TRENDS, BEST PRACTICES, ISSUES AND INNOVATIONS IN LIBRARY SERVICE:

WHAT'S AHEAD FOR SAN ANTONIO PUBLIC LIBRARY?

This overview, culled from multiple sources including scholarly and popular articles, interviews, websites, blogs, and on-site visits, provides a national context for the San Antonio Public Library (SAPL) planning process. Prepared by the seven members of the consulting team, this document reviews demographic, lifestyle, professional practice, and technology developments which will be considered as planning proceeds.

This overview does not purport to be comprehensive or specific to SAPL, but is designed to indicate trends, issues, best practices, and innovations that should inform the course of planning, with particular emphasis on the deliberations of the planning work groups. Board members and the senior management team may find this document will inspire creative ideas and opportunities for improving service to customers. This document may also be useful as an educational publication for new trustees and for sharing with staff as professional development is planned. It can become the basis of presentations to elected officials, Friends, and other stakeholders and as an introduction to and rationale for strategies put forth in the new plan.

A summary of this research will be presented to the planning team, the task force, and the Board of Trustees to assist them in placing SAPL's challenges in a more global context.

Implicit is the understanding that new strategies for library services in San Antonio will reflect a more close reading of San Antonio's demographics, current programs and practices, staffing, facilities, growth patterns, socio-cultural-economic circumstances, and decisions made by the Library's planning work groups.

DEMOGRAPHICS AND LIFESTYLE

Aging Populations

America is getting older! The median age reached 36.8 in 2008, up 1.5 years since 2000. There were 38.9 million people 65 and older in 2008, comprising 12.8 percent of the total population. Of this group, 5.7 million were 85 years old and older. (In 2000, 12.4 percent of the total population was 65 and older.)

American Community Survey Projections 2005-2009 indicate that more than 10 percent of San Antonio's population is 65+, a percentage slighter lower than the general population. Nevertheless, because the City has a substantial number of residents who have lived in their homes for more than 30 years, it is not unreasonable to expect that many of these individuals will continue to age in place and that the Library and all other service providers will have to adjust to accommodating to the needs of a growing number of older residents.

As the population ages, women outnumber men (Multiple research studies reveal women are significantly more likely to use public library services than are men). For those under age 18, 51.2 percent are male, but the percentage declines to 42.4 percent for the population age 65 and older and to just 32.6 percent for the population 85 and older. Women represent 50.7 percent of the total population.

Termed the "Gloomiest Generation" by Pew Research Institute, Baby Boomers (individuals born between 1946 and 1964) who began their lives in the postwar economic good times are now facing unexpected late-career unemployment, rising health costs, declining retirement nest eggs, devalued homes, higher college costs and 'boomerang' 20-something kids returning home. In times of economic uncertainties, they are returning to their comfort zones, including libraries.

For many Boomers, the public library was both a refuge and an entrée to the wider world of careers and culture during childhood, young adulthood and later when they were raising their own families. Boomers continue to expect their libraries to 'be there' for them as their needs change. As a result, every facet of public library service—facilities, technology, staffing, marketing, customer service, etc.—will be affected by the preferences of this growing, vocal, and politically influential population segment.

Libraries across the country are challenged to create programs, services, collections, and adaptive technologies tailored to the highly fragmented market—"no-gos" (largely in assisted living and/or under nursing care), "slow-gos" (often still at home or in assisted living and still engaged in community life), and "go-gos" (among the 191.2 million workingage adults age 18 to 64 in 2008, representing 62.9 percent of the total population, an increase of 17.1 million from 2000).

See also:

U.S. Census Bureau. American Fact Finder. 2005-2009 American Community Survey Five Year Estimate.



Immigration and Diversity

America's ethnicity is changing quickly and dramatically. The nation's overall minority population on July 1, 2008, was 104.6 million, or 34 percent of the total population. Minorities, defined as any group other than single-race, non-Hispanic white, increased by 2.3 percent from 2007 to 2008. 2010. Minority business start-ups are increasing at twice the national rate, and immigration issues are stressing politics and government funding in border states.

Overall, the ethnic composition of the country is increasingly more complex with immigrants coming from a greater number of countries than ever before. While the emergence of ethnic communities was formerly limited to large metro areas along the coastline or borders, immigrant communities are now growing in smaller towns, and in states which, traditionally, had not been culturally diverse.

The largest and fastest-growing minority group is Hispanics, who reached 46.9 million in 2008, up by 3.2 percent from 2007. In 2008, nearly one in six U.S. residents was Hispanic.

The U.S. Census Bureau estimates show that nearly half (47 percent) of the nation's children younger than five were a minority in 2008, with 25 percent being Hispanic. For all children under 18, 44 percent were minority and 22 percent were Hispanic. Preliminary 2010 Census data suggests that overall, even though the birth rate has declined because of the economic downturn, the birth rate for Hispanics has not decreased.

The Census Bureau estimates the number of Asians at 15.5 million in 2008. Asians were the second fastest-growing minority group from 2007 to 2008, increasing by 2.7 percent.

There were 5.2 million people who were of two or more races in 2008, up 3.4 percent from 2007.

Libraries, like many social service agencies, are committed to public service in the face of evident community discord on services to illegal immigrants. Libraries currently focus on friendly, confidential service and information on immigration processes, community assistance, and ESL resources that have proven benefit for users.

However, demand for library services, especially ESL classes, far outstrips available resources and is stressing library resources. Meanwhile, bilingual and minority library staffs continue to be in short supply for many communities, and the changes call for increases in multi-lingual collections, programming, and marketing and communications.

See also:

Austin Public Library, New Immigrants Project, http://www.austinlibrary.com/newip (2010).

Diana Miranda_Murillo, *New Immigrants Centers at the Austin Public Library [Presentation]*, http://www.slideshare.net/bonniesue/new-immigrants-center-at-the-austin-public-library-presentation (Source 2006, Accessed: 2010).



Karen Fisher, Joan Durrance and Marian Hinton, *Information Grounds and the Use of Need-Based Services by Immigrants in Queens, New York: A Context-Based, Outcome Evaluation Approach*, http://onlinelibrary.wiley.com/doi/10.1002/asi.20019/full (2010). [Original Source: *Journal of the American Society for Information Science and Technology*, 55(8), pp. 754–766 (June 2004)].

Queens Library, *Citizenship and Immigrant Services*, http://www.queenslibrary.org/index.aspx?page_id=42 (2010).

Ragnar Audunson, "The Public Library as a Meeting-place in a Multicultural and Digital Context: The Necessity of Low-intensive Meeting-places," *Journal of Documentation*, 61:3 (2005): 429 – 441.

U.S. Citizenship and Immigration Services and Institute for Museum and Library Services, *Library Services for Immigrants: A Report on Current Practices*, http://www.uscis.gov/files/nativedocuments/G-1112.pdf (2006).

Info-Poverty Widens the Digital Divide

Exciting as the information explosion may be, individuals who lack the funds, ability, or training to own the most basic digital tools are missing out. The Gates Foundation estimates that 40 percent of Americans still lack Internet access at home. Elderly, disabled, and low-income populations in particular have limited access to the hardware and software necessary to ease and advance their lives. Meanwhile, many state and local government agencies and unemployment offices have trimmed budgets by moving customer interactions such as license and employment applications, unemployment claims, enrollment, and status-checks online at the very time when the unemployed are least able to afford technology.

Quite naturally and in line with previous economic downturns, the recession has dramatically increased public library use: in particular, computer use is at an all-time high because libraries offer free access to word processing, email, and the Internet not available elsewhere. Public libraries will continue to provide free computing labs for an extended period, especially as rapid technology and network changes will make it difficult for low-income individuals to keep pace.

This situation highlights the strain of serving populations with iPhones, laptops, and e-Readers versus serving those who lack basic personal computing access and skills. Funding limitations challenge libraries to balance provision of basic computer access against the cost of staying on top of the tech curve. Over time, libraries will have hard choices to make between providing more public terminals or servicing more advanced technologies.

See also:

Bill and Melinda Gates Foundation, http://www.gatesfoundation.org/libraries/Pages/united-states-libraries.aspx (2010).

Digital Divide Institute, http://www.digitaldivide.org/ (2010).

James R. Valadez and Richard Duran, "Redefining the Digital Divide: Beyond Access to Computers and the Internet," *High School Journal*, 90:3 (Feb/Mar2007): 31-44.

