



Scholarly Publishing & Academic Resources Coalition  
*An initiative of the Association of Research Libraries*

[www.arl.org/sparc](http://www.arl.org/sparc)

# Scientific Communication IN THE Internet Age

Rick Johnson • Executive Director, SPARC  
AIBS Special Meeting on Open Access Publishing  
March 9, 2005 • Washington, DC



# Change is all around

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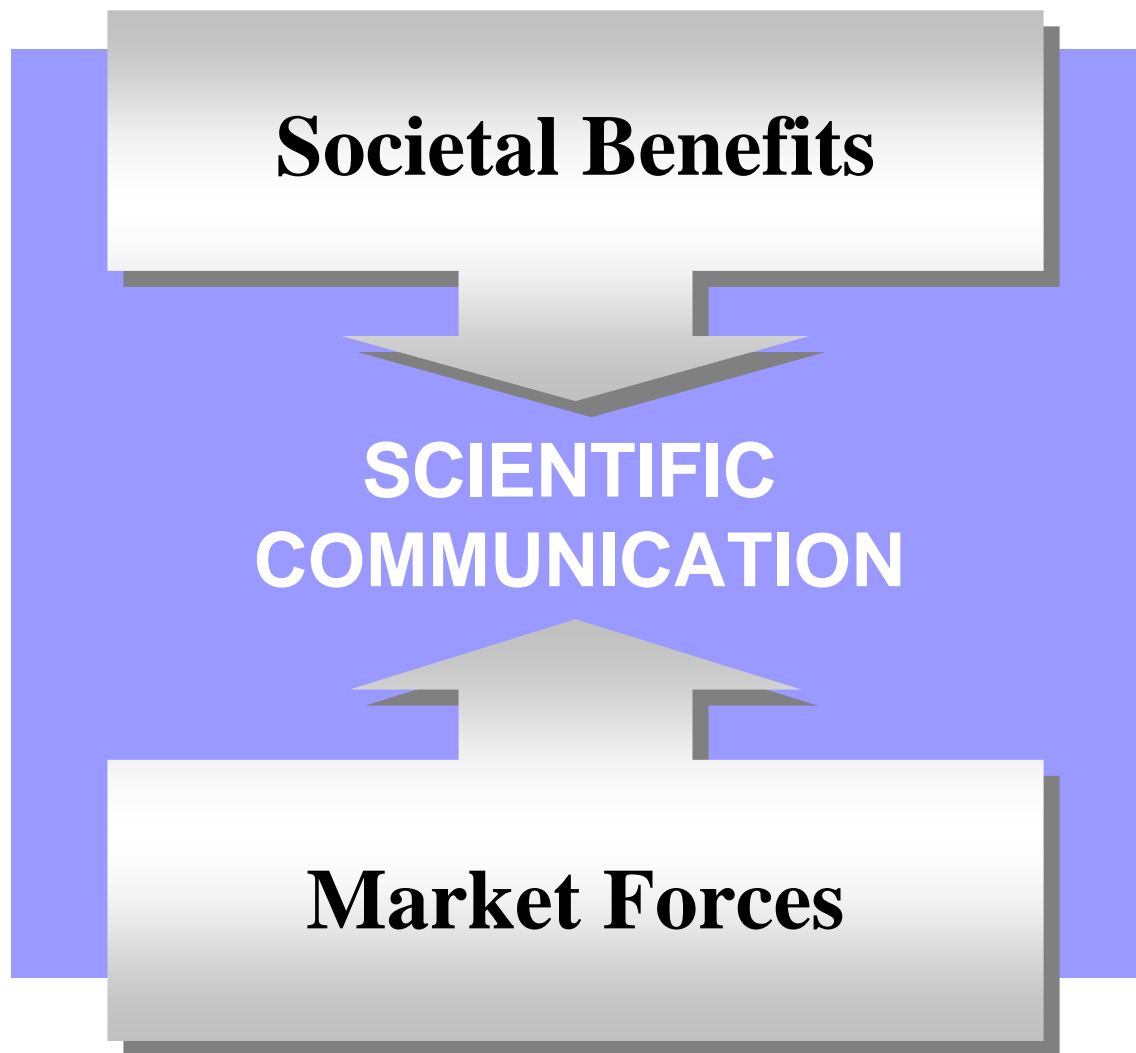
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# Impetus for change

[www.arl.org/sparc](http://www.arl.org/sparc)





# Market forces: opportunities

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## **New models born of the Web**

- Availability of digital publishing **technologies**
- Availability of ubiquitous **network**
- Economics of Internet -- low **marginal cost** of dissemination



# Market forces: problems

- Growth in cost & volume of journals outpacing library budget growth
- Poor correlation of publisher economic benefits with value contribution (“high prices”)
- Defensive e-publishing strategies
  - extension of print journal model
  - failure to maximize benefits from Internet
- Bundling of journals by large publishers exploits market position — limits library choices, harms smaller publishers
- Ceding of IP rights by authors



# Impetus for change

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# Societal benefits

www.arl.org/sparc

ATA

http://www.taxpayeraccess.org/

THE ALLIANCE FOR TAXPAYER ACCESS

**ATA**

member media birds of a feather

Action

Watch for opportunities or recent progress involving:

- [U.S. Congress](#)
- [NIH](#)
- [ATA](#)
- [You](#)

News

These sources will keep you updated on the latest developments related to taxpayer access:

- [SPARC Open Access Newsletter](#)
- [Open Access News blog](#)

A diverse and growing alliance of organizations representing taxpayers, patients, physicians, researchers, and institutions that support open public access to taxpayer-funded research.

