NLST – DS1: Digitizing Local History

As libraries look for new opportunities to deliver information to their communities, as well as highlight their unique resources, many are exploring ways to make local history collections available digitally. These projects entail scanning and archiving photographs and other historical documents held by the library or other community members, as well as making them publicly available on the Internet (where copyright allows). Digitization initiatives accomplish several purposes:

- Archiving and protecting unique collections, while simultaneously making those collections accessible to a broader range of users.¹
- Investing community members in a collaborative partnership many libraries involve local history organizations, museums, tourism boards, local college staff and interns, community foundations, and other community groups at all levels of the process, from collecting materials, to the nuts-and-bolts technical aspects, to promoting the availability of the new collections.²

- JCPL should identify community partners whose mission supports digital history projects and share resources where appropriate.
- JCPL should identify unique holdings that can be safely archived in digital form.
- Staff and/or interns will need to be trained on the process and copyright constrictions.

¹ Chen, M. (2011). Libraries as Curators of Local History: Using Digitization to Cultivate Communal Memory. Retrieved from: http://ntxlibpartners.org/node/214

² Huwe, T. K. (2011). Building Digital Libraries. Involving the Community in Digitization. *Computers In Libraries*, *31*(1), 21-23.

NLST – DS2: Supporting Online Education

Distance education and online learning have taken huge strides in the last five years. As the web matures, traditional college becomes more expensive, and the job market becomes more competitive, learners of all types are turning to the Internet to acquire certification, higher education credits, and professional & vocational skills that used to be solely the domain of the traditional classroom. For the 2007-2008 academic year, 20% of all undergraduates were enrolled in at least one class via distance education, while 4% of undergraduates were enrolled in a program taught entirely through distance education.³

Much of this learning still takes place within the pay-for-credits structure of the university system. Public and private universities offer online courses that supplement their standard course fare. These students may live anywhere from 10 to 1000 miles away from their school's campus, and they may look to their public library to offer services normally provided by the university library (as well as a writing lab and technology services department).⁴

- Adult librarians should be educated on best resources to assist these students, common e-education platforms used in distance education classes, and core skills and knowledge expected of undergraduate students.
- Where possible, JCPL should liaise with distance education programs popular in the community to ensure library resources are useful and appropriate for students.
- The need for test proctoring could rise; JCPL proctoring services could be marketed to the public.
- Where practical, JCPL should make space available for distance education students for exams, video conferencing, and collaborative learning.

³ National Center for Education Statistics. (2011). *Learning at a Distance: Undergraduate Enrollment in Distance Education Courses and Degree Programs* (NCES Publication No. 2012154). Washington, DC

⁴ Farkas, M. (2007, October 17). Online learning and its impact on public libraries. [Web log post]. Retrieved from: http://meredith.wolfwater.com/wordpress/2007/10/17/online-learning-and-its-impact-on-public-libraries/

NLST - DS3: Creating a Mobile Web

The next evolution of the web will be portable. Internet-ready mobile devices such as Smartphones and tablets are becoming more pervasive and popular; 13% of global Internet traffic now comes from mobile devices, compared to just 1% three years ago. Mobile Internet traffic may still be a minority, but adoption rates indicate it may not stay that way for long. Websites designed for desktop and laptop PC monitors can prove challenging to navigate on the smaller mobile screen. Ignoring mobile is no longer an option for organizations that hope to reach users via the Internet; indeed, some are going so far as to adopt a "mobile-first" strategy.

Mobile strategies can vary depending on the needs and resources of the organization. One option is creating a branded app that users can download and install on their device. Another involves designing a separate mobile website that offers core services in a small-screen, touch-friendly interface. Mobile users can be given a separate URL to access the website, or be automatically redirected to the mobile site based on their device or screen size.

- JCPL should look into strategies for creating a mobile version or an app for patron use.
- JCPL should also monitor mobile adoption in the community by observing website analytics for mobile traffic trends.