Jim Jansen, *Use of the internet in higher-income households*, Pew Internet and American Life Project, http://www.pewinternet.org/topics/digital-divide.aspx (24 November 2010).

Illiteracy and New Literacies

San Antonio has well-documented challenges with low literacy, and, in this respect, mirrors the nation. In 2009, the United States Department of Education released federal statistics indicating that more than 32 million adults had very low literacy skills, and, over time, more and more adults are functionally illiterate—between 1992 and 2003 of the 23 million people added to the U.S. population, almost 3.6 million were illiterate adults.

Reading and writing are now identified as only two skills among a variety of literacies that educators and libraries cite as essential for personal and career success. Libraries are at the forefront of a new educational trend to redefine "literacies" as capabilities in decoding visual, technology, financial, and health information and other basic life and work skills.

Libraries have well-established roles in supporting, teaching, and providing space and multi-media, low literacy, ESL, and instructional materials for tutoring and collaborating with literacy providers and advocates on family, intergenerational, and other literacy programs and community workforce development initiatives.

Through partnerships and coalitions (floating collections, cooperative programming, provision of meeting, tutoring, and study space, etc.), libraries extend their influence into the educational and social services realm and build a case for support by positioning themselves as "players" in workforce development.

See also:

Adult Literacy in America. U.S. Department of Education. National Center for Education Statistics. 2009

Pennsylvania Library Association, *Libraries and 21st Century Literacies Initiative: Leveraging the People's University.*

http://palibraries.org/displaycommon.cfm?an=1&subarticlenbr=356 (2010).

The George Lucas Educational Foundation: Edutopia, http://www.edutopia.org (2010).

The Verizon Foundation: Thinkfinty, http://www.thinkfinity.org (2010).

Early Childhood Literacy

Ongoing research in early childhood development repeatedly confirms the high value of early intervention and literacy services for children aged birth to five. Reading and related skill development activities can advance children's vocabulary and cognitive and social skills, and there is an average 12 percent return for each public dollar invested in early childhood services.

As a result of a baby-boomlet of the last decade, libraries can anticipate an increased demand for programs and materials for preschool age children, and can maximize their programs through collaborations with other agencies. Public libraries traditionally have offered story times and materials for preschoolers, and are now expanding innovative baby programs, outreach to daycares, and enhanced children's spaces.

Preschool services and family library use, always public library service strengths, continue to be "hot buttons" for grants and funding as educators and elected officials are prioritizing preschool and family-oriented programs. Programs geared to babies, outreach services to daycares, and enhanced children's spaces are expanding across the library world as the "the-earlier-the-better" mantra is applied to library services. At the same time, there is increasing pressure from funding sources to demonstrate a return on investment and assess progress toward goals.

Libraries cannot afford to become early childhood education centers, but focusing on multigenerational and family literacy programming can work to bring male users (an underserved market segment) back into the library and to engage ethnic populations. For this latter group in particular, family programming also offers an easy introduction to all the other services that libraries offer.

See also:

Arthur J. Rolnick and Rob Grunenwald, *Early Childhood Development on a Large Scale*, Federal Reserve Bank of Minneapolis, 2005.

http://www.minneapolisfed.org/publications_papers/pub_display.cfm?id=3279 (2010). [Original Source: *The Region: Banking and Policy Issues Magazine* (June 2005)].

Child Trends: Research to Improve Children's Lives, http://www.childtrends.org (2010).

National Association of Social Workers: *Kids and Families,* http://www.helpstartshere.org/kidsfamilies (2010).

The Annie E. Casey Foundation: *Helping vulnerable kids & families succeed,* http://www.aecf.org (2010).

THE STATE OF LIBRARIES

Economic Development and Community Building

Economic development funds have traditionally been allocated for projects such as sports venues, business complexes, retail districts, or recreational and tourism initiatives. However, from 2007-2010, three major studies—two by the Urban Libraries Council and one by the Fels Institute of Government at the University of Pennsylvania—have provided compelling evidence of the contributions public libraries make to economic development by supporting basic literacy, workforce development, and business development. By validating libraries' role as agents of economic development, these documents become persuasive arguments for more financial support.

The Fels Institute Study explored the relationship between public library services and local economic development from another ground breaking perspective. A Research Fellow at the Institute for Urban Research used a database of Philadelphia home sales and determined that the value of homes located within 0.25 miles of a public library increased on average by \$9,630 more than those located outside the 0.25-mile parameter. The research also calculated that the increased value of the home in close proximity to a library generated an additional \$18.5 million in property tax revenues.

City and urban planners are also paying more attention to the role of public libraries in community development. Wayne M. Senville, editor of *Planning Commissioners Journal*, toured public libraries across the United States to explore the value that libraries bring to their communities: "...not only do libraries provide valuable services for residents of all ages, incomes and ethnic backgrounds, but they can also inject a healthy dose of vitality into downtowns, main streets, and neighborhood centers...libraries in cities big and small are becoming dynamic places actively seeking to engage the community instead of simply providing a place to read or take out a book...libraries are expanding their mission."

Mayor Julian Castro of San Antonio is among the growing number of elected officials and economic development specialists who recognize the value of public libraries as economic development agents. In the Urban Libraries Council 2010 report, *Partners for the Future: Public Libraries and Local Governments Creating Sustainable Communities,* Mayor Castro noted, "Brainpower is the new currency of success in the 21st century. And libraries are often cities' best assets in building up the brainpower of the community so that we have folks who can handle the most technical jobs all over the globe."

Librarians will continue their attempts to align public library services with local, county, and state goals and aspirations. In this process, they will be called on to demonstrate the positive return on investment they deliver and to leverage new findings, such as the nationally publicized impact of summer reading programs on school district budgets.

See also:

Beata Bajaj, Carlos A. Manjarrez, and Jessica Cigna, *Making Cities Stronger: Public Library Contributions to Local Economic Development*, Urban Libraries Council, http://www.urbanlibraries.org (Source: January 2007, Accessed: 2010).

Penn Fels: Institute of Government, *Economic Value of The Free Library in Philadelphia*, http://www.freelibrary.org/about/Fels_Report.pdf (21 October 2010).

Urban Libraries Council, *Partners for the Future: Public Libraries and Local Governments Creating Sustainable Communities*, http://www.urbanlibraries.org (November 2010).

Wayne M. Senville, "Libraries Bring Value to Our Communities," *Planning Commissioners Journal* 75 (Summer 2009).

Trustee Development

For many years, library boards were composed of library lovers and more or less engaged political appointees—often capable, but not always effective as advocates or fund raisers. Now, more than ever, skilled, knowledgeable, well-connected, and generous trustees are critical to the health and success of any library, and their ability to generate good will and to communicate with one voice the library's value to the community is a critical element in repositioning libraries as critical public institutions.

Boards are becoming more effective in large part because of initiatives like the American Library Association's ALTAFF (Association of Library Trustees, Advocates, Friends, and Foundations) Trustee Academy which offers a suite of online courses to help library trustees become "exceptionally proficient" on behalf of their libraries.

Many states, through annual conferences and ongoing professional development workshops, have also provided more tools and training. The best boards recruit strategically, orient and train, lead advocacy initiatives and recognize their roles in leadership development, fundraising, adherence to state and local governing laws, self- and executive evaluation, succession, and strategic planning. They engage in long term strategic planning that is research-based and focuses not only on library card holders but also on individuals and groups who do not yet cross the library's threshold.

See also:

ALA ALTAFF Trustee Academy http://www.ala.org/ala/mgrps/divs/altaff/trustees/trustee_academy/index.cfm

Funding and Philanthropy

Recent economic challenges, and long-term cyclical changes in public funding, have found libraries examining long-held convictions about "free" library services. Serving the community's needs with restricted revenues has required new considerations of user fees for basic or enhanced computing, media, and programs. Trustees and staff are challenging assumptions about consumer preferences as they consider Redbox DVD services, reserves fees, and interlibrary loan shipping charges.

Public libraries are well-advised to heed the path of institutions of higher learning as colleges and universities have, of necessity, developed more sophisticated development structures to manage private philanthropic support. In an environment of dwindling public monies, only the largest libraries have proactively planned for the shifting funding paradigm. Instead, many libraries continue to rely on books sales, Friends-sponsored fundraisers, annual giving appeals, and occasional bequests to augment their budgets.

The transition to effective fundraisers has not been easy for even the most sophisticated boards as they seek to differentiate the relative importance and roles of annual giving, major giving, capital and endowment, and planning giving. They also struggle with assessing the appropriate balance of public and private funding (and not undermining advocacy for public funds by private fundraising efforts), the distinctive role of the Director in fundraising, and the governing relationships among Directors of the library, Board Members, and Friends groups.

