

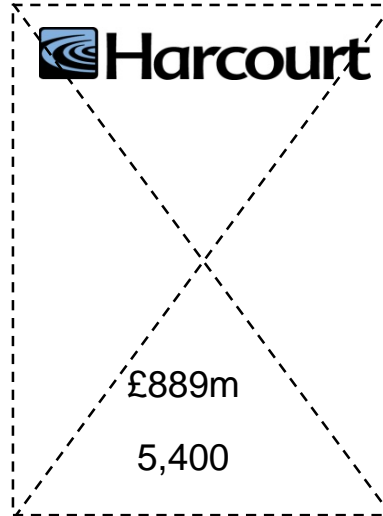
**Professional Information**

**Product and Business Model Trends**

ICIC Oct 2007

Nick Baker  
 Reed Elsevier

# Introduction to Reed Elsevier



	ELSEVIER	LexisNexis™	Reed Business	Harcourt	TOTAL
Revenue £m	£1,521m	£1,570m	£1,418	£889m	£5,398m
FTE's	7,300	13,400	10,200	5,400	36,300

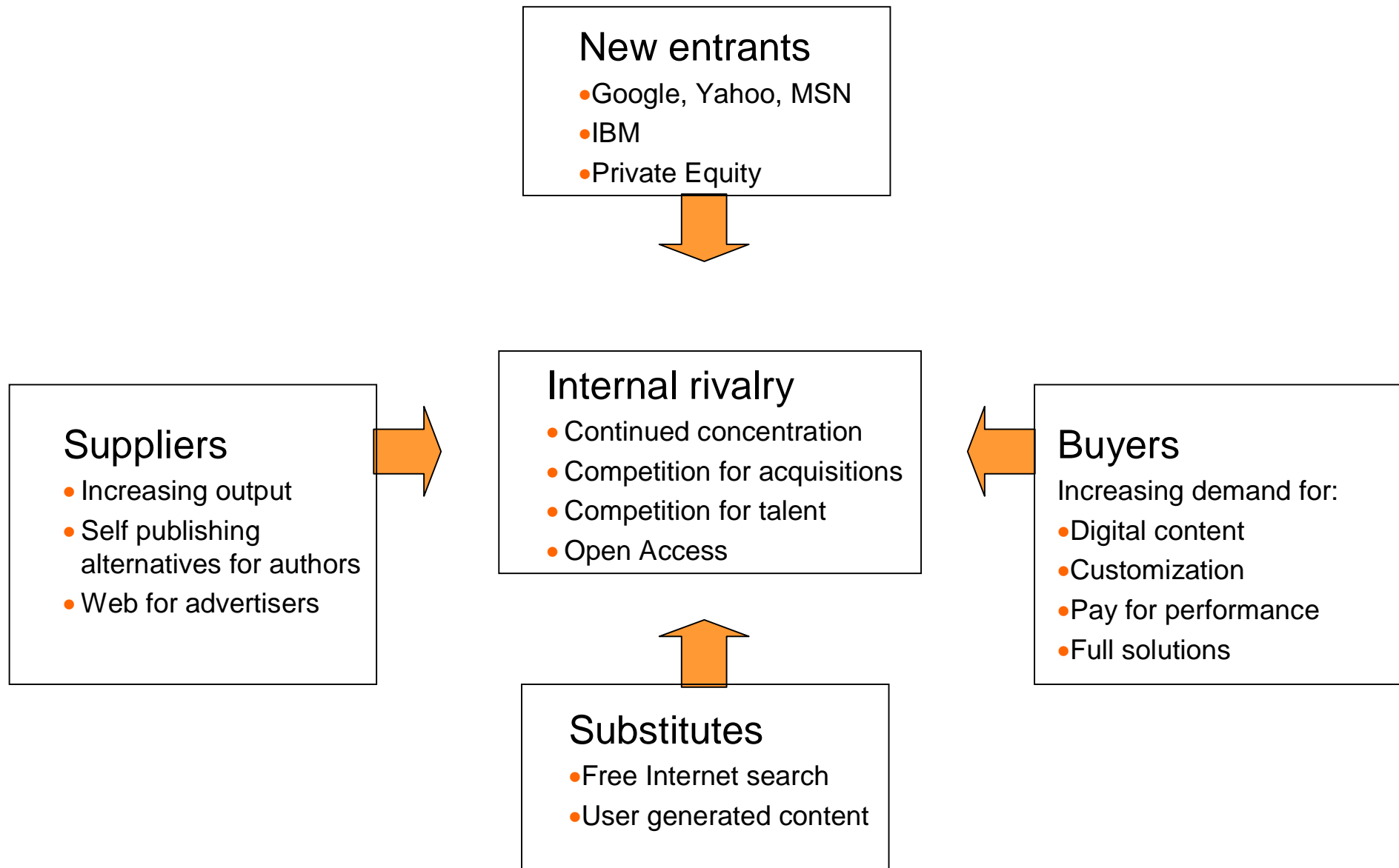
Source: Annual report 2006

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# **General Information Market Key Trends**

# Information Market Forces

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# Customers Trends: Information Use

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- Universal and anytime access to broadened content
- Increased customisation
- Networking
- Risk and cost reduction
- Focus on outcomes: increased efficiency and productivity



# Publishing Competitive Landscape

## Traditional Competitors

- Incumbency mindset
- Strong to proprietary content
- Technology is enabler
- Mix of print and electronic
- Primarily subscription revenue
- Process (and cost) heavy
- Narrow audience
- Limited scalability

## New Entrants

- Disrupter mindset
- Little proprietary content
- Technology is core
- Content/tools vs solutions
- Advertising/Broad Audience (content “free”)
- Pay for performance based – direct
- Strong Network Effect



The McGraw-Hill Companies



Better information. Better health.

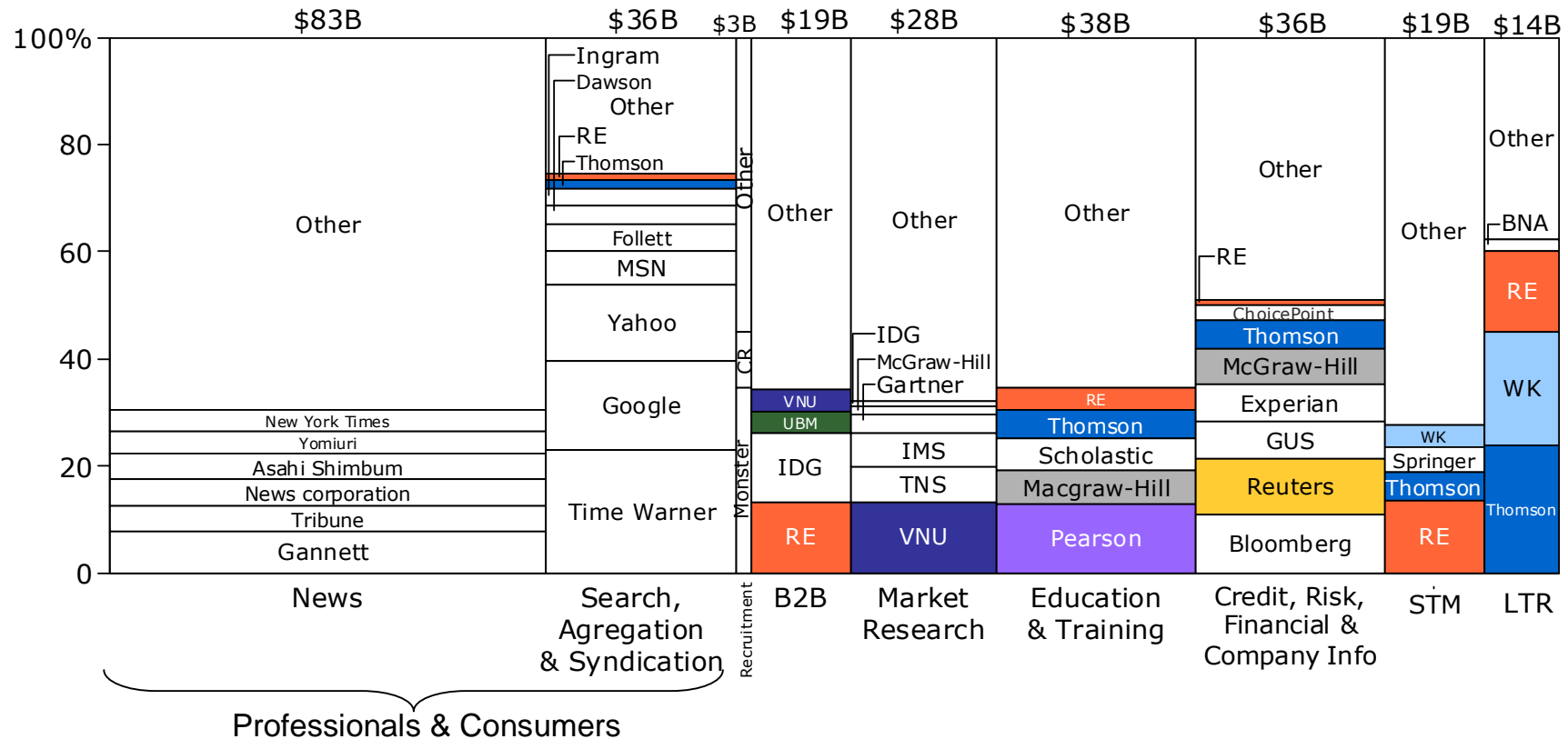


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# **Professional Information Market Key Trends**