**Statement of Principles:**

1. American taxpayers are entitled to open access to the peer-reviewed scientific articles on research funded by the National Institutes of Health (NIH).
2. Open access to these reports will lead to usage by millions of physicians, public health professionals, patients, students, teachers, scientists, and others, and will deliver an accelerated return on the taxpayers' investment in NIH.
3. Widespread dissemination of these reports is an essential, inseparable component of our nation's investment in science.

**What is "Taxpayer Access"?**

Access to scientific and medical publications has lagged behind the wide reach of the Internet into U.S. homes and institutions. Subscription barriers limit U.S. taxpayer access to research that has been paid for with public funds.

Taxpayer access removes these barriers by making the peer-reviewed results of taxpayer-funded research available online, and for no extra charge to the American public.

To achieve this, the ATA supports applying the developing practices of Open Access as defined by the [Budapest Open Access Initiative](#) in February 2002.

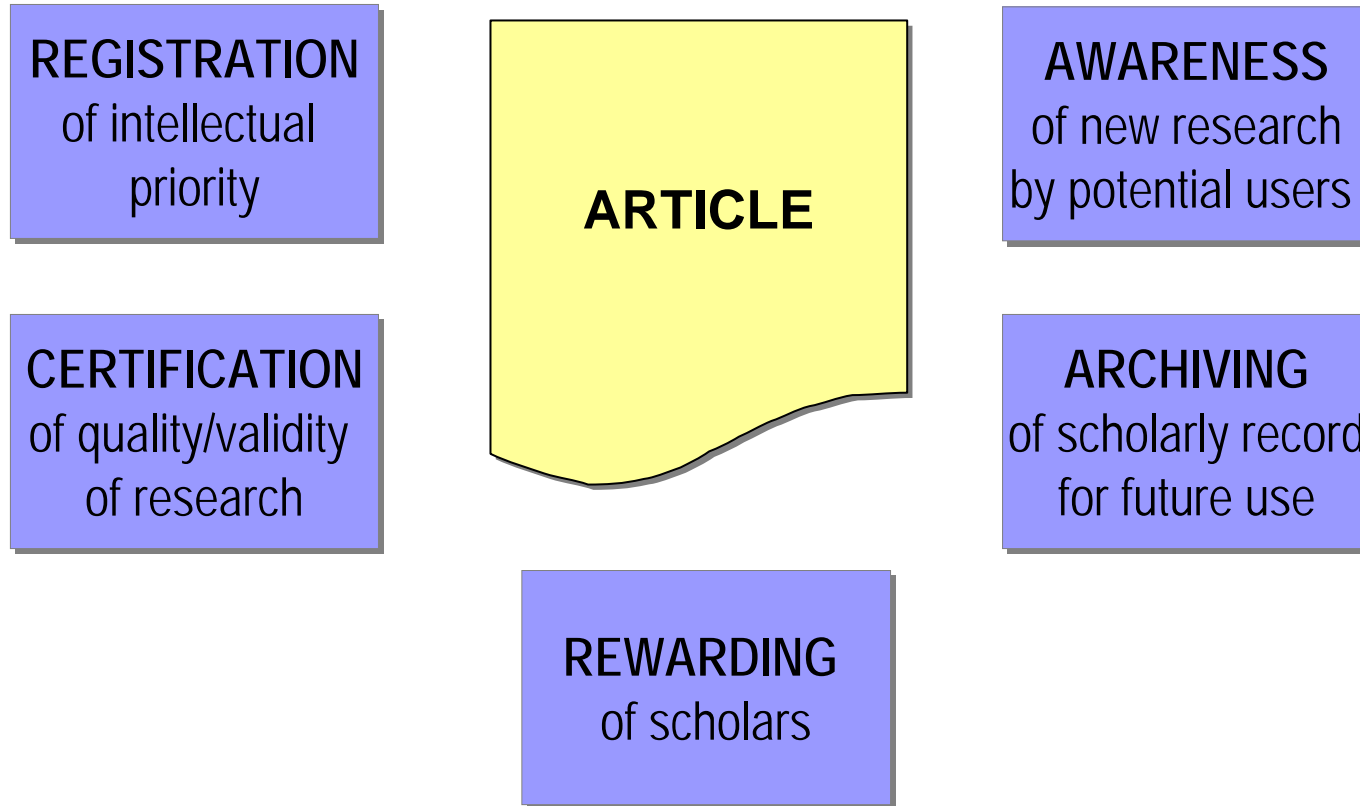
Contact ATA

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# Functions of scholarly publication

