



The Importance of

Big Data, Ethics, and Public Engagement

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Topics

- ▶ Crowdsourcing may be new but IS researchers can apply developed concepts
- ▶ Information as a strategic resource
- ▶ Importance of focusing on innovations
- ▶ Examples of LIS innovations

Strategic Information Systems

- ▶ IT -> Strategic Value of Information
- ▶ Strategic IS
 - ▶ Applications that change practices
 - ▶ Mission critical
 - ▶ Long-range and future-oriented
 - ▶ Involve substantial organizational resources
 - ▶ Seek maximum benefit as opposed to minimum cost

Flip Side of Innovation

- ▶ 3 traps
 - ▶ Physical
 - ▶ Big investments in old systems prevent fresher ideas from emerging
 - ▶ Psychological
 - ▶ Fixate on past successes; fail to notice new displacements
 - ▶ Strategic
 - ▶ Focus solely on today; no anticipation of future

Reading Technology Evolutions

- ▶ 1935: paperbacks and ebooks
- ▶ 1971: Project Gutenberg
- ▶ 1998: Dedicated e-readers
- ▶ 2012: ebook sales outpace hardcovers
- ▶ ***Trends usually take time to embed***

Community Networking

- ▶ Information for, by and about the community
- ▶ Digital literacy for all
- ▶ Libraries led the way
- ▶ Community created content
 - ▶ Local websites
 - ▶ Digital publishing and on-demand printing

Big Data and Digitization

- ▶ Typically viewed as an IT issue
- ▶ Information Professionals add value
 - ▶ External data sources
 - ▶ Discoverability
- ▶ Future of physical collections
 - ▶ Value of historical records in trend analysis
 - ▶ Artifacts
- ▶ Digitization costly

Optimizing Crowdsourcing

- ▶ Useful for tasks that can't be reduced to algorithms
- ▶ Designing data management solutions not trivial:
 - ▶ People are slower than computers
 - ▶ People can make mistakes
 - ▶ People can have prejudices / subjective viewing
 - ▶ People want to be compensated

Framework for Crisis Crowdsourcing

- ▶ Computer supported cooperative work (CSCW)
- ▶ Collaborative computing
- ▶ Articulation work: work to make work work
 - ▶ Divide, allocate, coordinate, schedule, mesh, etc.
 - ▶ 1st order: planning/COORDINATING
 - ▶ 2nd order: cleanup, repair, REASSIGN unfinished tasks