⁵ Meeker, M. (2012) *Internet Trends* [PowerPoint slides]. Retrieved from Slideshare website: http://www.slideshare.net/kleinerperkins/2012-kpcb-internet-trends-yearend-update#btnPrevious
⁶ Google's New Rule: Mobile First. (2010, February 16). *PC Magazine Online*. Retrieved from http://go.galegroup.com/ps/i.do?id=GALE%7CA219077772&v=2.1&u=jcli frank&it=r&p=ITOF&sw=w

NLST - DS4: Assisting Self-Publishing & Micro-Publishing Authors

Recent developments in self-publishing and micro-publishing have made it easier than ever for writers to publish projects of all shapes and sizes in affordable, professional-looking formats, both print and digital. Some libraries are finding roles in this process. This may be as simple as bringing in self-published authors for instructional programming and providing resources to help writers navigate the complicated process of publishing, promoting and selling their self-published book. Some libraries are getting further involved in the process, partnering with self-publishing services or even purchasing equipment capable of printing and binding books onsite.⁷

Not every self-publisher is looking for a best seller. Micro-publishing is printon-demand self-publishing; examples can include family histories and student projects. These writers usually aren't interested in promoting or selling their book, just the mechanics of getting it ready for publication, and getting the copies in their hands.⁸

- Librarians should be familiar with the major self-publishing services, as well as common warning signs for identifying fraudulent or otherwise deceptive services.
- JCPL should keep in contact with local self-published authors who may be willing to offer programming or other instruction in the self-publishing process.

⁷ Koerber, J. (2012, 1 October). *The Makings of Maker Spaces, Part 2: Espress Yourself.* Retrieved from: http://www.thedigitalshift.com/2012/10/public-services/the-makings-of-maker-spaces-part-2-espress-yourself/

Retrieved from: http://walt.lishost.org/2012/01/the-librarians-guide-to-micropublishing-get-it/

NLST – DS5: Enabling Content Creation with Media Labs

Libraries have always provided media for patrons to consume – starting with print books and periodicals, and over time adding music, video and electronic resources. With the increased availability of affordable, easy-touse technology, more libraries are finding ways to help patrons create media as well, sometimes by circulating the tools outside the library, and sometimes by providing special areas within the library where patrons can have access to both the technology and staff expertise.9

These resources support students of all ages, whose school assignments more frequently involve the production of multimedia and other forms of communication. Transliteracy, a relatively new concept which acknowledges the importance of different communication platforms, is gaining traction in library and education literature. 10 Just as the library has provided word processing and presentation software in the past, we may be expected to provide multimedia editing capabilities to support the students of tomorrow.

- Where practical, JCPL could find available space to create in-house media labs, providing equipment for patrons to record, film, and edit media projects.
- Library staff should be conversant in the tools and software used in rich media creation (video, audio, etc.), particularly as it is commonly used in school assignments.
- JCPL could look into partnerships with local organizations that provide media labs.

⁹ Jacobsen, M. & Anthony, C. (2011, 8 November). *Build Your Own Digital Media Lab.* Retrieved from: http://www.thedigitalshift.com/2011/11/media/build-your-own-digital-media-lab/

10 Jaeger, P. (2011). Transliteracy—New Library Lingo And What It Means For Instruction. Library

Media Connection, 30(2), 44-47.

NLST – DS6: Gaming and Gamification in the Library

In today's society there are more venues that provide both entertainment and education than ever before. As a result, organizations must focus on marketing resources to attract and retain users' attention. Users want to be entertained and engaged at every step of the process. Successful organizations will be as enticing, engaging, and rewarding as possible.

Gamification is the technique of incorporating game-like elements into nongame interactions to make them more fun.¹¹ This type of interaction provides an incentive to patrons to continue interacting, i.e. use the library more frequently.¹² Some examples of gamification include:

- Collecting badges for completing achievements
- Earning points to cash in on virtual prizes
- Frequent flyer/buyer programs

- JCPL should explore how other libraries or organizations are using gamification techniques.
- Staff members should think about which existing programs/processes could best benefit from the addition of gamification (for example, Summer Reading), or if any new program/process should be added.
- IT requirements would have to be explored.

¹¹ Gamification.org (2012) What is Gamification? | Gamification.org. [online] Available at: http://gamification.org/wiki/Gamification [Accessed: 5 Dec 2012].