Some libraries have sought start-up grants for philanthropic infrastructure development. Others simply hire a director of development and expect results. As these initiatives mature, boards look to outside counsel to establish the development function and to institutionalize prospect identification, engagement, solicitation, and stewardship.

See also:

American Library Association, Library Fund Raising: A Selected Annotated Bibliography, http://www.ala.org/ala/professionalresources/libfactsheets/alalibraryfactsheet24.cfm (2010).

Edwin Clay and Patricia Bangs, Entrepreneurs in the Public Library: Reinventing an Institution, http://findarticles.com/p/articles/mi_m1387/is_3_48/ai_63165618 (2010). [Original Source: Library Trends (Winter 2000)].

OCLC, From Awareness to Funding: A Study of Library Support in America, http://www.oclc.org/reports/funding/default.htm (Source: June 2008, Accessed: 2010).

The Chronicle of Philanthropy, http://philanthropy.com (2010).

Advocacy

The San Antonio Public Library has demonstrated its ability to forge a positive and productive working relationship with City government, as evidenced by the 2011 budget. Libraries across the country have not fared as well. Inadequate and unpredictable funding has resulted in diminished library services from New York to California. Jobs have been lost; hours, curtailed. Some libraries have suspended the purchase of new materials.

While librarians have anticipated the budget cuts resulting from the economic downturn, time and again, across the nation, they have been surprised that their reductions were frequently disproportionate to those imposed on other departments and agencies. Research and anecdotal evidence provided by librarians involved in budget negotiations indicate that many elected officials still view libraries as discretionary. Educational public health and safety are generally ranked as higher priorities than libraries when financial resources are allocated.

This situation has intensified the focus on advocacy. More Boards are establishing advocacy or government relations committees. A growing number of Trustees are participating in advocacy training programs provided by national, state, or local professional library agencies or organizations. Training reinforces the fact that securing adequate funding to provide quality library services is a fundamental fiduciary responsibility of all Trustees and that they should leverage their personal and professional contacts to satisfy that responsibility. Trustees also learn how to share information about library services in a language which funders will understand and to position libraries as solutions to local problems in such critical areas as economic development, academic achievement, and community building. The importance of Trustees maintaining ongoing communications with elected officials apart from the budget process is also stressed.

When developing advocacy plans and strategies, Friends can also be called on to generate grassroots support when libraries have to reaffirm the value which the general public attaches to public library services. There is growing recognition of the importance of doing a better job of managing relations with Friends and of organizing their advocacy efforts by including them in advocacy training initiatives, conducting Friends recruitment drives, and helping them in all ways to reach their full potential for speaking up for their library.

See also:

http://www.ala.org/ala/mgrps/divs/pla/plaadvocacy/index.cfm

The "Urge to Merge"

The pressure to consolidate which has affected school districts, police and fire departments and emergency medical services has extended to public libraries. Politicians, funders, and a weak economy are increasingly driving libraries to collaborate, consolidate, and partner in facilities, technology, and services. While small libraries (and their Friends) may fiercely value their independence, they may find themselves in precarious financial situations that put their survival in doubt. Political and public sentiment favors county-based or largerarea library consortia and systems, but Trustees of independent libraries often prefer local control and orientation at any price.

While libraries may benefit from the resulting cost-savings, the call for consolidation is not always tempered by an understanding of the unique and sometimes incompatible missions, and differing building and service requirements of partner organizations. Shared school and public library spaces, for example, are popular topics with politicians who often do not understand the nuanced differences between the two in their missions. Opinions and results are still mixed for public library shared facilities, typically arranged with boards of education, local government, or recreational agencies.

Active partnerships and group efforts are most productive when the roles and responsibilities of the partners are clearly defined and sustained and both organizations work towards consensus on use of space, hours of operation, security, assets, staff, etc. Conversely, joint ventures can be problematic when a partner agency's staffing changes or obligations go unfulfilled.

See also:

Colorado Libraries, *Trends, Tips and Techniques: Interviews with Colorado Library Leaders*, http://www.coloradolibraries.org/2010/02/19/trends-tips-techniques-interviews-with-coloradolibrary-leaders (19 February 2010).

Measurements and Impacts

Because funding agencies increasingly require objective data that demonstrates productivity and success and because measures of success can be used for effective advocacy, libraries must hold themselves accountable. At the same time, more onerous reporting requirements call on libraries to be versatile and innovative with measures. Moving beyond counting circulation and other outputs, libraries are assessing outcomes such as customer satisfaction, benchmarks, economic impacts, and anecdotal behavioral changes to showcase the value of library programs and services.

Outcome measurement assesses program impact and how it has achieved its intended result by changing a user's skills, knowledge, behavior, or life condition. Customer satisfaction surveys and continuous feedback mechanisms on websites and service points highlight performance strengths and weaknesses.

Benchmarking performance with similar libraries has become more widespread with the Hennen American Public Library Ratings and newer *Library Journal* Star Library rankings—these simplify other comparisons available through the Institute for Museum and Library Services "Compare Public Libraries" website. Because there are so many variables from library to library and system to system, benchmarking is most useful inferentially in illustrating dramatic statistical deviations among peers.

Return on investment and economic impact studies continue to expand in scope and impact, with dramatic stories and numbers available for elected officials, funders, and a citizenry expecting maximum accountability for public dollars. Effective use of this data to reposition libraries as primary providers in educational and economic development realms has worked, in some instances, to sustain funding in communities where public library services have traditionally been undervalued.

Apart from the many ways in which the profession measures progress toward goals, there are still honors that accrue to libraries that demonstrate effectiveness with "softer measures". *Library Journal* recognizes outstanding achievement with a Library of the Year Award. The \$10,000 prize celebrates the library that most profoundly demonstrates: service to the community; creativity and innovation in developing specific community programs or a dramatic increase in library usage; and leadership in creating programs that can be emulated by other libraries.

See also:

Hennen's American Public Library Ratings, http://www.haplr-index.com (2010).

Institute of Museum and Library Services, http://harvester.census.gov/imls/publib.asp (2010).

Library Journal, *Index of Public Library Service 2010: America's Star Libraries*, http://www.libraryjournal.com/lj/articlereview/886935-457/americas_star_libraries_2010_top-rated.html.csp (1 October 2010).

OCLC, How Libraries Stack Up: 2010, http://www.oclc.org/reports/stackup/default.htm (2010).

Rosalind F. Dudden, *Using Benchmarking, Needs Assessment, Quality Improvement, Outcome Measurement, and Library Standards: A How-to-do-it Manual* (NY: Neal-Schuman, 2007).

Library Journal's Library of the Year Nomination Guidelines http://www.libraryjournal.com/article/CA606275.html

A Profession Under Stress

The recession has greatly reduced library staffing numbers and professional development budgets. *Library Journal's* most recent *Placements & Salaries Survey* found slight salary increases "countered by more part-time and temporary jobs, an expanding gender gap, setbacks for minority [graduates of schools of library science], and a dip in the number of total graduates."

Personnel layoffs and reductions have come at a time when libraries have experienced more users and increased use. The result is librarians and paraprofessional staff doing more with less. Frequent complaints include work backlogs and demoralization.

Cost reductions have also resulted in declines in conference attendance with attendees shouldering more of the cost themselves. Elected officials continue to explore and implement the outsourcing of library staffing and operations to the private sector, especially when union or existing wage structures are considered too expensive or restrictive.

The value and deployment of the Masters of Library Science professional degree continues to be debated, as more libraries bring on individuals with business administration and other graduate degrees for management, hire more staff with alternative specialty skills, and use paraprofessionals for tasks that, until recently, were MLS-level.

See also:

Leander Public Library, *New Facilities to Support Rapid Population* Growth, LSSI, http://www.lssi.com/leander.html (2010).

Stephanie L. Maatta, *Placements and Salaries Survey 2010: Stagnant Salaries, Rising Unemployment*, Library Journal,

http://www.libraryjournal.com/lj/careerssalaries/887307-

473/ljs_placements_salaries_survey.html.csp (15 October 2010).

Work Efficiencies

As staff numbers decline, many libraries are questioning professional practices. "Why are we doing this? How can we do this task more easily, or for less cost?" The answers can result in a refreshing staff focus on the customer interaction instead of routine library tasks.