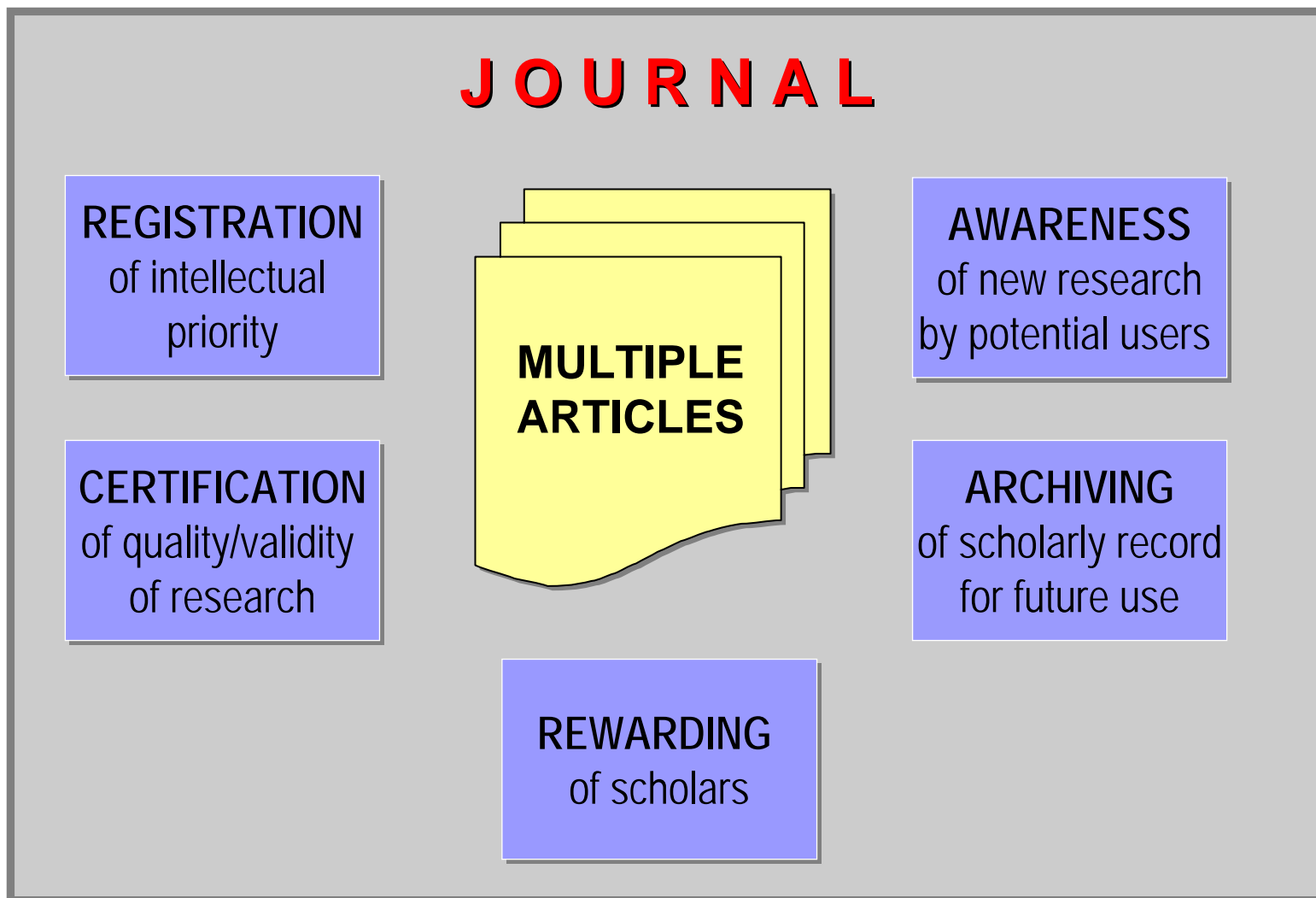
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# Bundling of functions