¹² Libraryjournal.com (1872) *Games, Gamers, & Gaming: Gamification and Libraries*. [online] Available at: http://www.libraryjournal.com/lj/ljinprintcurrentissue/888832-403/games-gaming-gamification.html.csp [Accessed: 5 Dec 2012].

NLST - DS7: Communicating with Patrons via SMS

Communicating with others through SMS or text messaging has been more popular than communicating by voice phone in the United States since 2008¹³, and the shift from talking to texting has continued to gain ground. "The number of text messages sent monthly in the U.S. exploded from 14 billion in 2000 to 188 billion in 2010, according to a Pew Institute survey, and the trend shows no signs of abating."¹⁴

Many libraries are already communicating with patrons via text message. With simple tools they are able to notify patrons of:

- Available holds
- Overdue items
- Fines added to accounts

In addition, patrons can use SMS-based services to access other account features, including renewals, lists of items available to check out or on hold, and other account notifications.

- JCPL should research vendors that offer SMS communication services for libraries, with special attention paid to interoperability with existing technological infrastructure.
- A pilot program could be offered at one library location, with a limited feature set, with expanded functionality offered over time.

¹³ CNET (2008) *Americans text more than they talk*. [online] Available at: http://news.cnet.com/8301-1035 3-10048257-94.html [Accessed: 6 Dec 2012].

We never talk any more: The problem with text messaging CNN (2012) We never talk any more: The problem with text messaging. [online] Available at: http://www.cnn.com/2012/08/31/tech/mobile/problem-text-messaging-oms/index.html [Accessed: 6 Dec 2012].

NLST - DS8: Streaming and Downloading Multimedia Content

DVD sales in the home market have been steadily decreasing as viewers shift from purchasing physical copies of movies and music to streaming or downloading the content from sources like Netflix, iTunes, Amazon and others. While patrons may not yet get the majority of their movies and music online, more people do every day.

DVD circulation figures in public libraries have yet to reflect this downward trend, but libraries are preparing for what may be an inevitable shift. Several vendors are offering public libraries services to provide patrons with streaming or downloadable digital media. While the catalogs offered do not yet compare with offerings to individual consumers, these services have the potential to take off in popularity and usage, much as e-book technology did¹⁵.

- Physical media circulation trends should continue to be monitored closely.
- JCPL should research vendors offering streaming and downloading media services to libraries, with special attention paid to selection, pricing, and accessibility/platform.

¹⁵ Media Spotlight: DVD Circ Holds Steady, For Now - The Digital Shift Enis, M. (2012) *Media Spotlight: DVD Circ Holds Steady, For Now - The Digital Shift*. [online] Available at: http://www.thedigitalshift.com/2012/11/media/media-spotlight-dvd-circ-holds-steady-for-now/[Accessed: 6 Dec 2012].

NLST-DS9: Providing Innovative Virtual Reference Services

In response to the growth of text messaging (SMS) options and easy access to online information and research materials, more patrons are expecting immediate and constant access to their public libraries as well. According to RUSA guidelines, libraries should "integrate virtual reference services so that they become a natural part of the institution's reference services."16 Users are becoming more mobile, and librarians should take this opportunity to capitalize on the core values of collaboration, access, and relationships. Virtual reference effectively extends service hours and makes utilizing library resources a more convenient option that increases the customer base and aoodwill. 17

Examples include:

- Ask?Away Illinois online service, working in conjunction with the 24/7 Reference Cooperative, that gives users the chance to interact with a professional librarian in real time all day every day. 18
- Text-a-Librarian services using SMS messages.
- Connecting with patrons via social media such as Facebook and Twitter.
- Other IM (instant messaging) or chat services, including sites such as Tutor.com.
- Using VoIP services such as Skype for face-to-face interaction.

- Evaluate and revitalize reference transactions based on current user habits and interests to stay relevant.
- Determine what percentage of the community uses mobile technology on a frequent basis.

