

# Discussion on Technology

With Bruce & Doug

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# Available Technology

## Web 2.0

Blogs, Wikis, Social Q&A,  
Podcasting

### Social Networks

Twitter, Facebook,  
Myspace, Diaspora  
LibraryThing, Second Life

Widgets, Web APIs, RSS

# Available Technology

## Web 3.0 (Semantic Web)

Machine Readable

Linked Data

Machine Metadata

RDF, OWL, RDA, XML

Digital Libraries

Fedora, Greenstone,  
DSpace

FOAF, SIMILE, NextBio,  
OpenPSI

# Available Technology

## Electronics

E-Readers, 3D Displays, iPods,  
Netbooks, iPads, Augmented  
Reality

### Mobile Devices

Smartphones, Tablets, PDAs

QR Codes

Near Field Communication

SMS

# Library Specific

AquaBrowser & BiblioCommons

QuestionPoint

Mosio's Text-a-Librarian

LibraryH3lp

LibGuides

NetLibrary & OverDrive

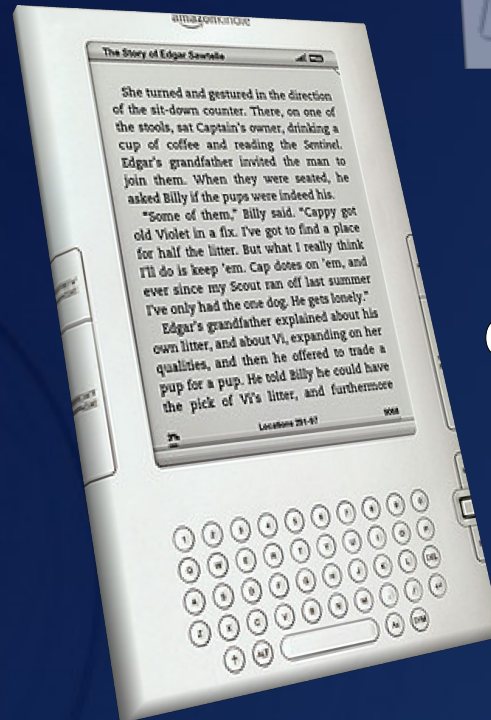
Digital Library Systems

# Three Technologies in Libraries

## QR Codes



## Social Library



## e-Books & e-Readers

# QR (Quick Response) Codes

QR Codes are used to reach mobile users

- QR codes are used to:
  - Link to the library on social networks
    - Twitter, Facebook
  - Link to Library Systems
    - Library Catalog
    - Research or Pathfinder Guides
    - Stack Description
    - Downloadable Content
  - Provide instant text information
  - Initiate SMS reference service

# Libraries using QR Codes

## Sacramento Public Library

When the QR code on the library's blog is scanned, the user receives text message chat info

## Boise State University's Albertsons Library

Uses QR codes on their blog and Twitter to direct users to their mobile website



# Libraries using QR Codes

## Lafayette College Library

Utilizes QR Code-Clues in a interactive library mystery game for first year student library orientation

## Bath University Library

QR codes in catalog records supplies users with basic information such as location and call number