Shared or rotating collections, patron-tagged cataloging, self-checkout, RFID (Radio Frequency IDentification), shelving robotics, outsourcing delivery services, and other work efficiencies are taking hold. Other libraries are working with vendor partners for value-added services, such as customizing collection development by vendor-developed customer and community profiles, cataloging, materials processing, and creating ILS (Integrated Library System) item records before the materials are drop shipped to branches.

Partnerships and Collaborations

The concept of partnerships is not a new one for libraries; however, the pressure to collaborate with public and private sector organizations has recently escalated. Elected officials want to avoid duplication of efforts. The general public believes that taxes will be lower if publically supported entities pool their resources. The result is that most long-range plans for public libraries now include strategies for identifying high-value partners and entering into agreements to share facilities, expertise, technology, programming, purchasing, etc.

Libraries, as with other non-profit organizations, are motivated to court potential partners for a variety of reasons, including the opportunity to:

- Attract new customers, especially in traditionally hard-to-reach market segments
- Secure grants that require collaboration
- Garner support of government officials
- Reduce costs
- Increase visibility and understanding of the library in the community
- Establish the library as a leading community organization
- Increase the base of volunteers
- Expand programming capabilities

Recently, libraries have begun to expand their search beyond educational institutions and literacy providers for new partners to include social service, healthcare, recreational and sports, business, civic, cultural, and government entities. Having learned that partnering for the sake of partnering has pitfalls, libraries are selecting organizations with a shared mission and vision and often insist on a formal signed agreement which delineates responsibilities and financial obligations.

See also:

Janet L. Crowther, *Partnering With Purpose: A Guide to Strategic Development for Libraries and Other Organizations*, (Westport, CT: Libraries Unlimited, 2004).

On Demand Content

Twenty-first century collection development will increasingly become "content" driven with less attention given to format, the "container" in which content is delivered. Many libraries are looking ahead to the implementation of a new cataloging best practice, RDA (Resource Description and Access) which enables patrons access to all formats for a single title (print, audiobooks, films, e-books), easily sorted and reviewed by means of a single search. Customers will get what they want, when they want it, and how they want it.

In this vein, collection development is increasingly focused on responding in a timely fashion to cultural and social trends, such as:

- Consumer activism through pressure, protest and politics;
- Consumer yearning for security and affordable luxury;
- Social pangs of conscience over American policy;
- The "socioquake" that has many questioning authority and corporate decision-making;
- The yen for roads untrod coexisting with the nostalgia for what has been lost and a search for spiritual (and real) roots;
- Fears of harsh, unpredictable realities of the outside world and the deterioration of the environment;
- Cravings for individuality in a depersonalized society and for validating a personal belief system;
- The too-fast-a-pace, too-little-time syndrome that forces individuals to be highly adaptive and to assume multiple roles; and
- Concerns about data mining and invasion of privacy occurring at the same time that unprecedented numbers are sharing personal information on the Internet.

The era of branch-level collection development has given over to a centralized model in which a small cadre of dedicated specialists manages the process. These librarians have access to new tools that can track how well each title they purchase performs within the total library collection and then apply this information to make smarter, data-driven selection decisions going forward.

In addition to monitoring holds queues and the numbers of holds per copy before reordering a title, some libraries are experimenting with PDA (Patron Driven Acquisitions), a method that places an 'under consideration' record in the Library's OPAC and then uses the number of patron requests to drive selection choices.

A number of large public libraries in the U.S. are now using an evidence-based collection management tool developed in England known as Smartsm. Its developers position the product as an improvement over the value added services offered by book vendors which improves the performance of a library's collection, conserves staff time, avoids unnecessary purchases, and increases customer satisfaction by using circulation and usage statistics to guide new acquisitions, replacements, and redeployment of titles and media.

See also:

Barbara Genco, as told to Raya Kuzyk, 20 Maxims for Collection Building: Contemporary collection development involves art, science, and business, Library Journal, http://www.libraryjournal.com/article/CA6476396.htm (Source: 15 September 2007, Accessed: 2010).

Collection HQ, http://www.collectionhq.com (2010).

OCLC, *Information Format Trends: Content, Not Containers*, http://www.oclc.org/reports/2004format.htm (Source: 2004, Accessed: 2010).

RDA Toolkit: *Resource Description & Access*, http://www.rdatoolkit.org (2010).

Shapiro, Phil. "Towards a National Transition Plan for Libraries." PC World. January 4, 2011. http://www.pcworld.com/article/215445/towards_a_national_transition_plan_for_libraries.html

Library-Created Content

Low-cost computer storage and high-speed scanners make it faster and cheaper to digitize local collections, newspapers, photos, archives, and documents, and to post them on the Internet. Libraries have been active in this respect, though in this economic downturn fewer large grants will be available and more staged project approaches will be required.

Affordable technology to record moving images, sound, and video files is also increasingly available. Almost anyone can create and share content via the Web through popular sites such as YouTube. Many libraries have begun to create and post library instructional and author and public service programming podcasts and videos on their own websites and on media sites such as YouTube. With increasing ability to deliver links to this quality community content via social media sites like Twitter and Facebook, these initiatives have strong marketing as well as informational use and appeal.

As the e-book market matures, with a proliferation of reading devices including smartphones, dedicated e-book readers, tablets, and new devices available daily, the library's role in providing original, unique, local content will continue to evolve. The San Antonio Daily Eagle Online Archives and online photographs are a significant resource of the SAPL. SAPL has also posted videos on YouTube and is featured in news video and audio in a variety of places on the Web. Additional audio and video productions and more collaboration with local cable TV, public radio, etc. will enhance programming and marketing efforts, if well-produced and organized and targeted appropriately.

Customer Service

A few visionary libraries in the U.S. are addressing the quality of the holistic customer experience and changing the library model, with positive public response. The Rangeview Library District (Adams County, CO) "Anythink" model; Dewey-less, bookstore-like Maricopa County Library District (AZ); Darien Public Library (CT) and its progressive technologies are showing librarians and customers that an exciting user experience can be created when vision and leadership are in play.

While most libraries are slow to embrace such dramatic changes, a number of well-managed strategic planning processes are incorporating innovation, such as Charlotte Mecklenberg Library, with its Future of the Library Task Force and "Director of Library Experiences."

Other libraries are changing one service at a time, with decisions to eliminate fines, or redefining reference as "concierge" service. "Shared" collections that are shelved at the agency of return, instead of a designated owner-library, are gaining popularity in systems and offer more collection turnover for customers while reducing some delivery and processing costs.

Merchandising, cross-selling, user-friendly way-finding, strolling reference, and a renewed focus on customer service at all dimensions—not always successfully implemented in libraries—are here to stay, and savvy librarians are making the most of lessons from the retail and for-profit online world.

See also:

BCR, *Reference Renaissance: Inventing the Future [2010 Conference Materials]*, http://www.bcr.org (2010).

Future Library Task Force, Recommendations for the Future of the Library Task Force, Charlotte Mecklenburg Library,

http://charmeck.org/mecklenburg/county/CountyManagersOffice/change/libraryfuture/Docume nts/FinalReport102010.pdf (20 October 2010).

Norman Oder, *In the Country of Anythink*, Library Journal, http://www.libraryjournal.com/lj/home/887538264/in_the_country_of_anythink.html.csp (15 November 2010).

Do It Yourselfing

Give them what they want, when they want it, and how they want it! Library customers and staff benefit from self-service options that include self-check stations, self-serve holds shelves, materials vending units, kiosks, lockers, and self-contained mini-branches that open with a swipe of the library card. Self-serve is getting an especially hard look as personnel dollars decline and technologies improve. It provides options when real estate is unavailable or partners are eager for selected services in offsite locations.

In addition, to compete with the sophisticated online capabilities offered by entities like Google, Borders, Amazon.com, or Netflix, libraries find they must offer comparable amenities, such as online library card registration and renewals; online patron–placed holds; enhanced OPAC content that offers patron the option to rate or share their reading; new "buy" buttons that allow patrons to buy books or DVDs that may have long holds queues; the ability to download audiobooks, music, videos, or e-books 'to go'; fines payment via credit card; the choice of receiving holds pick-up notices by email or text.

Library websites and OPACs have been revamped for maximization of discoverability and mobile access by smartphones. Patrons who miss library programs can now access podcasts and videos of community forums, author visits and even story-times—anytime and anywhere. All these options combine to make it possible for customers to conduct their library business when it is most convenient for them—not for the library. And libraries that embrace an institution-wide commitment to examining and enhancing the UX (User Experience) are finding new keys to unlock successful 24/7 service with the added benefit of high impact and lower continuing staff costs.

