

**Verträglichkeit von Wissensökonomie und  
Wissensökologie - zu  
aktuellen Modellen für Open Access**

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# Content - Topics

- **Wissensökonomie und Wissensökologie**
- **Proprietäre und offene Informationsmärkte**
- **Open Access- erzwungen**
- **Open Access - Geschäfts-/Finanzierungsmodelle**
- **Kann Open Access kommerzielle Märkte zerstören?**
- **Kommt darauf an**
- **Konsequenzen für InformationswissenschaftlerInnen und Informationsprofessionelle**
- **Fazit - Thesen und Fragen**

Wissensökonomie

Informationsmärkte

Wissensökologie

## Zugriff auf und Nutzen von Wissen und Information



**Proprietäre  
private  
kommerzielle  
Informationsmärkte**

**Knowledge economy**

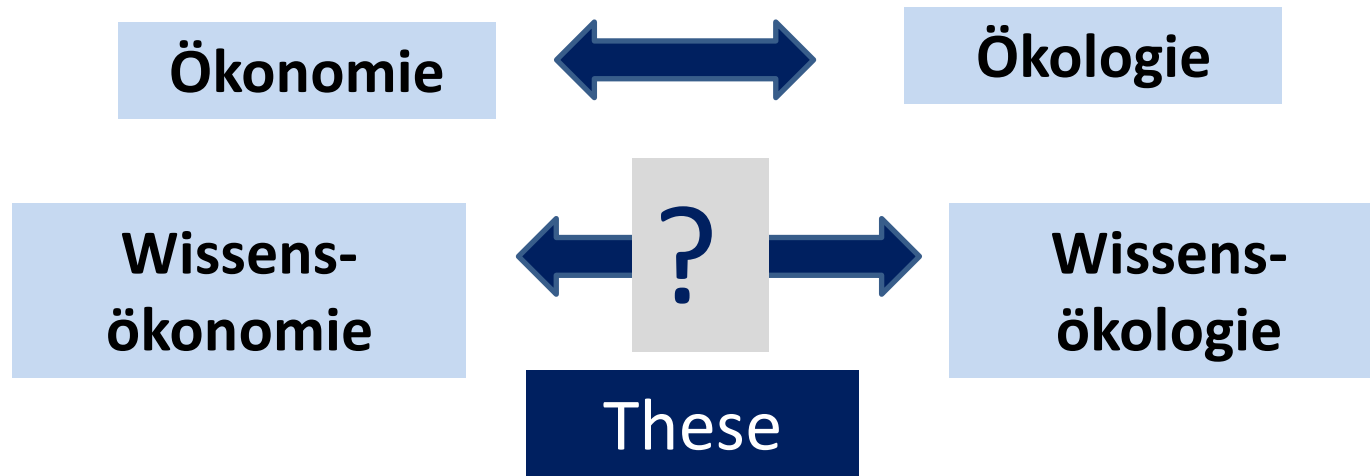
**Wissensökonomie**



**offene  
öffentliche  
commons-basierte  
Informationsmärkte**

**Knowledge ecology**

**Wissensökologie**



Wissenökologie steht nicht im Widerspruch zur kommerziellen

Verwertung/Nutzung von Wissen,

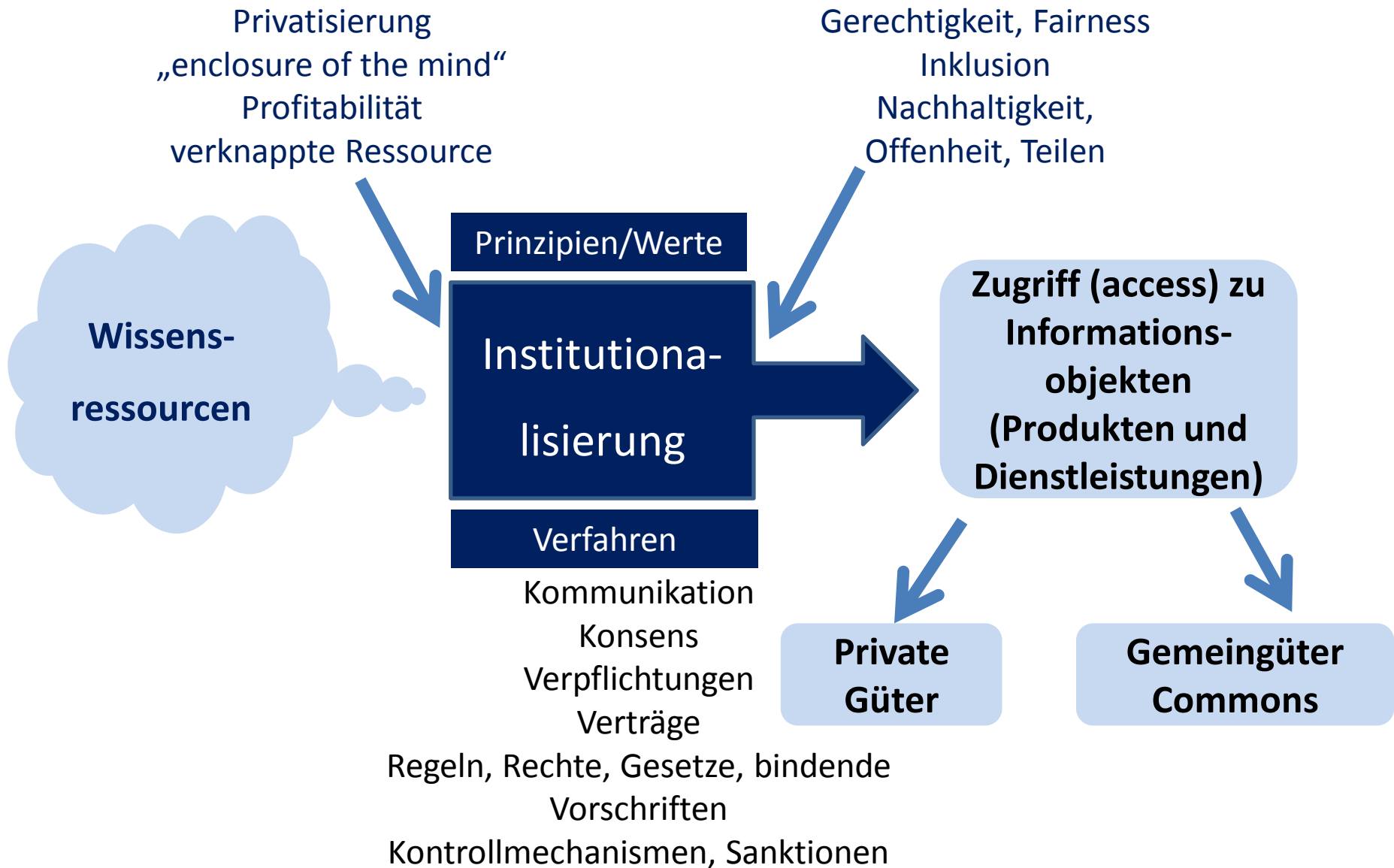
unter der Annahme, dass Publikations- und Nutzungsmodelle nur dann

akzeptabel sind

**wenn sie den Status von Wissen als Gemeingut (Commons) anerkennen:**

“allowing free and open access for everyone  
not claiming exclusive property rights”

# Commons-Modell der Institutionenökonomik



# Knowledge economy Wissensökonomie



## Publikationsmärkte der Wissensökonomie

5-10.000 wissenschaftliche  
Zeitschriftenverlage

➤ privat organisiert

mehr als 28.100 scholarly  
peer-reviewed journals (2009)

➤ geschützt durch starken Urheberrecht

Umsätze zu ca. 70% durch  
Subskription)

➤ geschützt durch technische Schutzmaßnahmen

98% of STM online

etwa 1,5 Millionen peer  
review validierte Beiträge

➤ In hohem Maße profitabel durch Verknappung

mehr als 3 Millionen  
Artikel verarbeitet

➤ stabilisiert „information rich“

über **46 Millionen** Artikel  
elektronisch recherchier-  
und downloadbar

M.Ware/M. Mabe; The stm report . an overview of scientific and scholarly journal publishing.  
STM, Third edition November 2012