# e-Books & e-Readers

## e-Books

### Systems

Google eBookstore,  
OverDrive, NetLibrary,  
ebrary, Amazon

### Standards

EPUB, ADE, Mobipocket,  
PDF, Kindle, OCF

## e-Readers

Kindles, Kobo, Sony  
Reader, Nook, iPad, iRiver  
Story, ETI-2,

Countless other generic e-  
readers

# Libraries Loaning e-Readers

Irvin L Young  
Memorial Library

Kindle, Nooks &  
Sony e-Readers

e-Books are supplied  
through OverDrive

North Vancouver City Library

Kobo, Kindle, &  
Sony e-Readers

e-Readers are preloaded  
with selected titles from  
OverDrive

# Libraries Loaning e-Readers

Oklahoma State University  
Library

Laptops & iPads available

NetLibrary used for e-Books

# Social Layers for Libraries

## Networks

Facebook, Myspace, LinkedIn

## Blogs

Wordpress, Blogger, Twitter

## Sharing

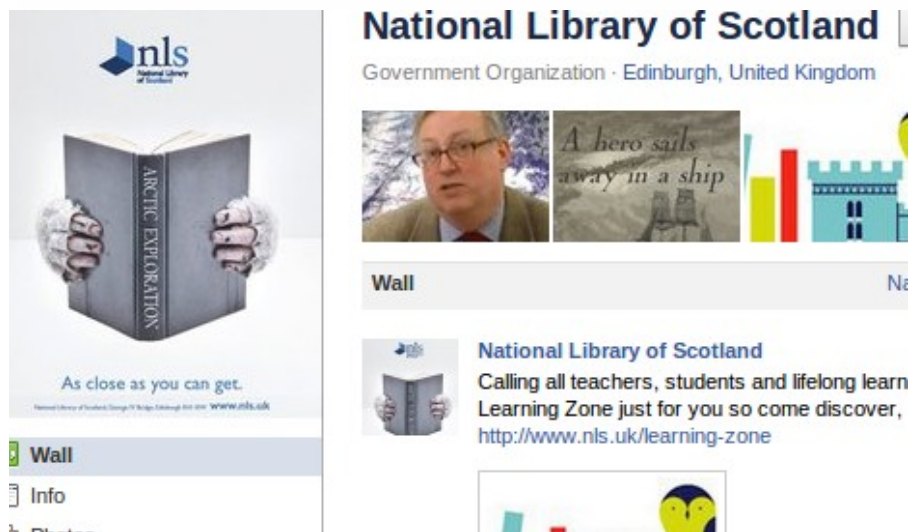
Delicious, StumbleUpon,  
Flickr, YouTube

## Reading

LibraryThing, Goodreads

# Libraries Using Social Networks

## National Library of Scotland



**National Library of Scotland**  
Government Organization · Edinburgh, United Kingdom

As close as you can get.

**National Library of Scotland**  
Calling all teachers, students and lifelong learners! Learning Zone just for you so come discover, <http://www.nls.uk/learning-zone>

## Manchester Library and Information Services



**Manchester Library & Information Service**  
Library · Manchester, United Kingdom

**Manchester LIBRARIES**  
Welcome to Manchester LIBRARIE

Your Library. Your Place. Contact Us  
Borrow books, films and music Manchester Library

# Libraries Using Social Networks

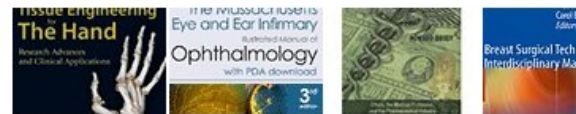
## Lane Medical Library



- Wall
- Info
- Photos
- Discussions

### Lane Medical Library — Stanford Like

Education · Stanford, California




#### Wall



**Lane Medical Library — Stanford**  
Don't be left out! Sign up for this class today!

**Lane Classes - Lane Medical Library & Knowledge Mana  
Stanford University Sch**  
lane.stanford.edu  
Earl B. Beutler, President and CEO of LabArchives, LLC. will



Share what technology is  
new in your library



# Adoption & Implementation

# Five Step Plan

What need does 'it' fulfill

Why can't you live without 'it'

Who can we use as a guinea pig to test 'it'

How will you make sure 'it' is used

Where does 'it' fall into your future plans

# Avoid Speed Bumps

Let staff know early

Explain how it fits with mission of the library

Get staff involved

Train them well

Set them free

# It's About People

Technology change and innovation is about people and not the technology itself

The library exists to serve patrons, not technology or information

The adaption of a new technology needs to be a benefit to patrons and/or staff

# Associated Risk

Added Expense


Investment of time and effort

Early adoption usually means “going alone”

Risk of poor acceptance or obsolescence

Additional Training

Added responsibility to overworked librarians



Share how the new  
technology was adopted and  
implemented in your library

# Surprises & Challenges

# Happy Surprises

Successful Implementation

Wide adoption & acceptance

Successful & Limited Training

Easy Implementation

Ready Support and Resources

Matches Need or Expectation

Everyone Loves 'It'