See also:

Contra Costa County Library, *Library-a-Go-Go*, http://ccclib.org/locations/libraryagogo.html (2010).

Evanced Solutions, Branch Anywhere, http://evancedsolutions.com/our-solutions/branchanywhere (2010).

James R. Lund, *A Vending Library is No Library*, Library Journal, http://www.libraryjournal.com/article/CA6725226.html (15 April 2010).

Library and Information Technology Association, *LITA 2010 Presentation: Library Materials Vending*, LITA Presentation, http://www.slideshare.net/cayar/lita-2010-presentation-library-materials-vending (2010).

FACILITIES

Inviting, Flexible, Experiential, and Green

Some of the most important decisions challenging library Trustees are those related to library construction projects. Trustees have to gauge the level of political and public support for such projects and assess the likelihood that sufficient funds can be raised from public and private sources.

Trustees who have taken on a capital campaign and construction projects have learned the importance of proceeding in a logical way beginning with a dream and ending with ribbon cutting. They have also learned they have to delineate appropriate roles for the Board, the director, the community assessment and fundraising specialists, the building consultant, and finally the architect. In those instances where the Board starts with architect, they sometimes end up with a facility that is beautiful but does not necessarily meet the needs of the community or the staff who have to work in the building.

Public library spaces are changing to respond to sociological and technological shifts in four overarching ways:

Libraries are inviting. Library design is focused on creating welcoming, comfortable, and attractive destinations that can accommodate those in a hurry (self-service features) and those who wish to linger in cozy surroundings (lounge chairs and fireplaces). "Destination place" and "community space" concepts are being integrated into many building programs.

Libraries are green. Environmental sensitivities, especially in planning for the construction of new facilities, have driven the design process. Municipalities that have committed resources to protecting the environment, decreasing fuel dependency, and increasing operational efficiencies have often driven library "greening" programs.

Despite the higher cost of green buildings, LEED certification is a gold standard; libraries that can't afford certification are employing whatever energy efficiencies they can afford in their plans. Sustainable materials, energy-efficient lighting, and recycling workflows can provide high cost recovery and savings over time.

Libraries are flexible. Libraries are anticipating less need for collection space, as the book warehouse concept is outdated, and are activating more "gathering" and "creativity" areas, such as art galleries and small group study rooms. Other incorporations include open floor plans, multi-purpose rooms, interchangeable and mobile furniture and equipment, and smaller and mobile service desks.

Libraries are experiential. New library design incorporates flexible features for a variety of activities and audiences, as the user's experience becomes the key consideration. Libraries are designing zones geared to:

- Ages (senior spaces, teen areas),
- Activity (creative computing, gaming, galleries),
- Socialization (meeting rooms),
- Solitude and "sanctuaries of silence" (lounge and study rooms free from cell phones and other noise), and
- Technology access (fixed, mobile, wired, and wireless devices).

See also:

American Library Association, *LLAMA/BES Library Building Awards Committee [Presentation]*, http://www.slideshare.net/LLAMA_ALA/top-library-building-trends (2010).

Prairie Librarian [Blog], *Green Libraries*, http://prairielibrarian.wordpress.com/green-libraries (2010).

Interior Design, http://www.interiordesign.net (2010).

Louise L. Schaper. "Let Green Creep: Ten steps to sustainable library operations." Library Journal, 05/15/2010

http://www.libraryjournal.com/article/CA6727897.html

Trend Ideas, http://trendsideas.com (2010).

Construction Management

Alternatives to the traditional design/bid/build approach for the construction of libraries are increasingly used both to improve design and to manage costs. With a design/build option, the library contracts with a developer or construction management firm that can provide both design and construction services. While this can offer advantages in both schedule and cost control, it somewhat removes the client from design decisions since the architect is employed by the developer or CM firm.

Another increasingly popular approach is Construction Management at Risk (CM@Risk) model, in which the library contracts with both the architect and the building contractor through RFP processes and employs a Program Manager to coordinate their interaction and oversee the building project. With this approach, all project partners remain directly accountable to the client.

A major advantage of both the Design/Build and the CM@Risk alternatives is the involvement of the building contractor early in the project design, which allows more effective cost engineering to keep the project within budget.

TECHNOLOGY

The Living Catalog

Smartphones and other portable devices that make browsing "on the run" as well as advanced interactive technologies offer new opportunities to increase library use by enhancing traditional catalog searches and readers' advisory services. Growing use of Wikipedia, crowd sourcing, blogs, rating and review systems on commercial sites, and other communal information-sharing practices create expectations for how a customer might interact with a library catalog.

No longer satisfied with their library's OPAC (online public access catalog) as a simple "discovery tool", tech-savvy library users (and librarians) now look for virtual opportunities to rate resources, write comments, and customize and save searches. They engage in a form of social networking by sharing lists of favorites with others seeking information and opinions.

"Living" catalogs can now present metadata to describe additional information each item. For example, the cataloging of an image may include metadata that describes size, color, depth, resolution, date created, and other similar data. A text document's metadata may contain information about its length, authorship, and content while users can "tag" descriptors onto item records in the catalog. It is still important for a pre-determined, authoritative, and standardized cataloging protocol to describe books and media in library collections that provides some consistency and accuracy.

See also:

http://www.blyberg.net/downloads/SemanticLib-MLC07.pdf

http://www.techterms.com/definition/metadata

http://www.kcoyle.net/meta_purpose.html

http://www.aadl.org/catalog

Downloadables

Libraries are uncertain about the rapidly-changing media scene. Hands-on media, such as DVDs (and even VHS!), remain popular with library customers, especially among seniors and those of lower incomes.

Meanwhile, downloadable media, especially for music, are the norm for youth and Boomers who are comfortable with iPods, Kindles, and laptops. Balancing the purchase, storage, and access to a wide variety of physical and electronic media will be a pressing challenge for the foreseeable future. As hard copy DVDs and CDs give way to digital copies, libraries will need to have plans in place and new vendors identified in order to manage the transition.

E-books have reached the tipping point: library patrons now read both library and purchased e-books on their iPhones, iPads, smartphones, tablets, netbooks, and a growing variety of e-reading devices. Many library users have already noticed that popular e-Readers' terms of use will not allow for the download of library copies (and they have complained—thinking that *their* library is the culprit).

At the same time, some of the major U.S. trade publishers, stung by the Napster impact on music, are wary of licensing or selling e-book files to libraries. Major library e-book vendors like NetLibrary and Overdrive, in order to meet the DRM (digital rights management) requirements of publishers, will continue to balance the rights of users and artists even as they work with cooperative publishers to expand the variety and numbers of titles and languages available for download.

See also:

Sue Polanka, No Shelf Required: E-books in Libraries (Chicago: ALA Editions, 2010).

Digitization and Digital Preservation

Digitization is so commonplace that it has created an additional preservation challenge: how to store, archive and access the universe of digital files being created. Preservation of constantly changing web pages, blogs, and social media is a concern for historians, archivists, and librarians. Cataloging, tagging, and indexing of digitized sources collected in digital repositories provide new challenges for librarians. In addition, just as technological change made "floppy discs" obsolete, today's USB flash drives and hard discs may not be a permanent solution. These portable storage devices also have an unknown life expectancy which threatens the preservation of many important documents.

The success of recent large scale digitization efforts that bring obscure primary source materials to the public has encouraged even smaller libraries to digitize local and historic documents. Libraries are also reexamining their collection development policies in light of the ready availability of material through initiatives such as Google Books. Academic and special libraries are more active in this area than public libraries. Librarians, as information gatekeepers, can play a role in selecting and organizing the digital past and must proactively craft policies and procedures for digitization of special holdings that ensure they are preserved in multiple and translatable formats for posterity.

See also:

Digitization 101 [Blog], http://hurstassociates.blogspot.com (2010).

The Library of Congress, *Digital Preservation*, http://www.loc.gov/library/digitalpreservation.html (2010).

The Library of Congress, *The Top 10 Digital Preservation Developments of 2010*, http://www.digitalpreservation.gov/news/2010/20101229news_article_top10stories.html (29 December 2010).

Intellectual Property, Copyright, and E-books

As publishers are prioritizing the ease and profits of direct-to-consumer transactions, the proliferation of streaming media and the geometric explosion of the e-book has led to tension and controversy around issues of intellectual property and copyright. The negative impact on the music industry of the Napster file sharing debacle of the 1990's heightened copyright concerns among authors, artists, publishers, producers and libraries. All are struggling to define rights and responsibilities in sharing, licensing, and purchasing materials.

