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Library Services for Mobile Devices

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Library Services for Mobile Devices

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Toby Greenwalt - Skokie Public Library
Jacob Hill - Elmhurst College
Colin Koteles - College of DuPage

Background

- ## Skokie Public Library
  - *FY 2008-2009 LSTA Grant Project to develop a platform for current and future mobile library services*
  - *Stressing multiple levels of access to traditional library offerings*

- ## College of DuPage
  - *2007 "experiment" to create low-cost, low-maintenance mobile web access to basic Library services*
  - *Marketing is just beginning; looking at "next steps"*

- ## Elmhurst College Library
  - *mobile resources grew out of a winter 2008/09 collaboration between Jacob Hill & Kyle Jones*

  - *Our overall goal was finding ways to support the mobile population on our campus, at no cost.*

The Mobile Wave

Mobile data and communications activities: by Age (Those who have a cell phone or personal data assistant who have <u>ever</u> done one of listed activities)				
	18-29	30-49	50-64	65+
Send or receive text messages	85	65	38	11
Take a picture	82	64	42	22
Play a game	47	29	13	6
Send or receive email	28	21	12	6
Access the internet for news, weather, sports, or other information	31	22	10	6
Record a video	34	19	8	3
Play music	38	16	5	2
Send or receive instant messages	26	18	11	7
Get a map or directions to another location	18	16	9	5
Watch video	19	11	4	2
Percent who have done at least one of these activities	96%	85%	63%	36%
Median number of activities <u>ever</u> done	4	2	1	0
Number of cases	311	616	456	310

The Mobile Wave

Mobile data and communications activities: by Age (Those who have a cell phone or personal data assistant who have ever done one of listed activities)				
	18-29	30-49	50-64	65+
Send or receive text messages	92%	76%	50%	17%
Take a picture	87	71	59	29
Play a game	46	32	12	6
Send or receive email	34	30	17	7
Access the internet for news, weather, sports, or other information	39	31	14	4
Record a video	32	21	11	2
Play music	43	21	7	5
Send or receive instant messages	34	21	12	7
Get a map or directions to another location	27	24	11	5
Watch video	24	15	7	3
Percent who have done at least one of these activities	93%	80%	59%	27%
Median number of activities ever done	4	2	1	0
Number of cases	296	578	506	399

Pew Internet & American Life, 7/22/2009

The Mobile Landscape

(via Lance and Erin)

Mobile Technologies : Devices

- Voice calls (hopefully)

- Address book/Caller ID

- Calendar

- Text Messaging

Generally assume "flip" or "candybar" shape.

