

# The New Digital World and the Transformation of Information and Libraries



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# Objectives

- Describe major changes in how knowledge-based information is delivered and accessed
- Understand obstacles to accessing digital content
- Describe major changes in user behavior when seeking and using knowledge-based resources
- Identify major changes in library services and resources



# Myths and Expectations

- Everything is free on the Internet
- Digital materials are less costly
- Electronic resources are easier to acquire and manage
- Google provides access to everything



# About 15 years ago

- Print bound collections
- Online journals very experimental
- Free PubMed/Medline (1997)
- Few vendor hosted resources
- Local servers with password authentication
- World Wide Web in its infancy
- Few robust Web sites



# Fast Forward to 2011

- Most journals electronic
- More and more e-books
- Google and billions of Web pages
- Commercial Web-based resources
- IP authentication / VPN accounts
- Mobile applications



# Major Changes/Challenges

- Scholarly communication process and the publishing industry
- Economic realities
- Access issues
- Management / findability



# Scholarly communication

- Commercial and society publishers
  - Stockholder demands
  - Society survival
- Ownership/control of content
  - Loss of control
  - Loss of revenues
- Proprietary interfaces
- New costs of Web-based delivery

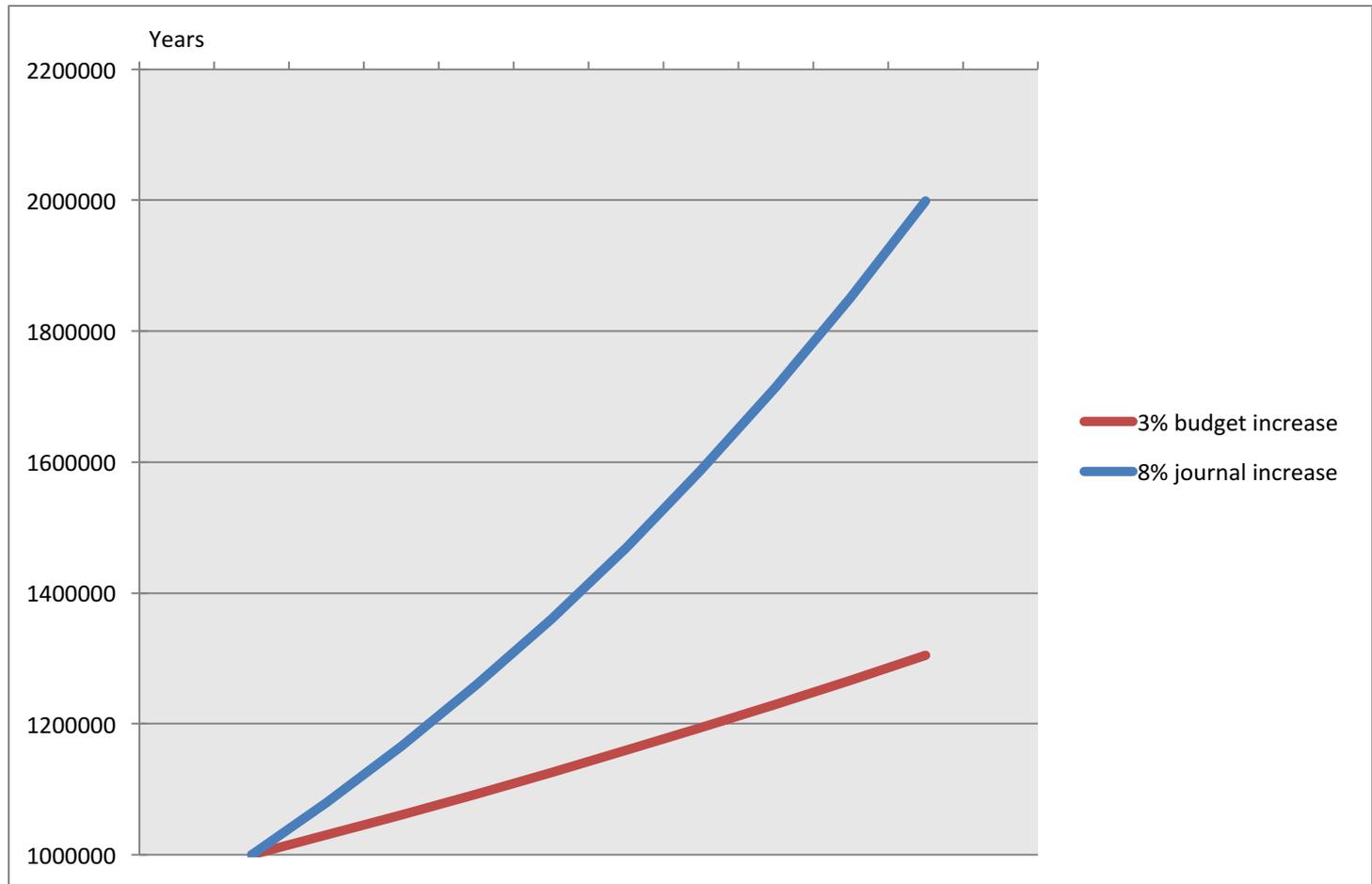


# Escalating Costs

- Premium prices for electronic
  - 5%, 25%, 400% and more
  - Inflation of 8 to 11%, low of 6%
- Big deals
  - Discounts but unwanted bundling
  - Cancellation limits
- Tiered pricing models
- Use based pricing



# Journal Crisis



# Restricted vs. Free Access

- Licensing restrictions
- Open access and hybrid models
- Public access policies
- Access, not ownership



# Technology and Access

- Authentication / authorized access
- Tracking and managing URLs
- Linking full-text to citations
- Metadata in online catalogs
- Mobile applications
- Disparate search engines



# Digital Knowledge

- Access anytime from anywhere
- End-user database searching
- Google scholar
- Linking citations to full-text
- Search filters
- Social media



# Quality and Content

- Focus on content not the container
- Evaluation of interfaces
- Ease of navigation
- Purpose
- Metrics
- Cost per use



# User Behaviors and Expectations



# Impact on the User

- Tenopir and King 2008 scientist / faculty study
