



# Activities costs and funding flows

## A perspective

Mayur Amin

Senior VP, Research & Academic Relations , Elsevier



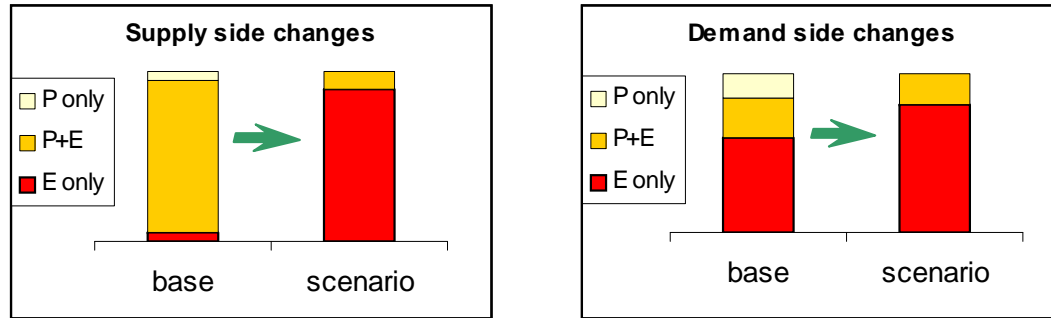
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# Outline of presentation

- Observations and comments on three models in the study
  - Migration towards e-only
  - Migration towards author-side payment
  - Payment of referees
- Other challenges and opportunities

# 1. Migration towards e-only

## The Scenario



## The Model

Publishers	Libraries	Users (User Institutions)
↓ Print & distribution costs	↓ Print copy management cost	↑ Search & printing costs
↓ Advertising revenues	↓ Storage/shelving costs	
↓ Membership revenues	↑ VAT (for some)	
↑ IT & user management costs		

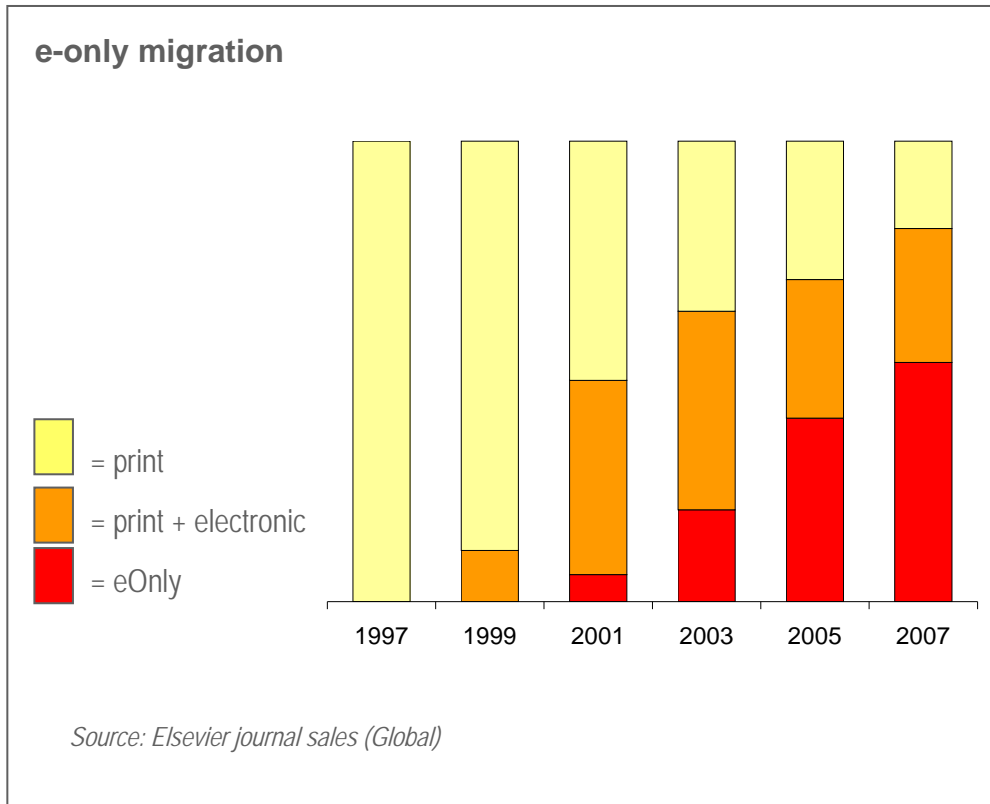
## Net Impact

- Globally - reduction of £318m in total costs
- UK - reduction of £23m in costs (academic libraries account for £18m of these, mainly due to reduction in print-associated handling, storage and processing costs)

