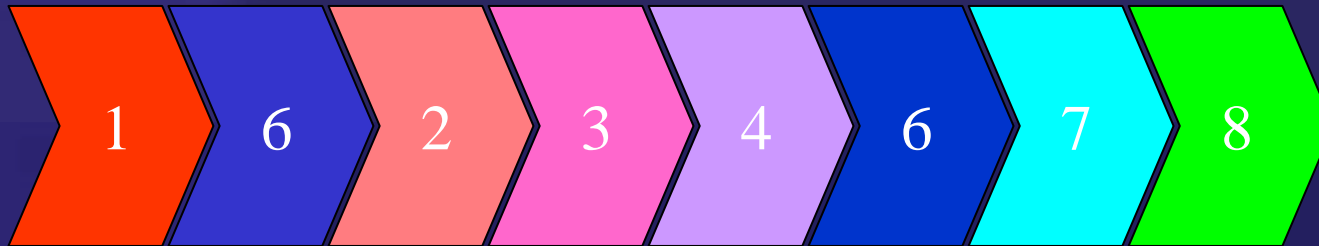
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High level strategy

- **interest**
 - stakeholders
- **single focus: USER**
 - author/reader
 - learners, researchers, teachers and students
 - comprehensive approach to USER behaviour
- **other stakeholders**
 - enablers

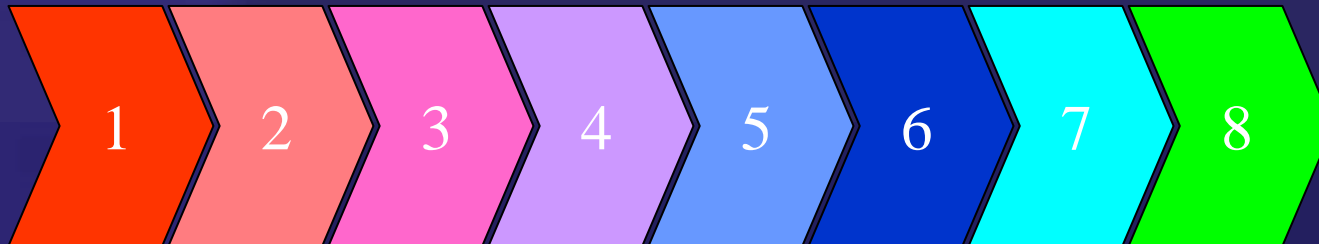
Netherlands









- **full availability**
 - Elsevier Science & Kluwer Academic
 - 1% + matching \Rightarrow research
- **steering group**
 - universities, publishers, SURF, independent chairman
- **research**
 - how has full availability changed use patrons?
 - logfiles
 - structured interviews: high response

Goal

- universities, knowledge institutions, scientific publishers
 - make use of network
 - ensuring that architecture will serve needs

Strategic tasks



- | | | | |
|--|---------------|---|--------------|
| 1:  | creation | 5:  | production |
| 2:  | acquisition | 6:  | distribution |
| 3:  | certification | 7:  | archiving |
| 4:  | disclosure | 8:  | usage |

Technology strategy

- **connecting repositories and libraries**
 - existing and future
- **integration**
 - resources syndication
- **shared architecture**
 - e-learning and e-science

Registration & archiving

- **universities**
 - integrated information environment
 - e-learning
 - e-publishing and e-archiving
- **in network of institutions**
 - network of repositories
 - institution-independent entities
 - international organisation

⇒ **value chain!**

Publishing function

- **facilitating/aggregating network**
 - distribution \Rightarrow access and linking
 - certified material
 - different repositories
 - assistance to certification
- **international**

Structure

- federated network
 - repositories
 - archives
- federated ownership

Industry relations

- **develop business models**
 - symmetry
- **develop distribution models**
 - copyright

Conclusions

- **develop and test new value chains**
 - university should take initiative
 - international development in education
 - new conditions
- **main issue: how can we get this done?**
 - not technological, but organisational issue
 - high level strategy

Literature

- **Nature:**
 - www.nature.com/nature.debatess/e-access/Articles/roosendaal.html
- **Bibliothek und Forschung:**
 - www.bibliothek-saur.de/preprint/2002/roosenda_end.pdf
- **Serials 15(1), 2002, 51—56**
- **Information Services and Use, 21 (2001) 13-32**
- **Journal of Business Ethics, 34 (2001) 87 - 100**
- **On Line Information Review: 27 (2003) 120-128.**
 - <http://www.emeraldinsight.com/1468-4527.htm>