

TOP TECHNOLOGY TRENDS FOR NTRLS LIBRARIES

Table of Contents

Executive Summary.....	3
Methodology.....	3
TLA survey.....	4
NTRLs member library website analysis.....	7
Other data sources.....	8
Trends	8
Downloadable or streaming media	8
Open source integrated library systems (ILS) and portals.....	9
Information commons	10
Gaming.....	10
Social software	11
Technolust.....	12
MARC's death knell.....	12
Risk tolerance.....	14
iPhone	14
Kindle	15
The Remaining trends	16
Follow-up	17
The Author	17
References	18

Executive Summary

This report is the result of an agreement between the North Texas Regional Library System (NTRLS) and Strategic Information Management Services (SIMS) whose principal is Richard Wayne. The primary purpose of this report is to discuss some of the top technology trends that affect libraries in the North Texas area. The report also hopes to help NTRLS libraries prepare for some of these trends.

Much of the data in this report relates to a survey that Richard Wayne has done annually for the Automation and Technology Round Table (ATRT) of the Texas Library Association (TLA). Survey results and related issues are presented at the TLA Annual Conference as well as in an article for the *Texas Library Journal*.

The top technology trends for survey responders from NTRLS are very similar to the top technology trends for all Texas public library responders as well as for all Texas library responders. The top five trends for NTRLS responders are:

1. Downloadable or streaming media – providing e-books, videos, podcasts, lectures and the like to our community
2. Open source integrated library systems (ILS) and portals – examples are Evergreen, koha, and vufind
3. Gaming – advocates think that this is an important way to draw children and teens to the library
4. Information commons – our areas with computers and / or connectivity are evolving
5. Social software – we are actually incorporating Web 2.0 tools into our environment – examples are blogs, wikis, IM, facebook, MySpace, meebo, and twitter

A separate evaluation of issues and trends in NTRLS member libraries is consistent with the results of the survey for NTRLS responders. There clearly are some trends that stand out as relevant and useful for NTRLS libraries.

Methodology

Much of the data from this report came from a technology survey of TLA members which included many NTRLS members. Another important source of information was an evaluation of the websites of NTRLS member libraries. A more minor source of information was interactions and consultations that Richard Wayne has had with some member libraries. Finally, an awareness of NTRLS activities and projects also provided data for this report.

TLA survey

The survey is an important part of the T4 project. T4 stands for Top Technology Trends in Texas libraries. The project consists of the survey, an article for *Texas Library Journal*, and a presentation at TLA's Annual Conference.

For the fourth year in a row, I surveyed the Texas Library Association's (TLA) Automation and Technology Round Table (ATRT) members to determine the leading technology trends and issues in libraries. This year I also opened the survey up to the broader TLA membership by publishing the link to the survey in *TLACast*. The 16 trends on this year's survey (in no particular order) were:

1. Open source integrated library systems (ILS) and portals
2. MARC's death knell
3. iPhone
4. Gaming
5. Software as a Service or SaaS
6. Open, shared databases such as Freebase
7. Kindle
8. Technolust
9. WorldCat Identities
10. Risk tolerance
11. Information commons
12. Social software
13. Mashups
14. Perpetual beta
15. Downloadable or streaming media
16. The Standardized Usage Statistics Harvesting Initiative (SUSHI) protocol

The 16 trends were derived from a much larger list. The original list of library technology trends comes from numerous sources, including:

1. The Library & Information Association's (LITA) [Top Technology Trends](#)
2. Many, many library and library technology blogs such as [The Shifted Librarian](#)
3. Technology magazines – in print and online such as [PC Magazine](#) – still one of my favorites
4. Previous year's trends
5. Information gathered at library and technology conferences
6. Good old observation

