The Matrix

explained...
A “QUICK RESPONSE” TO NOT-SO-NEW TECHNOLOGY

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QR Codes Explained

- **What is a qr code?**
  - A code that holds information—similar to a barcode
    - Text
    - URL
    - Contact information
    - Email address
    - Google map locations

- **Other names for qr codes**
  - A matrix code
  - A 2-dimensional barcode (2D)
  - A mobile code

- **Created by Denso Wave (subsidiary company of Toyota) in 1994**
QR Codes Explained

- **How they work**
  - From Google Chart Tools: Infographics
    - Are squares with equal number of rows and columns
    - Numbers range from 21-177 rows and columns
    - A code will hold the amount of data equivalent to the number of rows/columns. See chart at Google Chart Tools: Infographics.
      - “Version 1 has 21 rows and 21 columns, and can encode up to 25 alphanumeric characters”
      - “Version 40 has 177 rows and 177 columns, and can encode up to 4,296 alphanumeric characters”
Uses of QR Codes

- Promotion of products, events, services
Uses of QR Codes

- Connect users to…
Kinds of Codes

Not everything is a “qr code”.

NOW, How To Make a QR Code

Generators

- ZXing – Simple to use interface (no advanced options).
- Delivr – Another simple to use interface (no advanced options).
- SnapMaze – Few types however allows color choices.
- RACO – For advanced users, not very simple to use.
- SparqCode – Simple to use however put their branding on the QR Code.
- BeQRious – Simple and has many options. Allows you to put your logo into the code.
- Bosqweb – Several options including social media.
- AT&T Create-A-Code – Requires registration to use.
- ConnectMe QR – Creates a mobile page with your contact info.
- ItsMyURLs – Sort of the MySpace of QR codes.
- Jumpsan – Creates a mobile page with all your contact and social info.
- Kaywa – Simple. URL, Text, SMS and Phone only.
- Likify – Creates a QR code that goes to a like button for your FB Page.
- Mobilefish – Advanced QR code generator.
- MyQR – Simple. URL, Text, Contact Card and Map only.
- QRreate & Track – Simple to use with plenty of info. Also allows for tracking.
- Quickmark – Many options to choose from.
- Qurify – Only does text. Nothing else.
- SmallQR – Creates a short link QR code.
- Social QR Code – Requires registration. Creates QR codes for social media.
- SPARQcode – Many options. Also creates a social media box.
- TapReader – Simple. Creates several commonly used items.
- Tagginn - QR Code & MS TAG Generating with Tracking Analytics
- Tag.cx – Offers a Free API
- QR Pro – Profile Exchange, Reader and Creator of QR 2D Barcode Profession Version in iPhone ($1.99)
Kaywa  http://qrcode.kaywa.com

- Choose from URL, Text, Phone Number, or SMS
- Copy and paste, or type in the URL
- Choose size
- Click “Generate!” button
Let’s do one for real

- QRStuff.com
Tracking QR Codes

- From 2D’s QR code and two dimensional bar codes, news, views and analysis
- What do you want to track?
- Which codes are being scanned?
  - What information is of the most interest?
  - Which locations work and which ones may not?
- Some newer ones to add
  - Beetagg

QR Code Management Systems

Here is a list of QR Code campaign management systems (it’s very much work)

Beqrious QR Code Tracking System

CodeZ QR Solution Set

Dare2Scan Analytics PHP web application analyses QR Code traffic, mobile SMS and Email. Available as a white label product.

GossRSVP Media Link Service

i-nigma

Kishkee QR Code management and analytics, mobile site builder and mobile e

linkblots Mobile web pages and hosted mobile video and photo slideshows with a monthly pageview/scans cap.