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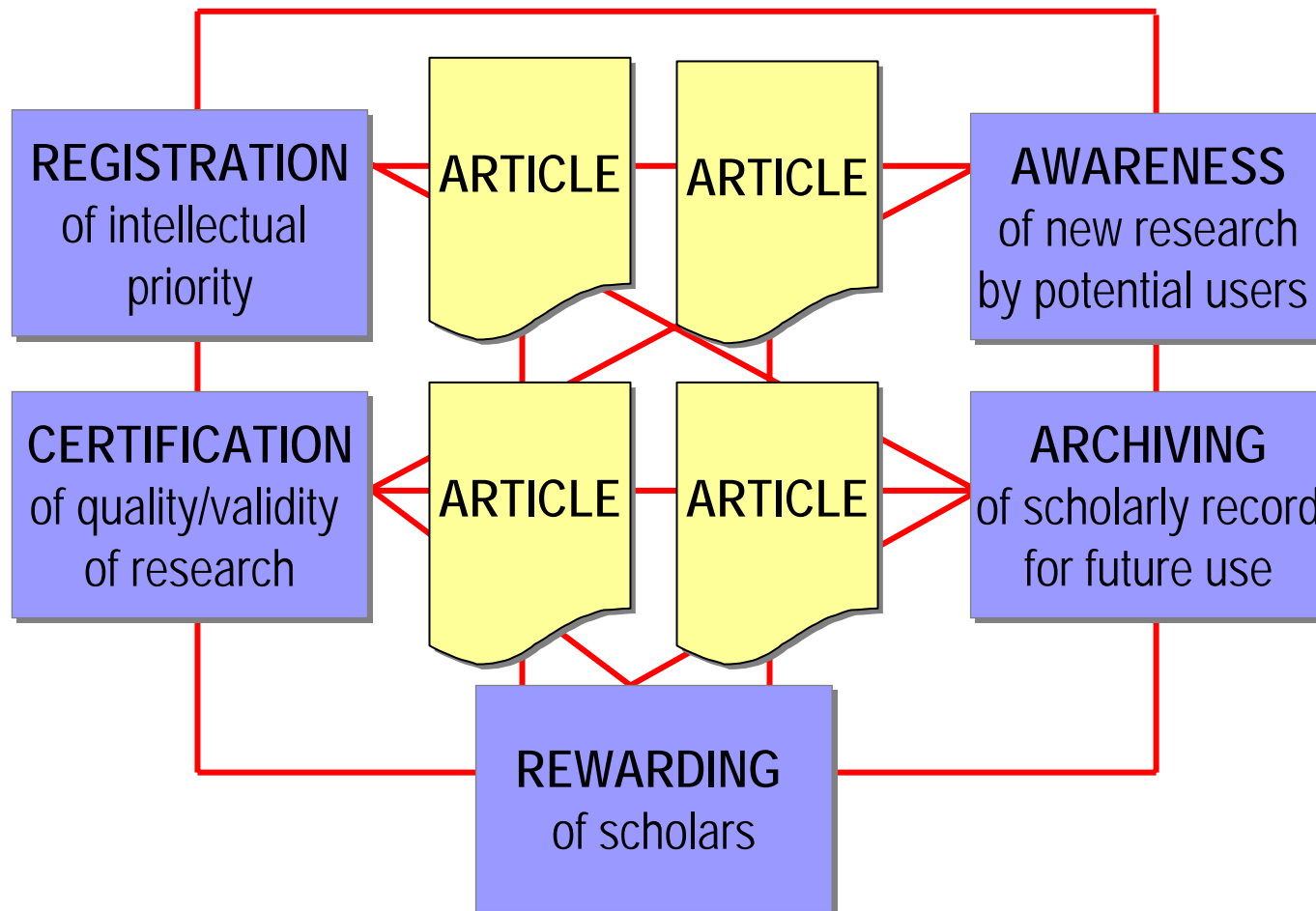




