Practical Ways to Incorporate New Technology Trends

So far, we have discussed reasons to stay on top of technology trends and how that affects libraries. We have also identified some technology trend watchers, explored how to follow them, and learned why it's useful to watch for emerging trends.

In this chapter, we take a look at how to incorporate new technology trends into your library. There are at least four aspects to consider when incorporating new technology trends into your library:

1. developing a plan
2. learning from library early adopters
3. conducting a technology process review
4. dealing with technology overload

Let's examine each of these areas in more detail.

Developing a Plan

As you start to trend watch, you will find new technology that you would like to purchase and incorporate into your library's technology offerings or infrastructure. You might discover technology that you can roll into an already existing service, or you may find something to help jump-start a new program, a service, or even a new library department.

Your library's strategic plan might provide guidance for exploring and incorporating new technology into the library. For example, one of my library's strategic plan goals (from a previous strategic plan) was to "support and nourish the community spirit, imagination, and culture."[1] This strategic initiative can be connected to multiple technology strategies, including purchasing more creative technology tools or using more participatory tools like online polls or surveys.

Let's take a look at how to incorporate an emerging technology trend in a library setting, using a current library trend—digital media labs—as an example.

Here are the steps we will explore:

- Learn about the trend and its potential benefits.
- Share the vision with management (and get permission).
- Research community interest.
- Create the plan.
- Start small.

Learn about the Trend

In the first two chapters, I highlighted effective ways to learn about trends. You now know how to use trend-watching tools to discover emerging library technology trends. If you have had these tools set up in the last couple of years, you probably have heard about digital media labs in libraries (see figure 3.1).

A digital media lab is a technology-focused space in a library where customers can create and manipulate digital content—like music, podcasts, photographs, videos, digital art, and graphic design. A digital media lab usually has a mix of hardware, software, and space dedicated to digital content creation. Tools and software usually include Macs and PCs with software like Adobe's Creative Suite and Apple's GarageBand. There are often microphones, digital audio interfaces, MIDI keyboards, guitars, and digital drawing tablets that are included as peripheral hardware that can be used in the space. Some libraries have gone further and have created complete recording studios, video creation spaces, and multimedia art learning labs.

How would you learn more about building a digital media lab in your library? Trend watching is a great

Figure 3.1
Digital media lab at Skokie Public Library (IL)

Figure 3.2
Topeka and Shawnee County Public Library's Make-It Lab website

place to start. You would also need to do some more in-depth research to determine how to set up a digital media lab in a library and to identify benefits of incorporating a digital media lab into your institution.

A great way to learn more about digital media labs is to visit a library's website to read about their space. For example, you might visit my library's Make-It-Lab page (see figure 3.2) and read about the services and equipment we offer our customers. Some other webpages to visit include the following:

- Skokie Public Library's Digital Media Labs
- Johnson County Library's MakerSpace
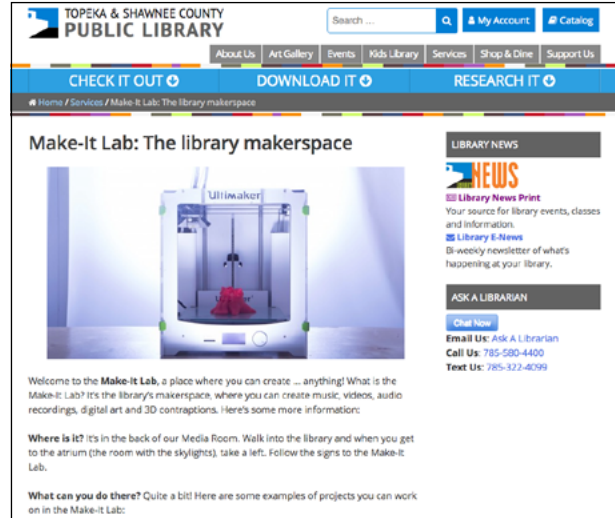- Kansas City Public Library's Digital Media Lab
- North Carolina State University Libraries' Makerspace
- University of Massachusetts Amherst Libraries' Digital Media Lab
- University of California San Diego Library's Digital Media Lab

Topeka and Shawnee County Public Library's Make-It Lab
http://tscpl.org/services/make-it-lab

Skokie Public Library's Digital Media Labs
https://skokielibrary.info/services/computers-technology/digital-media-labs