OpenQr

QRerate & Track Create QR Codes (one-at-a time or in bulk) and then track them only and a range of prices based on the number of QR Codes that you create and share.
Tracking QR Codes

- **Shortened URLs—Suggestions**
  - Zi.ma – bulk url shortening
  - Bit.ly—I like use this one. Liked the way it looked. Can import into Google spreadsheets
  - Snipurl.com—can export into Excel
  - Budurl.com—real time stats
  - Ow.ly—looks interesting; can share files

- The above had these three features
  - Customizable URL
  - Tracking
  - 301 Redirect

Information from [Social Media Marketing Tools: 11 Tools to Shorten URLs](#)
Phone Apps

- iPhone
  - Scan
  - i-nigma
  - Neo-Reader

- Droid
  - QR Droid
  - Quick Mark
  - Barcode Scanner (ZXing)

- Blackberry
  - ScanLife
  - BeeTagg
  - QR Code Scanner Pro
Drawbacks

- Installation of apps may be a hindrance
- Formatting issues
- Possibility of saturating the area with codes
- Lack of awareness of QR codes
- Exclusion of disabled patrons, non-cell phone users, and non-smartphone/internet-abled cell phone users
Uses in the Library

- Exhibits—link to songs, videos, websites, surveys, contests
- Library stacks—end caps, near journals to point to online holdings
- Library audio tours
- Link to library
  - email
  - phone no.
  - Text no.
- Displays—enrich content of displays
- Catalog records—basic info about book
- On videos/dvds linking to summary or trailer
- Faculty/staff directory pages—contact information
- Author interviews
- Tutorials
Uses in the Library

- Geocaching
- Promotional media
- Subject headings
Uses in the Library

No one here to ask?

Text 318 228-5150
Call 318 357-4574
Email reference@nsula.edu

Twitter @NSULAWatson
Facebook http://www.facebook.com/nsulawatsonlibrary

Check out the Career Exploration Area @ Watson Library!

Call me in Tech Processes on the 2nd floor!

Call me in Reference!
2011 National Black History Theme:

African-Americans in the Civil War
Scan the QR code below to see a video about the “Glorious March to Liberty”, the travelling exhibit from the African-American Civil War Museum in Washington D.C.

African-American Civil War Memorial
Washington D.C.

Scan these QR codes with a barcode reading app on your smart phone and find another level of information!
Uses in the Library

result 1 of 12 for search stonehenge in anywhere AND (^15 OR ^122){COPY} in anywhere

**Stonehenge and the timber circles**
Gibson, Alex.
Publisher: Tempus,
Publication date: 2005.
ISBN: 0752433504
1 copy on the shelves.

**Copy details**
- **Shelf mark**: 936.1 GB
- **No. of copies**: 1
- **Loan type**: 28 day loan
- **Location**: Level 5 (see floorplan)

**Catalogue record**
- **ISBN**: 0752433504 (pbk.):
- **Personal Author**: Gibson, Alex.
- **Title**: Stonehenge and the timber circles / Alex Gibson.
- **Edition**: Updated ed.
- **Publication info**: Stroud : Tempus, 2005.
- **Physical descrip**: 189 p. : ill. (some col.) ; 25 cm.
- **General Note**: Previous ed.: 1998.

**Abstract**: The author's study of 1998 is brought up to date in the light of the latest archaeological evidence. The author shows how Stonehenge can help us to understand the Neolithic and Bronze Age timber circles of Britain and Ireland and how these timber circles aid our understanding of Stonehenge.

**Subject term**: Building, Wooden--Great Britain--History.
**Subject term**: Temples--Great Britain--History.
**Subject term**: Stone circles--Great Britain.
**Subject term**: Building, Wooden--Europe--History.
**Subject term**: Temples--Europe.
**Subject term**: Megalithic monuments--Europe.
**Geographic term**: Stonehenge (England).
**Geographic term**: Great Britain--Antiquities.
**Geographic term**: Europe--Antiquities.
The QR codes just encode the title, author, location and call number. The SirsiDynix Symphony e-Library (the OPAC, previously known as iLink) has a page markup language, a bit like PHP, so it's possible to assign these data fields to JavaScript variables. Javascript is then used to call the Google Charts API to generate the QR code.

Obviously they're meant to help users who are physically in the library, saving them from writing the details down before heading for the shelves. In practice I never see anyone use them. For whatever reason, I don't think QR codes have really caught on in the UK.

I hope that helps and good luck with your presentation!