## Observations

- From supply side the vast majority of journals are already in electronic form.
- Although there is increase in e-only on demand side, not all for the same journals so print demand for most journals persists.
- Advertising and membership needs will require print for some on supply side
- VAT is a barrier
- Archiving & preservation now a shared role (and cost) for publishers and libraries

# 1. Migration towards e-only (contd)



**Archiving & preservation**

Elsevier led the establishment of an official online third party archive at the National Library of the Netherlands.

**KONINKLIJKE BIBLIOTHEEK**

1<sup>st</sup> official archive

Developed similar arrangements with other organizations

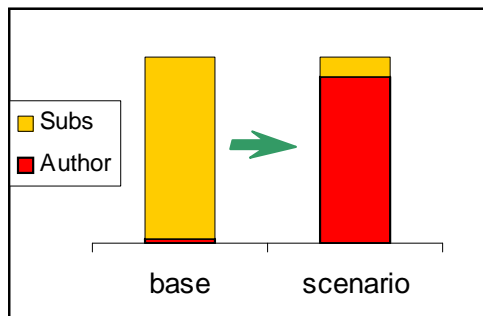
2<sup>nd</sup> official archive 3<sup>rd</sup> official archive

## Outcomes

- To some extent we are already seeing a migration towards more e-only
- Archiving and preservation issues being addressed
- Advertising and membership needs will require print for some on supply side
- Likelihood of modelled scenario in next 5 years: medium to high

# 2. Migration towards author pays

## The Scenario



Note: builds on scenario 1 and models difference due to change in payment business model

## The Model

Publishers	Libraries	Authors (Institutions/ Funders)
↓ Costs of subs sales and admin	↓ Subscription costs	↑ Author-side Payments
↑ Costs of managing author payments	↓ Access provision costs	↑ Admin costs to manage payments
↓ Costs in user management		↑ Cost in authors' time for payments
<b>Not modelled</b>		

## Net Impact

- Globally - reduction of £556m in total costs (less costs of management and administration of author-side payments). Increase of £10m for academic orgs.
- Shift in balance of cost towards academic orgs with high research/publication activity.
- UK – model implies overall increase of ca £40m (academic orgs increase ca £70m and other orgs decrease ca £30m) plus cost of administering author-side payments

## Observations

- Cash and non cash costs of managing and administering author-side payments likely to be much higher than currently modelled
- Model assumes all authors pay equally. Any subsidy for developing countries would imply higher costs for developed nations (ca +5%)
- Shift in burden of cost to research-intensive organisations not universally welcomed

# Migration towards author pays (contd)

## Observations

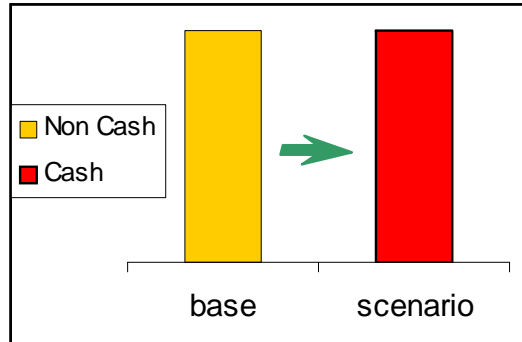
- Not all researchers will have funds to be able to pay
- Variable or uncertain mechanisms for funding author-side payments
- Mixed buy-in from authors
- How to sustain top-end journals (sustainable charges likely to be very high)?

## Outcomes

- Continued publisher experimentation with this approach including hybrid models, working with funders and other organisations (e.g. WT, SCOAP3)
- New author-pay journals/publishers may continue to evolve
- May suit some subject areas more than others
- Likelihood of modelled scenario in next 5 years: Medium for some areas; low for others

# 3. Payment of referees

The Scenario



The Model

Publishers	Libraries	Authors/Referees (Institutions)
↑ cash cost of refereeing	↑ Cost of Subs	↑ Cost of author pays
↑ cost of managing referee payments		↑ revenues to referees

Net Impact

- Globally – Increases total cost of system by £1.9 billion which would need to be recovered (of which ca £1.4 billion would be through academic subscriptions)
- UK – increase in UK library cost of ca £53m

Observations

- Likely additional cost increases to the system to manage referee payments.

