

Scientific Communication

- authors
 - want to publish more
- readers
 - want to read less



University
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The Value of Scientific Information

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New value chain

- **ICT in scientific communication**
 - engine for change
 - **research and education**
- **positions partners in the value chain**
 - negotiations ⇒ discussions on the value chain
- **main developments**
 - research
 - education

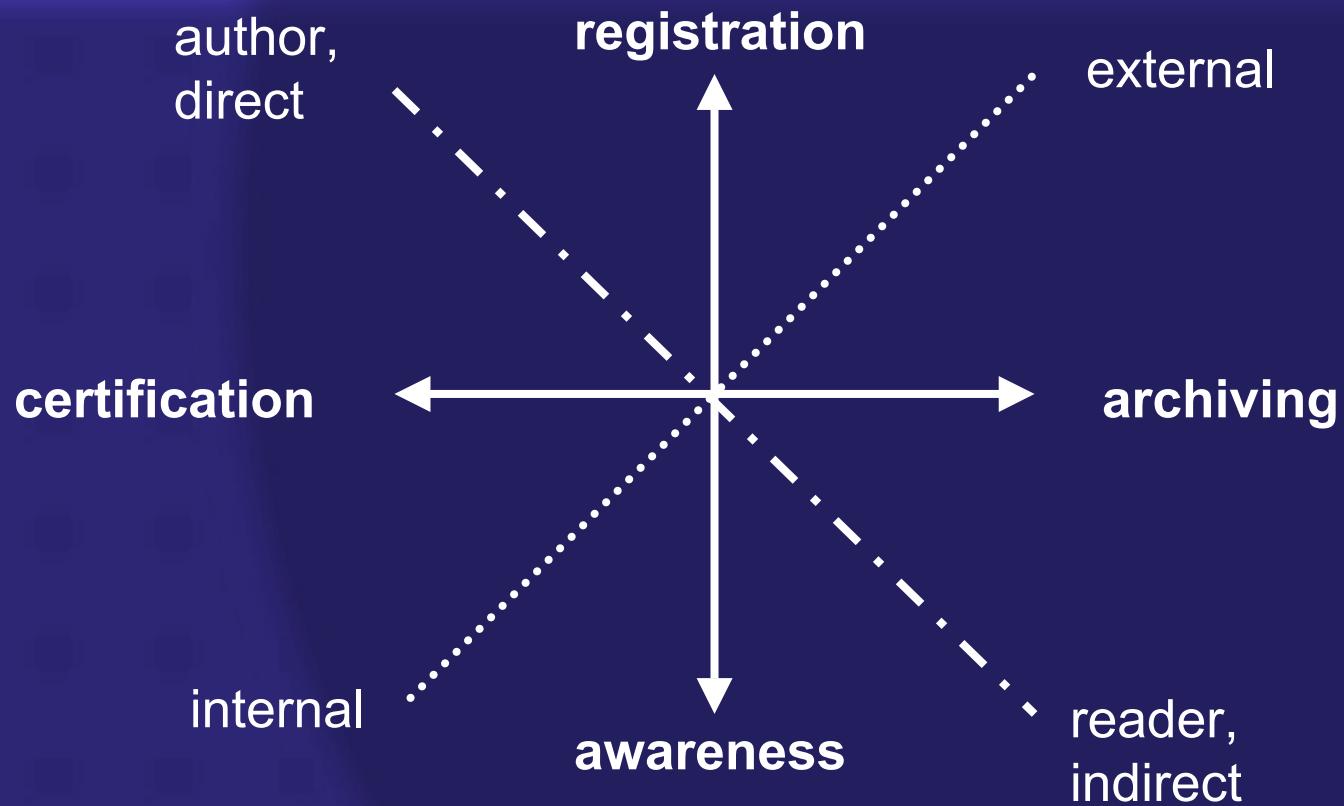
Research Developments

- market
 - intellectual property
- *a priori* planning of research programmes
 - societal implementation of its research results
- strategic research
 - mode 2 (Gibbons)

Education Developments

- **ICT: distance & lifelong learning**
 - anyplace, anytime, anyhow
 - **education**
 - connectivity, content, culture
- **integration research and education**
 - information is key integrator
- **primary functions in information?**

Functions



Value chain



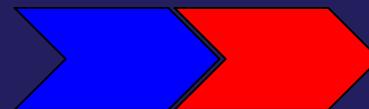
author > publisher > reviewer > publisher > agent > univ > reader

Value chain?



author > reviewer > reader

Ideally?



author > reader

Value chain



author > publisher > reviewer > publisher > agent > univ > reader

Value chain



author > publisher > reviewer > publisher > reader

Value chain



author > univ > reviewer > univ > reader

Value chain



author > univ > publisher > reviewer > publisher > univ > reader

University

- **authors and readers**
 - students, teachers and researchers
- **integrated study and information environment**
 - digital learning platform
 - digital publishing and archiving

➤ **value chain!**

“Market” for virtual supply

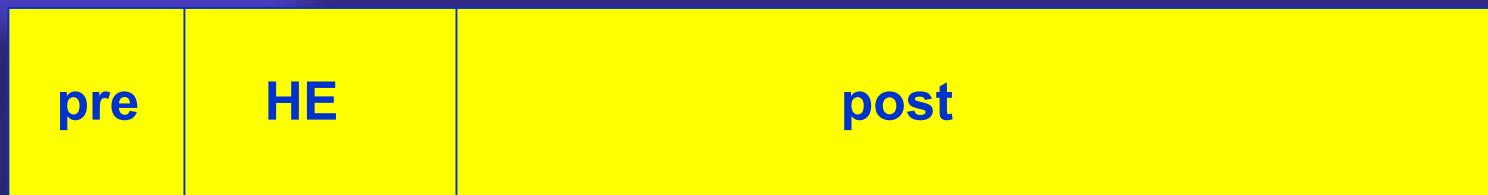
- **expansion target group (demand):**
 - “regular” students : bachelor
 - “Wanderstudenten” : masters
 - distance learning : selective
 - “CPD” : network of professionals