Regards,

Laurence Lockton
Systems Librarian
University of Bath
Before we continue...
Why Bother With This Sort of Thing

Mobile Year in Review 2010
Why Bother With This Sort of Thing--Stats

- 2009—300 million apps downloaded
- 2010---5 billion apps downloaded
- Foursquare users
  - 2009—200,000 users
  - 2010—5,000,000 users

Social Media
- Facebook mobile users – 200,000,000
- YouTube videos PLAYED on mobile devices
  - per DAY—100,000,000
- ½ of all page views were to social networking sites
Why Bother With This Sort of Thing--Stats

- **Growth**
  - Cell phones and desktops connected 1,000,000,000 people to devices
    - Growth of 40x expected by 2015
  - 2010—76% of adults polled use phones to take pictures
  - 2010—Average teen sends 3,339 texts per month
  - **SMARTPHONES shipped in fall of 2010—77,000,000**
  - Wireless data traffic is expected to grow 100 times faster than voice traffic over the next 10 years.
  - Connected mobile smartphones today generate 30xs the data traffic of basic-feature cellphones.
End of 2011—half of all mobile users will be using a smartphone OR an internet-enabled phone.
Why Bother With This Sort of Thing —AT ALL

- Phone Use
  - More than just person-to-person contact
  - Focus of phone use is moving from access to information through voice to access to information through data
  - Apps are free, easy enough to install and use
  - Usage by under-30s point to continued/increased usage of smartphones to access data—
    if it’s *easy enough to use* and *relevant to their needs*!!
Why Bother With This Sort of Thing—AT ALL

- **QR Codes**
  - Easy way to add a *virtual experience* to the physical library—“tie the physical to the digital”—enriching
  - More content at the point of need
  - Interactivity with the medium
  - Low tech
    - Simple to acquire—many generators available online
    - Simple to use—if you can type or copy and paste—you’re good
  - Low cost
    - Many free QR code generators available online
    - Free scanning apps/software available
    - Requires little equipment, and the equipment needed is standard in any library (computer, printer)
    - Denso-Wave holds no patent rights
Why Bother With This Sort of Thing --AT ALL

- QR Codes (cont.)
  - Easy implementation by the least amount of staff
  - Well-designed—higher capacity than other matrix codes for large amounts of data
  - Size variability
  - Error correction capability. Up to 30% of data can be obscured/corrupted.

Basically, a lot of

for your buck!
My Thoughts on QR Codes

- This is worth our while.
- Librarians can be the educators of the academic/local community about QR codes. Being seen as leaders in technology can’t hurt us and increases our street-cred!
- Label each QR code.
- Don’t code everything! Make it special.
- Have a plan. You’ll need a “campaign” to educate and promote this powerful tool.

C. Lue Watson
My Thoughts on QR Codes

C. Lue Watson

BE LOOKING FOR

LUE'S CLUES

I’m Lue!

TO "CLUE YOU IN" ON AVAILABLE LIBRARY SERVICES AND INFORMATION. USE YOUR SMARTPHONE TO READ THE QR CODES!

Watson Library, Northwestern State University, Natchitoches, LA
It’s time to FLY!!!
• How To Create QR Codes and Track with Bit.ly http://notixtech.com/blog/how-create-qr-code-and-track-bitly
• Mobile Year in Review—2010 http://www.youtube.com/watch?v=6mCkbrYKQyl
• QR Codes @ CLC http://www.youtube.com/watch?v=O6Jk1bfobXA
• Introducing Word Lens http://www.youtube.com/watch?v=h2OfQdYrHRs&feature=youtu.be
• List of QR Code Management Systems (blog) http://2d-code.co.uk/qr-code-management-systems/#comments
• QR Generators with Tracking and Analytics  http://qrmedia.us/qr-code-generators-with-tracking/
• QR Media Guide  http://qrmediaguide.com/
• Social Media Marketing Tools: 11 Tools to Shorten URLs
• 5 iPhone QR Code Reader Apps Reviewed
• QR Code Readers for iPhone, Android, Blackberry and Windows Phone 7
References


Mobile Year in Review 2010 http://www.mobilefuture.org/resources

QR Codes and the Academy (March 25, 2011) Robin Ashford blog, Library by Design.

QR Code Generators and Tracking http://qrmedia.us/qr-code-generators-with-tracking/

Situated Questions and Answers: Responding to Library Users with QR Codes. By: Hicks, Alison, Sinkinson, Caroline, Reference & User Services Quarterly, 10949054, Fall 2011, Vol. 51, Issue 1
Discussion Time

QR Code Libguide