# Unbundling of functions

www.arl.org/sparc

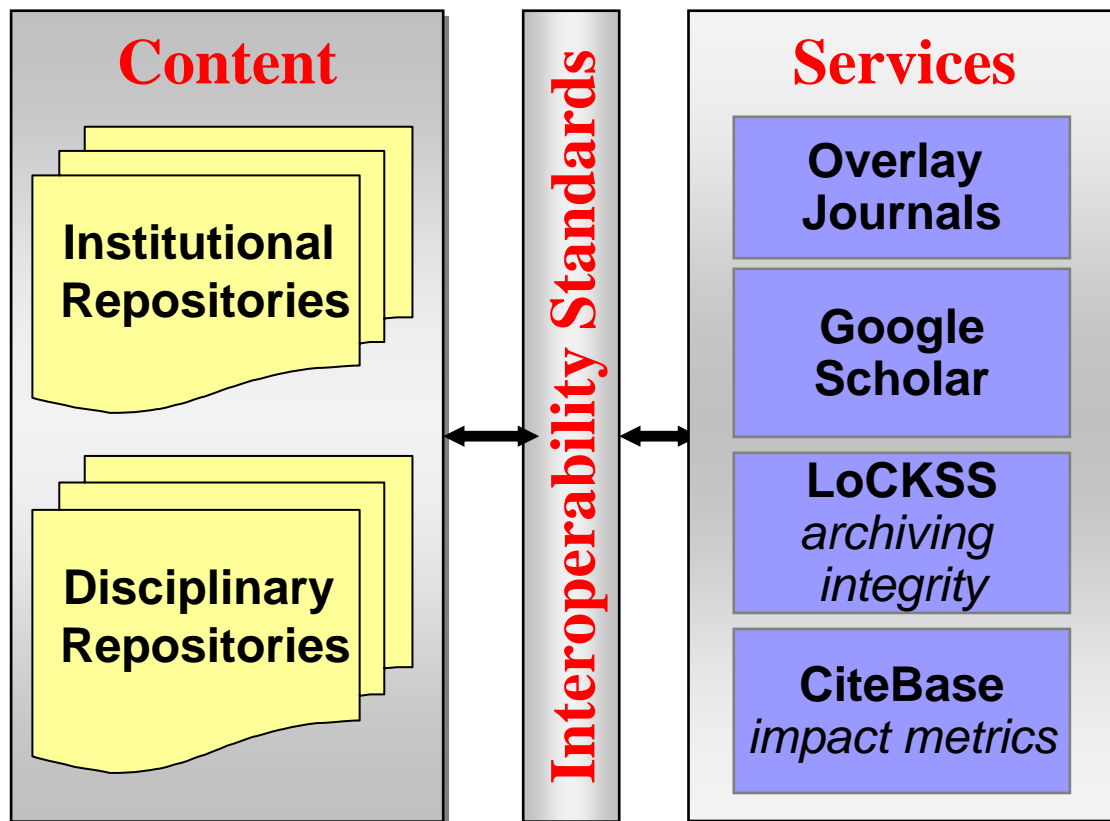
## DECONSTRUCTED JOURNAL





# How the pieces work together

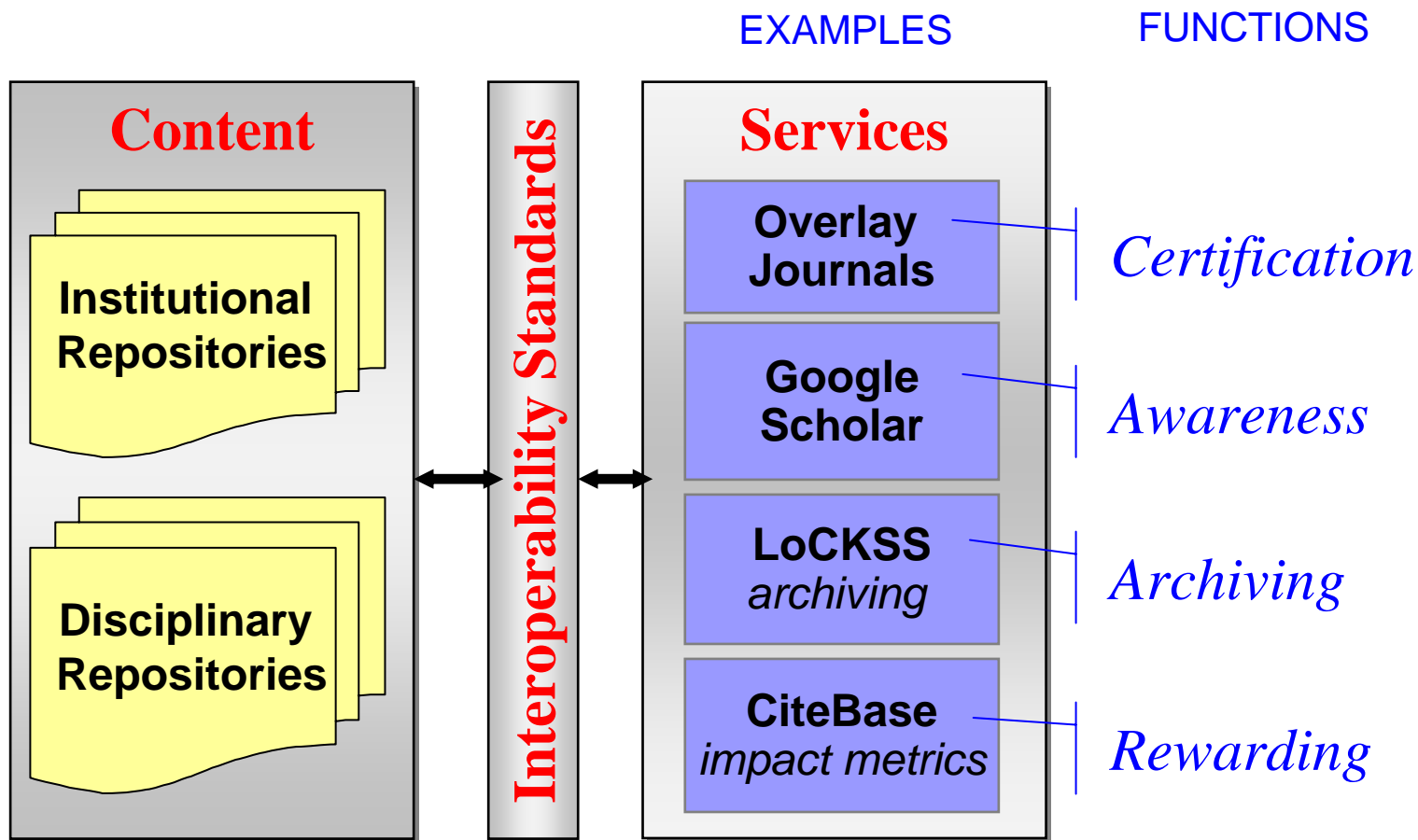
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# How the pieces work together