# Professional Information Markets

Total = \$277M



Estimated future growth rate (2006-08)

2-4%

15-17% NA

0-4%

7-9%

5-9%

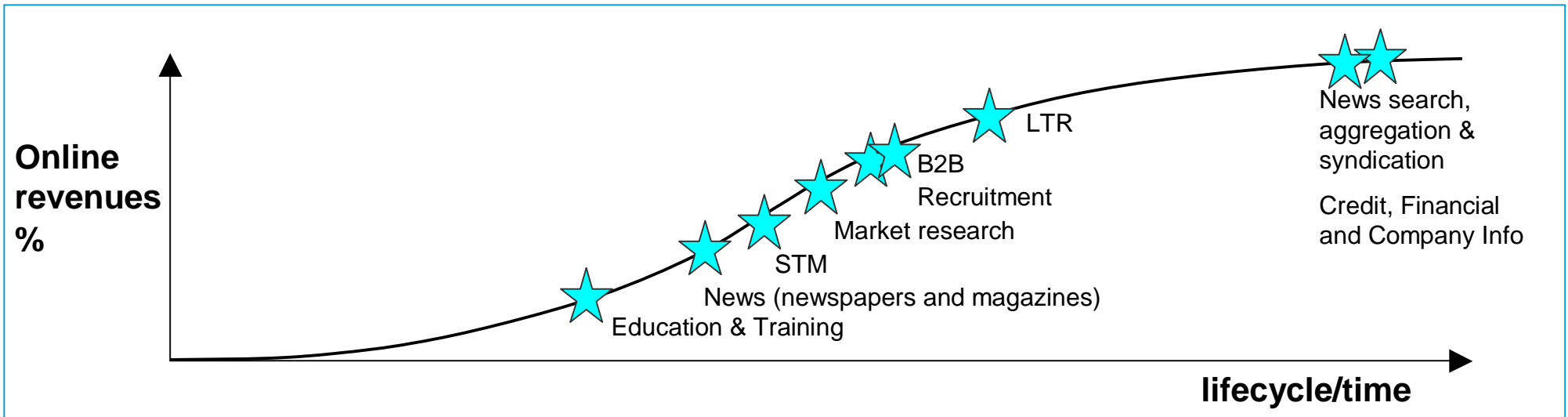
7-9%

4-5%

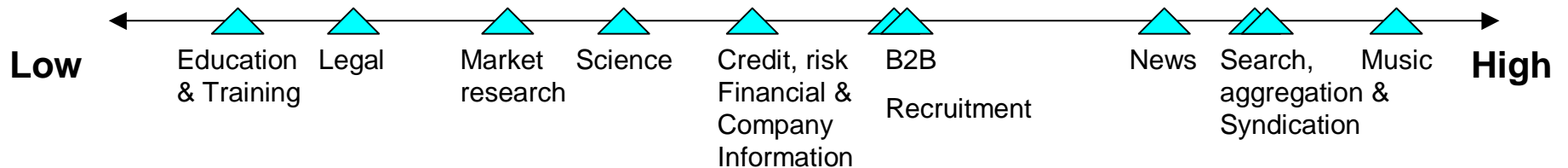
4-5%



# Online Adoption



## Impact of online new media competition today

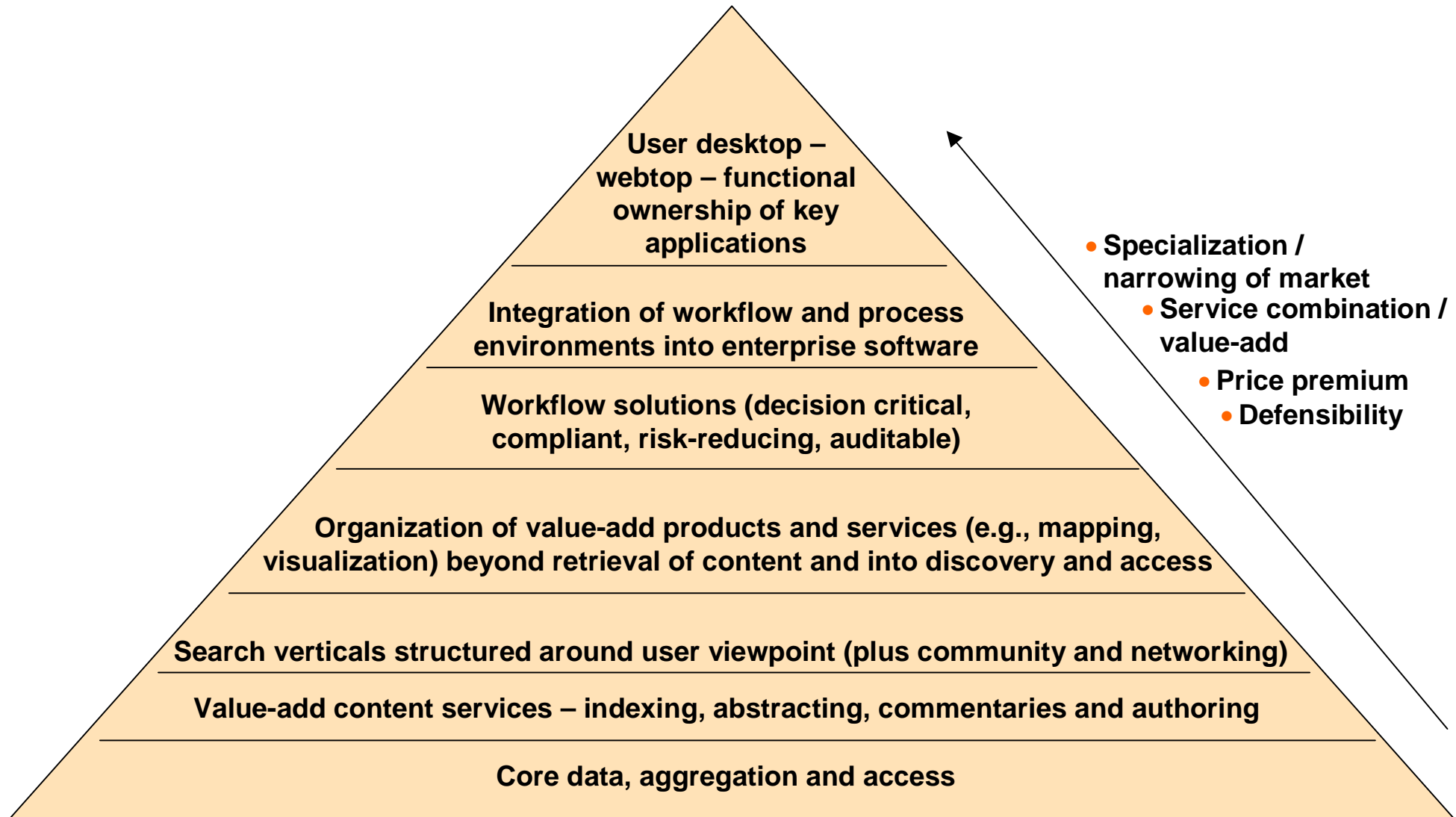


### Examples of factors impacting adoption

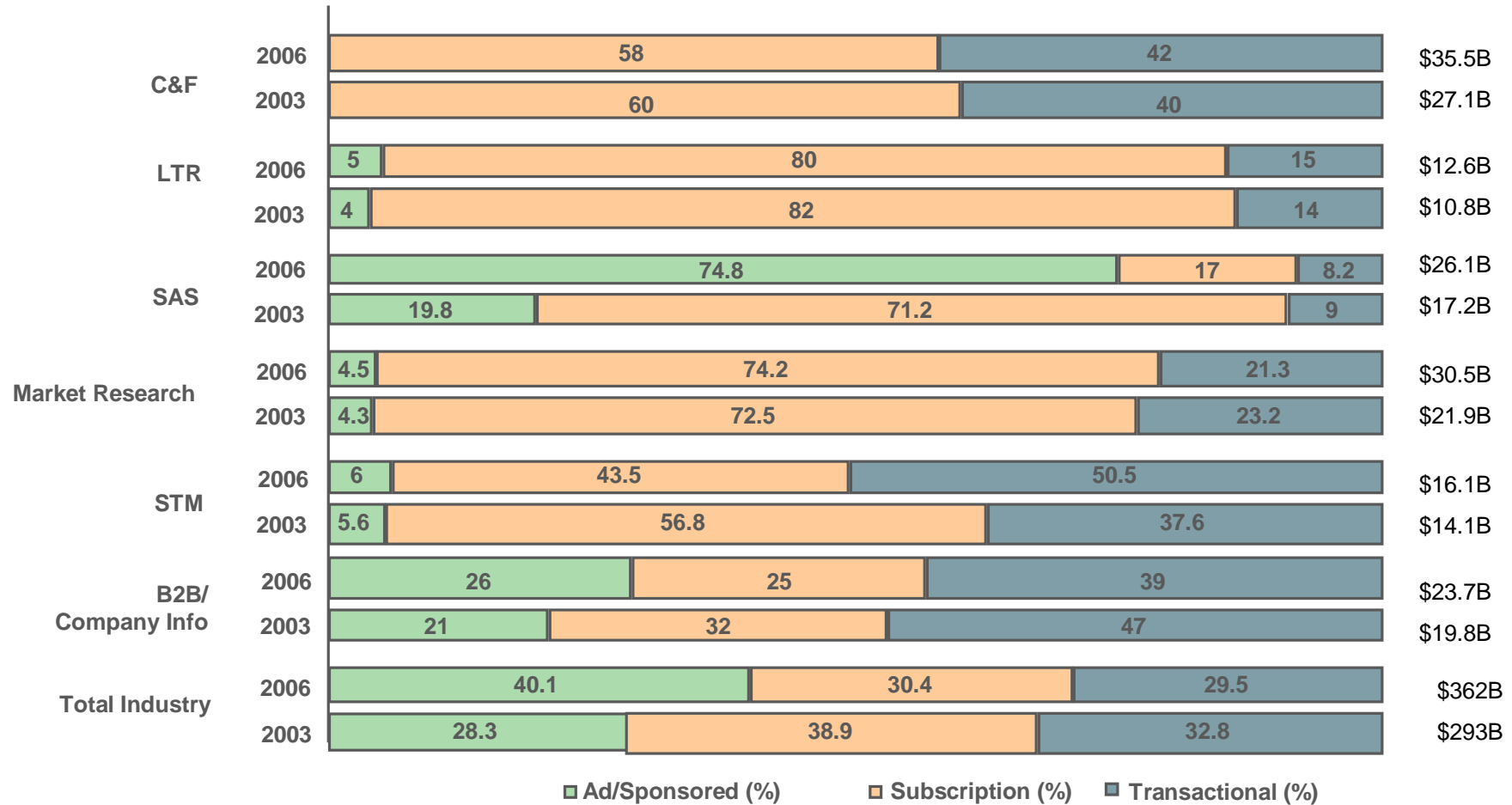
- Type, accessibility and use of content
- Need for content / answers precision / reliability