¹⁶ Ala.org, "Guidelines for Implementing and Maintaining Virtual Reference Services". Accessed December 5, 2012. Available

at.http://www.ala.org/rusa/sites/ala.org.rusa/files/content/resources/guidelines/virtual-reference-

se.pdf

17 Julie Strange, "Is Virtual Reference Worth the Effort?". Accessed December 5, 2012. Available at

¹⁸ OCLC.org, "Who? What? Where? Ask?Away Illinois librarians can be heroes to their users". Accessed December 5, 2012. Available at

http://www.oclc.org/services/brochures/212426usc B questionpoint illinois state.pdf

NLST - DS10: Using Open Source & Cloud Software

Major advances in software technologies have created more options and unique solutions for libraries and patrons in just a few short years. Reduced library budgets and the cost of traditional software packages have prompted alternatives that include cheaper and more reliable customizable applications. "Cloud computing" refers to software that is stored/delivered through the Internet. A free product such as Google Drive allows users more flexibility and collaboration when creating documents.¹⁹

New types of software have become an integral component in the rapidly changing library world, and the options may be classified as "no-cost" (freeware), "low-cost" or "open source" which is "available to *anyone* to examine, evaluate, and adapt."²⁰ Implementing open source software is not without its drawbacks (labor-intensive initially)²¹ and some may be limited in usage, but they offer great opportunities to create reference or instructional materials for patrons using free video/audio software; educate patrons about these new tools as an extension of conventional "computer classes;" build simple websites or blogs, which can be managed by staff and not outside agencies; create digital repositories, content or library management systems, and expand online storage.²²

- Library staff members should consider free, cloud-based options when making software purchasing decisions.
- JCPL staff members could use cloud software internally to collaborate on committee/taskforce projects or to save network storage space.
- Since these sites are getting more common, staff members should be trained to answer patrons' questions and be aware of privacy, security, and data integrity concerns.

¹⁹ Kulikowski, Leah, "Going Google". Accessed December 7, 2012. Available at http://arsl.info/wp-content/uploads/2012/09/Cheat-Sheet-Getting-Started-with-Google-Drive.pdf

²⁰ Wikibooks.org, "Open Source". Accessed December 7, 2012. Available at http://en.wikibooks.org/wiki/Open Source#Free Software vs. Open Source software Rapp, David, "Open Source Reality Check". Accessed December 7, 2012. Available at

http://www.libraryjournal.com/lj/home/891350-264/open_source_reality_check.html.csp 22 Lyrasis Technology Services, "Free/Open Software for Libraries". Accessed December 7, 2012. Available at http://foss4lib.org/

NLST - DS11: Evolving Frameworks for eBook Ownership

Over the past couple of years, the eBook market has exploded, exposing a landmine of issues pertaining to accessibility, cost, copyright, piracy and Digital Rights Management (DRM).²³ Libraries and publishers now have a tenuous relationship, subject to dramatic changes in policy and price increases, hitting small, rural libraries and schools especially hard.²⁴ Five major publishers sell eBooks to public libraries with restrictions and one continues to refuse to sell to libraries at all, and mergers will pose other risks. Price-fixing lawsuits and disputes with other eBook vendors with competing formats, such as Amazon, and competitive eBook platforms with their own agendas, complicate matters more. This shaky connection has been/will continue to be a hot topic in national conferences, workshops and webinars. Advances in technology may overwhelm concerns of privacy or ownership, evidenced by the creation of the DIY robotic book scanner²⁵ or the growing DRM-free eBook market²⁶.

- Expect more changes and shifts in access and availability for library patrons in the next few years.
- Public *perception* of the library's role as an eBook provider or leader may become diminished or increase depending on publisher policies.
- Provide current, accurate information to patrons about library eBook availability so they can make informed decisions when purchasing devices and media, and also better appreciate library decision making.

²³ Wikipedia.org, "Digital Rights Managment". Accessed December 7, 2012. Available at http://en.wikipedia.org/wiki/Digital rights management

²⁴ Harris, Christopher, "A Call for Fair Ebook Pricing". *Library Journal* Accessed December 7, 2012. Available at http://www.thedigitalshift.com/2012/11/opinion/the-next-big-thing/a-call-for-fair-ebook-pricing-site-based-pricing-has-small-schools-overcharged/
²⁵ Tennant, Roy, "A \$1500 DIY Robotic Book Scanner". *Library Journal* Accessed December 7, 2012.

