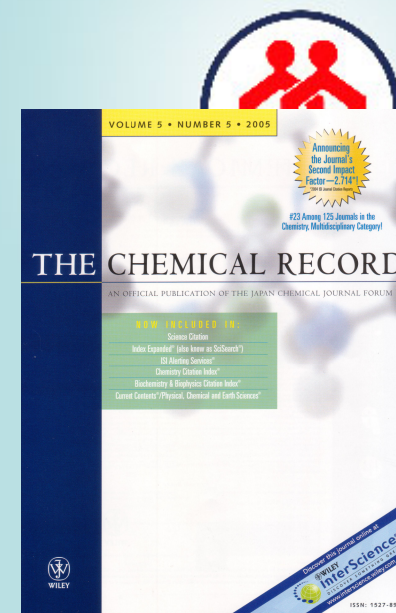
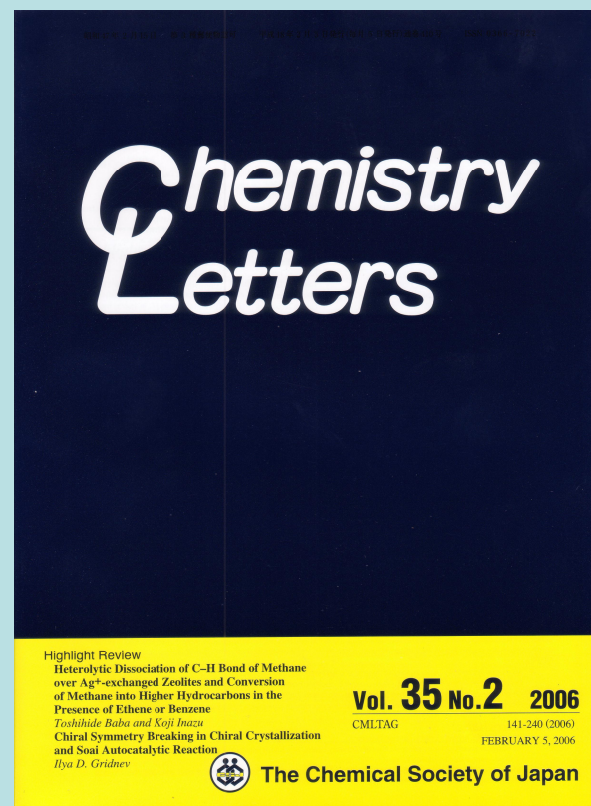
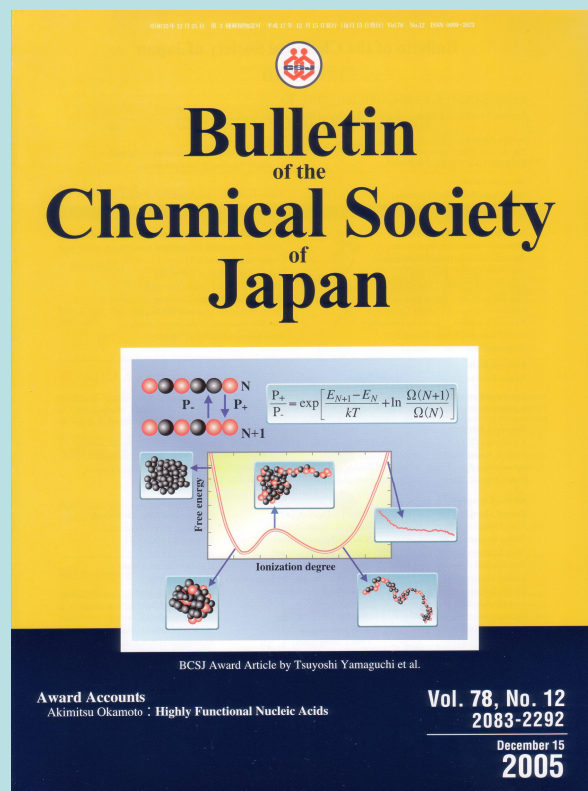