Johnson County Library's MakerSpace
https://www.jocolibrary.org/makerspace

Kansas City Public Library's Digital Media Lab
www.kclibrary.org/kcdml

North Carolina State University Libraries' Makerspace
https://www.lib.ncsu.edu/services/makerspace

University of Massachusetts Amherst Libraries' Digital Media Lab
https://www.library.umass.edu/locations/dml

University of California San Diego Library's Digital Media Lab
https://library.ucsd.edu/computing-and-technology/digital-media-lab

Each of these websites provides more information about the equipment and services each library makes available to its patrons. So read about what other libraries are doing, make a list of possible equipment and programs your library might be interested in, and adapt those ideas to work for your institution. You don't have to recreate the wheel!

Share the Vision with Management (and Get Permission)

Once your research is completed, your next step is to create a short summary or executive brief about the digital media lab you would like to create in your library, including the steps needed to turn that idea into reality. This doesn't need to be a detailed, step-by-step description of every possibility. Instead, your goal here is to provide an overview of what the idea would look like in your library.

Once you have that executive brief ready, your

next step is to meet with your supervisor, your manager, or your library director and share your vision, supported by your research. Your goal here is simple: Convince the library team that creating a digital media lab is a good idea, and get permission to move forward with the project.

Research Community Interest

Once your managers are on board with the idea, you should gather some information from your community about what it might want in a digital media lab. "Listening" in this instance means doing some community observation. To gauge interest in a digital media lab, you might look for these types of community activities:

Figure 3.3
First Friday event at Topeka and Shawnee County Public Library

- **Open mic nights.** Does your community have one or more open mic nights at a local bar or coffee shop? If so, that's a sign of an active music community. That group might be interested in a digital media lab.
- **Active music scene.** Similarly, if your community has an active, thriving music community, you might have interest. Look for entertainment newspapers, music festivals, music stores, and venues with local artists playing music.
- **Local arts scene.** If there are art galleries showing local artists' work, that means there may be artists interested in using the library's digital media lab. Figure 3.3 shows community members at Topeka and Shawnee County Public Library's opening reception in the library's art gallery.
- **Start-up businesses.** New businesses may be interested in using a digital media lab for supporting their business ventures and marketing.
- **Local events.** My library has hosted an annual Podcamp (a type of social media conference) that attracted people in our community who might be interested in a digital media lab. There are also local photography groups, website-building groups, and more. The existence of these local events and groups signals that there is potential interest in a digital media lab.
- **Local schools.** High schools in my hometown have small digital media labs and classes on electronic music, photography, and graphic design. There might be some partnership possibilities for the library.

While this type of observation doesn't ensure automatic customers for your new digital media lab, it does indicate potential interest. If you can gather examples of potential interest, you can move to the next step: asking your community about its interest in this potential new library service.

To gauge interest in the new service, you can create a short survey that can be placed on your website (see figure 3.4) and made available in paper form at the circulation or reference desk. You can also ask by using social media tools. If possible, visit some of the groups mentioned above in person and ask them about the potential new service.

To find out more about your community's interest in a digital media lab, you might ask survey questions like this:

- Are you interested in the library offering tools to help create videos and photographs?
- If the library had a computer for video editing, would you be interested in using it?
- Do you like to create music? Would you like to do that at the library?

Once you have gathered this information, add your findings to the summary you've already written. Now you have a report describing the new service and potential customer interest.

Create the Plan

Use the information you have gathered to make an informed decision about appropriate next steps for your library. Based on your research, you should know two important things: what other libraries have accomplished and your community's interests.

Use what other libraries have done as a basic template for your library's project. Then tweak that general template to meet the unique needs of your
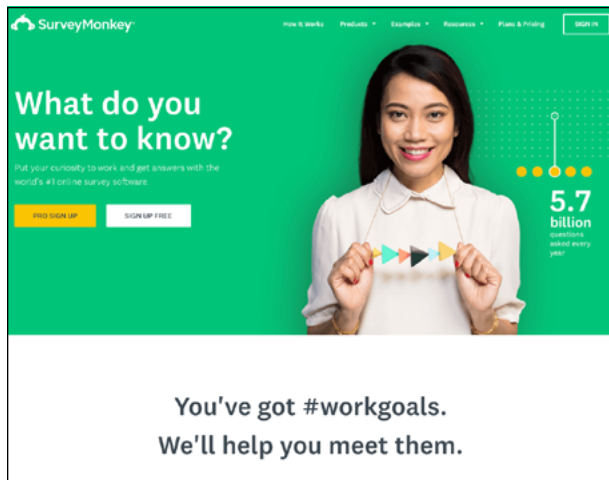
Figure 3.4
SurveyMonkey

community, based upon the community surveys and observations you have made. Based on your project idea and your research, you may need to plan for things like funding, staffing, equipment and software upgrades, and guidelines for usage.