Turns out as planned



# Success of e-Readers

e-Books & e-Readers have met success in several pilot trials and projects

e-Readers when tested with library patrons (especially among students) has been well received

## **Students valued:**

Portability

Ease of annotation

Quantity of e-books on a single unit

Allows libraries to focus on space for students instead of space for books

# Success of e-Readers

Cushing Academy replaced their entire print collection with iRiver Story and Kindles

Freed more library study space for the students

Pilot at Llyod Sealy Library resulted in students enthusiastically interested in purchasing personal e-Readers

Students enjoyed the portability & capacity of the e-Reader

# Success with QR Codes

A 2009 study showed 51.2% of undergraduate students owned an Internet-capable handheld device

Major corporations are utilizing QRs

Ralph Lauren  
Calvin Klein

22% of Fortune 50 companies use QR codes

# QR Code Success

## Reasons for QR Code Success

- Easy to implement with multiple venues
- Integrable with current systems or communication methods
- Broad impact with limited expense
- Multi-use
  - Text-based Information
  - URLs
  - SMS
  - Phone Number

# Success with Social Networks

Trinity College of Music's Library reported in December 2009

125 fans with 50% in an age range of 18-24

Walla Walla University Library reported April 2011

147 Likes with 38,686 page views 54% were in the 18-24 age range

Further Surveys and Results from Facebook and Other Social Networks indicate that younger generations (typically 18-30) are the majority involved in Social Networking

Making Social Networks and Social Layers part of the Library is important in reaching these users

# Social Networks

Web 2.0 technologies broke traditional static Web 1.0 barriers

Social Networks generally have low cost implementation and facility asynchronous communication between libraries and their patrons

Librarians should meet their patrons in format and technology currently being used

Venue for outreach and marketing

Expandability and integration into current systems

Provides statistics and analytics

Promotes current and continual updates

# Boldly Stepping Forward

"The road is bumpy or completely wrong altogether"

We learn from our mistakes and failures

(At least I hope we can)

# Unforeseen Challenges

Extra Expense

Extra Time

Extended training

Poor adoption

Fails expectation or to fulfill  
real need

Discontinued



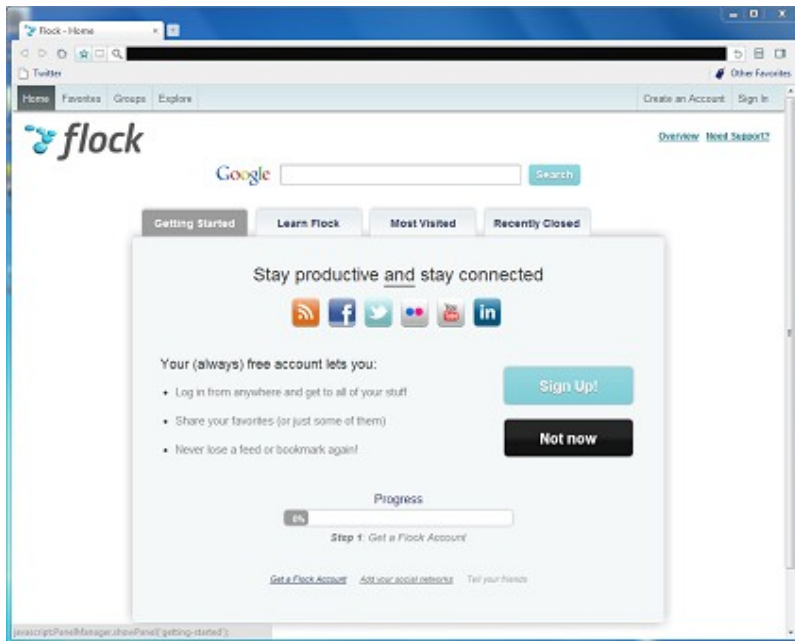
# Failure

**Rarely is failure written about in relation  
to technology projects**

**Failure does happen,  
but often only the successes are published**

# Failed “New” Technology

## Flock Social Media Web Browser shut-down



## Microsoft Kin had a 48 Hour Life



# Failed “New” Technology

## Microsoft Zune to be Discontinued



## Google Dead Projects

Wave, Catalog Search, Jaiku,  
Dodgeball, Notepad, Notebook,  
Video, Mashup Editor,  
Grand Central, Base,  
Lively, Gears, Knol

