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Standards and Scalability: Why Standards Are Critical

NISO/BISG Standards Forum

The Changing Standards Landscape:
Creative Solutions to Your Information Problems

June 22, 2007

Why are standards important?

- You could cross into Delaware and be forced to drive on the left side of the road!

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How the information world CONNECTS

Why are standards important?

- Patrons might actually have to walk the stacks to find a book or journal article!
- Photos of Sterling and Cross Campus libraries at Yale University ©Yale

Why are standards important?

- Your son's Amazon.com shipment of Harry Potter contains Kant's *Critique of Pure Reason* because they share the same ISBN …

Standards in our community

- Our community has long relied on standards - card catalogs, cataloging structures, MARC, etc
- Hearing more frequently now, "This needs to be standardized."
- What has changed recently?

Digital Transformations

- We have all seen the tremendous efficiencies of computer technology.
- Workflows have been radically altered, from manuscript flow, through production and printing, to digital distribution and management.
- We are only at the very beginning of this process.
- Many of the workflows and systems each of our organizations have developed need to become standards-based in order to become scalable.

Building Economies of Scale

- Standardization is about developing scalability
- Be it rail gauge, light bulbs or DTD formats, standard reduce production and delivery cycles, lowering costs
- Working together we make it easy for every organization to operate in the information economy

Issue with the Long Tail

- Everyone's heard of the "Long Tail"?
- Not that all publishing is long-tail
- While the costs of distributing digital content are reduced dramatically over physical materials, in order for real efficiencies, we need to remove the very significant transaction costs of digital delivery in a complicated network environment

Early days of digital distribution

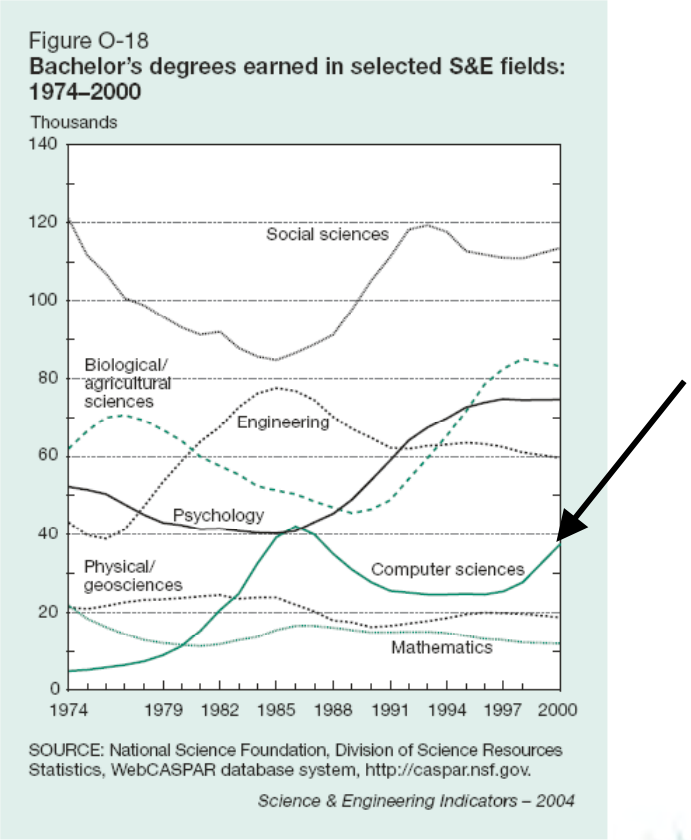
- Initially, large university libraries, consortia and large publishers were the first to test electronic distribution.
- They had the resources to invest in the technology and have trained staff to build custom systems.
- But as digital distribution expands to include every publishers and many non-traditional content providers we need to return…

Supply chain for analog information

- Need to return to a process as simple as ordering and receiving (or shipping) a print copy.
- Despite the fact that there is so much more at work with digital information
  - New creative uses and reuses, applications, management and tracking options

Who's going to do all this digital work?

- The US isn't producing enough "geeks"
- Granted, you don't need a BS in Computers to run a website
- But are we really going to compete with Wall Street, Silicon Valley, Wal-Mart for talent?
- Standardization will help facilitate the creation, management, and distribution of digital content for everyone.



Where are all the technicians?

