The network has configured whole industries: what will academic libraries do?

Lorcan Dempsey
OCLC
EMTACL10, Trondheim, Norway
26 April 2010
We cannot step outside our own environment .....
Overview ...
Companies Slowly Join Cloud-Computing

By BRAD STONE and ASHLEE VANCE
Published: April 18, 2010

SAN FRANCISCO — This year, Netflix made what looked like a peculiar choice: the DVD-by-mail company decided that over the next two years, it would move most of its Web technology — customer movie queues, search tools and the like — over to the computer servers of one of its chief rivals, Amazon.com.

Amazon, like Netflix, wants to deliver movies to people’s homes over the Internet. But the online retailer, based in Seattle, has lately gained traction with a considerably more ambitious effort: the business of renting other companies the remote use of its technology infrastructure
Consolidation at scale

• Network encourages efficiencies of scale
• Amazon
  – Phase 1: discovery and request: electronic
  – Phase 2: discovery, request, fulfilment: electronic
• Context and community: analytics
• The scalability of access: gravitational attraction at network level
Network level

• Matching supply and demand: long tail
  – Aggregating supply: large inventory
  – Aggregating demand: large audience

• Referencability
  – Wikipedia (an addressible knowledge base)
  – Amazon (canonical book URLs?)
Specialization: do what you do

• Vertical disintegration
• Specialise where can make an impact
• Outsource to other specialist providers
  – Where is not core to impact
  – Where ‘best’ is available elsewhere.
Institution-scale issues?
Library
Library activities?

• Do they create distinctive impact for the library within the institution?
• Is the institution the right level?
• Should they be externalised?
  – National?
  – Collaborative?
  – Third party?
• Should they be given up?

Difficult questions!
Sourcing and scaling
Institution-scale: some examples ...

1. Discovery happens elsewhere (as well) ...
2. ‘Reputation management’ ...
3. Citation management ...
4. The whole social thing: context and community ...
Diversion: a look at collections
COLLECTIONS GRID

**Stewardship/Scarcity**

**Low-Low**
Freely-accessible web resources
Open source software
Newsgroup archives

**Low-High**
Books & Journals
Newspapers
Gov Documents
CD & DVD
Maps
Scores

**High-High**
Special Collections
Rare books
Local/Historical Newspapers
Local History Materials
Archives & Manuscripts
Theses & dissertations

**High-Low**
Research & Learning Materials
Institutional records
ePrints/tech reports
Learning objects
Courseware
E-portfolios
Research data
Prospectus
Institutional website

**Uniqueness**

**Low**
In few collections

**High**
In many collections
Outside in: Consolidation of licensed?

Move of bought to licensed/electronic?

GBS?

Inside out:
reputation, institutional assets, institutional record, distinctive, ...

Individual destinations? Academic SEO.
Institution scale?

1. Discovery happens elsewhere
But we haven’t ever had **the scalability of access** that have today.

Consider how, pre-Internet, if you were looking for a particular book passage, but couldn’t remember which book it appeared in, you could only flip through the books **on the shelf** hoping to come across it. If you couldn’t find what you were seeking in your own books, you might have walked next door to see if **your colleague** had it. From there your search might have taken you don the hall to the common library maintained by your **department** or function. Failing to find it there, you’d have then headed off for the **library across town**, where the librarian might have been able to help you out.
Such a scenario almost seems quaint now. It’s easy to forget just how different things were prior to the advent of search engines. And not all of our practices have caught up. Just the other day one of us had the odd sensation of waking to the office bookshelves, trying to find an elusive passage, and suddenly recalling, as he stood there staring at the spines of all the many books, that there was a search function he could use to make the tasks easier: It was the one to be found back on the desk, Google Books. Soon he was staring at the passage on the computer screen as the hardcover itself gathered more dust across the room.
That’s what we mean by the scalability of access. We’re no longer limited simply to the 150 people we can maintain physical-world relationships with, to the books on the shelf across the room, or even those at the local library.
We firmly believe in the promise of the agreement, as do our many supporters. As Sergey Brin recently wrote in a recent op-ed, "even if our cultural heritage stays intact in the world’s foremost libraries, it is effectively lost if no one can access it easily."
In an environment of scarce attention, high transaction costs equals low/no availability?
In the flow ..