Intermediate Mobile Features

- Still and video cameras

- Microphone/note recording

- Audio/video playback

- Some Web integration

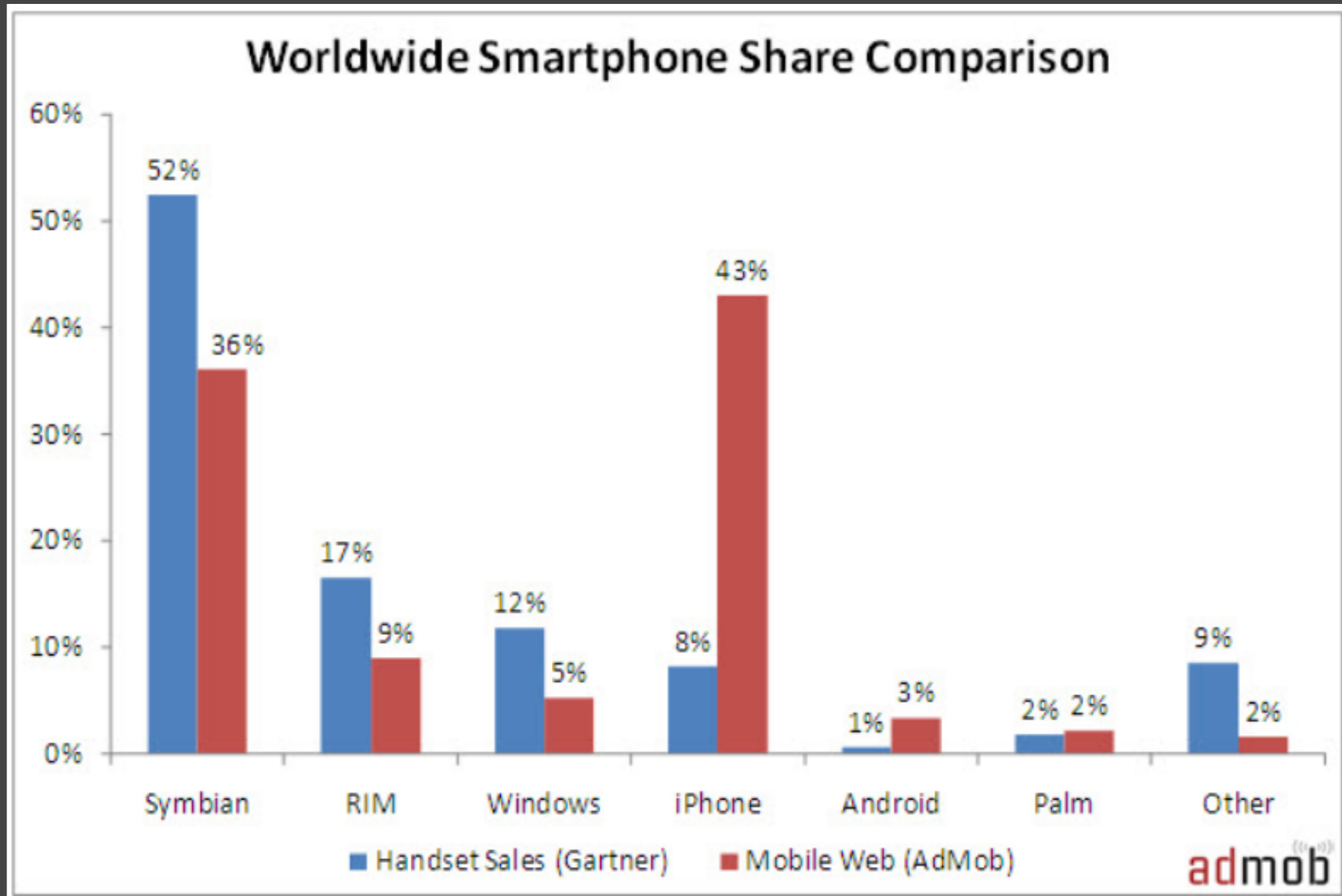- Full keyboards on many

- Not much customization

Advanced Mobile Features

- Possess true "operating systems"

- Advanced Web capabilities

- PC integration

- Utilize built-in GPS

- Downloadable applications

- Many use wireless as well as mobile networks

Mobile Web Usage

Admob Mobile Metrics Report, April 2009

Mobile Technologies - Capabilities

In terms of Libraries:
- Mobile Websites
  - News & basic information
  - Library & staff contacts
- Mobile search
  - Web
  - OPAC
  - Databases
- Mobile communication
  - Phone
  - SMS/IM
  - Web (Facebook, Twitter, etc.)
  - E-mail

"Myths" of mobile usability

- "It's really do-or-die when it comes to SMS and libraries"
  - Presenter comment at *Handheld Librarian* conference, July 2009
- Training
  - Services can be bundled with extant tools
- *Set it and forget it...*
  - Mobile uses thrive on dynamic content

More Myths

- Marketing- don't assume they'll find it
- Texting: the perceived vs. actual
  - Texting plans cost $
  - Texting not ideal medium for reference interview
  - Response time, brevity crucial
- Switching communication methods
  - Knowing when to end the text conversation
- Has Texting "replaced" the phone call?

Texting outpacing calling

Average Number of Monthly Calls vs. Text-Messages Amongst U.S. Wireless Subscribers by Age (Q2 2008)

|	Calls	Texts
All Subs	204	357
12 & Under	137	428
Ages 13–17	231	1742
Ages 18–24	265	790
Ages 25–34	239	331
Ages 35–44	223	236
Ages 45–54	193	128
Ages 55–64	145	38
Ages 65+	99	14