# Innovation-oriented Publication System

Teruto Ohta  
The Chemical Society of Japan

# CSJ Journals



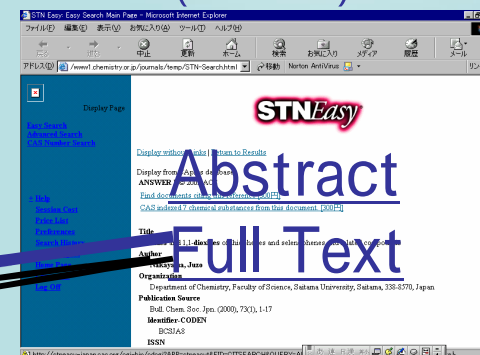
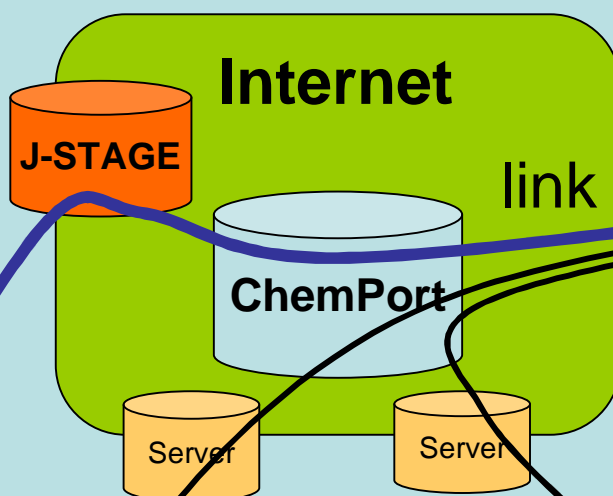
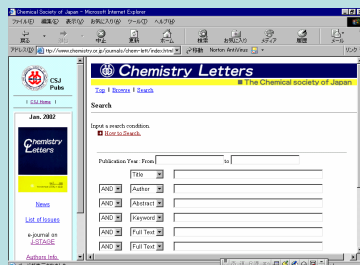
# CSJ Journals on J-STAGE



Direct Access

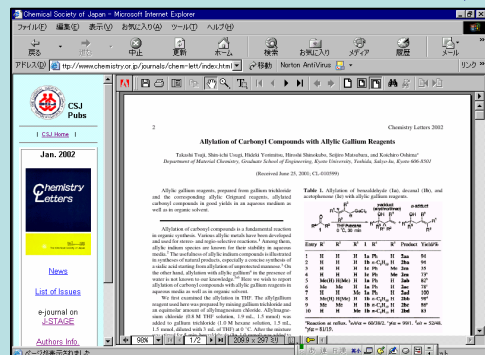
Search

Secondary DB  
(CAS)



STN  
SciFinder

CSJ e-Journals



e-Journals  
by not-for-profit publishers

e-Journals  
by commercial publishers

# What is going to be discussed?



- Is the current system innovation-oriented?
- Why does digitalization not enhance the dissemination of information?
- Can open access solve the problem?
- Are the user-pay-model and the author-pay-model the only choices?

# National Innovation Initiative Report



## America's Task

For the past 25 years, we have optimized our organization for efficiency and quality. Over the next quarter century, we must optimize our entire society for innovation.

From “INNOVATE AMERICA”

# 3<sup>rd</sup> Basic Plan of S&T in Japan



- Goal1 Quantum Jump in Knowledge, discovery and creation
- Goal2 Breakthrough in Advanced R&D
- Goal3 Economic Growth and Environmental Protection
- Goal4 Innovator Japan
- Goal5 Nation's Good health over Lifetime
- Goal6 The World's Safest Country