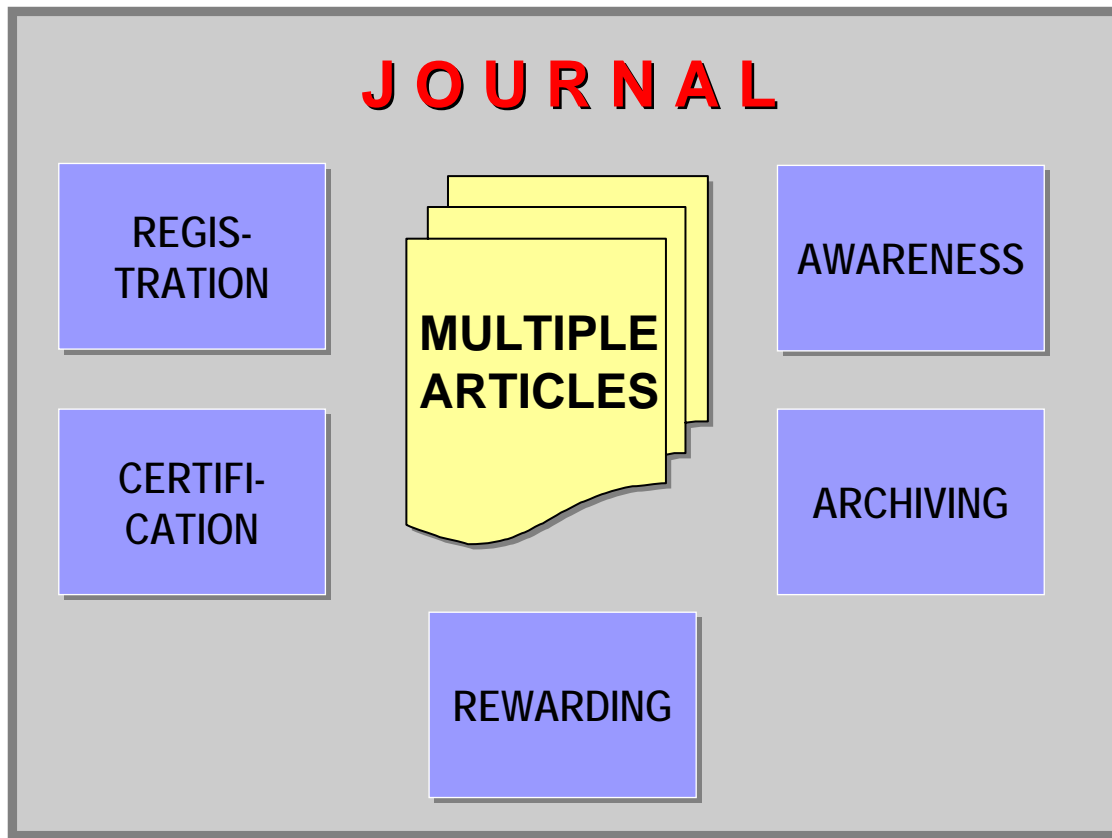
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# Content control maximized