Source: Nielsen Telecom Practice Group

EPL Text questions, Aug 08-June 09
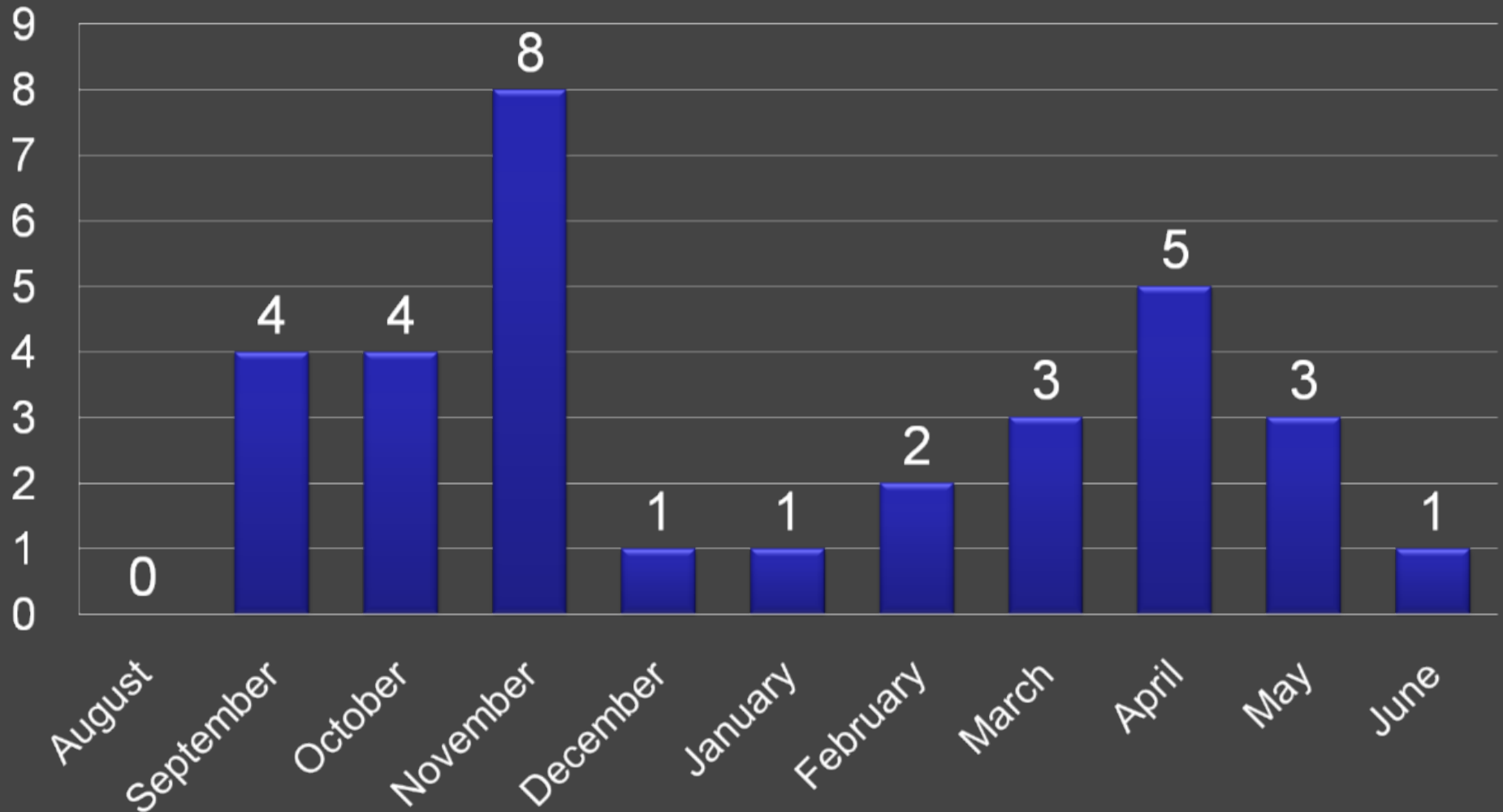
Other myths: Mobile websites

- Mobile devices can't display standard web content optimally.

  - However, in a 2009 web usability test, sites designed for **mobile devices had a "successful use" rate averaging 64% (vs. 53% when using standard sites).***

- Even the iPhone's "ideal" large display parses content, and requires tedious scrolling.
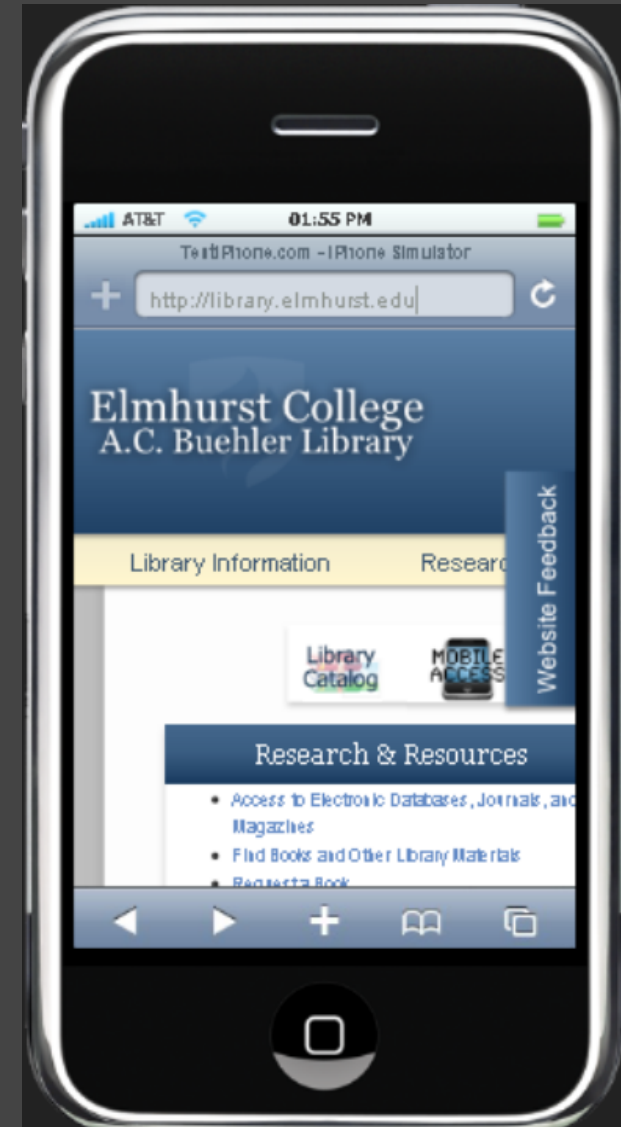
*Nielsen, Jakob (2009, February 19). Mobile Web 2009 = Desktop Web 1998. Retrieved March 4, 2009, from http://www.useit.com/alertbox/mobile-usability.html