# Innovation-oriented Publication System

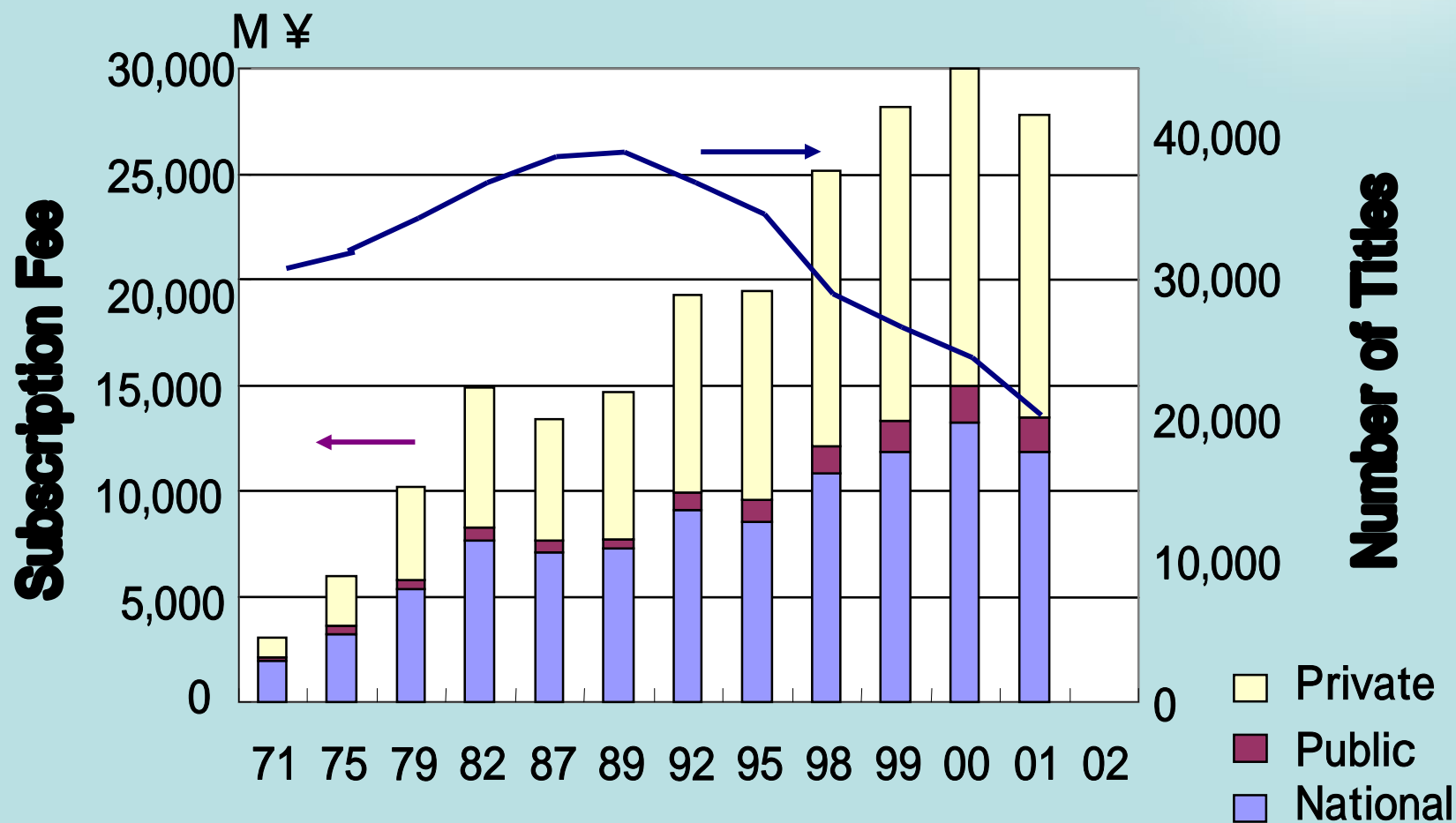
- Wide accessibility to scientific information
- Securing the opportunity of publication
- Incentive to research workers
- Quality control of published information

# Increasing Information Gap



- Ordinary life  
TV, Internet  
Decrease in Information Gap
- Academic life  
Digital publication  
Increase in Information Gap