- User familiarity with technology and access to it
- Business economics
- Institutional vs individuals and professionals vs consumers

# Professional Information Product Evaluation

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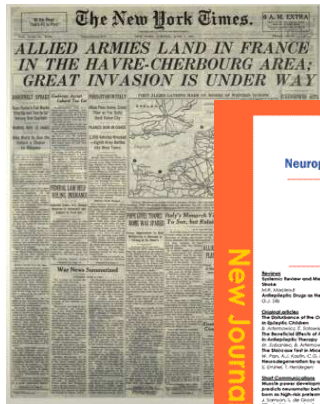
# Search Leads Industry Shift to Ad/Sponsored Model



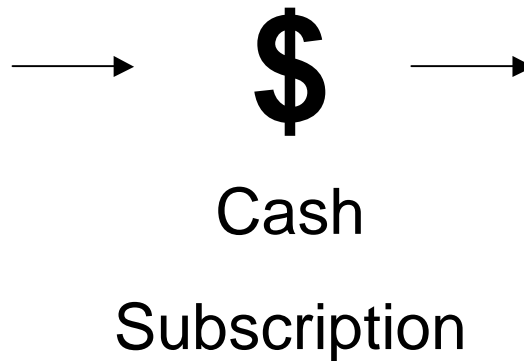
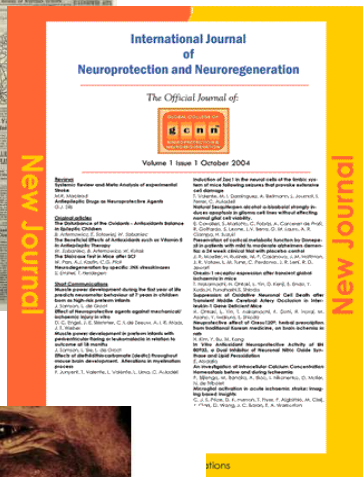
Source: Outsell's Publishers & Information Providers Database