Available at http://www.thedigitalshift.com/2012/11/roy-tennant-digital-libraries/a-1500-diy-robotic-book-scanner/

Rosenblatt, Bill, "Library E-Lending with DRM-Free E-Books?" Accessed December 7, 2012. Available at http://copyrightandtechnology.com/2012/05/06/library-e-lending-with-drm-free-e-books/

NLST – DS13: Embracing the Next Generation of Personal Electronics

The last decade has seen a sea change in the use and pervasiveness of advanced personal electronics by all sectors of society. This wave of innovation has mostly been led by Apple, who popularized the Smartphone with the release of the iPhone in 2007, and then the tablet computer with the launch of the iPad in 2010. Meanwhile, Amazon's Kindle started a renaissance for the dedicated eReader in 2007.

The success of these devices has led other device and software manufacturers to enter the market, driving prices down and increasing the rate of adoption. Over 125 million people in the United States now have a Smartphone²⁷, and 38% of US consumers own a tablet, with that rate projected to rise dramatically in the future.²⁸

Needless to say, the popularity of these devices presents both challenges and opportunities for libraries. As the user base expands beyond the techsavvy early adopters, patrons look to the library for help in either selecting a device or using one they have purchased. The public library successfully positioned itself as a place for free training and access to resources pertaining to computers and the Internet; it is only natural that we continue those services. The most recent set of benchmarks from the Edge initiative includes one-on-one help for patron-owned devices.²⁹

- Public service staff should maintain awareness of trends in personal electronic technology.
- With a wide variety of hardware and software available, staff should share information and knowledge as much as possible.
- Collections and programming should stay up-to-date with patron technology needs.

²⁷ comScore, Inc. (2013). comScore Reports December 2012 U.S. Smartphone Subscriber Market Share. [Press release]. Retrieved from

http://www.comscore.com/Insights/Press_Releases/2013/2/comScore_Reports_December_2012_U.S.

Smartphone_Subscriber_Market_Share

28 Consumer Electronics Association. (2013). Hunger for Tablets Continues to Grow, CEA Research Finds. [Blog post]. Retrieved from: http://blog.ce.org/index.php/2013/01/30/hunger-for-tabletscontinues-to-grow-cea-research-finds/

²⁹ Edge Foundation. (2013). *Benchmarks v 1.0.* Retrieved from: http://www.libraryedge.org/community-value--benchmarks-1--2--and-3-pages-61.php

NLST - DS12: Changing Trends in Patron Privacy

In the past libraries, JCPL included, have always been staunch supporters of patron privacy keeping no record of what a patron has read. However, with recent trends in social media many libraries are beginning to re-think their position on this issue.³⁰

Many younger patrons have grown up with social media and online purchases through Facebook, Twitter and Amazon. They are accustomed to sharing details of their lives with audiences that range from close friends to only people they know on the Internet. With this change, they have come to expect a certain level of customization in their use of these platforms. For instance, Amazon and Barnes and Noble, based on previous purchases and browsing history, will suggest items that are similar to those or were purchased along with whatever item they are considering.

Harvard University recently tried to do something similar. They would send a tweet every time a book was checked out, but wouldn't specify who checked it out. Citing privacy concerns they shut it down. But, that doesn't mean that something similar to that should not be done. Some tweaking, and potentially the ability to opt into the service, may make this a more feasible option for any library.

- Foster an open dialogue with library patrons about their privacy expectations and rights as it pertains to library services.
- Be mindful of relevant state law as it applies to library privacy.
- Make adjustments to services where value to patrons can be demonstrated, and legal framework allows.

³⁰ Parry, Marc. "As Libraries Go Digital, Sharing of Data Is at Odds With Tradition of Privacy." *Chronicle.com*. The Chronicle of Higher Education, 5 Nov. 2012. Web. 30 Nov. 2012. http://chronicle.com/article/As-Libraries-Go-Digital/135514/.