Most library users do not understand why stringent DRM (Digital Rights Management), imposed by content producers, actually makes it harder to download library content. Library users also tend to blame their local libraries when they cannot download library licensed e-books onto their Amazon Kindles or other e-reader devices.

E-books are here to stay. Libraries have reported geometric increases in e-book circulation and there seems to be another e-book device or e-book copyright kerfuffle weekly. Christmas 2010, in particular, was a watershed for e-reading devices. The SONY Reader, the Barnes & Noble Nook and Nook Color, the iPhone, the iPad, and a wide variety of new tablet computers have joined smartphones as preferred ways to download and read e-books. All are elbowing the Amazon Kindle for market share. By this time next year, the e-book will be as familiar to library users as DVDs. Libraries must have an e-book strategy, a good selection of titles available and a well-trained and informed staff to support this new service.

However, during this boom period in e-publishing, many major U.S. and international publishers continue to express concern about e-books and libraries. Some assert that libraries will fail to safeguard copyright, that widespread library delivery e-books will further erode the meaning of intellectual property and 'ownership'. Some U.S. publishers have even begun to express concern that each library sale (and each subsequent book or e-book loan) represents a 'hit' to the publishers' financial bottom line. Library leaders have begun to detect a new whiff of hostility toward libraries in a time when 'traditional' print newspapers, magazines, and book publishing models are under siege.

By contrast, libraries see themselves as champions of access and protectors of copyright; they are astonished that some publishers are reluctant to license their e-book content to libraries. The single road to détente is not clear. Libraries have generally relied on ALA's Washington Office to advocate with the AAP (Association of American Publishers) around copyright. Librarians tend to side with groups like the Electronic Frontier Foundation and are particularly concerned that the Digital Millennium Copyright Act (DMCA) suppresses free speech, inhibits scholarly communication, hampers research, and squelches innovation due to its inadequate consideration of what makes for truly "Fair Use".

OverDrive recently announced new e-reader applications that will make it easier for library users to download content to their iPhones, iPods, iPads, SONY Readers, B&N's Nook, Android devices, and more.

Though outlook is dim for a library-friendly change in the Amazon model, the current rocky economic outlook may encourage less wealthy consumers to opt for non-proprietary choices (i.e. until recently, Kindles only allowed readers to access and read content purchased through Amazon). The good news? Library-compatible e-readers are gaining market-share.

Libraries would be well-advised to:

- Continue to press OverDrive and other e-book vendors for more content and simplified DRM. Libraries can experiment with a variety of e-book selection, licensing, and usage terms (examples: one user-one book, maximum access, patrondriven acquisitions, etc.).
- Test the right mix of e-book and audio books vs. the numbers of physical copies available.
- Educate staff more intensely about e-books and best practices via events like the recent LJ/SLJ e-book Summit.
- Monitor the professional and trade press for e-book developments, such as when or
 if libraries can win a change in Amazon's 'terms of use' policy to allow libraries to
 acquire and lend e-book content for Kindles, etc.

See also:

http://www.androidguys.com/2011/01/04/libraries-provide-direct-e-book-downloads-iphone-android/

Privacy

Privacy for library borrowing, Internet, and computer use is a legal and practical concern for library institutions and their users. Laws exist to protect the borrowing records and computer use of library patrons, but customers and library staff remain vulnerable when they use search engines, social networks, cloud computing, Wi-Fi, and other online tools. Vulnerabilities exist in most aspects of computing, from cookies to data logging to the proliferation of individuals' photos and videos online. Recent outcries about marketing spyware, cookies, and Face-book maneuvers have resulted in much media play on online privacy issues. However, despite surveys that demonstrate people's concerns about privacy and identity theft, they actually do little to protect themselves online.

Libraries must continue to follow laws and expand privacy protection initiatives through network security and consumer education. Library users, especially children and young adults, need to be made more aware of privacy risks both in and out of the library. Library patron privacy policies are necessary to describe the library's limited use of patron and donor information. Appropriate use of security cameras and equipment, RFID and smart tags, and other potentially invasive technology should be addressed in policy and practice.

See also:

Electronic Frontier Foundation, http://www.eff.org (2010).

Privacy Rights Clearinghouse, *Online Privacy: Using the Internet Safely*, http://www.privacyrights.org/fs/fs18-cyb.htm (December 2010).

Electronic Privacy Information Center, *Privacy*, http://epic.org/privacy (2010).

Library IT Reorganization

Technological sophistication is no longer the sole realm of IT. Most adults have become more facile with a variety of technologies over the past decade, and patrons appreciate the opportunity to explore and share new technologies at the library (a service dubbed the "digital petting zoo"). They also come to the library to learn how to manage technological appliances and communications devices they purchase or receive as gifts. To serve these needs, front line librarians need to be one step ahead of their customers in understanding innovations and advances.

Meanwhile, the advent of open source platforms, Web 2.0, mobile applications, and the dizzying pace of change have stressed and confounded information technology departments, and digital strategy has become a high priority. IT departments are stretched to handle interfaces and web applications, software, hardware, and networking support and find they need additional personnel and skill sets to progress from fixing and maintaining to trending, planning, and prioritizing.

A report by Gartner Consultants predicts the emergence of four domains in the IT profession:

- 1. *Technology Infrastructure and Services* now composes 65 percent of IT staff, but this segment will dwindle to 40 percent. This group should emphasize technical knowledge, such as "How does this technology work?"
- 2. *Information Design and Management* will rise from 20 percent to 30 percent. This group will need to focus more on business-specific knowledge, such as "What makes this institution tick?"
- 3. *Process Design and Management* will rise from 10 percent to 20 percent. This group will need to balance business knowledge with core process knowledge, such as "What processes make this area unique," and with industry knowledge, such as "What characterizes this sector?"
- 4. *Relationship and Sourcing Management* will rise from 5 percent to 10 percent. This group will need to balance business knowledge with core process knowledge.

SAPL may wish to review technology staffing against these four realms, especially in terms of the Library's capabilities in addressing the advent of new technologies, mobile messaging, open source ILS, etc. Partnerships with businesses and/or other library systems might be explored to capitalize on cost-efficiencies and pooled labor.

Cloud Computing

Fully 69 percent of Internet users who take advantage of Yahoo email, store photos online, or use Google Docs are on "the cloud," a network architecture unseen by users that leverages the power of a cluster or grid of computers to push applications and manage large-scale storage.

Cloud computing is convenient (accessible from any computer), uncomplicated (software and files are kept and managed elsewhere), and collaborative (easy and fun to share). The most popular cloud activities are e-mail; storing photos, videos, and files; specific programs such as Photoshop Express; and storage and backup of home or office files.

While the cloud offers low-cost and virtually unlimited storage capacity, it raises issues of security and confidentiality that may not be fully appreciated by many cloud users. Essentially, applications and files stored elsewhere require trust that the provider will be reliable, secure, consistent, and respectful of ownership and privacy. In addition, in a rapidly changing economy, tests of ownership, control, and pricing will certainly emerge.

The cloud holds great promise for expanding the public's access to computing while reducing cost as libraries reject expensive traditional software licensing and operating structures in favor of the cloud, especially for public workstations. The cloud also holds great potential for infrastructure savings for activities such as common access to productivity tools and collaboration on papers, slideshows, and projects among individuals using multiple devices and working from multiple locations.

In general, librarians are more cautious than the general public about the privacy and security issues associated with the cloud. Many are concerned that patron or sensitive information will be compromised, that today's free application will someday have its limits, and that future price tags may make this technology less attractive to public sector organizations.

See also:

Eric Knorr and Galen Gruman, What cloud computing really means: The next big trend sounds nebulous, but it's not so fuzzy when you view the value proposition from the perspective of IT professionals, Info World,

http://www.infoworld.com/d/cloud-computing/what-cloud-computing-really-means-031?page=0,1 (2010).

Jonathan Strickland, *How Cloud Computing Works*, HowStuffWorks.com, http://communication.howstuffworks.com/cloud-computing.htm (Source: 8 April 2008, Accessed: 3 January 2011).

Tech Soup, *Cloud Computing for Nonprofits*, http://home.techsoup.org/pages/cloudcomputing.aspx (2010).