- **differentiation in supply**

➤ new strategic balance for university

Market development

4-5
years



30-40 years

economy is engine for change

University

- now
 - autarky
 - broad supply
 - public financing
 - parity
- future
 - import & export
 - specialised supply
 - independent
 - stratification

Scientific Information Issues

- publishing and archiving
 - education and research
 - time-window 5-10 years
- network of institutions
 - network of repositories
 - institution-independent entities
 - international organisation

Strategy

- **develop virtual information collection**
 - research
 - education
- **added value**
 - visibility of author
 - retrievability for reader

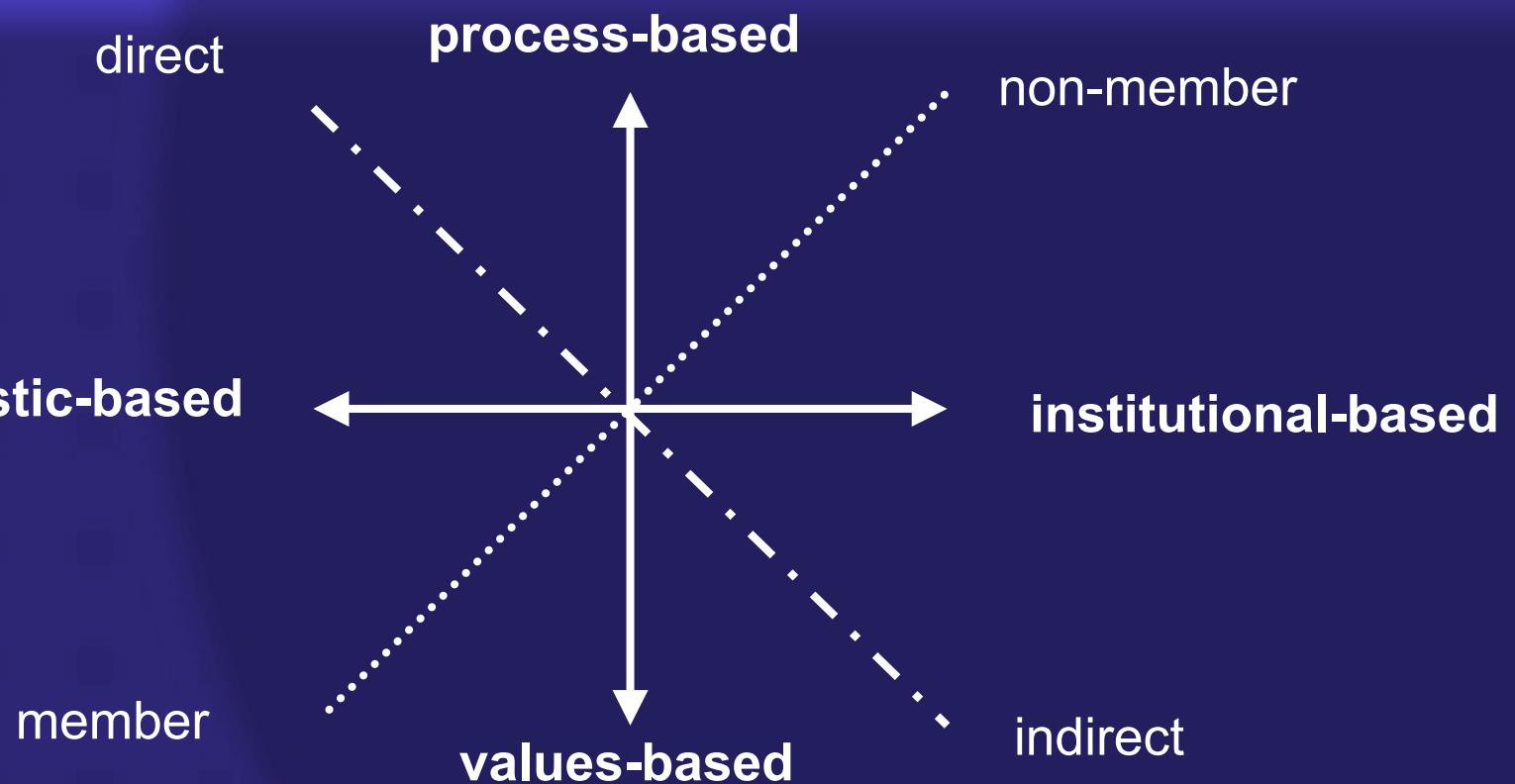
Publishers

- **facilitators/aggregators network**
 - high quality access and linking
 - certified material
 - different sources of creation/repositories
- **international**

Structure

- **distributed network**
 - repositories
 - archives
- **distributed ownership**

Types of Trust



Industry relations

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

Consequences Universities

- **develop internal value chain**
 - research & education
 - publishing & archiving
- **financial structure**
 - new cost allocation models should allow innovation

Conclusions

- **new value chain feasible**
 - risks primarily for weaker partner
 - university
 - if only research
 - cannot at present replace existing system
 - but publishers cannot either
- **international development in education**
 - new conditions

Some literature

- **Nature:**
 - www.nature.com/nature.debates/e-access/Articles/roosendaal.html
- **Bibliothek und Forschung:**
 - www.bibliotheksaur.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**