Outcomes

- Continued investment in tools to help make refereeing process more efficient
- Likelihood of modelled scenario in next 5 years: Low

# 3. Payment of referees (contd)

## Why reviewers undertake peer review



	disagree	agree
<u>Payment for Reviewers</u>		
All:	40%	35%
Anglophone countries:	48%	28%
<u>Payment will make publishing more expensive:</u>	18%	52%

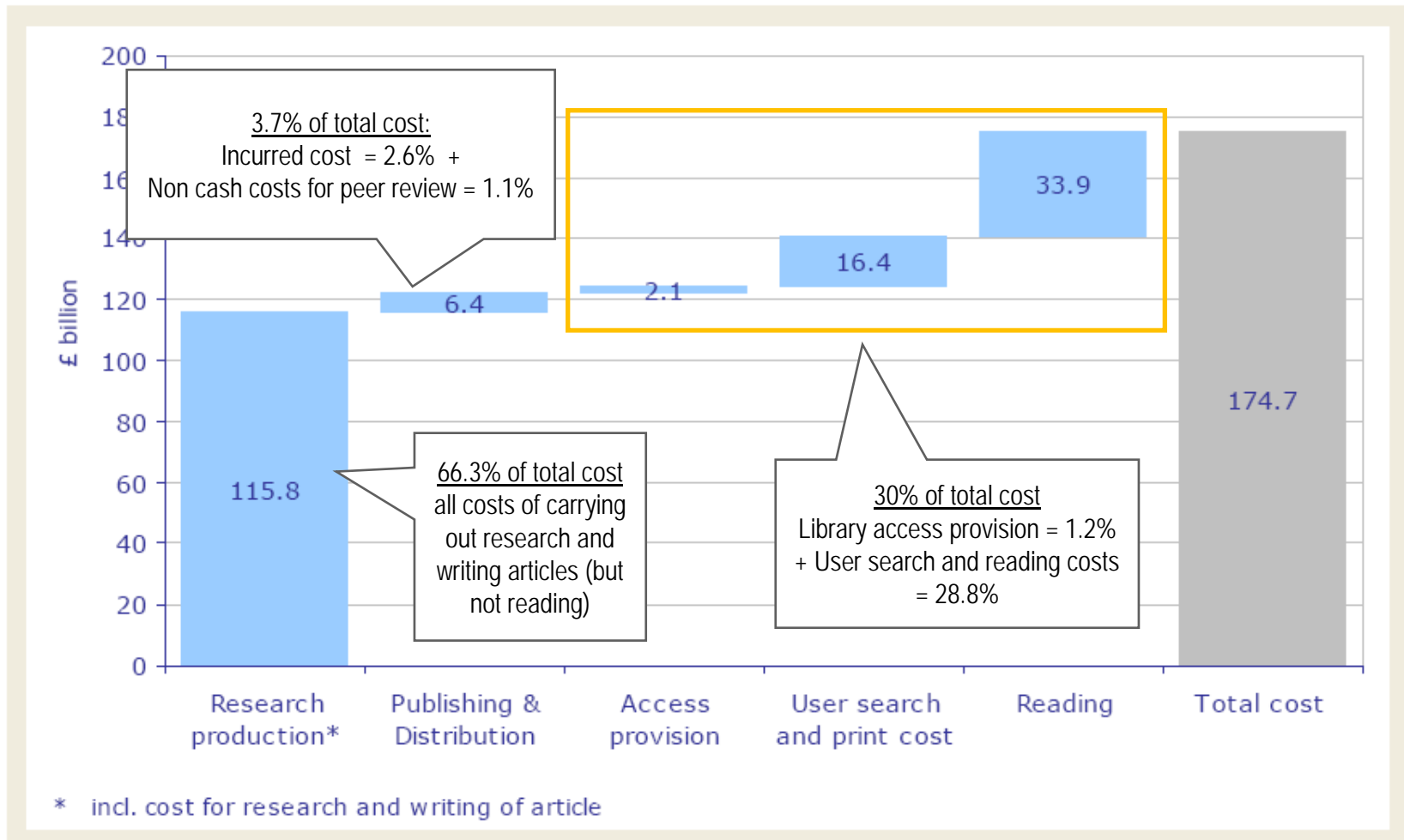
Source: *Peer review, benefits, perspectives and alternatives, PRC summary paper 4, Mark Ware*