# Knowledge ecology Wissensökologie

**Open information  
markets in science**

**Commons-based  
Information markets**

## **Directory of OA Journals:**

7183 journals, 650572 articles  
(19.10.2011)

7449 journals, 745962 articles  
(31.1.2012)

**9411 journals, 1099912 articles  
(1.6.2013)**

almost 4 journals per  
day since 10/2011

still only about 2,4 %  
of all commercially  
available articles

# Scientific Impact

Open information  
markets in science

Commons-based  
Information markets

## Results

In medicine and health, **OA journals founded in the last 10 years are receiving about as many citations as subscription journals launched during the same period.**

Bo-Christer Björk; David Solomon: Open access versus subscription journals: a comparison of scientific impact.  
*BMC Medicine* 2012, 10:73 - <http://www.biomedcentral.com/1741-7015/10/73>

# Scientific Impact

Open information  
markets in science

Commons-based  
Information markets

## Conclusions

Our results indicate that **OA journals indexed in Web of Science and/or Scopus are approaching the same scientific impact and quality as subscription journals**, particularly in biomedicine and for journals funded by article processing charges.

Bo-Christer Björk; David Solomon: Open access versus subscription journals: a comparison of scientific impact.  
*BMC Medicine* 2012, 10:73 - <http://www.biomedcentral.com/1741-7015/10/73>

# Open access and information economy

More and more **publishers** (in particularly the four dominating ones) **accept the OA-paradigm and see their future in OA publishing**

Elsevier  
Wiley  
Thompson  
Springer

**enforced by**

users

markets

legislation/  
copyright

private or  
public  
foundations

political  
commit-  
ment

golden

delayed  
subsequent  
subscription

green

Zweitveröffentlichung

authors

golden

# The Cost of Knowledge

## 13696 Researchers Taking a Stand. *[See the list](#)*

Academics have protested against Elsevier's business practices for years with little effect. These are some of their objections:

1. They charge exorbitantly high prices for subscriptions to individual journals.
2. In the light of these high prices, the only realistic option for many libraries is to agree to buy very large "bundles", which will include many journals that those libraries do not actually want. Elsevier thus makes huge profits by exploiting the fact that some of their journals are essential.

The key to all these issues is the right of authors to achieve easily-accessible distribution of their work. If you would like to declare publicly that you will not support any Elsevier journal unless they radically change how they operate, then you can do so by filling in your details on this page.



markets

green

ELSEVIER



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markets

Springer Open

golden

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- Articles by authors from a member institution enjoy centralized payment and/or a discounted fee as well as promotion on a special member page.
- Use of blogs, tweets and social networking for promotion and visibility.



In this model, High-Energy Physics (HEP ) funding agencies and libraries, **which today purchase journal subscriptions** to implicitly support the peer-review service, **federate to explicitly cover its cost**, while **publishers make the electronic versions of their journals free to read**. **Authors are not directly charged** to publish their articles OA.

Today, most publishers quote a price in the range of **1'000–2'000 Euros per published article**. On this basis, we estimate that the annual budget for the transition of HEP publishing to OA **would amount to a maximum of 10 Million Euros/year, sensibly lower than the estimated global expenditure in subscription to HEP journals**.

Each SCOAP<sup>3</sup> partner will **finance its contribution by canceling journal subscriptions**. Each country will contribute according to its [share of HEP publishing](#).

Public foundations

NIH

require

golden



## The law states:

The [NIH Public Access Policy](#) ensures that the public has access to the published results of NIH funded research. It **requires** scientists to submit final peer-reviewed journal manuscripts that arise from NIH funds to the digital archive [PubMed Central](#) *upon acceptance for publication*. To help advance science and improve human health, the Policy requires that these papers are accessible to the public on PubMed Central no later than 12 months after publication.

The NIH Public Access Policy applies to all peer-reviewed articles that arise, in whole or in part, from direct costs <sup>1</sup> funded by NIH, or from NIH staff, that are accepted for publication on or after April 7, 2008.