Open Source

In contrast to software that is copyrighted and limited to payers or approved users, open source software makes code, rights, and capabilities freely available in the public domain. The software can be used as is, modified, improved, and/or shared with others with varying degrees of freedom depending on the terms of the open source license. Collaboration allows users to exchange ideas, develop new capabilities and changes, and foster enhancements and improvements. The Android mobile operating system is an example of well-known and used open source software.

A commonly held misperception, however, is that open source means easy and cheap. Open source products still require the technical expertise of web developers to customize and integrate products. Users have been known to complain that they land up with a generic product that does not adequately meet their needs and cost more, when the cost of customization is factored in.

In the current funding environment, open source software has generated much interest and excitement in the library community as a replacement for expensive and proprietary Integrated Library Systems (ILS). ILS vendors have been generally criticized for offering outdated products, inflexible features, and inconsistent service at a high price to purchase and maintain. Koha and Evergreen, two of the most visible open source ILS platforms, have been implemented by libraries, including many consortia which share knowledge and human resources needed to run the systems.

Libraries have also found that open source has its disadvantages, including a need for programmers and other technical personnel, or dependence on an intermediary vendor such as Equinox, the Evergreen support and development company. In addition, the responsibility of collaboration and sharing is burdensome to some libraries and the resulting product may meet the needs of most users, but not the unique needs of each individual user.

Each library must weigh the pros and cons, but open source is worthy of consideration by those needing to replace their ILS. Depending on the longevity and robustness of San Antonio's Millennium ILS, open source should be considered in the next round of ILS replacement. Open source applications could also be utilized in other technology projects as warranted.

See also:

Open Source Initiative, *The Open Source Definition (Annotated): Version 1.9,* http://www.opensource.org/osd.html (2010).

Open Source Software Institute, http://www.oss-institute.org (2010).

Mobile Web and Other Advanced Applications

A recent study by the Pew Internet and American Life Project showed that 40 percent of adults use the Internet, email, or instant messaging (IM) on a mobile phone (up from the 32 percent of Americans in 2009), and 59 percent of adults now access the Internet wirelessly. Pew predicts that by 2020, the mobile 'smartphone' will be "the primary Internet connection and the only one for a majority of the people across the world, providing information in a portable, well-connected form at a relatively low price." Today's smartphones make calls, surf the Web, IM, offer GPS, produce and play photos, videos and music, store books and documents, and much more, via a booming market of installed and third-party applications (apps).

Intense competition for sales is rapidly increasing device capabilities and changing the fundamental communication and information-seeking habits of users. (Pew also reports that there are over 250,000 apps designed for the iPhone, more than 30,000 apps for smartphones running Google Android, and several thousand more for Blackberry devices.)³ And perhaps, even more interestingly, Pew has uncovered a marked preference in the adoption and use of mobile devices (vs. 'traditional' broadband access) by people of color.

Many academic libraries have already taken the lead in developing their own apps, and "the library in your Smartphone" is within reach for public libraries. Library catalogs, patron accounts, reference services, and website content are increasingly accessible via mobile devices. We have seen modest gains as more ILS vendors have jumped on the mobile bandwagon and have begin to develop their 'own' apps and have become more open to connect ILS 'back-end' support with homegrown tools. Libraries must continue to press their vendors to support their needs via users groups and contract with ILS and third parties for app development.⁴

SAPL must continue to ensure that key products and services—website, catalog, patron information, holds, e-book downloads, and community information—are fit for mobile use. Patron account information, communications, and marketing should be directed to mobile devices as soon as possible; this is a trend that will grow for some time.

See also:

http://latimesblogs.latimes.com/technology/2011/01/british-library-debuts-smart-phone-app.html

Adaptive Devices

The Americans with Disabilities Act turned 20 in 2010. Technology hardware is migrating from a keyboard-based environment to one with touch and audio commands, particularly in mobile devices. Text to speech is widely available; font size is variable. E-book readers are hardwired options to increase text size. For example, innovations like K–NFB Reading Technology's new Blio e-reader (developed in association with the National Federation for the Blind) is now offering interactive and flexible 'reading experiences' with fully embedded audio and video.

Current library public computing options look antiquated amidst these developments. Library users of all ages who require assistive and adaptive technologies will be expecting more from their libraries than a neglected Kurzweil reading machine tucked in a corner. Though touch screen hardware does tend to be less robust for public use today it should improve and the costs will drop. The new iPads, smartphones, and tablet computers now offer touch screens and audio commands. These same touch and audio command options will serve disabled library patrons as well. A future scenario: a library user finds a library item in the catalog via a smartphone and verbally states his/her name, library card number, and library pickup location to place a hold. In the future, patrons should also be able to search, borrow, and download a digital audio book to their smartphone or webenabled tablet using easy audio commands.

New developments in mobile smartphones, tablet computers, and web-enabled e-book readers and other assistive/adaptive technologies are being adopted by people of all ages and abilities who love its ease of use and intuitive interaction. Text to speech technology is advancing at a rapid rate and more web-based content will be available via touch and talk environments within the next two to five years. The time to research, prepare, and test is now.

See also:

Barbara T. Mates, Twenty Years of Assistive Technologies: Celebrating 20 years of the Americans with Disabilities Act, American Libraries,

http://americanlibrariesmagazine.org/features/09142010/twenty-years-assistive-technologies (Source: 14 September 2010, Accessed: 2 December 2010).

Pew Internet and the American Life Project. *Baby Boomers: The Gloomiest Generation,* http://www.pewtrusts.org/our_work_report_detail.aspx?id=40778 (Source: 25 June 2010).

Automated Book Delivery System (ABDS)

Like other counterparts elsewhere in Europe, Portugal's Biblioclube 24, located on street corners, parking lots, and shopping areas, is an automated 24-hour-a-day book kiosk that holds a selection of books. On scanning a library card, a user can select from a variety of titles; a robotic arm retrieves the book and delivers it to the user in a hard plastic case. The book may be returned to the kiosk in the same manner.

Now, libraries as diverse as the French National Library and those of the North Carolina State University system are utilizing one or another form of automated book delivery to reduce labor-intensive book storage and delivery systems. Online from a computer or mobile device, NC State students can search the online integrated catalog to locate and reserve a book or to browse a virtual bookshelf that consists of an integrated view of the amassed collections of all libraries in the consortium. The books at the new Hunt Library are stored in large metallic bins within a vast, tower-like repository in the heart of the new James Hunt Jr. Library at NC State. On demand, they are robotically selected from the bins and delivered to the point of access at a front desk.

In a city growing as rapidly as San Antonio, where new library construction consumes considerable resources, an analysis of the costs/benefits of integrating off-site automated systems into service delivery may be an effective service strategy.

Geocoding and Smart Objects

Geocoding is the matching of geographic coordinates such as latitude and longitude with other data such as street addresses and photos. Popular applications can be found in auto GPS (Geographic Positioning Systems), geographic websites such as Google Maps, and Geographic Information Systems (GIS) used for maps and data. Smart Objects are "simply any physical object that includes a unique identifier that can track information about the object," such as RFID (radio-frequency identification), smartcards, etc. For example, car tires with sensors can report tire pressure and other information to a computer. In short, geographic and other information can now be attached to objects and read, used, and manipulated.

Smart tags such as RFID are already in use in libraries but remain too expensive for many libraries to employ. There are numerous potential library uses of these technologies, such as tagging books or games with reviews, instructions, etc. It could also be possible to track the location of any library item within the library or even as a patron uses it, with obvious privacy concerns limiting the latter, except in the cases of rare and valuable materials.

This trend is expected to mature four to five years from now, during which time considerable additional research is underway to adapt and develop these new technologies.

See also:

Daniel Nations, *What is Web 3.0?*, About.com, http://webtrends.about.com/od/web20/a/what-is-web-30.htm (2010).

Kelley, Michael. Straight from the Stacks to the Smartphone. *Library Journal*, 01/20/2011 http://www.libraryjournal.com/lj/home/888908-264/ala_midwinter_2011_straight_from.html.csp

New Media Consortium and EDUCAUSE Learning Initiative, 2009 Horizon Report [Section: Semantic-Aware Applications], http://wp.nmc.org/horizon2009/chapters/semantic-aware-apps (Source: 2009).

Digitized Media and Gaming

Digitized photos, videos, and music are transforming the media industries. iTunes is ubiquitous. YouTube is an Internet phenomenon that has built consumer appetite for online video streaming and delivery. Hulu, Cable DVR and "On Demand" services, Redbox DVD rental vending machines, Kindle, Nintendo's Wii, and Netflix's streaming movies and TV shows are additional players in the changing media game.