- Other challenges and opportunities

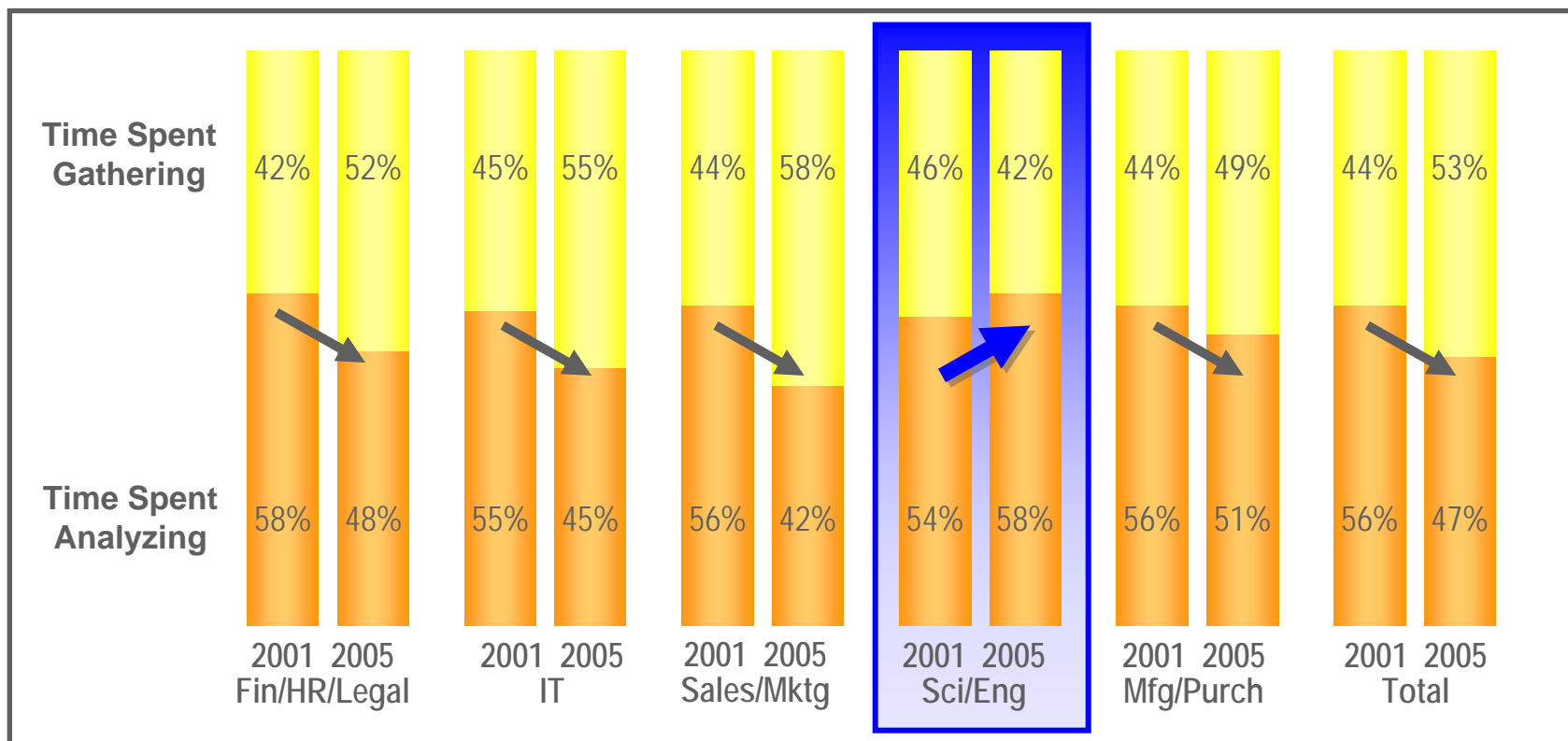
# Global costs of academic research & communication

Figure 4.1: Total (system-wide) annual cost incurred in the global scholarly communications process, by value chain component