\* 2006 data is estimate as of 7/20/2007

# In the world of print, everything was relatively straightforward



John Steinbeck  
*Of Mice and Men*

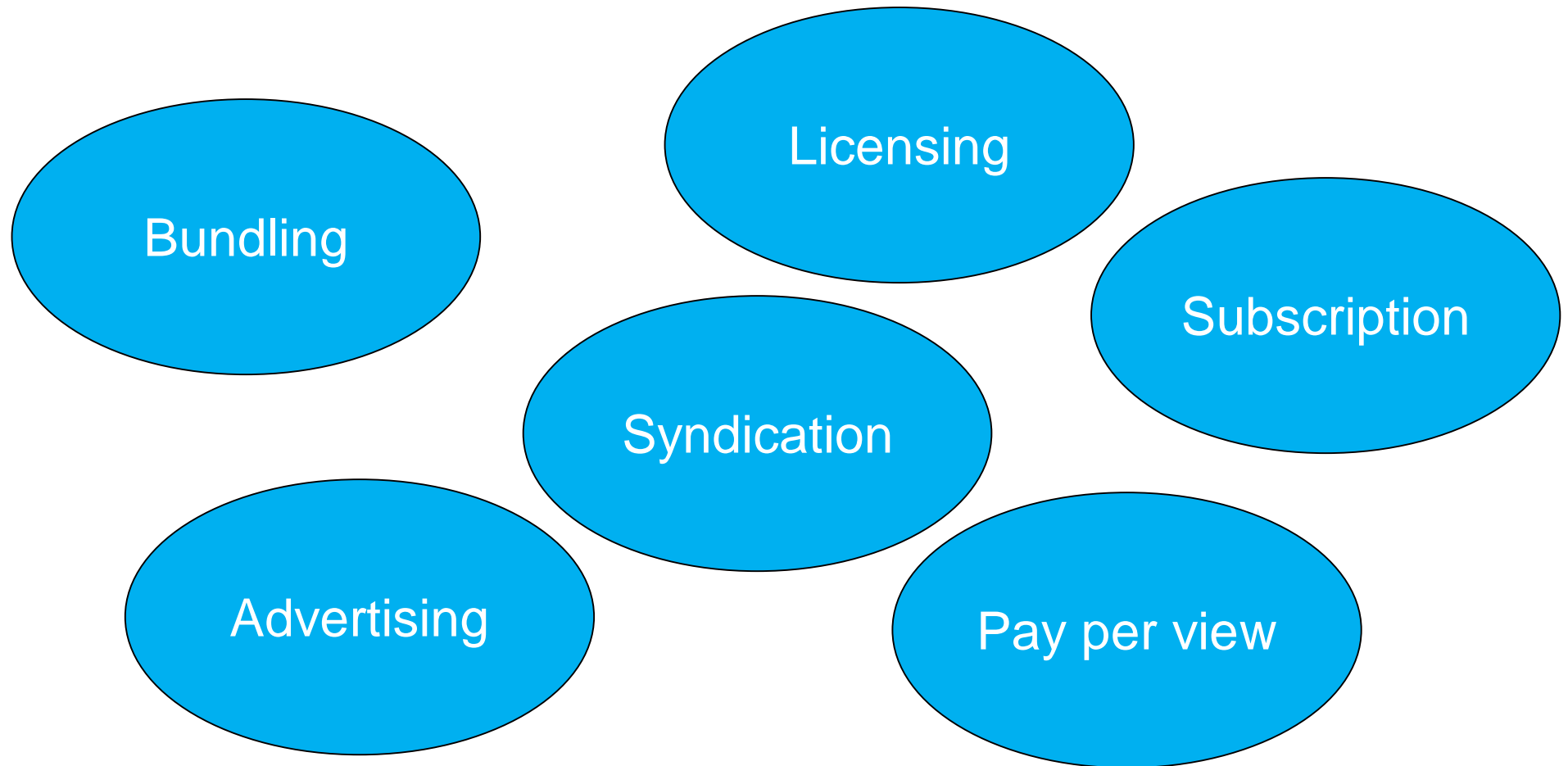


## End user

- Individual
- Corporate subscription
- Academic subscription

# But as the migration to digital started, business models became more complex...

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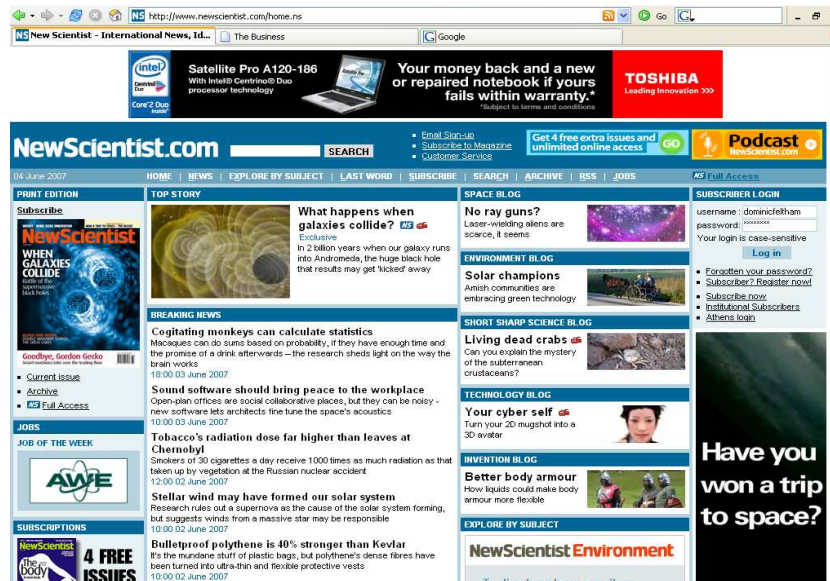


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# **Information and Business Models in Individual R&D End User Markets**

# New Scientist For People Who Ask Why?

NewScientist



- In 1956, New Scientist was launched for:

“All those men and women who are interested in scientific discovery and in its industrial, commercial and social consequences”

# The World's Biggest Selling Weekly Science Magazine

NewScientist

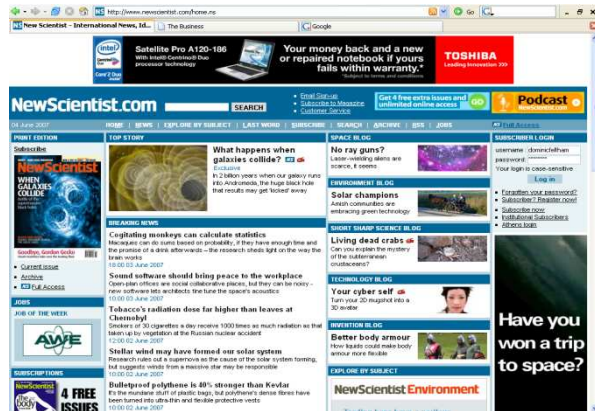


- Global magazine circulation still growing and now over 175,000 paid copies per week
- UK edition circulation of 115,000 copies
- US edition growing at 20% per year – now at 35,000
- Australia edition at 25,000 copies
- 125,000 copies are paid subscriptions + 50,000 bought on newsstands



# The world's leading online resource for science and technology news and features

- Real-time news service
- Extensive archive of magazine and online content
- RSS, Video, Blogs, Podcasts
- ‘Vertical’ sites launched in Space, Technology & Environment
- All targeted at a global audience

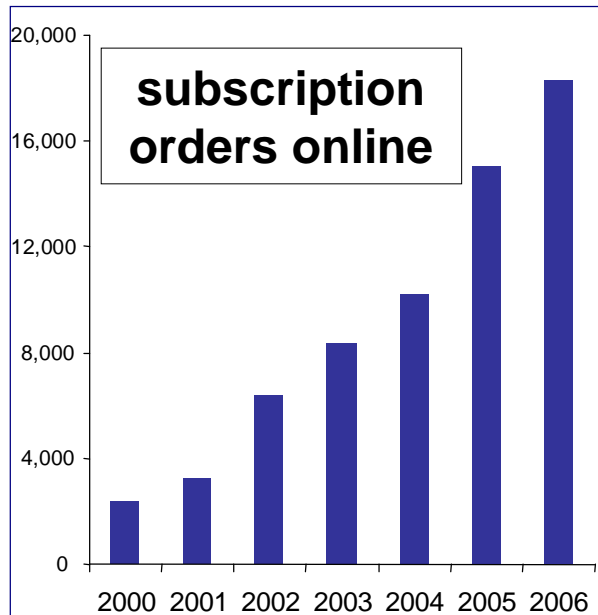


- Drives online display revenue through run of site advertising/creative solutions



- Generates online recruitment advertising revenue from the commercial/academic sectors

- Drives subscription revenue for magazine — new and renewed subs



# Engaging with Job Seekers and Recruitment Advertisers



- NewScientistJobs.com is the leading recruitment web site for jobs in science
- Over 1,500 jobs online across all industry sectors
- Email alerts with job vacancies sent each week to 100,000 job seekers
- Advertisers from commercial and academic sectors

# New Scientist – Community Development

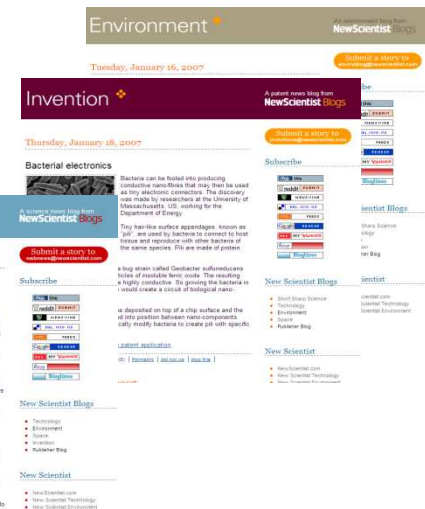
## New Scientist Blogs

233k page views in December alone.

Editorially efficient way of increasing scope of coverage.

Highly linked, and crawlable content good for SEO – SSS and Invention have pagerank of 8.

Video, forums, commenting on articles all to come..



# Nature Publishing Group

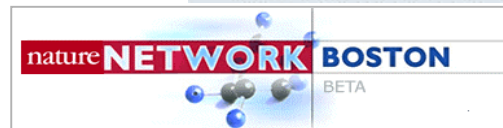
## Nature then.. 1995



### Key stats

- Flagship journal, *Nature*
- ~ 5 journals
- Available in English only

## Nature Now



### Journals

- More than 70 journals, including Nature, the flagship journal and 18 society affiliated journals
- New journal series – Nature Reviews, Nature Clinical Trials

### Interactive Web applications

- Nature.com has 1.7 million registered users with 20 million hits per month
- Podcasts – over 30,000 weekly downloads
- Connotea - Free online tool allows authors to index and tag web articles and define their own taxonomies and share across users has over 12,000 members

### Community

- Launched NatureNetworkBoston.
- Naturejobs.com carries more jobs than its principal competitor, Science