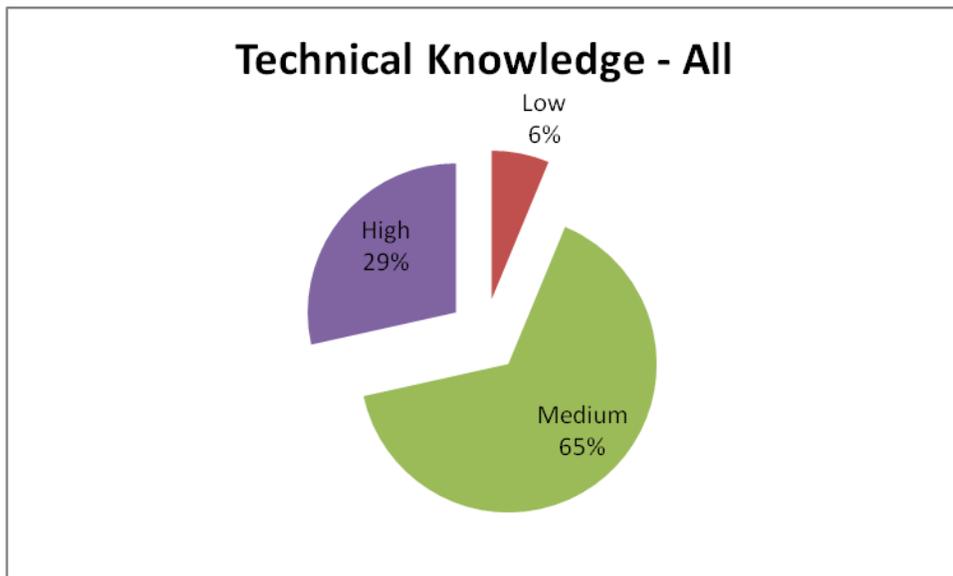
My original list of trends gets cut down to a more manageable number by working with my associates. That is, I usually survey my associates at The University of Texas Southwestern Medical Center Library to elicit further new trends as well as to drop the less viable trends from the list.

The T4 project is not intended to be scientific. Rather, it is intended to be simple, practical, and informative – particularly for Texas libraries and librarians. This year’s survey was Web-based and built upon the [SurveyMonkey](#) platform.

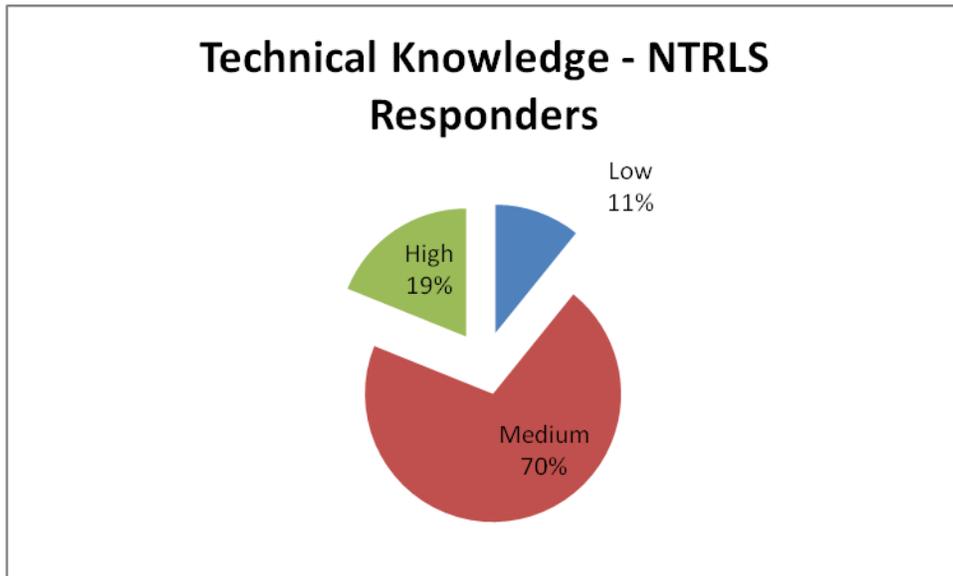
The survey was very simple. First I asked for a little information about each responder. This information included their name, email address, and type and size of library. Then I gave each responder the opportunity to select three of the 16 trends. That question was followed up with an opportunity to submit up to two write-in trends. Finally, I asked if the responder had any other comments on the trends or on the survey itself.

