

# CCLA Talking Tech: QR Codes

Presentation By:  
Steven Kolberg  
Edison State College, Rush Library  
Cataloging



# What are these things?

- 2D Matrix Codes
  - Hold more information than barcodes
- QR stands for “Quick Response”
  - Information can be quickly decoded
- Approved as a standard in October, 1997
  - AIM International Standard
  - ISO in 2000
- Free and Open format!

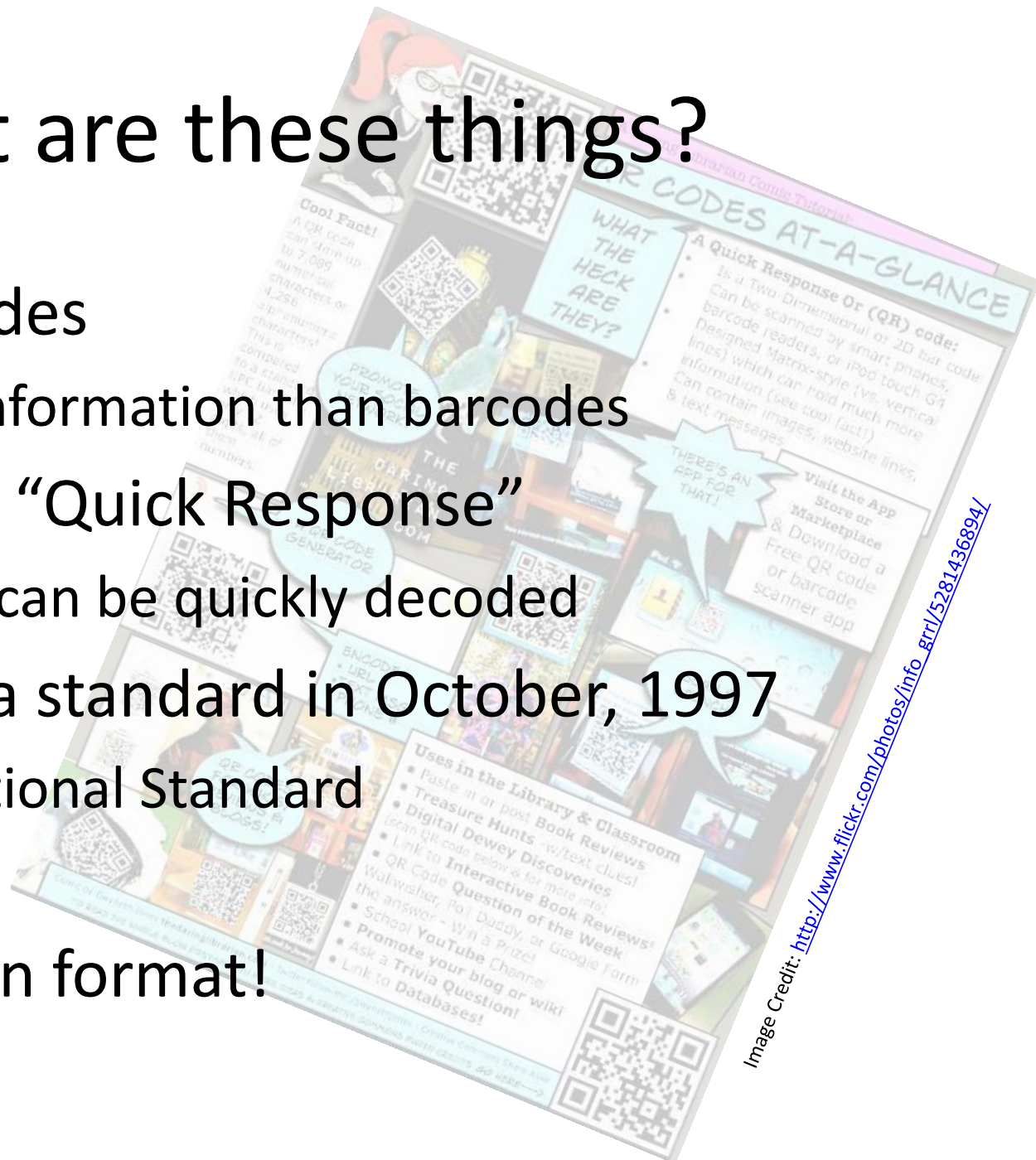


Image Credit: [http://www.flickr.com/photos/info\\_grrr/5281436894/](http://www.flickr.com/photos/info_grrr/5281436894/)