Mobile Content

Varying levels of commitment

- Transcoded design
- Universal design
- Mobile design
- OPAC (currently limited by vendor)

m.skokielibrary.info | m.codlibrary.org/ | library.elmhurst.edu/m/

Mobile Content : Transcoded Design

- Transcoded design
  - "Automagic"
  - Little effort
  - Content somewhat changed
  - Transcoder determines design
  - Little control
  - Out of the box services - Mobilesitegalore, Winksite, Google Mobile Sites
    - Examples: Fremont
    - C.O.D. Library mobile OPAC search

Mobile Content: Universal Design

- Universal design
    - Up-front effort
    - Content unchanged across platforms
    - Device determines design
    - More control

Mobile Content: Universal Design

- ## Universal design
  - Comply with Web standards
  - Separate content from presentation (CSS)
  - Use semantic markup
  - Provide text alternatives to images and multimedia

- ## Design "degrades gracefully" across platforms
  - Content usable in "standard" browsers, mobile devices, voice browsers, etc.
  - Can enhance accessibility

Mobile Content : Mobile Design

- Mobile design
  - Up-front effort; possible ongoing effort
  - Content optimized for mobile
    - Concise, single-purpose, spatial, etc.
  - Designer/content-creators determine design
    - <div class="handheld_only">
    - <a href="tel:+##########">
  - Most control
   - But what's your target device?
  - Can enhance accessibility

SMS (text messages)

3 major choices for reading and responding to text messages:

1. Use a free instant messaging client as an intermediary (AIM, Google Voice).

2. Use a fee-based intermediary tool (Text a Librarian, LibraryH3lp, MyInfoquest, Shoutbomb)

3. Subscribe to your own mobile device plan, and use a mobile device to answer texted questions

The AIM Option

- AIM (America On-Line Instant Messaging) tool. Free to create a screename account.

- Patrons dial 265010 from their mobile device, and type your screename, a colon, and their question.

- Respond directly to text questions as you would a IM chat.
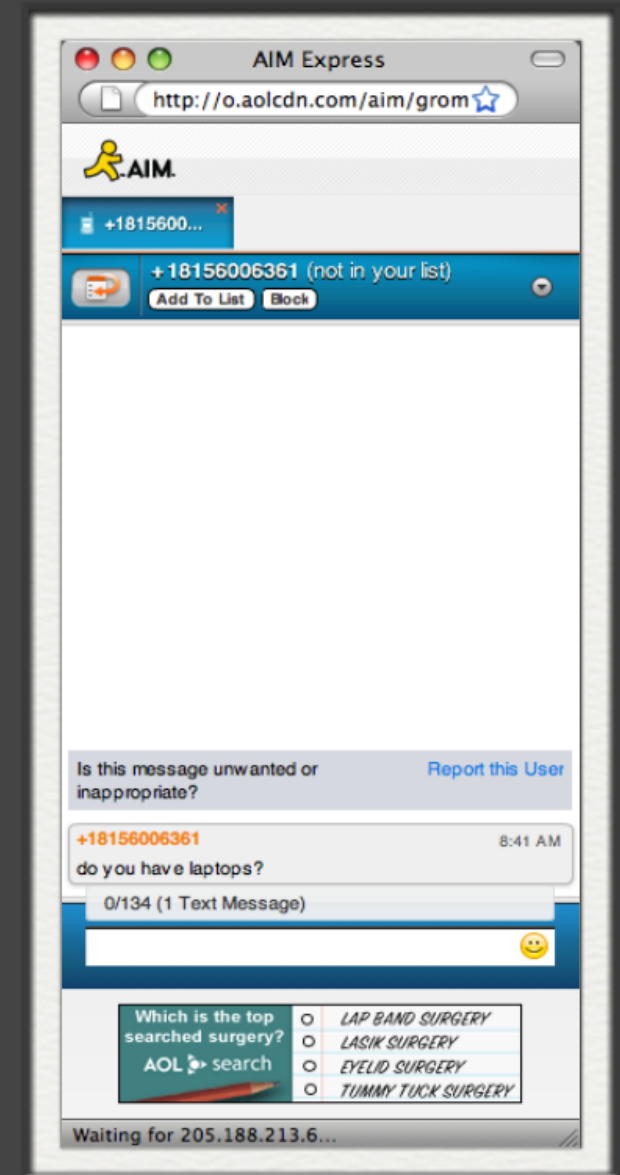
Issues surrounding Texting support

How do I send a text/SMS message to the reference desk librarian?
Each phone will be different, but start by entering the text/SMS section of your mobile phone:

- Type **265010** for the number the message should be sent to
- In the message section, type "**texteclib:**" (lose the quotes, but don't forget the colon)
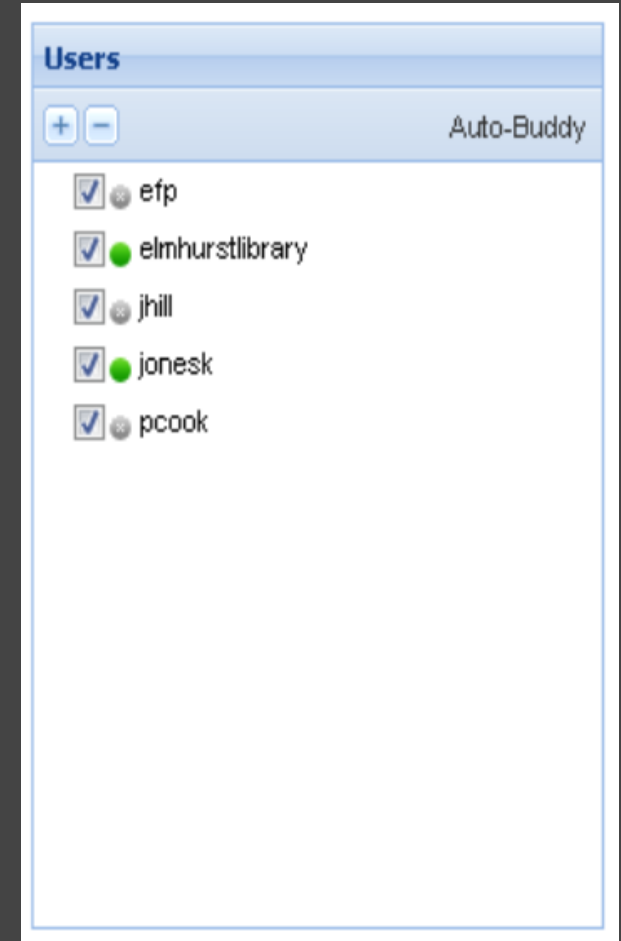- Type your question after the colon

- Free tools can disappear at any time

- You need to market the service

- You need to identify and answer text questions quickly (nature of medium) and with brevity (screen size limitations)