I received 144 unique responses in total. 37 of those responses were from NTRLS member library responders. Each responder chose what type of library he or she was from. If she was from a public library, she had the option to choose the library system that she was associated with. Carolyn Davidson Brewer, the NTRLS Assistant Director, encouraged NTRLS member libraries to full out the survey so that we would have the data available for this project.

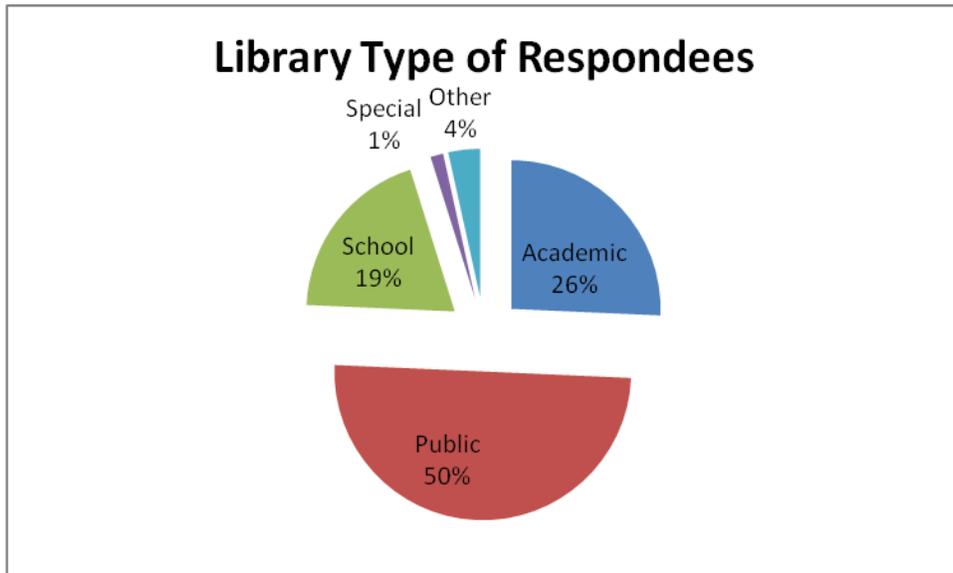
When asked ‘How would you rate your personal level of technical knowledge,’ the entire group of responders answered as follows:



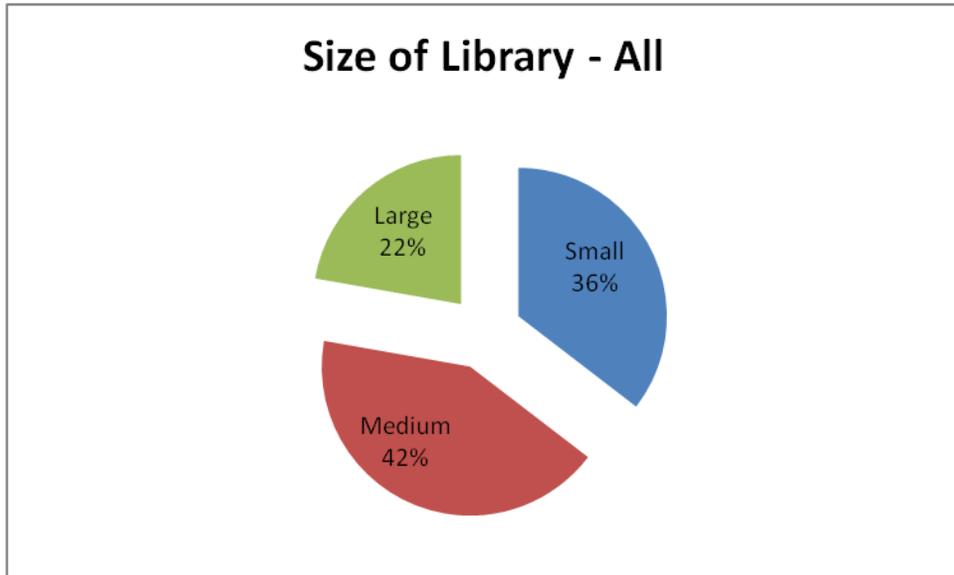
The NTRLS member responses to the same question came out a bit differently:



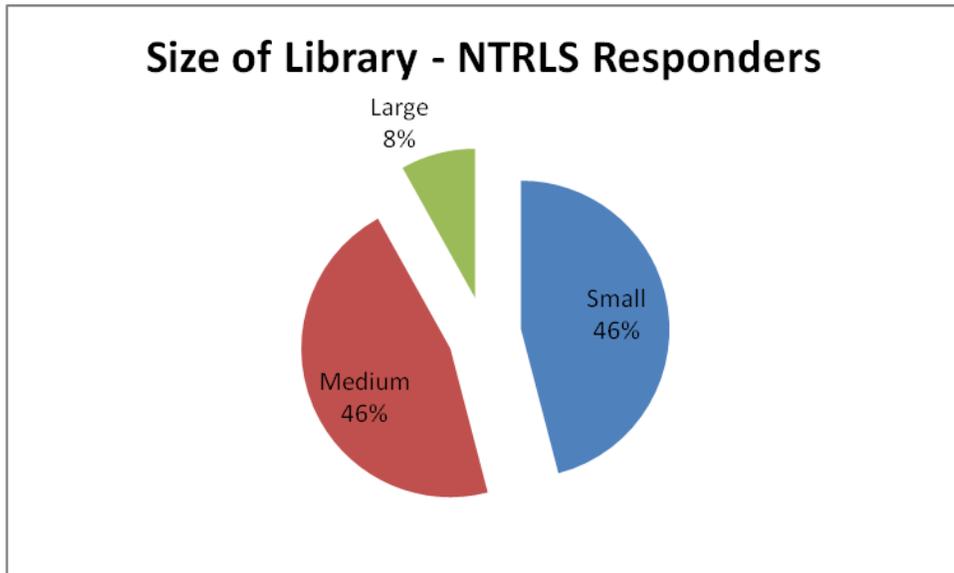
When asked 'What type of library are you associated with,' the entire group of responders answered as follows:



When asked the size of their library, the entire group of responders answered as follows:



The NTRLS responses to the same question came out a bit differently:



NTRLS member library website analysis

Neither the survey nor the website analyses were entirely scientific. However, I would argue that both are very informative. Website analysis inherently carries a measure of assumption and inference.

I could not find the websites of several member libraries. Perhaps they don't have websites or perhaps I just could not find them. Regardless, their data is not included in this specific analysis. These libraries might consider the [Plinkit](#) method of creating a website so that some basic library and TexShare information could be posted for their online patrons.

The great majority of NTRLS libraries did have websites. Some were basic and some were quite elaborate. I made the further assumption that the products and services included on a library's website were largely reflective of its actual current products and services.

Other data sources

Activities and projects of the NTRLS office are important and very well documented on the NTRLS website. Four resources on the website are of particular interest to this project:

1. Library Live [Podcasts](#)
2. Shared Integrated Library System (SILS) [Project](#)
3. LFNT Overdrive [Consortium](#)
4. [Plinkit](#)

Trends

In some of the categories listed below, I provide specific examples. In most cases, there are a number of similar products and tools available. Mentioning a particular product is not an endorsement, but a way to provide practical examples. Remember, each responder could vote on three separate trends.

The trends will be listed in their order of priority by NTRLS member responders. The number of votes that each trend received by public library responders and all library responders will also be listed.

Downloadable or streaming media – providing e-books, videos, podcasts, lectures and the like to our community

#1 (23 votes – NTRLS members, 39 votes - public library responders, 75 votes - all responders)

Introduction

This has become so popular that many libraries are now facing Internet bandwidth constraints due to the increased demand from patrons using these resources. One resource that my library (UT Southwestern) provides is downloadable content from the Audio-Digest Foundation. This is a very popular source for continuing education for our clients.

Another example is the Libraries Now podcast series at <http://www.ntrls2.org/default.asp?action=article&ID=263>. The podcasts feature NTRLS members as well as other experts talking about best practices, successful programs, and transformed library spaces.