# Less bought with more money



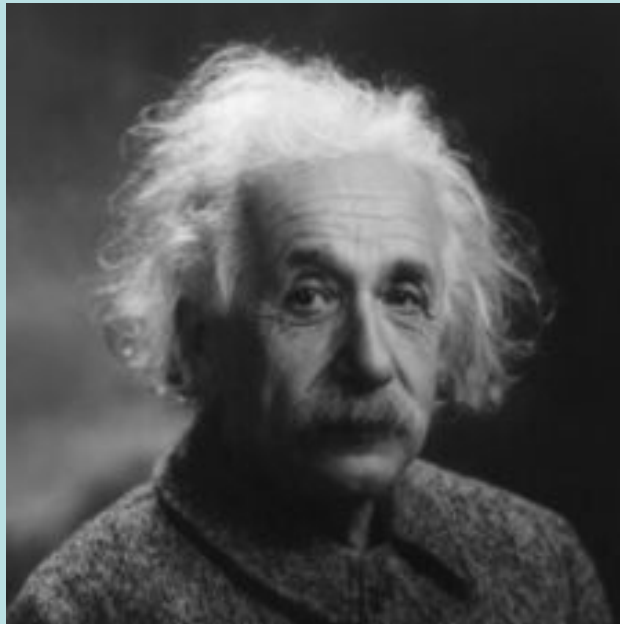
# Small Firm



- Small-firm innovation is twice as closely linked to scientific research as for large-firms, and it is more technically important
- Small firm's patents are at least twice as likely to be found among the top one percent of high impact patents.
- Small firms are more effective in producing high-value innovation.

(From "INNOVATE AMERICA" )

# Small Farm or Institute

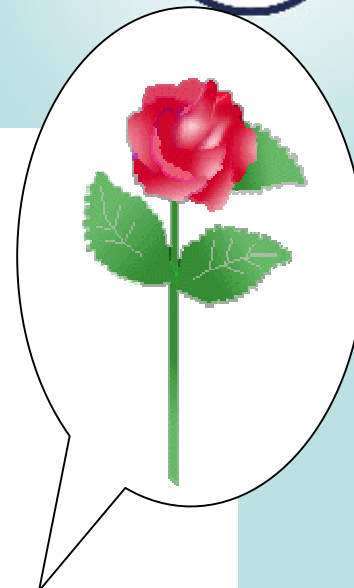


# Printed and Digital Articles



	Printed	Digital
Binding	Necessary	Not necessary
Handling	Mechanical	Electronic
Shipping	Postal	On-line
Storage	Bulky	Nothing

# Buying a Bouquet for a Single Flower





Can Open Access solve  
the Problem?

# Open Access Journals



- Most of them depend on other financial sources than submission fee.
- In-house selection

Authors will pay submission fees not because it is an open access journal, but because it is a journal of reputation that their works will be ranked high.



## With an Increase of Acceptance Ratio

	User-pay model	Author-pay model
Advantage	None	Increase in income
Disadvantage	Increase in cost Potential risk of damaging reputation	Potential risk of damaging reputation

# Evaluation through Journal Ranking



- World of Evaluation

Employment, Promotion, Funding or Awarding

Daily evaluation by outsiders

Peer review by colleagues and/o competitors

Without information through journals, daily evaluation will be much more unfair and inadequate