Variety of campus venues

* Student portal
* Course management system
* Reading list
* Refworks
* **VIVO, OSU Pro, ...**
* ...

Network level

* **Mendeley**
* Google
* Amazon
* Flickr
* iTunes
* Wikipedia
* Twitter
* Facebook
* ...

* …
1. Direct – added value

2. Disclosure and syndication
   - 2 and 3: discovery happens elsewhere
   - Disclosure: holdings (non-unique) and existence.

3. Indirect – may involve identity, locate, resolution or other services at library
   - SEO: interoperability with the web ..
Indirect discovery

Mineralization, wallrock alteration and zonation of ore deposits associated ...

By Peter M. Ihlen, Reidar Trønnes, Frank M. Vokes

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**Book overview**

No preview available - 1980

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**Reviews**

We haven't found any reviews in the usual places.

[Write review]

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**References to this book**

**From Google Scholar**

- An evaluation of the Rb vs. (Y+ Nb) discrimination diagram to infer ...
  H-J Förster, G Tischendorf, RB Trumbull - 1997 - LITHOS
- Molybdenum and tungsten in continental rift ...
  Reidar G Trønnes, Alan D Brandon - 1992 - Contributions to Mineralogy and Petrology
- Fluorine as a tool in the petrogenesis of quartz-bearing maagmatic ...
  Ricardo Saito - 2000 - LITHOS
- Wall-rock Alteration And Tungsten And Molybdenum Mineralizations ...
  ROB H HELLINGWERF, JAMES H BAKER - 1985 - Economic Geology

[All Scholar search results »]

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**More book information**

**Title**
Mineralization, wallrock alteration and zonation of ore deposits associated with the Drammen granite in the Osb region, Norway

**Authors**
Peter M. Ihlen, Reidar Trønnes, Frank M. Vokes

**Publisher**
Forfatterne, 1980
Mineralization, wallrock alteration and zonation of ore deposits associated with the Drammen granite in the Oslo region, Norway / P. M. Ihlen, R. Tønness and F. M. Vokes

Ihlen, Peter M. 1947-
Tønness, Reidar
Vokes, Frank M.

[1980?]

Trondheim : [Forfatterne]

26,[18] bl. ill.

Malmforekomster

Katalogisert etter spisstitel
Indirect discovery:
Google knows about KnowledgeBase

Disclosure:
Google knows it is on the web

Mildly peraluminous high-silica granites in a continental rift: the Drammen and ...  
RG Trønnes, AD Brandon - Contributions to Mineralogy and Petrology, 1992 - Springer  
Abstract. The peraluminous Drammen batholith (650 km 2) is the largest granite complex within the mainly alkaline province of the Permo-Carboniferous Oslo Rift, and peraluminous to metasomalous granites are also pre-sent in the southern part of the otherwise alkaline Fin-nemarka ...

Mildly peraluminous high-silica granites in a continental rift: the Drammen and ...  
RG Trønnes, AD Brandon - Contrib Mineral Petrol, 1992 - toyen.uio.no  
Abstract. The peraluminous Drammen batholith (650 km 2) is the largest granite complex within the mainly alkaline province of the Permo-Carboniferous Oslo Rift, and peraluminous to metasomalous granites are also pre-sent in the southern part of the otherwise alkaline Fin-nemarka ...

Mildly peraluminous high-silica granites in a continental rift: the Drammen and ...  
RG Trønnes, AD Brandon - Computer, 1992 - adsabs.harvard.edu
SEO and syndication via wikipedia
Cornell University Library's **Library Outside the Library** (LOL) team works to make the Library visible and usable **outside of standard library places, tools and services**. To accomplish this task, the team finds, configures, distributes, and assesses electronic tools and services that take the library to its users, wherever they may be.

- **CULite** - Library's Mobile Interface (app)
- **CUL's Mobile Website**
- **Cornell's Flickr Stream**
- **CUL New Books** (RSS)
- **Text a Librarian**
- **Research made easy with LibX**
- **Passkey Bookmarklet** (routes off-campus users through proxy)
- **Resources in Wikipedia**
Institution scale?
2. reputation management (researcher pages)
E-Strategy Development

- Success: Further development of the Library’s digital library offerings:
  - UCL E-Prints and the ability to showcase all UCL’s research outputs through Open Access

- Challenges
  - Identifying the needs of UCL researchers and students, and recognising the most appropriate tools to meet these needs
  - Fitting such developments into an electronic world which now focuses work not on the local level, but at the network level
100,000 users and 8 million research papers

VIVOweb Project is a two-year $12 million project funded by the NIH.