NTRLS Usage

NTRLS is a partner with the Central Texas Library System, the Alamo Area Library System, and the New Mexico State Library in the Libraries Now podcast series mentioned above¹. That series is a great resource to learn about top library technology and non-technology issues.

Several NTRLS libraries have formed the Library Foundation of North Texas Overdrive Consortium. The members offer downloadable audio books, music, videos, and ebooks to their patrons via the [Overdrive](#) service. One example is the [Denton Public Library's](#) Overdrive page.

NetLibrary ebooks are available via [TexShare](#). Libraries can offer TexShare NetLibrary ebooks via their website or by providing patrons with alternative remote access capabilities.

Open source integrated library systems (ILS) and portals – examples are [Evergreen](#), [koha](#), and vufind

#2 (14 votes – NTRLS members, 21 votes - public library responders, 43 votes - all responders)

Introduction

A number of libraries are seriously looking at koha, Evergreen, and other open source solutions as their next ILS or replacement search tool. And an even greater number of libraries are talking about the open source ILS potential.

Please see my article in the October 2007 issue of *Computers in Libraries* on Integrated Library Systems (ILS)². In that article, I talked about the excitement at the Liblime booth

at ALA Annual Conference in Washington D.C. last year. The excitement that I experienced at the Liblime booth has still not passed.

NTRLS Usage

Open source ILS have caught the attention of many libraries. A group of NTRLS libraries are evaluating Evergreen from [Equinox](#) as part of the [Shared Integrated Library System \(SILS\)](#) project.

Information commons – our areas with computers and / or connectivity are evolving

#3 – tie (12 votes – NTRLS members, 19 votes - public library responders, 42 votes - all responders)

Introduction

We had an interesting discussion on this topic at an ALA MidWinter meeting in Philadelphia in January³. The ‘we’ that I am referring to is the Heads of Library Technology (HoLT) Interest Group which is an Interest Group within the Library Information and Technology Association (LITA). The University of Illinois at Urbana-Champaign describes who participates in their ‘learning commons:’ Library, Campus Information Technologies and Educational Services, the Housing Division, the Writer’s Workshop, Academic Advising, and Career Services.

An information commons does not just need to be a clump of networked computers. It can also be a comfortable library space with additional library services.

NTRLS Usage

An interesting blog post on IC for public libraries can be found at the [Technolywood Librarian](#)⁴. Nora Daly thinks that the IC should be comfortable as well as a place for some technology experimentation. Although the IC concept is usually related to academic libraries, I think that there is great opportunity for public libraries. Certainly the Internet computing area has become one of the most popular areas of the library. We can leave patrons alone or we can provide added value in activities, services, information, guidance, and comfort.

Gaming – advocates think that this is an important way to draw children and teens to the library

#3 – tie (12 votes – NTRLS members, 25 votes - public library responders, 36 votes - all responders)

Introduction

Although I never developed much interest in computer gaming, my three sons can be quite passionate about it. They are amongst the 117 million active gamers⁵ in the United States. Would your library draw crowds if you integrated gaming into your library services? You bet! Is that appropriate for your library? Well, that's your call.

Even the venerable New York Public Library has embraced gaming in the library⁶. The library thinks that today's youth need new methods of engagement. As a result, 18 branches now check out games for Wii, Xbox 360, and PlayStation 3. Some offer open gaming video sessions.

NTRLS Usage

Several NTRLS libraries already offer gaming. For example, the Arlington Public Library is planning their fourth installment of the [video game tournaments](#). The Alvarado Public Library offers use of a [PlayStation](#) and associated games.

One of my favorite Librarian Live Podcasts features an interview with Eli Neiburger from the Ann Arbor Public Library. Mr. Neiburger has also written a book entitled *Gamers... in the Library?!: The Why, What, and How of Videogame Tournaments for All Ages*.

Social software – we are actually incorporating Web 2.0 tools into our environment – examples are blogs, wikis, IM, facebook, MySpace, meebo, and twitter

#4 (9 votes – NTRLS members, 32 votes - public library responders, 69 votes - all responders)

Introduction

We might include services such as blogs, wikis, IM, Facebook, MySpace, Meebo, and Twitter in this genre. My library (UT Southwestern) has substantially invested in some of these technologies. We use Trillian to instant message with our clients. We started a new blog aimed at our clients called "Tell Us What You Think." We also implemented a SharePoint system which includes blogs, wikis, and many other teamware features.