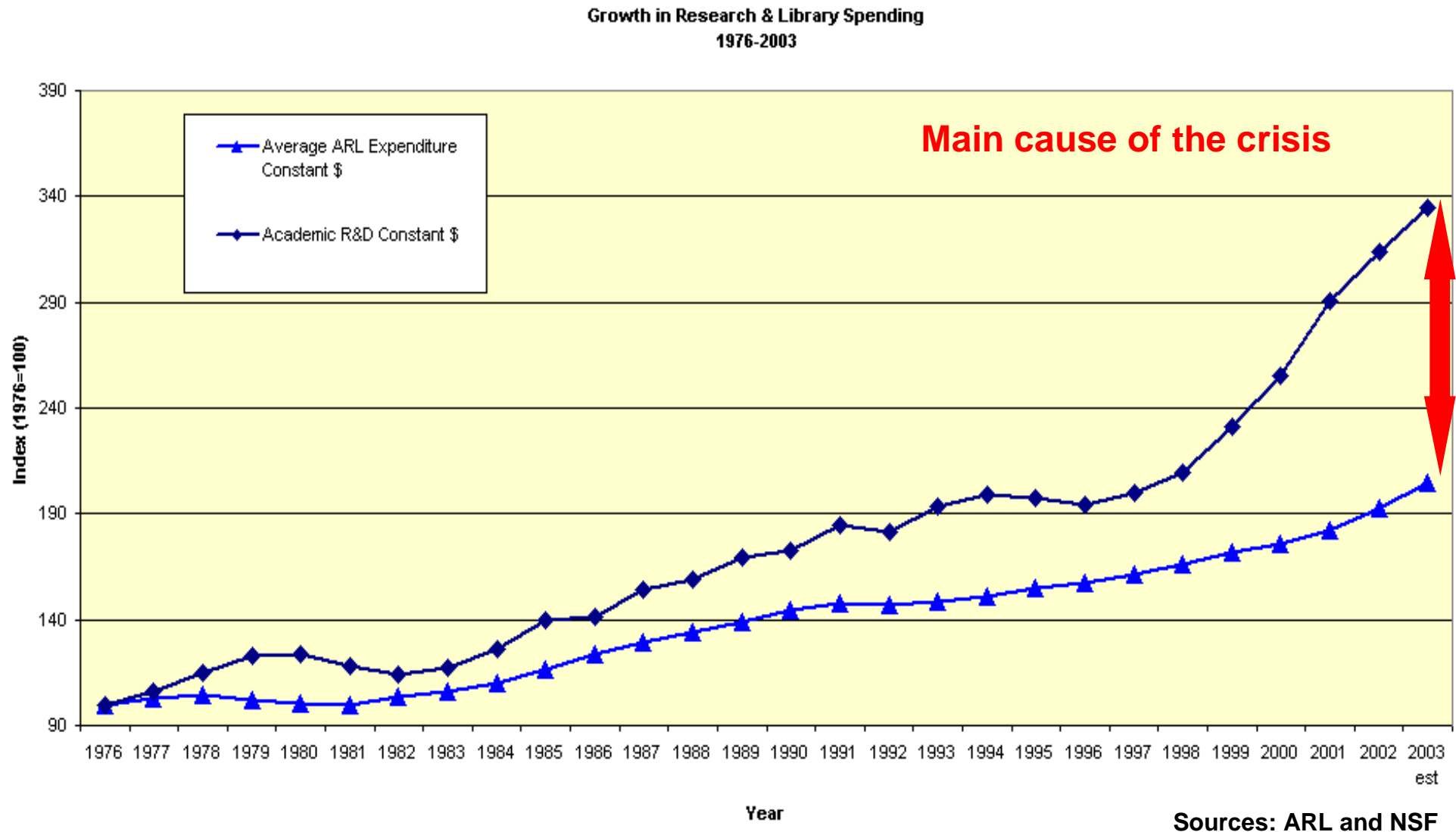
### Globalization

- Formed NPG Nature Asia-Pacific, employing editors in the region for the first time

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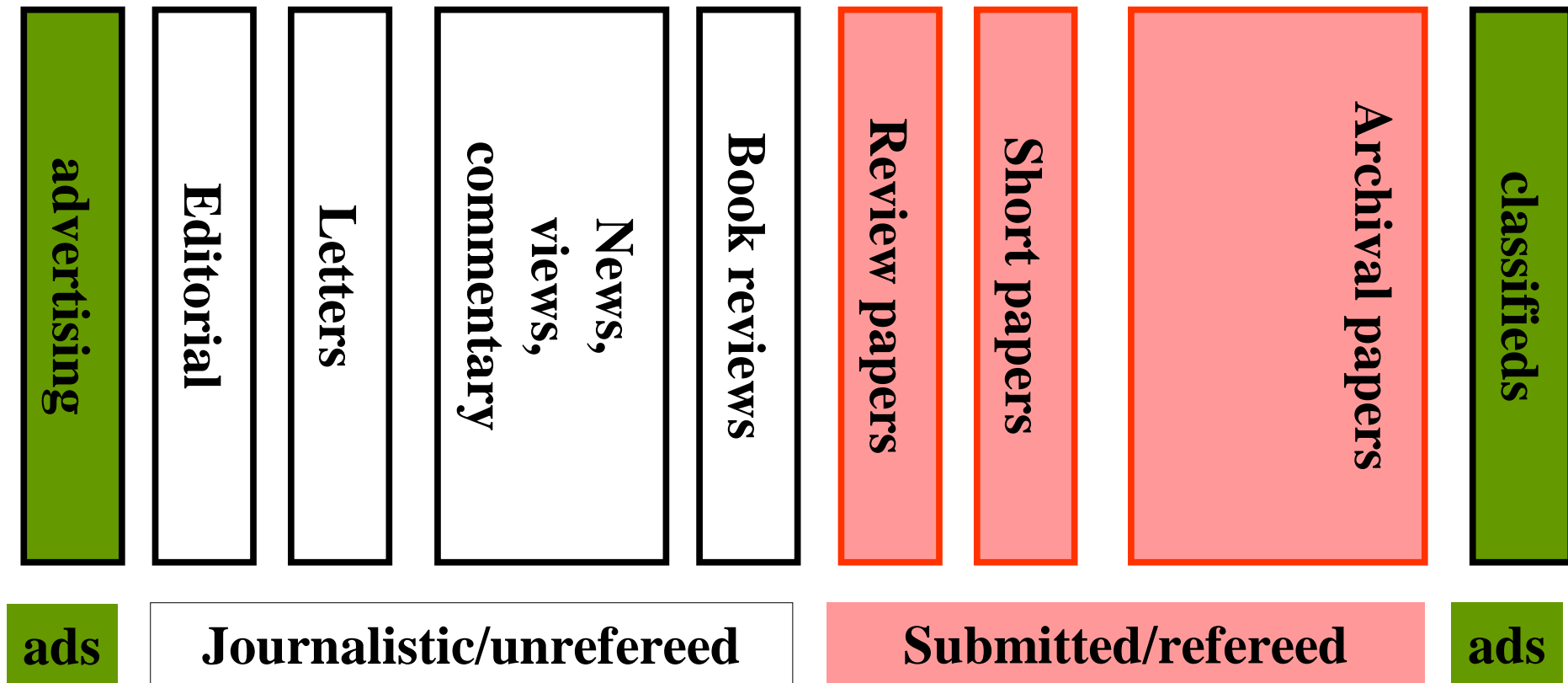
# **Information and Business Models in Institutional R&D Markets**