# Matrix

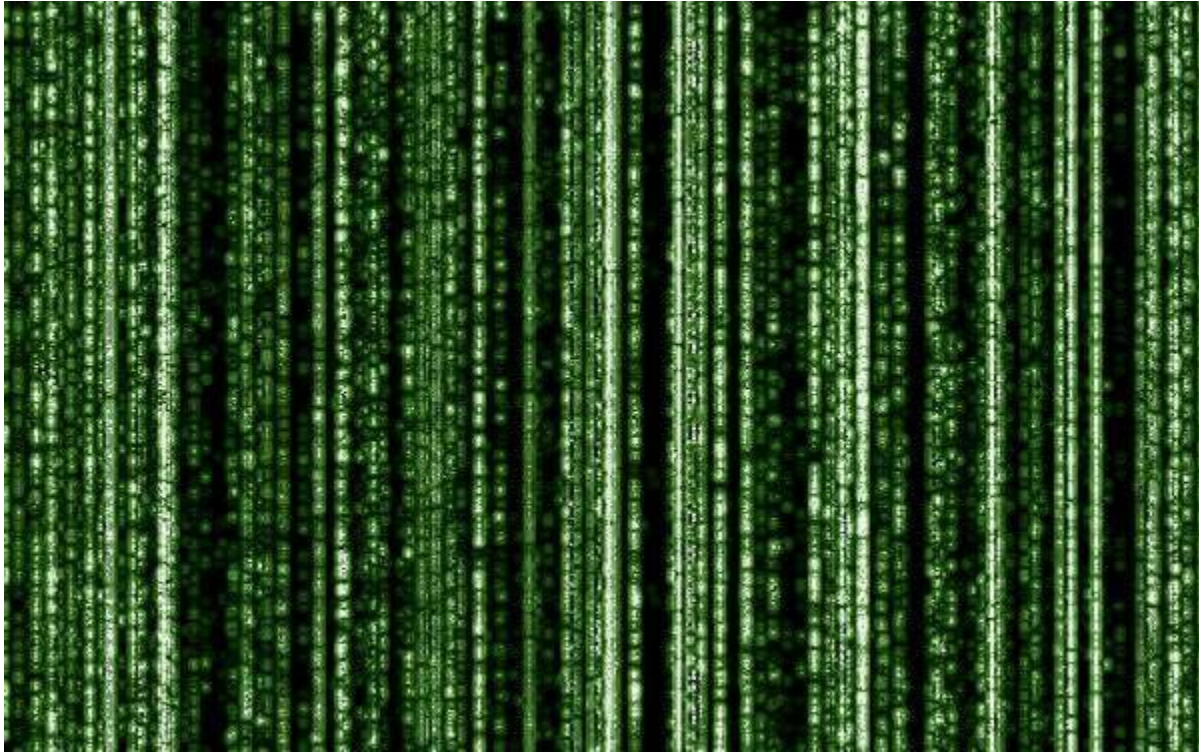


Image Credit: <http://www.artelista.com/en/artwork/1337715294764546-fondowallpaperquotdigitalmatrixquot.html>

# Not Bar



Image Credit: [http://jmason.org/albums/2006-02-Venue-Markree/tn/bar\\_4.jpg.index.html](http://jmason.org/albums/2006-02-Venue-Markree/tn/bar_4.jpg.index.html)

# Traditional Barcode vs. QR Code

- Can hold up to 20 Alphanumeric characters Max.
- Data is stored in single direction bars.
- Numbers, letters, some special characters can be encoded.
- Not easily scaled.



- Can hold up to 4,296 Alphanumeric characters Max.
- Data is stored in 2 directions.
- Links, text, contact information, calendar events can be encoded.
- Can be scaled easily.



# How do you use them?

- Dedicated QR Code Scanners
- Smart Phone Applications
  - [BeeTag](#)
  - [i-nigma](#)
  - [QuickMark](#)
  - [ScanLife](#)
- Webcam Applications
  - [QuickMark](#)
  - [ZBar](#)
- Web-Based Decoders [Readers]
  - <http://miniqr.com/reader.php>
  - <http://zxing.org/w/decode.jsp>



Image Credit: <http://www.flickr.com/photos/cocreatr/2211459923/>

# Common Functions

- Calendar Events
- Contact Information
  - Emails
  - Vcards
- Easily Transmit URLs
  - Business/Realty Listings
  - Maps
  - Social Media Profiles
  - YouTube
- Free-Formed Text Messages
- Quickly Acquire Geo-Location Information
- Send SMS Messages [A.K.A. Txt]

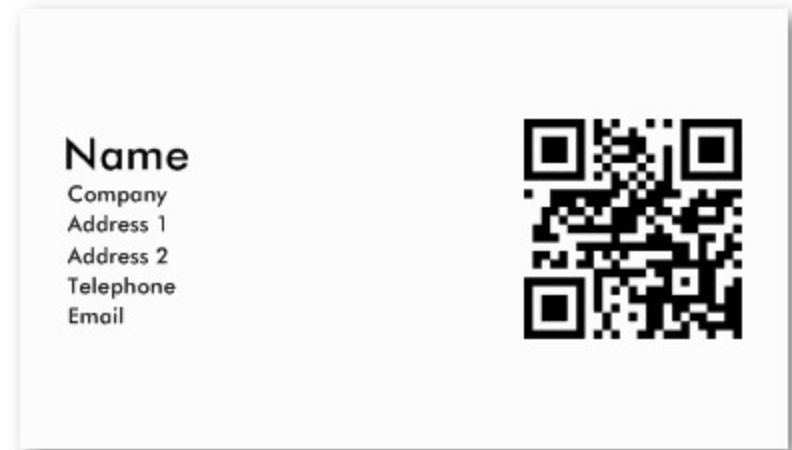


Image Credit: [http://www.zazzle.com/qr\\_business\\_card-240672155243038700](http://www.zazzle.com/qr_business_card-240672155243038700)