- Funneling effect of IM/SMS traffic (most tools allow only 1 "responder" at a time)
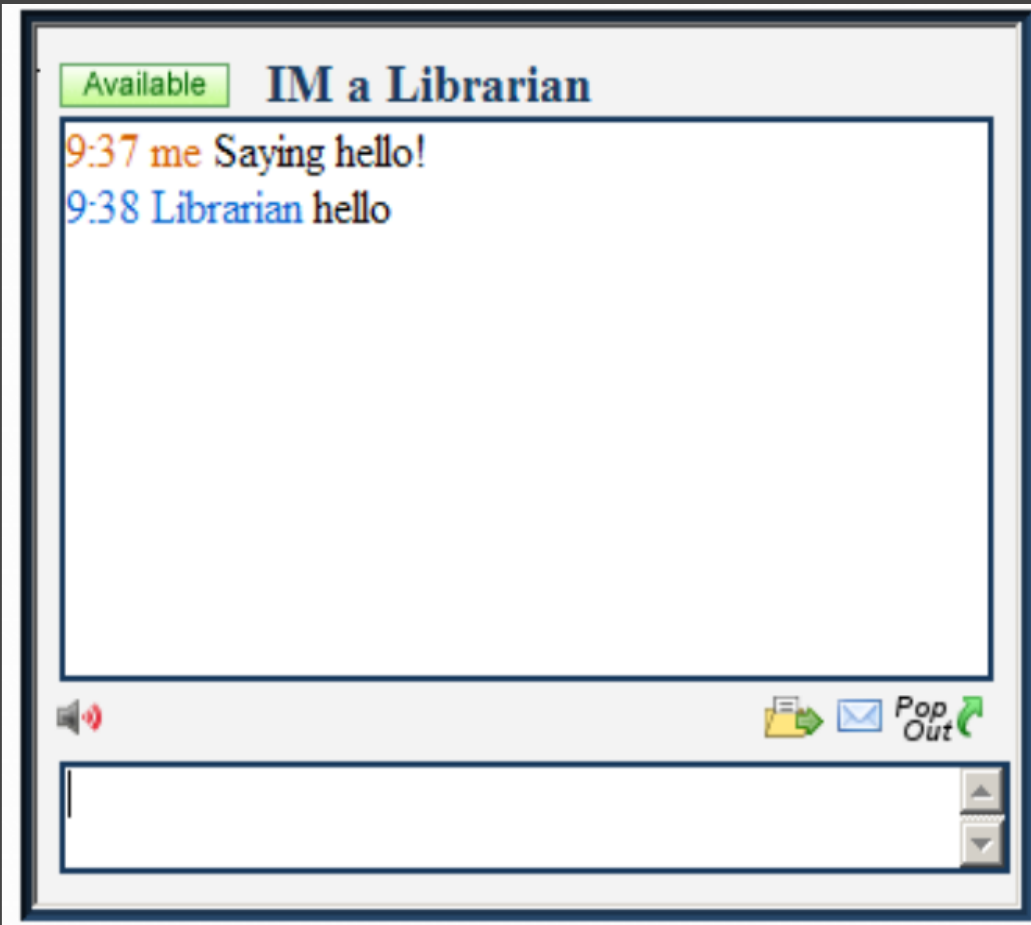
Problematic SMS/IM reference model
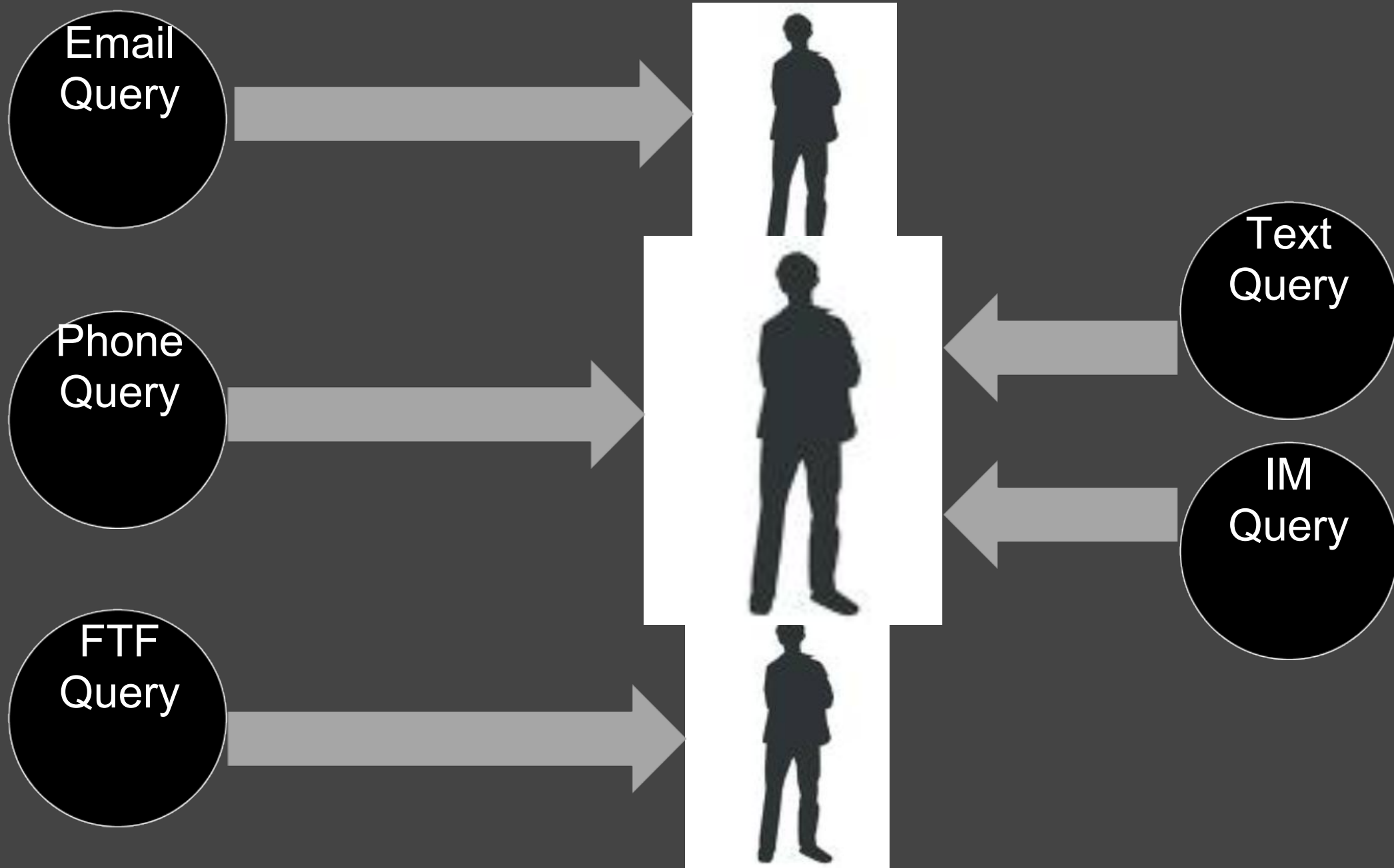
LibraryH3lp and Text a Librarian

- [TextaLibrarian](#) and [LibraryH3lp](#) (fee services) are tools that enable IM and SMS *queuing.*

- Queuing is the future for mobile devices...several users can respond to a single texted question. (1st responder "wins")