# Productivity Increasing

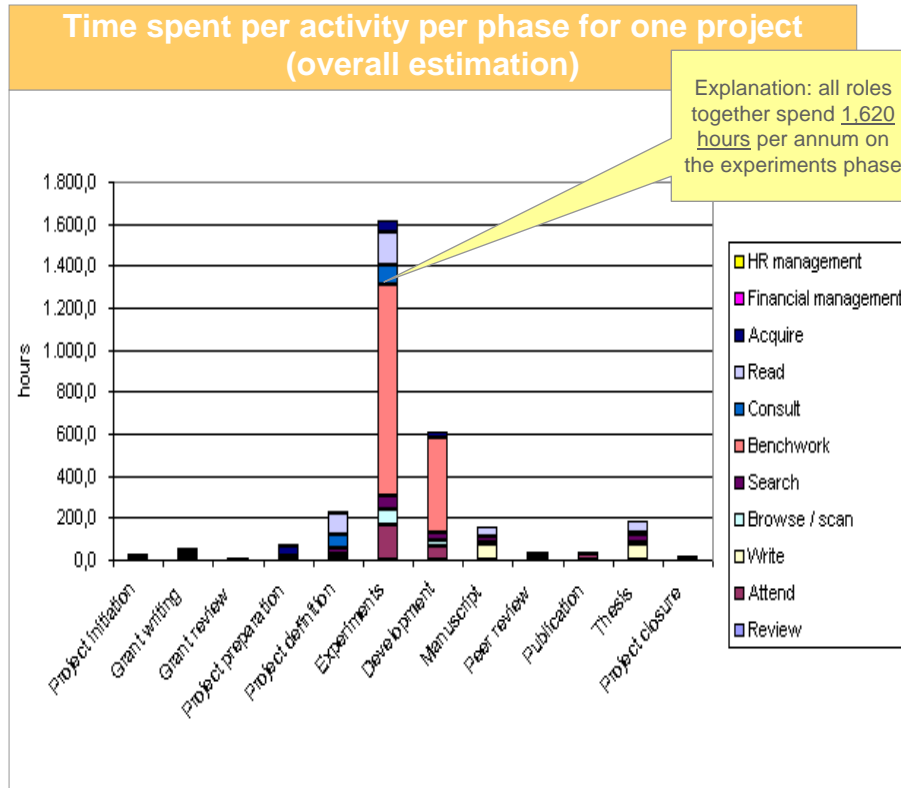
Scientists can now spend more time analyzing information than gathering it



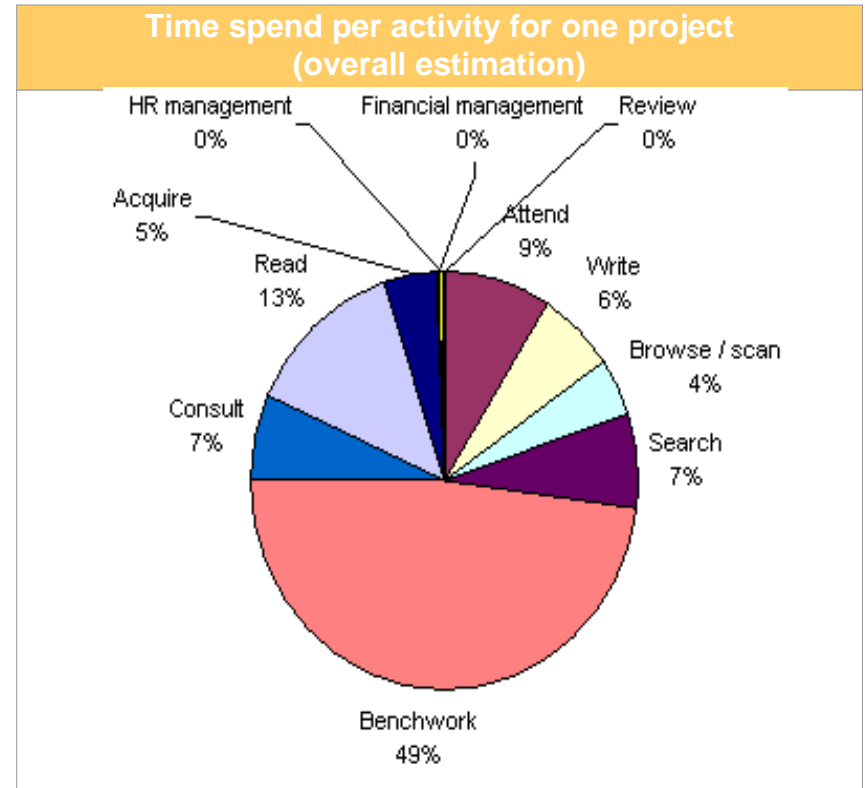
## Compared to print-only era

- Scientists now read 25%+ more articles per year
- Scientists now read from almost twice as many journals