# Growth in Research vs. Library Spending



# Not all journals are the same

## Content types and business models



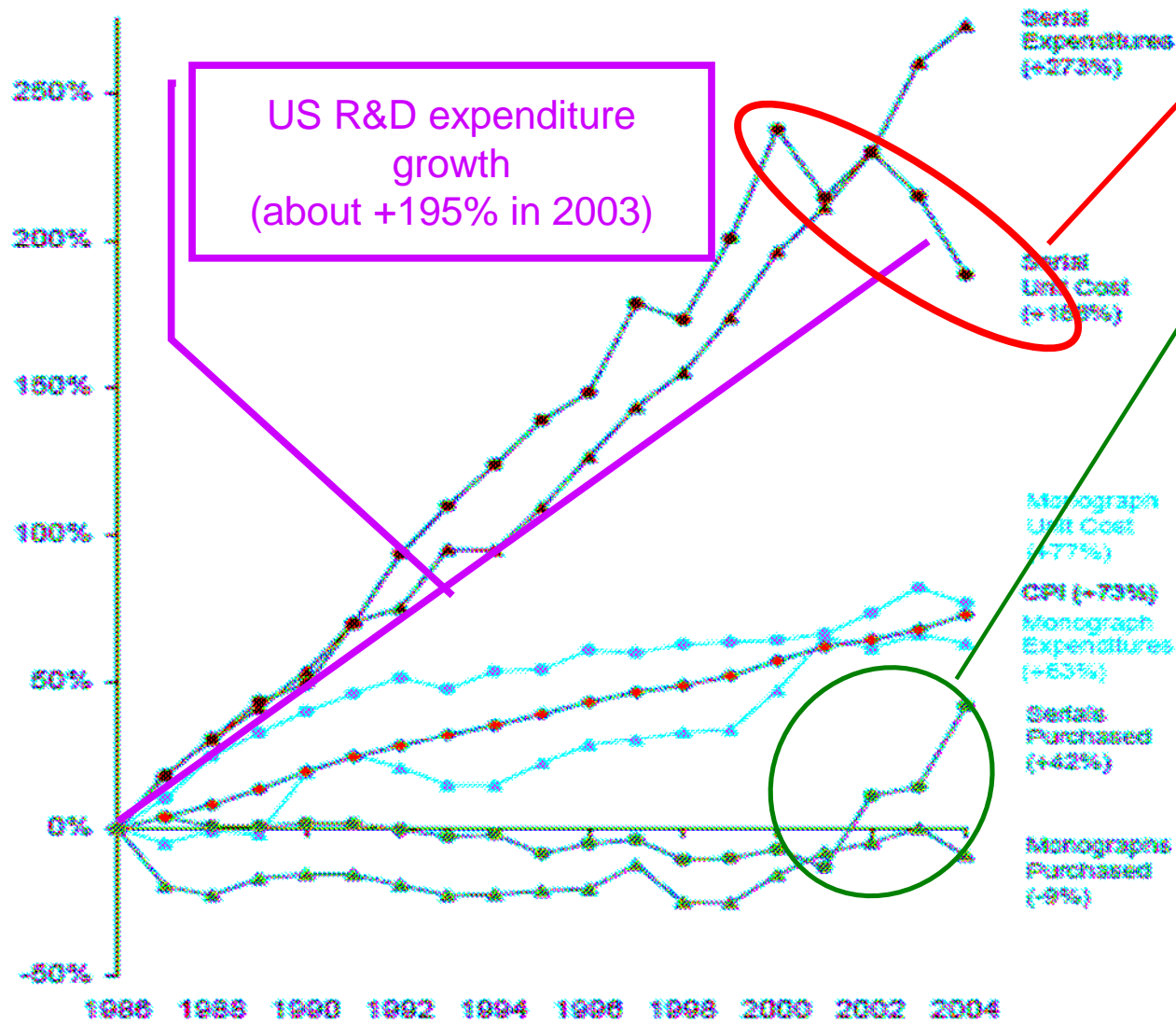


# ScienceDirect (SD) basic licensing options



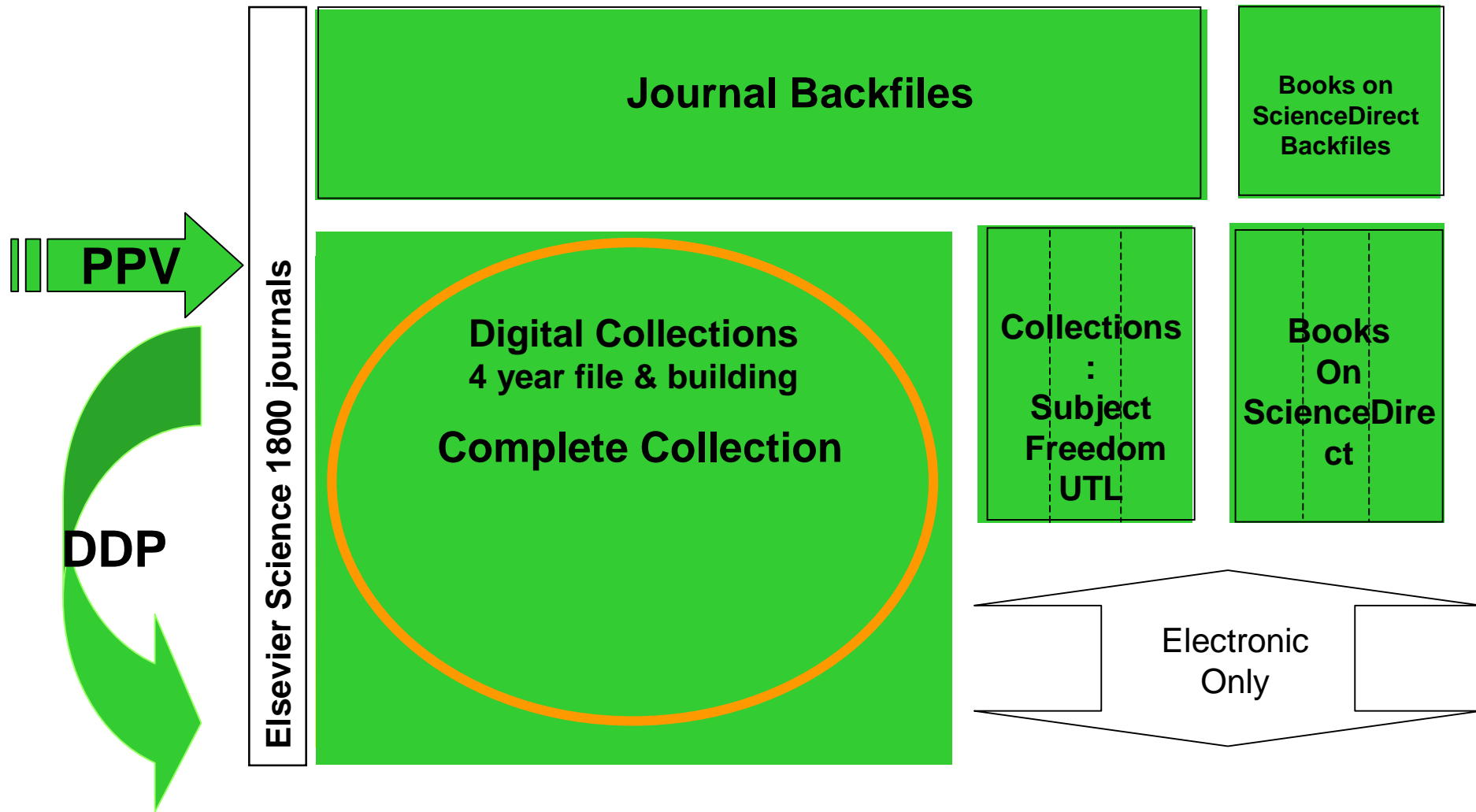
- Standard Collection\*
    - Only part of print holdings on line
    - Content fee is 25% (and thus on top of print spend)
  
  - Complete Collection\*
    - All print holdings on line
    - Content fee is 12.5% (and thus on top of print spend)
    - Multiyear licenses with capped price increase available
    - Electronic access to additional titles at marginal cost available
      - ✦ Freedom Collection, Subject Collections or Unique Title List.
- \* For all options customer can migrate to electronic only subscriptions and receive a **10% e-only discount** on print subscription price

# Online journal databases: improved access and cost reduction

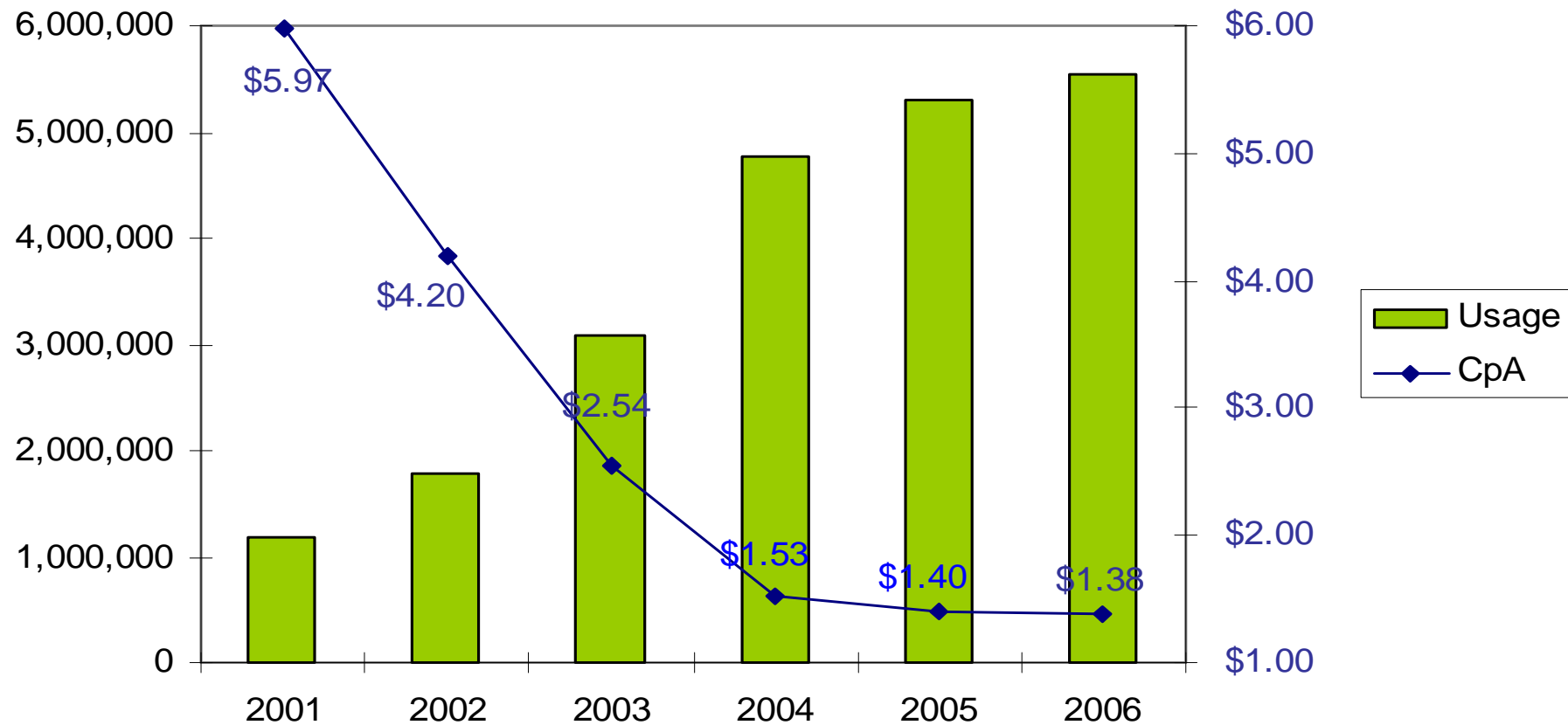


Note increase in **journals purchased** and reduction in average **journal costs**  
Effect of "big deal" and e licensing

Source: ARS Statistics 2003-04, Association of Research Libraries, Washington, D.C.  
\*Includes electronic resources from 1999-2000 onward.