- Reading more
- More from searching than browsing
- Broader range of resources
- Finding more older (10+ years) electronically



# E-book Use

- University of Pittsburgh 2009
- Flexible in terms of format
- Convenience an important factor
- Prefer e-reference books
- Federated e-book searching over catalog search
- Google book search, but want links to library collection



# College Students

- OCLC study 2005
- Delivery of wanted items, not just discovery
- Enhanced content – rely on and expect
- Advanced options and facets to refine, navigate, browse and manage results



# Digital Natives

- Ethnographic research at Illinois Academic libraries 2010

“Today’s students might have grown up with the language of the information age, but they do not necessarily know the grammar”



# User Expectations

- Adopt new technologies if support their work
- Content available digitally or easily delivered to them
- Convenience/easy access is important
- Google is a common starting point



# Concerns/realities

- If not online, does not exist
- Google search skills are good enough
- Users are overwhelmed by choices
- Less time to come to the library
- Self-reliance a strong attribute



# Engaging the Digital World

- Point of care/need resources
- Single federated search interface
- Filtering for high quality resources
- Customized Web portals
- Exploring/ integrating technologies
- Digital delivery of print
- Identifying productivity tools
- Social networking tools



# Collection of Services

- Customized information literacy training
- Evidence-based practice education
- Providing systematic reviews
- Expert search and evaluation skills
- Outreach and on-site delivery
- Virtual reference
- Online tutorials and training



# New Roles

- Digital research support
  - Data management, curation, preservation
- Embedded librarians
  - Infomationist or information specialist in context
- Knowledge creators/keepers
  - Institutional scholarship



# Library as Place

- The best thing about the library is that I do not need to go there anymore
- Community space
- Collaborative work environment
- Quiet sanctuary



# The Future?

- Digital collections
- New formats beyond article or book
- Text mining for expanded discovery
- Better federated searching
- Tools for distilling knowledge
- Data management resources
- Participation in resource development
- Integration into workflow



# Questions, Comments, Observations?



Thank you!