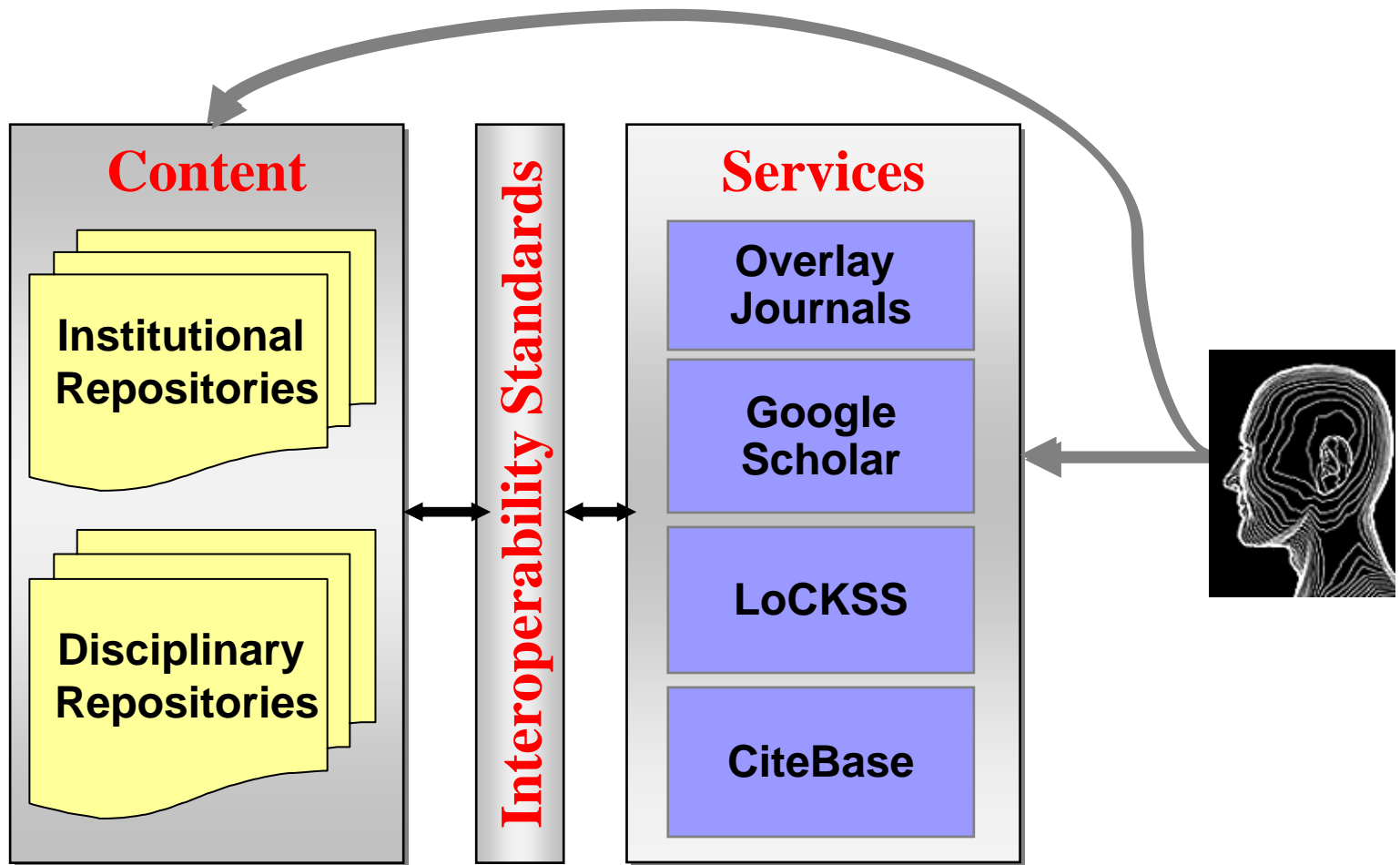
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# Content use maximized

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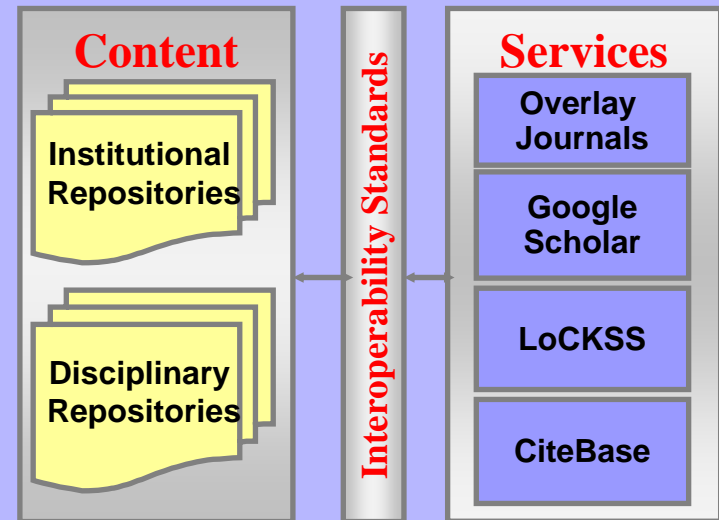
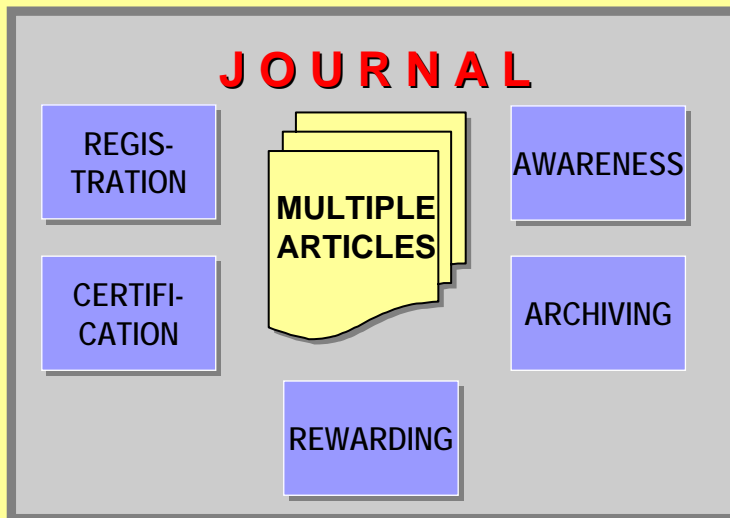