## SD Cost per Article trend UC system



- Cost per article download trend goes down because of continuous usage growth

# Other STM Pricing/Business Model Experiments

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- Type of journal
- Type of institution
- GDP
- Usage

AMERICAN INSTITUTE OF PHYSICS

- Type of Institution
- Number of articles published by Institution



- Type of Institution

# Cross Publisher Collaboration: Current Trials

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- Type of Institution
- Content collection
- Tiers



- Usage

CALTECH



- Type of Institution

Complex: Likely Cost Additive: Trials Ongoing

## Future institutional pricing models ...

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**GDP**

**Type of  
Institution**

**Type of  
Content**

**Usage  
Based**

**FTE – Full  
time  
Equivalent**

# Elsevier's Journal Index pilot: Google and Microsoft

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- Allowed Google and Microsoft to index full-text, users only see abstract
- 300 journals full-text indexed with Google Sep 06 to Apr 07
- 300 equivalent journals not indexed
- Measured actual increased usage comparing the two groups
  - 5% for health journals
  - 18% for S&T journalsbut pay per article levels low
- Advertising potential?





# Open Access: Access is not the issue

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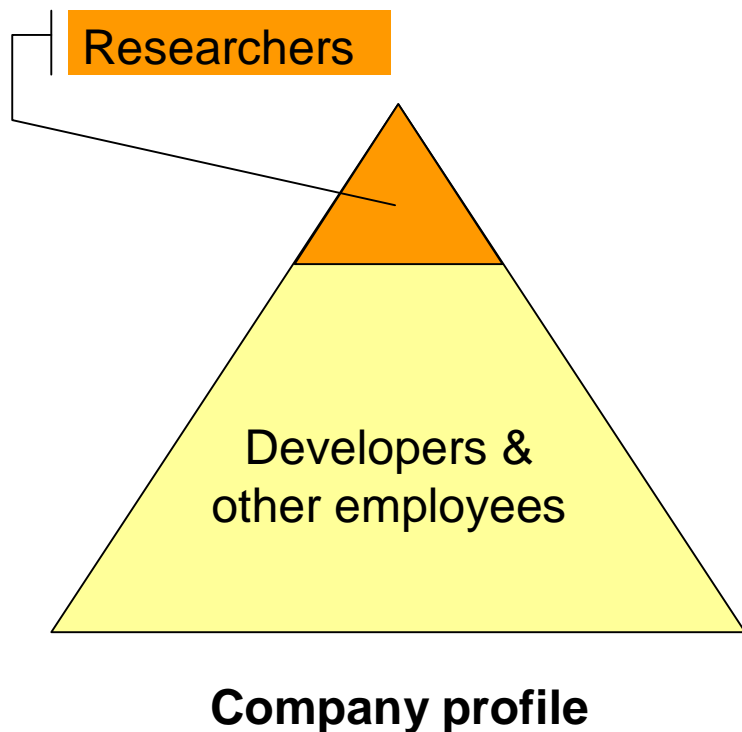
- Not really free
  - Multiple OA models, but can be easily rolled into subs model. Author pays model is used as moral high ground
- Niche growth
  - Author attitudes are positive, but action is scarce.
  - 2006: University of Munich and the University of Arkansas at Little Rock study - 688 participants.
  - 91% describe their attitude toward OA to be positive, but only one third has published work in OA outlets.
- Plenty more to learn
  - What is the real cost? Is OA content more or less easy to discover?
- Continue to watch this space
  - Initiatives like JISC Depot may spark greater take-up.

# Open Access = Author Pays? = Subscription?

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- Stand alone (e.g. BIOMED CENTRAL) or increasingly in combination with Reader Pays (Elsevier, Springer, OUP, etc)
- Still <1% of STM article output. Author take-up very low. Cost per article \$1500-\$3000
- It can work as a stand alone e.g. MALARIA journal (BMC) more about quality/object matter than business model
- Evolving to more centralised institutional roll-up
  - via research institute e.g. CERN
  - or via research bodies e.g. HHMI, Wellcome Trust, NIH





- Researchers are a small group in a company (1-10%)
- In a corporation research is focused on a few subjects
- In a corporation researchers are the only heavy users of ScienceDirect
- The assumption is that a typical researcher reads 200+ scientific articles per year. 25% are from Elsevier
- Pricing model is an access model and needs to be based on # of researchers and average usage (i.e. 50 articles per researcher).
- Besides it can be rolling year.

# Applied Research: Pharma Biotech Solutions

## Pharma Bio Tech Strategy

Increase penetration of corporate customers through sales expansion

Enter into the R&D workflow/productivity tools market

Workflow Solutions

Pharma and Biotech

Discovery Workflow Tools

Drug Safety Workflow Tools

Drug Dev't Workflow Tools

Increase customer value through content integration and interoperability

Integration Framework

Text Mining / Ontologies

Develop/acquire new "must have" content sources for corporate R&D

Integrated Content

Journals / Scopus

Biology

Pharmapendium (Phase II)

EMBASE/ MedLine

Beilstein

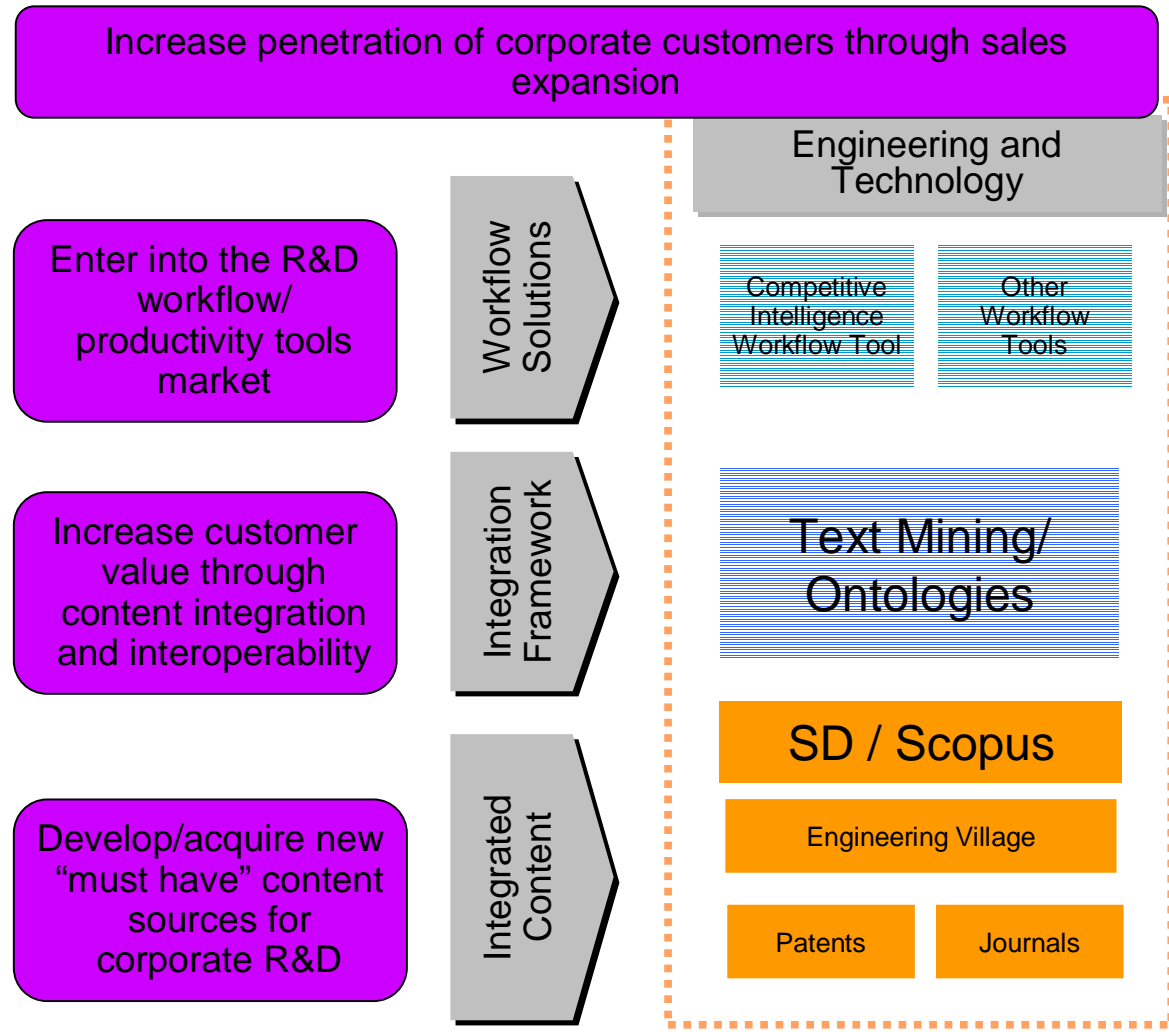
Pre-clinical Content

Pharmapendium

Existing offering
  New building blocks
  Partner/acquire software tools
  Our Strategic Objectives