The University of Texas libraries offer a Facebook app. You add the application to your Facebook account and that lets you search library resources from within Facebook. The Houston Public Library also has a presence on Facebook - <http://www.facebook.com/pages/Houston-TX/Houston-Public-Library/8575665644/>.⁷

NTRLS Usage

Several NTRLS libraries have invested in blogs. Examples are the [Bedford Public Library](#) blog and the [Burlison Library](#) online book discussion blog. The [Arlington Public Library](#) has a library technology blog. A new blog can literally be created in a matter of minutes. Of course somebody needs to keep it updated and respond to patron comments or it's not worth creating. It's a great way to get feedback and information from your patrons.

Technolust – we need to practice self-control, technology should add value to be incorporated into our library's environment

#5 (8 votes – NTRLS members, 20 votes - public library responders, 36 votes - all responders)

Introduction

In my humble opinion (IMHO), library technology exists to connect staff or patrons to information. If a technology does not do that or fails to do that in a superior way, then it has no value. After all, we are in the information business, not the hardware and software business.

We incorporated federated searching into our library environment at UT Southwestern in the early days of federated searching. The product was not mature and we spent quite a bit of time and money trying to make it useful for our clients. In the end, we decided to abandon the product and try again when the market matured.

NTRLS Usage

There's a concept in business called *opportunity cost*. This briefly is the cost of one choice versus another. We need to weight the benefits and costs of our potential products and services. For example, we might implement 'virtual reference' via Meebo instant messaging for two hours per day. The cost is low except for staff time. What else could that staff person be doing? How many 'chats' does she receive per week? Would that person be better off running a library blog which would reach more patrons?

MARC's death knell – embrace XML or similar newer, more flexible technologies to be competitive

#6 (7 votes – NTRLS members, 12 votes - public library responders, 23 votes - all responders)

Introduction

The Library of Congress Draft for Comment from the Working Group on the Future of Bibliographic Control⁸ has articulated this issue better than I could:

“The library community’s data carrier, MARC, is based on forty-year-old techniques for data management and is out of step with programming styles of today. No community other than the library community uses this record format, severely compromising its utility to other communities as a data transmission tool.”

NTRLS Usage

The working group stresses “that the World Wide Web is both our technology platform and the appropriate platform for the delivery of our standards.” Our data sharing will increasingly be tied to web standards and websites. It is clear that many of our patrons want our library websites to be the focal point of their information gathering and exploration – bibliographic and non-bibliographic. Make sure that your website is as good and accurate as it possibly can be.

The Standardized Usage Statistics Harvesting Initiative (**SUSHI**) protocol

#7 (5 votes – NTRLS members, 7 votes - public library responders, 16 votes - all responders)

Introduction

Usage statistics are critical to my library (UT Southwestern). Once we started getting electronic resources from a plethora of sources, our ability to manage and interpret usage statistics became a huge challenge.

You may have heard of COUNTER or Counting Online Usage of Networked Electronic Resources which is a related international initiative. SUSHI (ANSI/NISO Z39.93) is a protocol that defines an automated model for harvesting electronic resource usage data using a Web services framework⁹.

NTRLS Usage

Gathering accurate statistics are as important as ever for libraries. As more of our products become virtual, we need to make sure that we continue to capture accurate usage statistics. In many environments, these growing statistics will help us to justify enhanced products and services for the community.

Risk tolerance – it's OK to try things and even fail

#8 - tie (4 votes – NTRLS members, 6 votes - public library responders, 18 votes - all responders)

Introduction

I am convinced that status quo for libraries is not a good thing. That is not to say that everything that we do now is wrong or needs to be changed. We do a number of wonderful things now.

However, we need to be interested and engaged in our change processes or we might not survive. Change frequently involves some short-term risk. However, if we stagnate, the risk in the long-term will be much greater. Please see

www.informationdarwinianism.com for more information on this topic.