- Minimizes the funnel effect

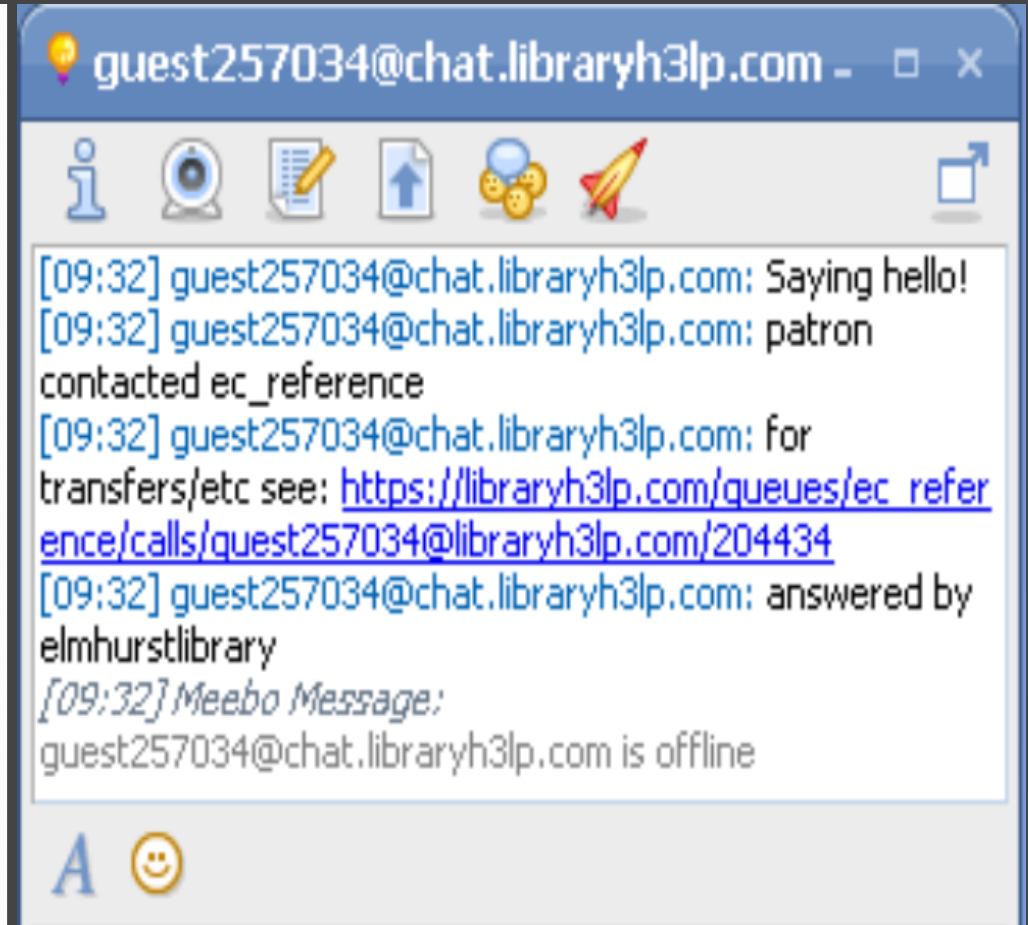- See also: Altarama/MyInfoQuest, [Velti](#)

Patron side

Library side

IM a Librarian — Available

9:37 me Saying hello!
9:38 Librarian hello

guest257034@chat.libraryh3lp.com

[09:32] guest257034@chat.libraryh3lp.com: Saying hello!
[09:32] guest257034@chat.libraryh3lp.com: patron contacted ec_reference
[09:32] guest257034@chat.libraryh3lp.com: for transfers/etc see: https://libraryh3lp.com/queues/ec_reference/calls/guest257034@libraryh3lp.com/204434
[09:32] guest257034@chat.libraryh3lp.com: answered by elmhurstlibrary
[09:32] Meebo Message:
guest257034@chat.libraryh3lp.com is offline

(Patron IMing in library website chat box or texting w/mobile device)

(view of Staff member logged in to chat client)

Google Voice- New Player

- Free service that allows you to aggregate several phones under 1 Google number.

- Number is also a direct SMS portal- can receive SMS traffic and <u>forward to email</u>.

- LibraryH3lp.com can pull Google Voice messages, so they appear as IMs.

Shoutbomb SMS Alerts

- Holds, Overdues, Courtesy Notices, and Renewals

- Supplement to email or phone notices

- Single point of access for other library services

- Minimize use of keywords and shortcodes

Text SIGNUP to
skokie@shoutbomb.com

The Shoutbomb Gateway

- Granted Shoutbomb tunnel access through Millennium

- Holds/Courtesy/Overdue reports generated daily

- Process automated using TCL script

- Files sent to Shoutbomb using SFTP

- Report resolved against list of opted-in patrons

- Records stored for 5 days and deleted

- Uses XMPP protocol for linkage with LibraryH3lp

Implementation, Training, Support

- Organizational buy-in
- Staff training up-front and ongoing
  - Awareness of and practice with multiple devices
- Marketing must be built into overall plan

Marketing and Promotion

- Newsletter

- Signage

- Website

- Moo Cards

- Brochure

- Lobby Card

- Blog posts

- Facebook advertising

- Twitter

Marketing and Promotion

- Newsletter
- Signage
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- Moo Cards
- Brochure
- Lobby Card
- Blog posts
- Facebook ads
- Twitter

GO MOBILE
m.codlibrary.org

m.codlibrary.org

- Text/IM the libary
- Search the collection
- Read news & events
- View hours & closings

COLLEGE of DuPAGE
Library

Reference: (630) 942-3364
Circulation: (630) 942-2106

Creating a Mobile-Friendly Atmosphere

Polite
cell phone
use permitted

? Where ?