# Implications for societies

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**Declining opportunities**



**Emerging opportunities?**

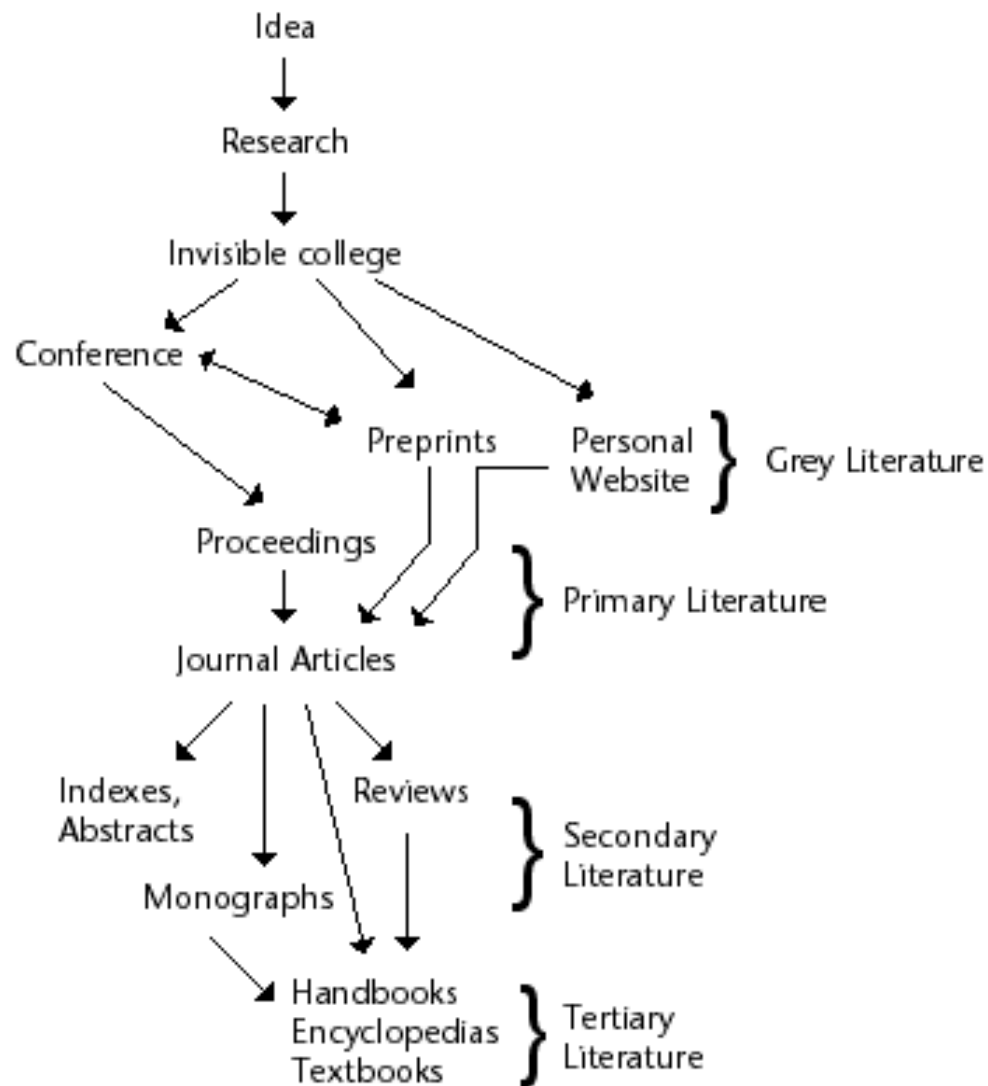


# Publishing vs. communication

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informal  
communication  
(within immediate  
community)

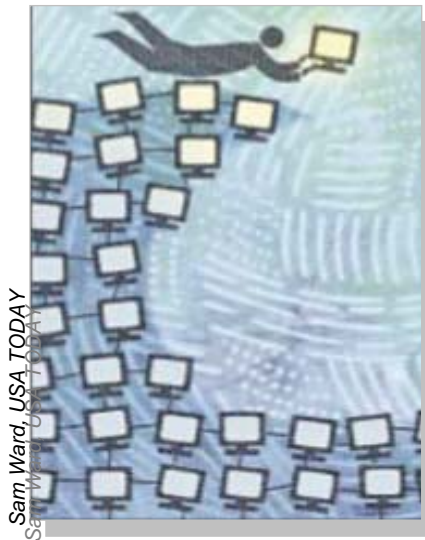
formal  
publishing





# Change is inevitable

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Sam Ward, USA TODAY  
Sam Ward, USA TODAY

“Once the logjam of business models and ‘who will pay’ is broken, a **tsunami of pent-up frustration and demand** for open access to scientific research is ready to **unleash the true power of sharing on the Web**”

– Outsell (Jan. 2004)