# Challenges of the Three

# e-Readers

Early investment into an e-Reader solution may entail greater expense

Due to individual low cost of units, students were eager to purchase e-Readers themselves

# e-Readers

Purchase of e-Readers in a large quantity is an expensive initial investment with significant upgrade and replacement cost

e-Materials are not really ready for the library purchase model where multiple copies of the same title are required, archived copies are retainable, and concurrent single copy sharing in a group can occur

# E-Readers Other Concerns

Ownership is based on Access Rights, content not actually owned by library

Long term availability of an e-Book for a specific e-Reader

Variable standards, formats, & functions

Currently evolving technology

# Libraries in Social Network

Push-back from patrons who dislike organizations which are viewed as outside their social circle

Social Networks generally conflict with the tradition of patron privacy

To initiate friending or following of patrons might seem creepy



# Libraries in Social Network

Need to keep content updated and fresh

Often ad-hoc implementation occurs

Without structure, the project may die after the initiator(s) leaves

Can funnel users away from the core library system and tools

# Libraries in Social Network

Often seen as just marketing tools by libraries

Yet marketing is not simply promotion but should reflect service improvement and add value

A social network user doesn't necessarily make a library user nor do they always desire overlap between social networks and libraries

# Who has heard of Friendster?

Facebook is crushing out MySpace  
And Ping, Orkut, The Hub, ConnectU,  
Yahoo! Buzz

The likelihood of failure, closure, or  
change of social networks should not  
mean a spirit of non-adoption but a  
spirit of cautious adoption

# QR Codes

Few people in the USA and Europe know what QR codes are.

Although 93% of Bath University students had the hardware only 12.6% knew what a QR Code was.

User-end data charges have limited full adoption for many

Because of ease of creation and low cost, QR codes can be overdone

QR code only information could cut out those who choose not to use them

# Here to day, maybe gone tomorrow

QR (Quick Response) Code  
VS NFC (Near Field  
Communication)

Google a major push behind  
the wide use and acceptance  
of QR Codes but has decided  
to side with NFC



Share the unforeseen surprises  
and challenges of the new  
technology

# Core Values

Traditionally librarians facilitate access, organization, storage and retrieval of information

Libraries have moved from collection focus to user focused

From stacks of dusty books to learning spaces

# Core Values

The value of the library in society has not necessarily changed

Libraries still exist to bridge the gap between user and information, the ways of building the bridge has changed with technology



# Core Values

Search engines have been recognized as the librarians biggest competitor. Search engines hardly replace a customer friendly support offered by the librarian.

Many core values remain the same but reemerge innovated through new technology.

# Core Values Goals for New Technology

Service improvement should be  
the result

In-sync with your library's brand

Communicated and Understood  
by librarians



How do core values impact  
your adoption of new  
technology

# Return on Investment (ROI)

What do you think of  
when I refer to ROI?

Have you in your  
library calculated the  
ROI when it comes to  
Technology?

# ROI

Library Technology Budgets are caught between business and individual fashion investment

The return on cost of technology maybe no more measurable than simply staying current with the Digital Age

Continual participation in the interlocking web of information is a requirement

# ROI

Libraries often do not perform rigorous analyses to justify purchases

There is often the assumption that libraries cannot calculate ROI because services are intangible

This is a shame, since technology has helped libraries achieve impressive efficiencies

# SROI

Jakob Nielsen refers to the Social Return on Investment (SROI), derived from the business model.

SROI attempts to measure the impact that an organization has on society rather than the impact that the organization's activities have on its own bottom line.

# Social Return on Investment (SROI)

What is your society?

How do you want to impact your  
society?

How can you measure your new  
technology's impact on your  
society?