Try some new technologies this year. It costs very little to create a library blog, or Facebook page or to setup a teen gaming event.

NTRLS Usage

Libraries, librarians, and other library staff are not always receptive to change and risk. But again, the status quo is no longer acceptable in my view. The status quo might work right now in your community but that will inevitably change as your patrons are exposed to other options and ideas. Many of our former patrons are quite content using Google, Amazon, Barnes and Noble, Starbucks, as well as a host of other competitors.

We can make our libraries more physically as well as virtually comfortable. Not just for the sake of adding technology - but to add value to the patron experience. If you have not tried a gaming event to lure teens into your library, perhaps it's time. If you have not tried to create a blog, or Facebook page, or MySpace page for your library - perhaps it's time. Not just to keep up with the other libraries and other competitors, but to keep up with your patrons.

iPhone – accommodating Apple's device (and other smartphones and similar devices) in our library

#8 - tie (4 votes – NTRLS members, 6 votes - public library responders, 13 votes - all responders)

Introduction

Go out into a public area and it's evidently clear that people love their phones. It seems like half of the people driving are on the phone. Certainly, the phone has become the main communication mechanism amongst the youth - surpassing laptop and desktop PC communications. My sons Gregory, Ryan, and Evan are constantly using their phones for voice calls, text messaging, Internet browsing, and other functions.

An article from Lance Ulanoff in the June 2008 issue of *PC Magazine*¹⁰ may portend the importance of the smartphone and the iPhone in particular. When the iPhone arrived, Mr. Ulanoff was skeptical. However, now he states "the iPhone is the most important product of the still-young 21st century... laptops, even ultraportables, will pale in comparison."

The usage of the iPhone and similar devices will continue to soar. Voice, text, music, video, pictures, email, YouTube, maps, web browsing – you bet this will stay popular!

NTRLS Usage

The iPhone is a pretty independent little device. However, we can make sure that the books, music, and videos that we provide will work with our patron's portable devices.

Kindle – the new Amazon e-book reader

#8 - tie (4 votes – NTRLS members, 6 votes - public library responders, 12 votes - all responders)

Introduction

Mike Elgan wrote in *Macworld* "Last week, I set out to deflate the hype about Amazon's new Kindle e-book reader and to tell you why it will fail. But while researching this column, I became convinced of the opposite: Kindle is revolutionary and will succeed in the market. Some percentage of book lovers, including me, will buy one to replace their beloved paper books, magazines and newspapers."¹¹

Perhaps the Kindle is just for those with quite a bit of disposable income. After all, it is \$399 and each book costs about \$10. But you can download the book you desire in seconds. And then you can search for particular text. A book lovers dream?

NTRLS Usage

Like the iPhone, the Kindle is a pretty independent device. Perhaps we will be lending these devices to patrons in our libraries in a couple of years? Perhaps we will be providing free or discounted Kindle content?

The Remaining trends

That leaves five trends that did not make the top eleven:

- Freebase is an example of an **open, shared database** (3 NTRLS votes) that hopes to share the world's knowledge.
- **Software as a Service** (3 NTRLS votes) or SaaS is an option for libraries to host their applications and data at a vendor's site as opposed to locally in the library.
- **Mashups** (2 NTRLS votes) – combining data from more than one source into an integrated tool – examples are Go-go Google Gadget, iGoogle, and Yahoo Pipes
- **Perpetual beta** (1 NTRLS vote) relates to risk tolerance but is different. It is the idea that you can test and even share with your patrons products and services before they are perfected.
- **WorldCat Identities** (0 NTRLS votes) creates a summary page for every name in WorldCat.

There were many write-in trends this year. Some were listed on previous versions of this survey. I have interpreted a few and categorized them where possible. A sample of the write-in trends were as follows: electronic resource management, faceted browsing, federated searching (3 votes – all libraries), improving lives with technology, death of the physical reference collection, and technology upgrade issues (2 votes – all libraries).

There were two write-in trends from NTRLS responders. The first was Radio Frequency Identification or RFID. The second was technology training for staff.