# Average time spend on content related activities is 25%, taking writing in to account up to 31%



Source: UMCU / Elsevier

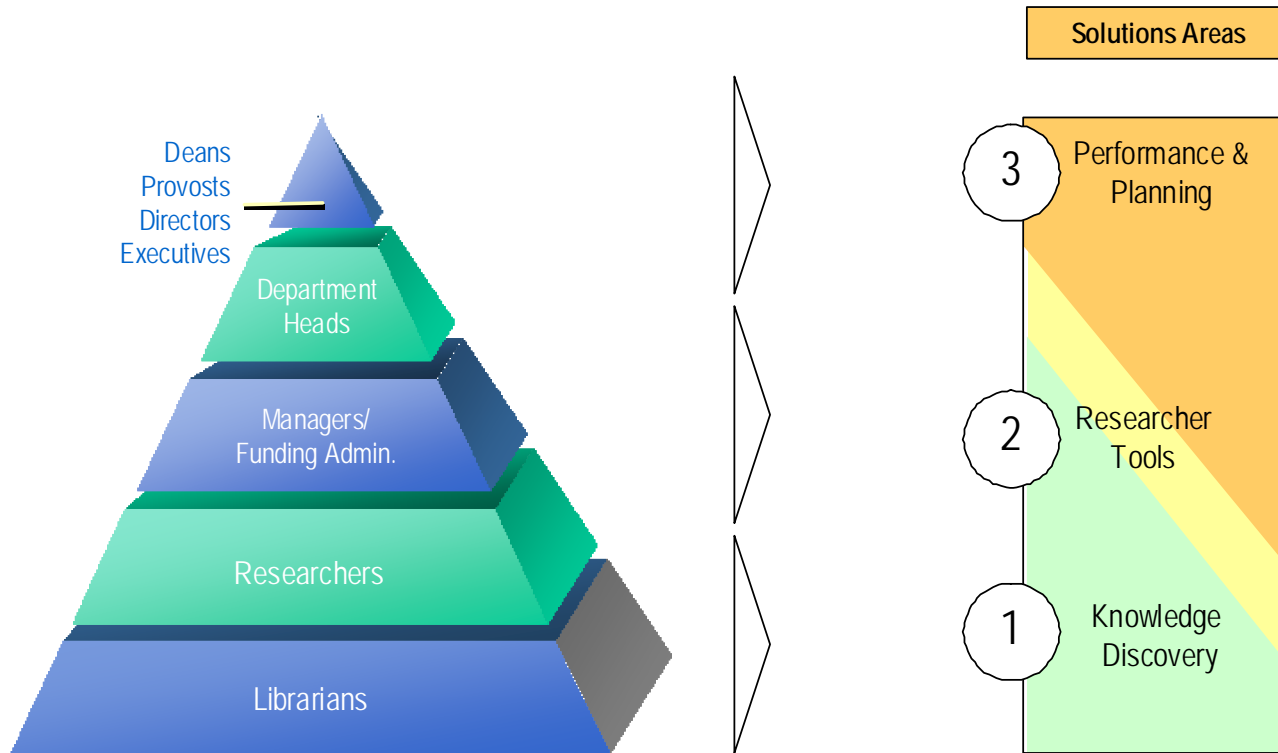


Source: UMCU / Elsevier

- The bulk of the work is concentrated in the experimental and developmental phases
- Project definition, manuscripts and thesis also require considerable effort

- Benchwork is by far the most time-consuming activity
- Content-related activities (browse/scan, search and read) account for 25% of all time spent on a research project. If we take write into account this percentage increases to 31%

# Challenges & Opportunities



## Knowledge Discovery

- search/linking tools
- semantic search

## Researcher Tools

- funding/grant optimisation
- online collaboration/networking
- finding potential (research) partners

## Performance & Planning

- performance evaluation
- comparative analytics

# Thank You

[m.amin@elsevier.com](mailto:m.amin@elsevier.com)