# Applied Research: Engineering & Technology Solutions

## Engineering & Technology Strategy



# Cautionary Note on Solutions

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- Must be what customers want and be customisable
- Combination of components has to add value to customer (beyond aggregation)
- Cannot be easily unpicked/unbundled
- Delivers solutions to identifiable problems
- Business model – tiered by inst and usage base
- Success based business models to be defined

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## **Conclusions Future View**

# Future View on STM R&D Business Models

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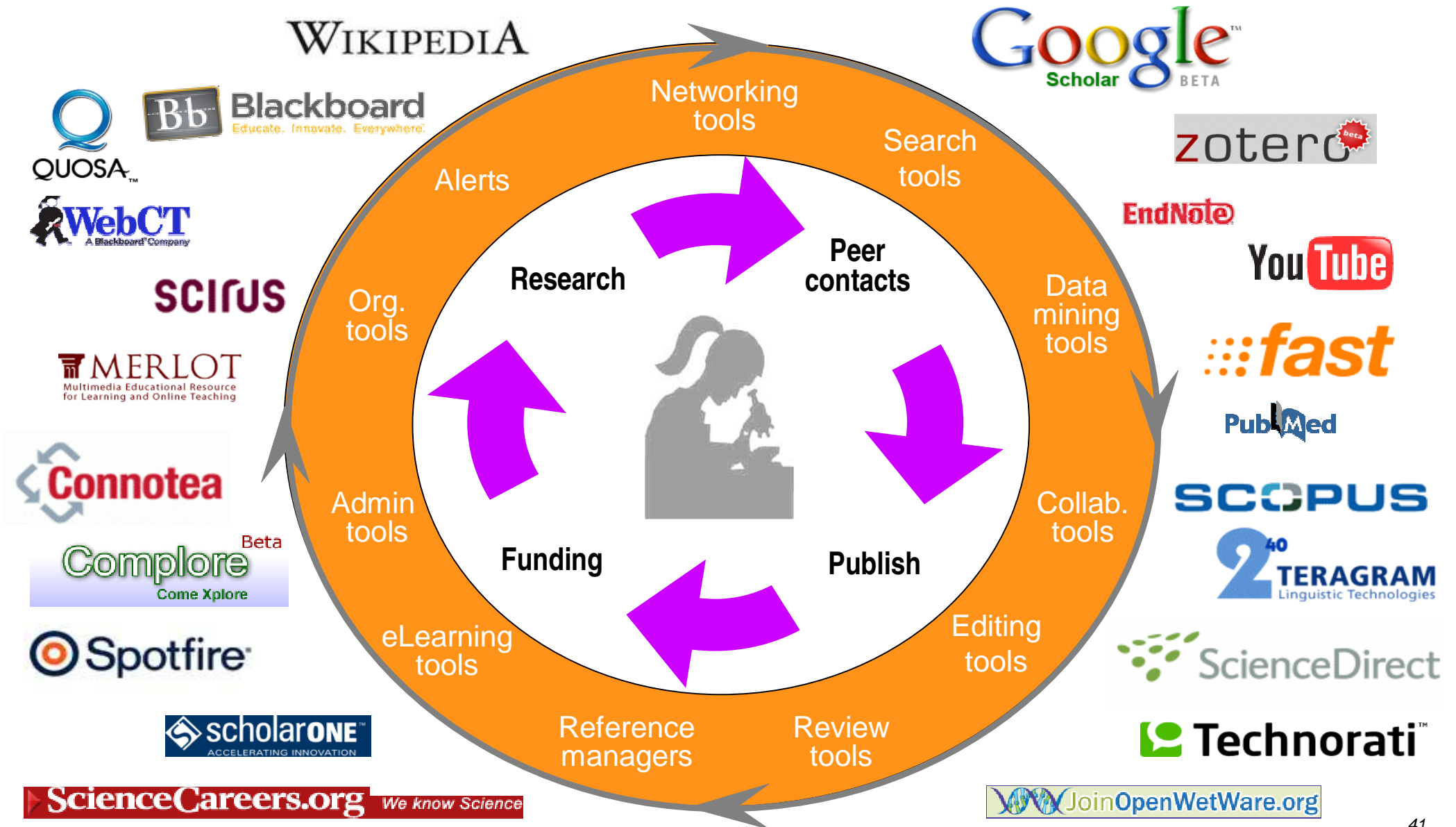
- Increasing link to editor/author /community services – nice to have
- Increasing link to affiliated data sets grey literature/data repositories and workflow tools/platform?
- Beyond “Open Access” → “Open Wide Access”
  - multiple online access routes (incl. search engines)
  - public access
- Some more advertising/sponsorship support but no paradigm change

**Core business model remains R&D funding body and R&D institutionally funded**



# Future Innovation in the Pipeline

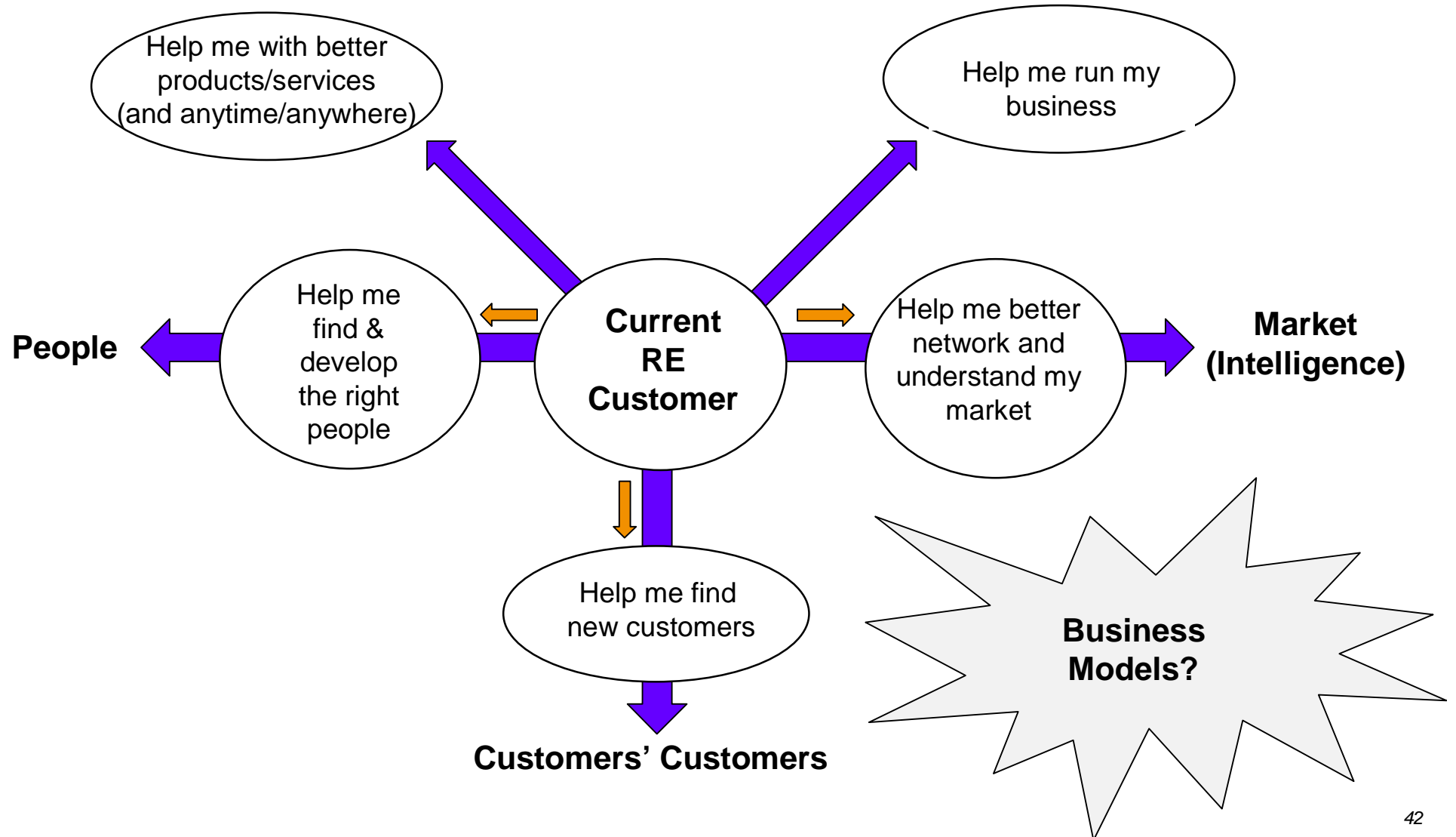
## Addressing the Entire Research Work Flow



# Future View for Publishers: Solutions to drive Outcomes

Knowledge/Info Products/Services

Productivity Products/Services



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**Thank you**

**Q & A**