I also received a number of interesting comments in the survey responses (from all libraries). Here's a few:

“They are all important. The ones I selected are longer lasting/longer term.”

“Streaming video is especially interesting as it can be a tool to keep librarians up to date on technology developments.”

NTRLS responders offered a number of comments as well:

“Most of that stuff above [the trends] is Sanskrit to me – I don't have a clue.”

“Some of the aforementioned subjects I have never heard of.”

“The death of the physical reference collection... patrons are using Google instead of coming to the library to get the answer.”

“I didn’t put it as a top concern, but there has been so much buzz about getting teens in through gaming – I think you have to pursue this really carefully and make sure you don’t sacrifice the quality of the library for the quantity of people in it.”

“I wish all could have been rate 1-3.”

If I had rated myself higher than “low” in technical knowledge, I’d have more opinions to contribute.”

Follow-up

You are most likely familiar with the NTRLS staff that are focused on technology. Adam Beatty is your Information Technology Specialist. Judy Daniluk is your Technology Consultant. Although technology planning for fiscal year 2009 has been completed, they are willing to take requests on a case by case basis. If there are important trends for 2010 that impact a number of libraries you might want to advocate that they be included in that fiscal year’s planning.

It is not really the end of this report. We have a blog at <http://t4-ntrls.blogspot.com/>. It’s a great place to discuss this report, other trends, and other issues. The blog will be maintained by the author for at least a year. Please participate. I’ll ‘see’ you there.

The Author

Richard Wayne is the Assistant Director at the University of Texas Southwestern Medical Center Library and is the president of Strategic Information Management Services – a library planning and library technology company. He can be reached at richardwayne@strategicinformation.com.

References

- 1 Central Texas Library System, "Central Texas Libraries Now – Podcast Series," www.ctls.net, < <http://www.ctls.net/content/view/83/157/> > (April 30, 2008).
- 2 Richard Wayne, "Helping You Buy: Integrated Library Systems," *Computers in Libraries*, October 2007, pp. 23-30.
- 3 Richard Wayne, "LITA Heads of Library Technology Meeting," www.litablog.org, January 13, 2008, < <http://litablog.org/2008/01/31/lita-heads-of-library-technology-holt-meeting/> > (May 1, 2008).
- 4 Nora Daly, "An Information Commons for the Public," <http://technolywoodlibrarian.blogspot.com/>, July 11, 2007, < <http://technolywoodlibrarian.blogspot.com/2007/07/information-commons-for-public.html> >, (May 31, 2008).
- 5 Candace Lombardi, "Women outnumber men in online games, survey finds," www.news.com, October 5, 2006, < http://www.news.com/Women-outnumber-men-in-online-games%2C-survey-finds/2100-1043_3-6123172.html > (May 1, 2008).
- 6 Tina Kelley, "Shh Free Video Games at the Library!," www.nytimes.com, March 21, 2008, < <http://cityroom.blogs.nytimes.com/2008/03/21/shh-free-video-games-at-the-library/?scp=2&sq=gaming%20library&st=cse> > (May 31, 2008).
- 7 Houston Public Library | Facebook, "Houston Public Library," www.facebook.com, < <http://www.facebook.com/pages/Houston-TX/Houston-Public-Library/8575665644/> > (April 30, 2008).
- 8 Library of Congress, "Draft Report of the Working Group on the Future of Bibliographic Control," www.loc.gov, < <http://www.loc.gov/bibliographic-future/news/draft-report.html> > (April 30, 2008).
- 9 NISO, "Standardized Usage Statistics Harvesting Initiative (SUSHI)," www.niso.org, < <http://www.niso.org/workrooms/sushi> > (April 30, 2008).
- 10 Lance Ulanoff, "So Long Desktop, Hello iPhone," *PC Magazine*, June 2008, pg 9.
- 11 Mike Elgan, "Opinion: Why Amazon's Kindle is revolutionary," [Macworld.com](http://www.macworld.com), November 26, 2007, < <http://www.macworld.com/article/61186/2007/11/kindle.html> >, (May 31, 2008).