# Role of Funding Agencies



Why Funding Agencies must pay attention to distribution

- Maximize Output

Not only the primary result but also secondary effect should be considered

- Equal opportunity for all tax payers

# Scholarship-friendly Journal



ALPSP's Scholarship-friendly Journal

Favorable to Author's right

Prestigious

High accessibility

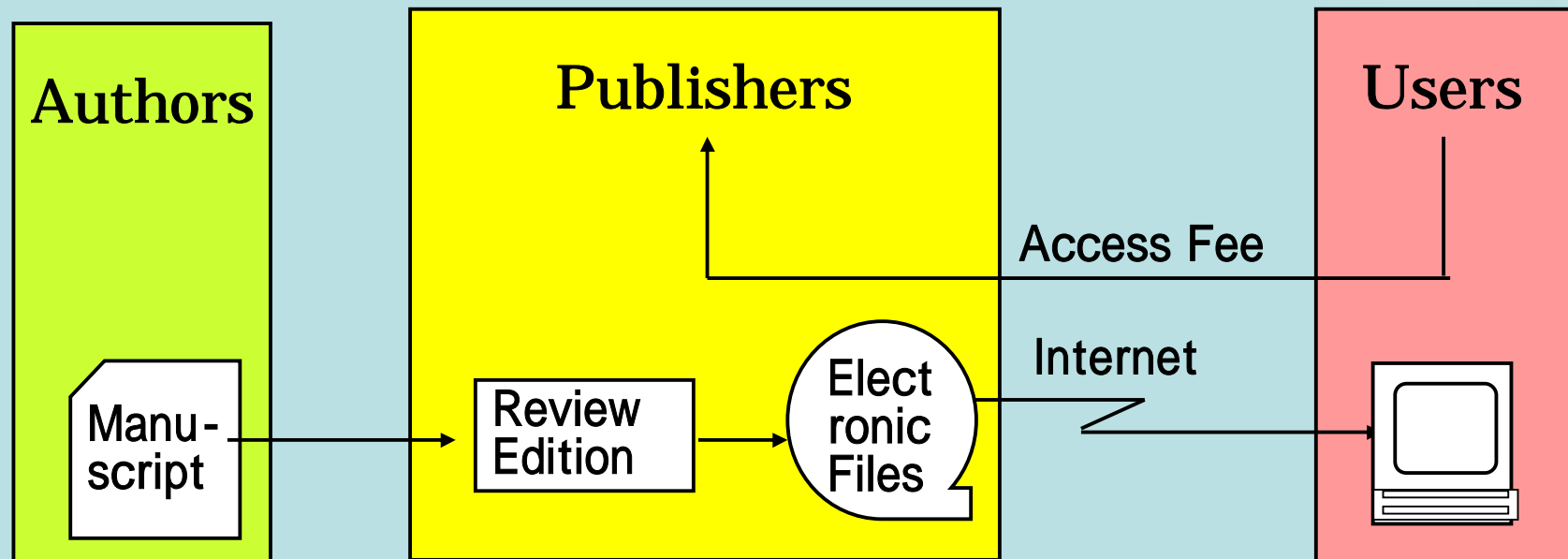
More consideration to small firms and  
institutes