<http://publicaccess.nih.gov/policy.htm>

Private foundations

golden

require

**Wellcome Trust** policy tightening (June 2012)

introducing sanctions for non-compliance and a move to CC-BY licenses

**Political  
commitment**

golden

green

**UK**

Policies on open access to scientific research results should apply to all research that receives public funds.

**Finch Report** of the Working Group on Expanding Access to Published Research Findings – the Finch Group

<http://www.researchinfonet.org/publish/finch/>

“Accessibility, sustainability, excellence: how to expand access to research publications”



Professor Dame Janet Finch's recommendations on open access publishing prompted the government's decision.

Political  
commitment

UK

golden

Free access to British scientific research  
within two years

green

Radical shakeup of academic publishing will allow papers to be  
put online and be accessed by universities, firms and individuals

“British universities now pay around £200m a year **in subscription fees** to journal publishers, but under the new scheme, authors will pay **"article processing charges"** (APCs) to have their papers peer reviewed, edited and made freely available online. The typical APC is around £2,000 per article.”

“cost of the transition, which could reach £50m a year, **must be covered by the existing science budget and that no new money** would be found to fund the process.”



Minister of State  
for Universities  
and Science

COMMISSION RECOMMENDATION of 17.7.2012  
on access to and preservation of scientific  
information

Political  
commitment

EU

golden

green

Cf. Commission Communication (12 Dec  
2011) on open data - a proposal for a  
Directive amending Directive 2003/98/EC

Policies on **open access to scientific research results** should apply to all  
research that receives public funds.

All projects will be **requested** to immediately deposit an electronic version of  
their publications (final version or peer-reviewed manuscript) into an archive in a  
machine-readable format.

This can be done using the '**Gold**' model (open access to published version is  
immediate), or the '**Green**' model.