VIVO at Cornell
‘Reputation management’
ICELAND: Volcano puts academics to the fore
University World News - 14 hours ago
Professor Reidar Tronnes of the Norwegian University of Science and Technology had a sobering ... Reidar Tronnes and other volcanologists also warned that ...

Downwind From Iceland’s Volcano - Eruption Could Last A Month Or More
Eurasia Review - 16 Apr 2010
Professor Reidar Tronnes, who was a research scientist at the University of Iceland’s Nordic Volcanological Institute from 2000 to 2004, said as eruptions ...

Iceland eruption could last for a month says expert
The Daily Inquirer - 18 Apr 2010
Professor Reidar Tronnes, who was a research scientist at the University of Iceland’s Nordic Volcanological Institute from 2000 to 2004, said that the ...

Katla-udbrud kan starte tsunami
Ekstra Bladet - 16 Apr 2010
Kommer Katla med et udbrud, vil det ifølge Reidar Tronnes, der er geologi-professor i Norge, betyde voldsomme ødeleggelser ...
Reidar G. Trønnes

Unit: Department of Geology and Mineral Resources Engineering
Position: Professor
Group: Geology
Office: Bergbygget B511, Sem Sælands vei 1
Phone: +47 73594306
Email: reidar.tronnes@ntnu.no

Mineralogy, geochemistry and planetary dynamics

Origin, evolution and dynamics of Earth and the terrestrial planets
Experimental studies of phase relations and mineral physics of major minerals in the deep mantle. This is a contribution to a multidisciplinary effort, including computational mineralogy and mineral physics, seismology and geodynamic modelling.

Geochemistry of primitive flank zone basalts from Iceland and Jan Mayen
Characterization of mantle source materials and melting processes, using Sr-Nd-Hf-Os-Fb-O-Hf isotope systematics. Compilation of the results with existing geochemical and geophysical data for the North Atlantic and Gakkel Ridge basin provides information on mantle dynamics. We are particularly interested in the relations between the active plume flow under Iceland, the passively ascending asthenosphere and detached and entrained lithospheric material originating from the continental margins of Greenland, Jan Mayen Ridge, Norway and Spitsbergen/Barentsheat.
Recent publications, R.G. Trønnes (some are linked to a PDF document)


Papers authored by Trønnes RG

Collect these papers and discover other ones on Labmeeting. Learn more.

Experimental evidence for the existence of iron-rich metal in the Earth's lower mantle.

Frost DJ, Liebske C, Langenhorst F, McConnon CA, Trønnes RG, and Rubie DC

Search Google Scholar for Trønnes RG
<table>
<thead>
<tr>
<th>Forfatter</th>
<th>Haug, Lars Erik</th>
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<tr>
<td>Tittel</td>
<td>Mantel- og skorpekomponenter i Drammensgranitten</td>
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<tr>
<td>Undertittel</td>
<td>En LAM-ICPMS Lu-Hf isotopstudie av zirkon</td>
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<td>2007</td>
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<tr>
<td>Velledere(e)</td>
<td>Tom Andersen, Reidar Trønnes</td>
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**Sjekksom MD5:** 223fcbd50af60d981502511a704bc150


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[Fulltekst](#)
## Result of search in NORA

You have searched for:

all of the words: "Reidar and G. and Trønnes"

1-1 of 1

<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>Documenttype</th>
<th>Year</th>
<th>Archive</th>
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<tbody>
<tr>
<td>Trønnes, Reidar G.</td>
<td>Structure, mineralogy, chemistry and economic potential of calcitic marble in the Gerifjellet-Bukkafield area, Nord-Trøndelag</td>
<td>Research report</td>
<td>1993</td>
<td>NGU</td>
</tr>
</tbody>
</table>
2010

1. Trennes, Reidar G.
   UIO

2. Trennes, Reidar G.
   Jordas indre bevegelser og platelektontikk. Faglig-pedagogisk dag. Univ. i Oslo. 2010-01-06
   UIO

3. Trennes, Reidar G.
   Structure, mineralogy and dynamics of the lowermost mantle. Mineralogy and Petrology 2010
   UIO

2009

4. Debaille, V; Trennes, Reidar G; Brandon, AD; Waigant, T; Graham, DW; Lee, C-T.
   UIO
Role?

• Personal
• Departmental
• Library
• University
• Discipline
• Webscale services

Scalar confusion ...
Scope confusion (OA, reputation, citation, archiving, ...) ...
Institution scale?