- While we are moving toward a digital environment, there is still a large analog world out there.
- Interesting how "traditional" these top 5 job titles are
- Still very far from an "online-only" world where "print is dead"

	Top 5 Titles by Total %age of libraries having that title on staff				
Library Type	Library Assistant	Administrative Assistant	Library Page/Shelver	Clerk	Circulation Supervisor
Medium-Sized Public Library	155	132	192	123	78
	56.40%	48.00%	69.80%	44.70%	28.40%
Large Public Library	125	99	119	88	60
	62.80%	49.70%	59.80%	44.20%	30.20%
Two Year College	46	18	1	22	15
	39.00%	15.30%	0.80%	18.60%	12.70%
Four Year College	39	36	4	6	43
	34.50%	31.90%	3.50%	5.30%	38.10%
University	55	64	3	22	34
	41.40%	48.10%	2.30%	16.50%	25.60%
TOTAL	420	349	319	261	230
	50.10%	41.60%	38.10%	31.10%	27.40%

SOURCE: Library Support Staff Job Titles, 2004 Denise Davis -- http://www.ala.org/ala/ors/reports/libsupjobtitles.htm

Digital libraries need support

- Certainly support staff aren't the only staff in the library
- But, the number of institutions reporting staff members with certain technology-related titles is shockingly low
- Assuming there is no overlap nearly 1/3 aren't reporting any technical support staff

Reported Library Support Staff Titles

Library Type		Webmaster	Network Administrator	Computer Specialist/ Associate	Computer Technician/ Assistant	Database Manager	Information Specialist	Technical Services Assistant	Technical Services Manager	Technical Services Supervisor
Total n=838										
Medium-Sized Public Library		13	35	16	37	3	10	61	26	15
		4.70%	12.70%	5.80%	13.50%	1.10%	3.60%	22.20%	9.50%	5.50%
Large Public Libraries		30	33	24	39	7	20	24	18	13
		15.10%	16.60%	12.10%	19.60%	3.50%	10.10%	12.10%	9.00%	6.50%
Two Year College		2	1	2	5	0	4	10	3	5
		1.70%	0.80%	1.70%	4.20%	0.00%	3.40%	8.50%	2.50%	4.20%
Four Year College		2	0	2	1	2	3	26	4	2
		1.80%	0.00%	1.80%	0.90%	1.80%	2.70%	23.00%	3.50%	1.80%
University		7	10	9	5	2	6	20	3	8
		5.30%	7.50%	6.80%	3.80%	1.50%	4.50%	15.00%	2.30%	6.00%
Total	67.6%	54	79	53	87	14	43	141	54	43
		6.40%	9.40%	6.30%	10.40%	1.70%	5.10%	16.80%	6.40%	5.10%

SOURCE: Library Support Staff Job Titles, 2004 Denise Davis -- http://www.ala.org/ala/ors/reports/libsupjobtitles.htm

What about standards?

- With institutions dealing with limited resources
- Formats need to be interoperable with existing workflows
- Purchase must be streamlined
- Access must be simplified
- End-users can utilize the content in ways they need to (within the bounds of copyright/license)
- Management and preservation need to be trusted, functioning and reliable

For libraries, this means…

- If products aren't easy to implement or take too much time to incorporate into existing workflows, there may be less material acquired
- Or possibly materials that are acquired aren't maintained suitably
- Problems may go unnoticed or unresolved.
- Usage may be hampered

And not just a library problem

- Products that aren't "plug and play"
- Don't work within existing library systems
- Present legal, licensing or ordering difficulties
- Pose significant use barriers for libraries
- May create situations where limits on adoption, use and retention affect sales for publishers

A standard-based example

- Bought a new MacBook Pro last fall.
- It arrives. Out of the box, open it up
- "I speak English and I live on the East Coast. Sure I'll register with Mac."
- Away I go.
- Finds my WiFi, plug in my FireWire hard drive, load in documents.
- Wouldn't work without standards
- It's not free, it's not Open, but its EASY

Two Quick examples of solutions

- Focusing on removing bottlenecks in the information supply chain
- SERU - Simplified E-Reources Understanding
- SUSHI - Standardized Usage Statistics Harvesting Initiative
- You'll hear more about these both throughout ALA

Briefly: SERU

- Need: Reduce the transaction costs of negotiating licenses, particularly for smaller products
- Solution
  - Framework for community-held best practices regarding delivery and management of electronic content
  - Based on a decade of growing mutual trust and experience with digital information
  - Broad consensus on issues such as authorized users, third-party archiving, improper use, systematic downloading, etc.
  - Not another model license, nor a click-through or wrap

Why have lawyers arguing over small ticket products?

Briefly: SUSHI

- Need: Simplify and automate the gathering of usage data for librarians
  - Librarians spending months gathering data
- Solution
  - Server/Client system to exchange COUNTER reports
  - Easily incorporated into usage systems (on publisher side) or into ERM (on library side)
  - Client calls to server, asks for report, and server runs the report and sends it on
  - Data exchange is taking place by machine talking with machine

Moving forward

- We've broken the rest of the afternoon into three groups based on ways that standards can facilitate information exchange:
  - Identify & Describe
    - Norman Paskin
    - Brian Green
  - Discover & Retrieve
    - Carolyn Pittis
  - Comply & Use
    - Nathan Robertson
    - Mark Bide

Thank you!

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