# Common Functions

- Calendar Events
- Contact Information
  - Emails
  - Vcards
- Easily Transmit URLs
  - Business/Realty Listings
  - Maps
  - Social Media Profiles
  - YouTube
- Free-Formed Text Messages
- Quickly Acquire Geo-Location Information
- Send SMS Messages [A.K.A. Txt]



**Ready to try it?** You can try scanning this code from your phone right now. (Hint: It will take you to [google.com](http://google.com))





# Who uses these things?

- Originated in Japan and eventually spread to Europe and Middle East.
  - Originally used for tracking parts in manufacturing.
  - Later used for mass marketing.
- Just now starting to pick up speed in the US.
  - Used in art advertising.

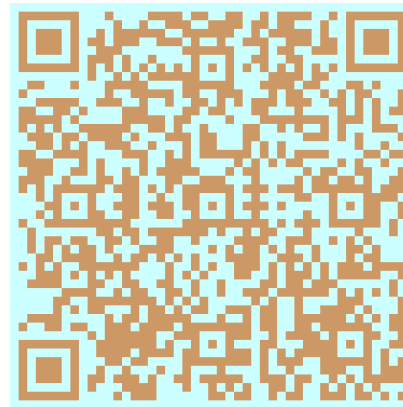


Image Credit: [http://en.wikipedia.org/wiki/File:QR\\_Waffle.jpg](http://en.wikipedia.org/wiki/File:QR_Waffle.jpg)

# Library Applications



- Video: Android Shelf Reading App.
  - Just for fun check out this video
    - <http://www.youtube.com/watch?v=NgZVI630Ssl>
- Online Library Catalogs as an Enhancement.
  - Text Message setting
    - Title
    - Author
    - Call number
    - Floor
    - Availability
    - Etc...



# Advertising

- Promote New/Existing/  
Unknown Websites
  - Business cards
  - Handouts
  - Newspaper ads
  - Persistent links
  - Phone books
  - Posters
  - Shirts
- Can be in fun colors  
too!



Image Credit: <http://www.flickr.com/photos/mpm2006/5333302839/>

# Advertising

- Promote New/Existing/  
Unknown Websites
  - Business cards
  - Handouts
  - Newspaper ads
  - Persistent links
  - Phone books
  - Posters
  - Shirts
- Can be in fun colors  
too!



Image Credit: <http://www.flickr.com/photos/gwire/1311545877/>

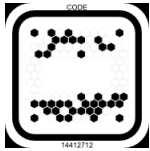
# Advertising

- Promote New/Existing/  
Unknown Websites
  - Business cards
  - Handouts
  - Newspaper ads
  - Persistent links
  - Phone books
  - Posters
  - Shirts
- Can be in fun colors  
too!



Image Credit: <http://adverlab.blogspot.com/2007/02/uses-for-qr-codes.html>

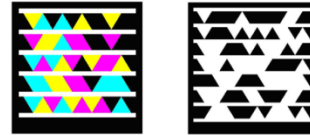
# Other Forms of Matrix Codes



BeeTagg



DataMatrix



Microsoft Tag



UPS

# List of Online Generators

- Many Generators are available online due to the open nature of this format.
  - Kaywa Generator
    - <http://qrcode.kaywa.com/>
  - invx.com - QR & DataMatrix Generator
    - <http://invx.com/>
  - ZXing Project
    - <http://zxing.appspot.com/generator/>
  - delivr
    - <http://delivr.com/qr-code-generator>
  - QRstuff.com [Makes Colored Codes!]
    - <http://www.qrstuff.com/>
  - GOQR.me
    - <http://goqr.me/>

# References

- Ashford, Robin. "QR Codes and Academic Libraries." *College & Research Libraries News* 71.10 (2010): 526-530. Web. 12 May 2011.  
<http://crln.acrl.org/content/71/10/526.full>
- Denso Wave. *QR Code Standardization*.  
<http://www.denso-wave.com/qrcode/qstandard-e.html>
- Mobile-Barcodes.com. *About QR-Codes*.  
<http://www.mobile-barcodes.com/about-qr-codes/>
- "QR Codes." *Library Success: A Best Practices Wiki*. 12 Apr. 2011. Web. 12 May 2011.  
[http://www.libsuccess.org/index.php?title=QR\\_Codes](http://www.libsuccess.org/index.php?title=QR_Codes)