3. citation management
Institution scale?
4. the whole social thing ..
"The 20th century was about sorting out supply," Potter says. "The 21st is going to be about sorting out demand." The Internet makes everything available, but mere availability is meaningless if the products remain unknown to potential buyers.

Read More
http://www.wired.com/techbiz/media/magazine/16-03/mf_netflix?curr

Context – community – conversation
“return on attention”
Because you enjoyed:

The Lives of Others
The Bicycle Thief

We think you'll enjoy:

Z

* * * * *

Critically-acclaimed Cerebral Independent Movies

Your taste preferences created this row.
Critically-acclaimed
Independent
Cerebral

Election
Down by Law
Crimes and Misdemeanors
The Spanish Prisoner

Understated Romantic Movies from the 1980s

Based on your interest in...

Tender Mercies
Maurice
Wings of Desire
The Fabulous Baker Boys

Based on true events, director Costa-Gavras's Oscar-winning film closely parallels the real-life assassination of a Greek doctor and humanist whose 1963 murder led to public scandal and eventual overthrow of the democratic government of Greece.

Starring: Yves Montand, Irene Papas
Director: Costa-Gavras
Genre: Foreign Classic Dramas
Language: French
Format: DVD and streaming

4.0 Our best guess for Lercan

Recommended based on your interest in The Lives of Others, The Bicycle Thief and The Conversation
Don't Look Back
by Karin Fossum

Series: Inspector Sejer Mysteries - English Publication Order (1), Inspector Sejer Mysteries (2)

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<th>Members</th>
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<td>436</td>
<td>11</td>
<td>12,911</td>
<td>★★★½ (3.66)</td>
<td>25</td>
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Recently added by: FrankyFra, Zozette, ann163125, Loesjes, Braintrust, dtptje, bcquinnsmom, nzurisana, ReneBevers, boekenwurm

Tags: crime, crime fiction, crime novel, detective, detective fiction, fiction, inspector sejer
Context, community, conversation

- Community cannot be painted on
- Scale
- Appropriate activity?
  - Indirect discovery
  - consultancy
Some directions
Attracting and building relationships with customers
“Service-oriented”, customization
Economies of scope important

Develop new products and services and bring them to market
Speed/flexibility important

Back office capacities that support day-to-day operations
“Routinized” workflows
Economies of scale important

Customer Relationship Management
Product Innovation
Infrastructure
Infrastructure: too much investment?
Collections

• Selective and targeted local engagement around creation, curation and disclosure of scholarly and learning materials

• With the exception of a small number of large research libraries, retrospective print collections will be managed as a pooled resource and physically consolidated in large regional stores

• 80+% of library materials spending in the academic sector will be directed toward licensed electronic content distributed by a small number of large aggregators
Systems

• Redundant, complex systems apparatus will have to be simplified.
• A part of this will be a move to shared infrastructure in the cloud.
• Need to realise network effects in this move.
  – Analytics (recommendations, collaborative collection management, ...)

Cloud is a question not an answer ;-)
Space

- Shift from Infrastructure to Customer relationship management
- Social
- Ad hoc rendezvous
- Showcase for expertise and specialisms.
Relationship management

• Role: make informational aspects of research and learning more effective

• Peel expertise away from collection and deploy across wider range of tools, services and practices
Relationship management

- People are entry points
- Expertise accessible and visible
Relationship management

• Scholarly literacy (P Courant)
• Partner on production of new learning and research outputs
• Inside out: partner in making expertise and outputs visible and accessible
Thank you
Lorcan Dempsey

http://www.twitter.com/LorcanD
Http://www.oclc.org/research