1st Floor: Lobbies
2nd Floor: By stairs
and in study rooms
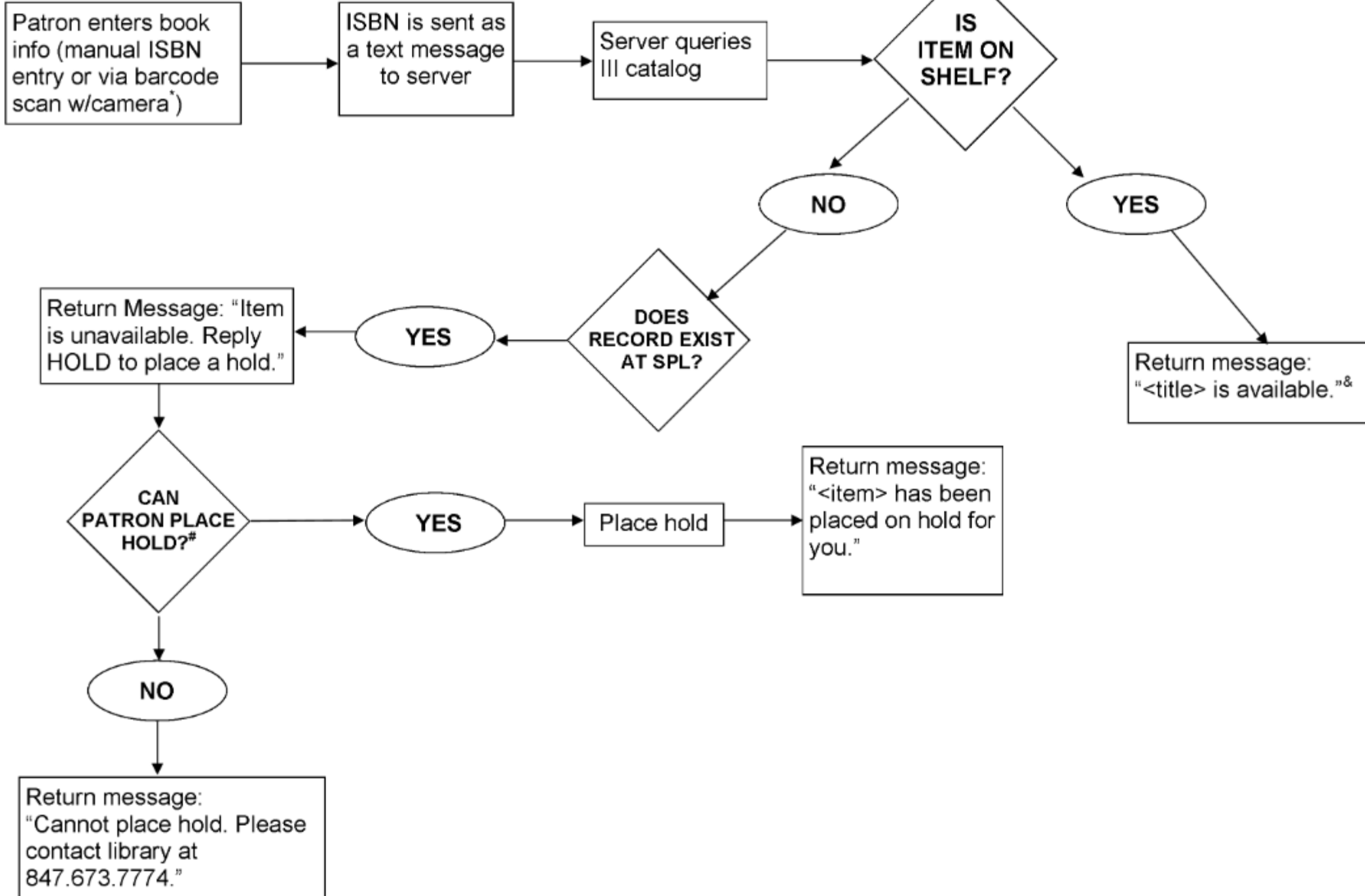
Turn ringers off

Respect your
neighbors

Skokie Public Library

(Hugovk, via Flickr)

Future of Mobile Tools & Technology

- Possibly more extensive deployment of queuing tools for communication
- Possibly LESS mobile website design
- Google Wave
- Focus on meeting specific needs of your library users -> App driven
- Seamlessness - integrating with other modes of online communication

SMS Shelf Check

Patron enters book info (manual ISBN entry or via barcode scan w/camera*) → ISBN is sent as a text message to server → Server queries III catalog → **IS ITEM ON SHELF?**

IS ITEM ON SHELF?
- **NO** → **DOES RECORD EXIST AT SPL?**
- **YES** → Return message: "<title> is available."&

DOES RECORD EXIST AT SPL?
- **YES** → Return Message: "Item is unavailable. Reply HOLD to place a hold."

Return Message: "Item is unavailable. Reply HOLD to place a hold." → **CAN PATRON PLACE HOLD?#**

CAN PATRON PLACE HOLD?#
- **YES** → Place hold → Return message: "<item> has been placed on hold for you."
- **NO** → Return message: "Cannot place hold. Please contact library at 847.673.7774."

QR Codes

Make your own QR codes at Snappr

(photo credit: Michael Stephens)

Augmented Reality (AR)

Nearest Subway iPhone App by AcrossAir

Any Questions?

Thank You!
delicious.com/tgreenwalt/handheld