Traditional library media collections look very dated next to these developments. Meanwhile, library customers continue to clamor for more DVDs in their collections. Only a few vendors, like Overdrive, have jumped in to provide libraries with downloadable media (music, video, and audiobook) content. Some libraries report success with retail partners like Redbox. However, most libraries that have attempted to use or partner with online media providers such as Netflix and Amazon have been stymied by their strictly direct-to-consumer business model and inflexible terms of use. At the same time, libraries are struggling with inadequate bandwidth and the stresses of overwhelming WiFi success. Libraries must determine if and how they will refashion their public computing models. They must decide if they will allow customers full access to streaming media and/or permit customers to download library licensed media content onto their own devices within the library. There are many different DVD types (DVD, HD DVD, Blu-ray) and gaming platforms (PlayStation, Wii, Xbox) to consider for cash-strapped collections and programs. Further, concerns about theft and industry uncertainty have combined to make some libraries gun shy. What's a library to do?

Even with Overdrive products, it may be time to explore new ways to offer more content to users through test contracts with vendors. In other parts of the country, consortia are leveraging their combined size and clout to pioneer new services through media producers. New models for licensing/ purchasing streaming media for patrons should be researched.

While SAPL's lower income and older customers may remain attached to media such as DVDs, more progressive users are downloading onto mobile devices. In this respect, trending, exploring, and test licensing/purchasing downloadable media will be an ongoing challenge. Gaming for collections may be a lower priority in adverse economic times, but can have a significant role in teen programming and marketing.

Website Development

While libraries position themselves as providing access to a world of digital resources, the sites by which those resources are accessed are badly organized, outdated, unsophisticated, and incompatible with all browsers. Even the best generally fall behind commercial websites and merit more professional presentation, performance, and customer-driven sites that attract, engage, inform, interact, and deliver. Libraries need better customer and data-driven web design and development to attract and engage users.

Reference librarians need to work harder than ever at keeping up on the best search engines and resources for patrons available on the web. Rather than trusting conventional indexing and storage of resources, libraries are reordering presentation and accessibility to resources in response to customer inquiries and emerging information needs in order to maximize access and facilitate service.

Yahoo and similar portals, and even some shopping sites, allow users to set up a home page with service selections tailored to their wants and needs, including "skins" (customized design and colors). Users are responding positively to this customization and making use of RSS feeds and other data aggregation tools. With Amazon.com as a "gold standard" for readers, libraries have generally been behind the curve with popular features such as mobile applications, tagging, geocoding, flexible account content and features, reader reviews, and shelf-browsing with realistic book jacket content. Library users want and need places to develop their reading and media lists and comments, but they are finding other avenues for such social interfaces.

While lacking the resources of the profit sector, libraries and non-profits have opportunities to employ web analytics and site usage studies that can enhance and improve content. Teaming with academics and consortia can be productive efforts, and open source software has the potential to improve web features and discovery overlays.

See also:

Library Success [Wiki], *Library Website Hall of Fame*, http://www.libsuccess.org/index.php?title=Website_Design (2010).

Marshall Breeding, "The Systems Librarian: Taking the Social Web to the Next Level, *Computers in Libraries*, 30:7 (September 2010): 28-30.

Web 3.0 or the Semantic Web

Hotly debated among the most cutting edge technology gurus, the Internet of the future is predicted to be "smart", functioning as a personal assistant through the employment of increasingly sophisticated browsers and filters. For example, a search for vacation options, currently taking hours to sift through various travel websites, would take much less time in Web 3.0 as it gathers, analyzes, and presents the information based on user preferences, browsing history, and keyword contextual analysis.

Much of this is little more than theory at the moment, and there are many naysayers; however, the practice of "tagging" photos, videos, and other online material with descriptors is one step toward creating the hierarchy and metadata linking information in ways that will foster Web 3.0. Libraries need to explore ways to allow their catalogs and collections to employ folksonomies and tagging while also maintaining an organized cataloging and recording scheme as a backup. Mashups and other ways to link programs and data can also be explored without major technical adjustments.

See also:

Daniel Nations, *What is Web 3.0?*, About.com, http://webtrends.about.com/od/web20/a/what-is-web-30.htm (2010).

Jonathan Strickland, *How Web 3.0 Will Work*, How Stuff Works, http://computer.howstuffworks.com/web-30.htm (2010).

COMMUNICATIONS

Branding and Marketing

Research conducted by libraries across the country reveals one of the primary reasons more people—non-English speaking populations in particular—do not make full use of their public library is that they are not well-informed about many new and non-traditional services available to them at a public library. Libraries are responding to this information gap by making marketing a strategic priority, intensifying efforts to brand and market their services more effectively, designating staff members as marketing managers, and including marketing as a line item in operating budgets. Reflecting this new emphasis, a growing number of library schools offer courses in marketing, and trustees recruit individuals with this expertise.

Logos which feature municipal crests, books, or representations of the main library are giving way to more colorful, imaginative, resonant brand marks that are designed to appeal to both book lovers and techies. Instead, libraries are working on brand statements, compelling brand imagery, comprehensive wayfinding systems, and communications crafted to appeal to individual target audiences. In contrast to the "one size fits all" focus on flyers, brochures, and press releases to generate awareness and use, there is growing recognition that teens, non-English speakers, young professionals, and other market segments are unlikely to respond to print-reliant vehicles. Multi-dimensional marketing now takes the best lessons from the for-profit world, in particular interactive blogs, social media, and web-based outreach.

Paco Underhill's groundbreaking studies of consumer behavior in retail settings, now updated to address online retail environments, have led librarians to study their customers' preferences and in-library habits. Do they browse or grab and go? Do they come to socialize or to study? Are they independent or do they want assistance? Librarians have found that insights gained by studying customer behavior guide every facet of service from presentation of the collection to staff training.

Libraries are also making better use of market research tools to determine needs and preferences of library users and nonusers. Online and telephone surveys, focus groups, executive interviews, mystery shopping, and customer assessments are routinely used as the basis of marketing planning.

Lifestyle analytics have also provided significant information on customer habits, preferences, and behaviors to libraries desiring data for collection purchasing, facilities locations, and service enhancements. Data from library card and website use—or community profiles and analyses available through commercial vendors such Nielsen's PRIZM and Claritas services—and GIS (geographic information systems) are among the data sources that have provided insights into generational and demographic differences in populations served. This wealth of consumer and user data can be used to make service and budget allocation decisions precisely matched to neighborhood and community needs.

See also:

Nielsen PRIZM and Claritas Services, MyBestSegments.com, http://www.claritas.com/MyBestSegments/Default.jsp?ID=0&SubID=&pageName=Home (2010).

Sniper Marketing and The Amma Group, *Integrated Lifestyle Marketing and Consumer Engagement*.: *Effective Marketing in a New Era; How Gen X and the Millennials Have Changed the Rules*, http://www.snipermarketing.net/Sniper-Amma_ILM.pdf (Source: December 2008, Accessed: 2010).

Underhill, Paco. Why We Buy: The Science of Shopping--Updated and Revised for the Internet, the Global Consumer, and Beyond. 2010.

Social Media

Social networking services such as Facebook and Twitter connect millions of people daily who want to share and explore their activities and interests with others. Meanwhile, the proliferation of Web 2.0 applications such as blogs and wikis are changing communication habits so drastically that newspapers, already weakened by a strained economy, are closing or going exclusively online. Social networking affords important marketing and communications tools for libraries—but only if effort is made to update content and answer posts and inquiries. Sixty-five percent of teens and 35 percent of adults are now using social network websites, with the share of adult users quadrupled from four years ago and the fastest growing sector over 55 years of age. The integration of social networking into marketing plans, considered cutting edge only a few years ago, is now routinely in use.

Library-land is still a-twitter with the hows and whys of using the most popular social tools. A few libraries "get it"—note Cleveland Public Library's recent use of Twitter for Ohio state funding advocacy. They are increasingly using the tools for viral and guerilla marketing. However, most libraries have pages that are neither updated nor relevant with muddled goals and unclear target audiences. In addition, because a great deal of staff time can be wasted on social media, libraries must integrate social media into strategic and marketing planning, provide training, and develop consistent messaging, and staff accordingly. The greatest potential for these services is for community outreach and marketing; with some effort and training, libraries can leverage their power.

SAPL is in the game, with its <u>teenlibrary@myspace.com</u>; however, advanced techniques and strategies should be explored and deployed to help SAPL step up to the standard of library market leaders.

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