# OA Business Models

# OA Business/Financing Models

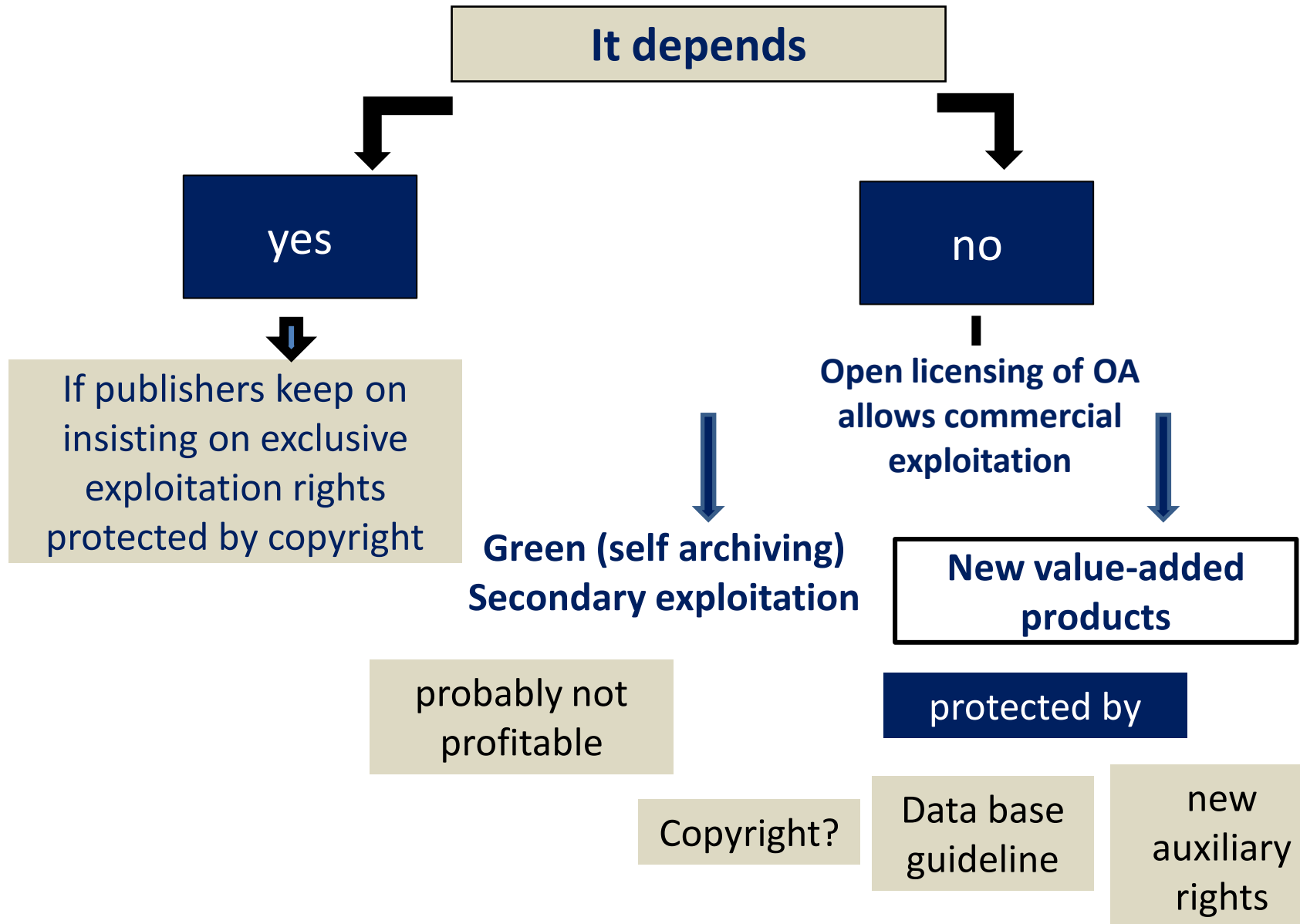
## Publisher driven

commercial reprints  
classified advertising  
subscriptions to print editions  
  
value-adding services

## Public pays

APC -author-side payment”  
model  
institutional memberships”  
grants by foundations  
  
sponsorship  
  
establish open access  
across to major fields of  
science such  
  
library/research budgets

# Will Open Access destroy commercial information markets?



## Commons-based information markets

Licence for applying using rights to new products

Business models für value-added products

- multimedia presentation
- hypertextification, dossiers
- summaries, translations
- retrieval, text and data mining
- innovative reviewing models
- personal und institutional background information
- etc. etc.

Commercial right to a secondary exploitation of information objects

Free and open access to information objects

realized by authors in education and science

modified and developed in collaborative working environments

legally protected by free licences (cf. CC)

# FAZIT

**These1:** Publikationsmärkte werden in mittlerer Perspektive tendenziell vollständig durch das Open-Access-Paradigma bestimmt

Alle Zeichen deuten darauf hin, dass **Open Access** der **Default-Wert** für wissenschaftliches Publizierens werden wird.

**These2:** Open-Access-Modelle entwickeln sich zunehmend auch im kommerziellen Umfeld

Alle Zeichen deuten darauf hin, dass **Open Access Gold** von den **wissenschaftlichen Publikationsverlagen** übernommen wird

Soll die Öffentlichkeit, wie es sich derzeit abzeichnet, die OA-Gold-Modelle auch für die Informationswirtschaft finanzieren?

im Prinzip nein

Die reine Basisinformation kann aus der Wissenschaft selber öffentlich zugänglich gemacht werden.

Eine kommerzielle Verwertung von mit öffentlichen Mitteln erzeugtes Wissen lässt sich nur über bereitgestellte informationelle Mehrwerte rechtfertigen.



Soll die Öffentlichkeit, wie es sich derzeit abzeichnet, die OA-Gold-Modelle auch für die Informationswirtschaft finanzieren?

Die Bereitschaft zur Finanzierung kommerzieller OA-Betreiber wird sinken - sollte sich herausstellen, dass der **Finanzbedarf nicht kommerzieller OA-Betreiber niedriger** als der der kommerziellen.

Fraglich, ob die **Öffentlichkeit** nicht nur die **reinen Produktionskosten übernehmen, sondern** auch den **Gewinnerwartungen** der kommerziellen Anbieter entsprechen sollte.

# *Vielen Dank für Ihre Aufmerksamkeit*

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