Scholarship-friendly

Innovation-oriented

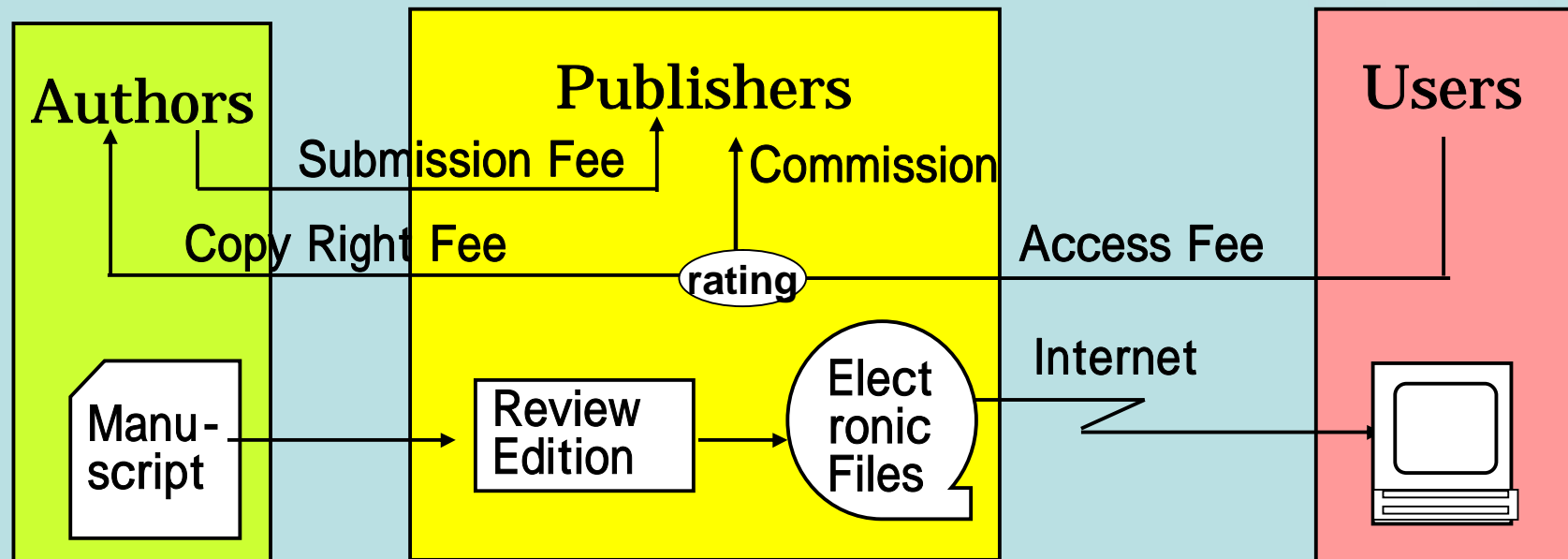


# New user-pay-model





# Beneficiary-pay-model



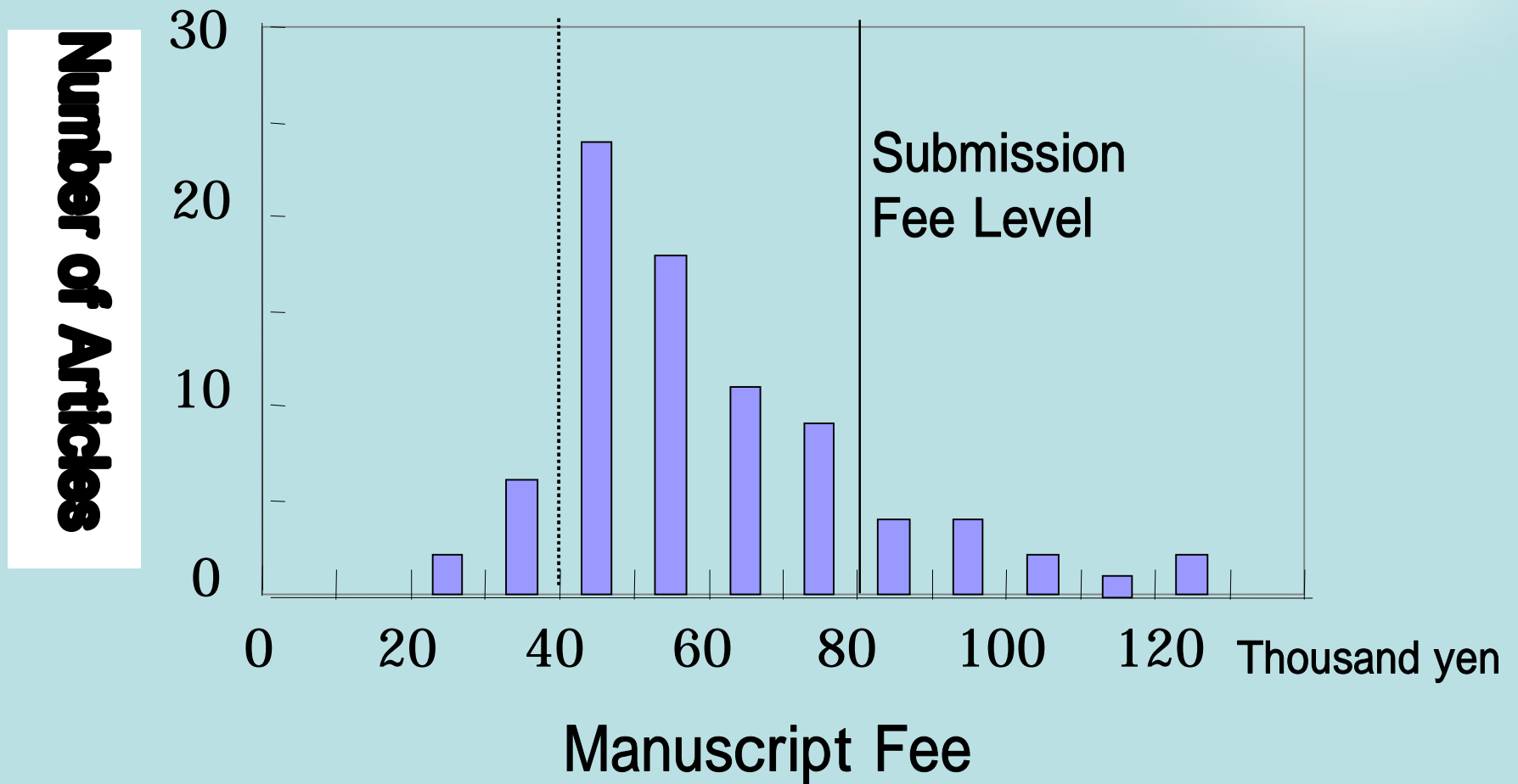
# Beneficiary-pay-model



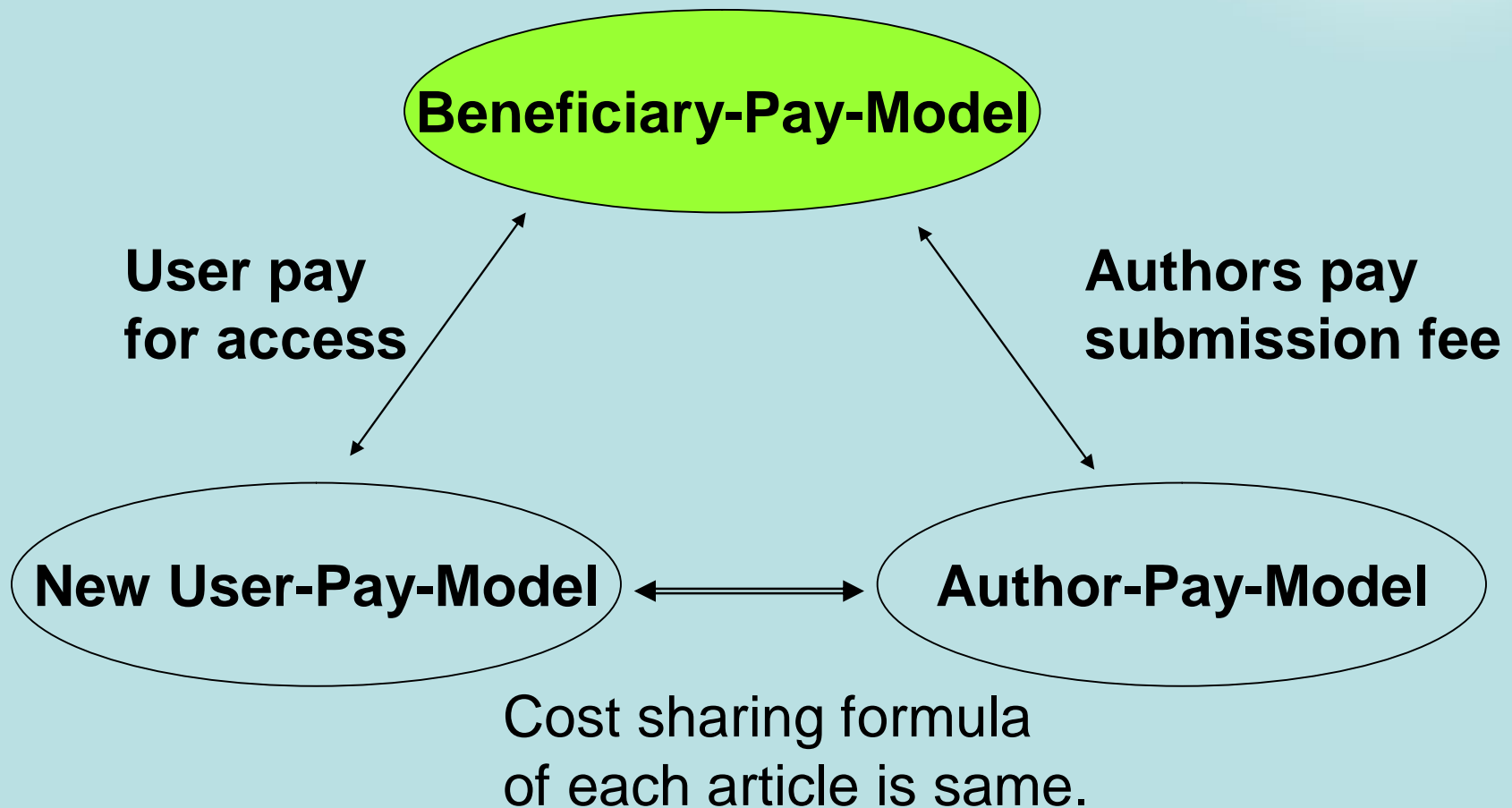
- The publication cost of articles with poor access is paid mainly by authors.
- The publication cost of articles with frequent access is paid mainly by users.
- Authors of articles with an extreme number of accesses can get more money than submission fee.



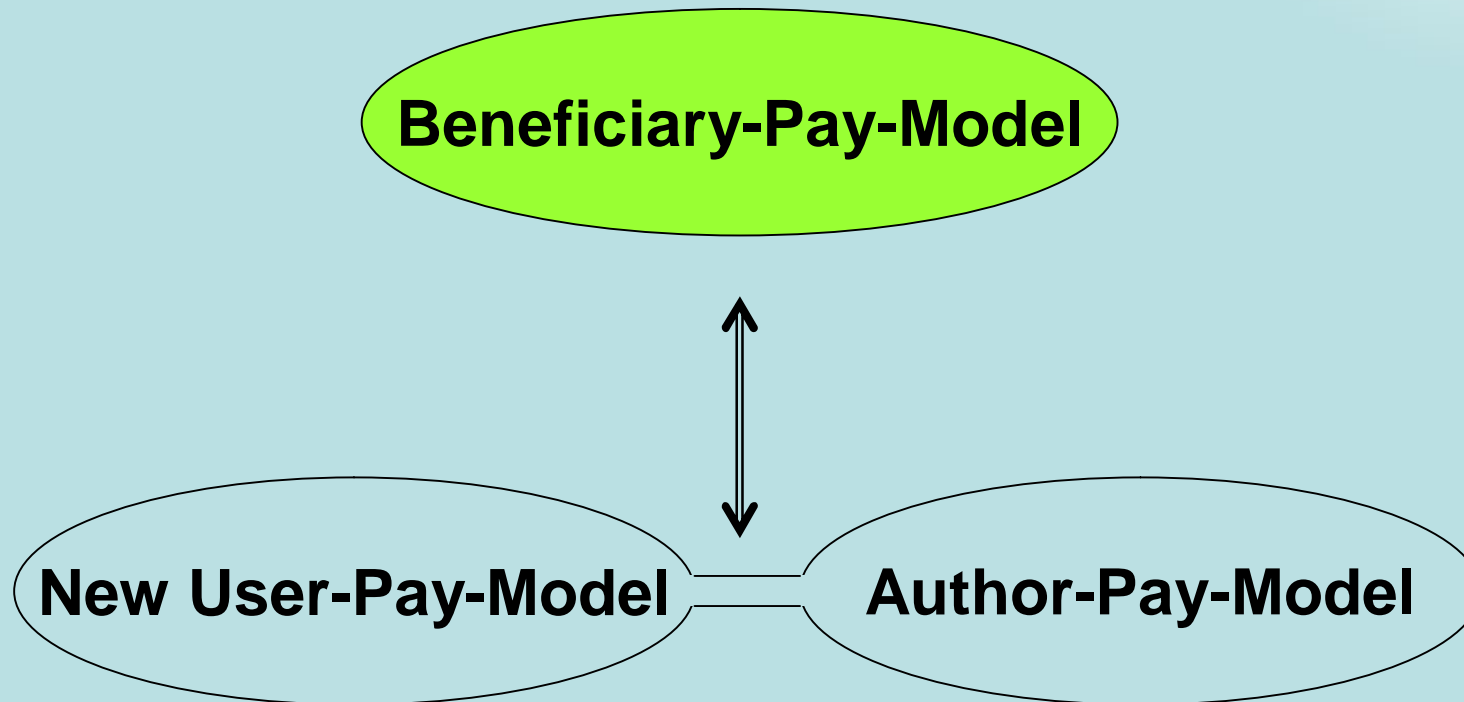
# Result of Simulation



# Relation among three models



# Relation among three models



Cost sharing formula  
of each article is same.

# Conclusion



- Information Gap is still increasing.
- It is doubtful if Open Access journals can ever acquire enough confidence from authors.
- Sales by article will improve the situation.
- Role of funding agency is important.
- Sales by article give rise to a 3rd business model; the beneficially pay model.