A good starting point for creating your final plan is your library's strategic plan. Take the system-wide goals from your library's strategic plan, and build technology goals and objectives based on library strategy. Most of your research findings will likely fit into the library's strategic plan.

If some of your research findings don't easily fit into an already existing strategic plan, that's a great starting point for holding discussions with management. Present the plan to your supervisor or another interested manager. Depending on your management level in your organization, you might not have much say in planning new projects, but the manager will. They can be the project champion—going to administration and discussing the merits of the project.

You might look for things like the following in your library's strategic plan:

- **Working with entrepreneurs.** Entrepreneurs need tools to help create videos, music, ads, posters, websites, and so on. These people might have an idea but not the equipment or knowledge to start. The library can provide equipment, training, and resources to help entrepreneurs start.
- **Attracting teens to the library.** Teens love being creative, trying new things, and creating something new. You can help them do that, possibly even connecting what they are doing to their high school curriculum. You can also look into more formal school partnerships.
- **Building the community's cultural spirit.** Does your community have art festivals, art galleries and showings, or First Friday art walks? Does your

community have local musicians wanting to share their music? If so, your library can help these community members create and share their art, thus helping to build the community's cultural spirit.
- **Helping people preserve their cultural heritage.** A digital media lab can also serve people who want to scan old photographs or digitize family documents and memorabilia. In this case, your digital media lab might include a digital scanner and software and classes to help clean up older images. Offering this type of digitization service helps your community preserve its cultural heritage.

A digital media lab can fit nicely in a library's strategic plan, and so can many other types of emerging technology initiatives, with a little thought.

Start Small

If your library doesn't want to embrace a full-scale technology project, you might think about starting small by creating a pilot project that will test potential success of the more fully formed project. Pilot projects are a great way to spend a little money, a little time, and a little space to see whether or not an idea will take off. Then you can expand (or not) as needed.

In the case of the digital media lab example, for your pilot project you might purchase one computer with some of the software and hardware installed that you would like to use in the larger project. Advertise the new, small service, and see if the equipment gets used. To find out what your customers would like to see in a larger version of the pilot project, you might put a "What's missing?" sign by the computer, and ask for customer suggestions.

Evanston (IL) Public Library is a great example of starting small. It developed a multiphase digital media lab project. Phase I of the project started with a single computer in the teen area.

Here's what the library says about its project:

We propose adding to the Teen Loft a single computer equipped with advanced software, as well as several media creation tools (cameras, microphones, green screen equipment, etc.). The Loft is a natural choice for this first step in upgrading the Library's technology offerings: staff there already have a knowledge of the software, the equipment can fit there and be monitored easily, many of its users are familiar with the technology or are eager to learn how to use it, and media creation has always been a highly nurtured activity in the Loft. Teens would have the opportunity to use the technology—for school projects or recreationally—to engage in projects that promote critical thinking, creativity, and skill-building. Teaching these technologies would also be a component of this action

step. Library staff with knowledge of this software could offer small workshops, as well as volunteers and teens themselves.[2]

After the Teen Loft was completed and deemed successful, Phase II was a dedicated digital media lab, open to adult users as well as to teens.

Learning from Library Early Adopters

Hearing about the successes and failures of other libraries doing technology projects can be a great way to learn. There are a couple of ways to watch and learn from other institutions—indirectly and directly.

Indirect learning. If a library is doing innovative things with technology, it will often share what it's doing in blog posts, in articles, and in presentations at industry conferences. The library-focused trend-watching organizations and individuals mentioned in the previous chapter are sources of information about how new technologies are being implemented in all types of libraries.

Direct learning. You can also meet staff from these libraries and ask them what they're doing. You can meet at a conference or via social media. If you find someone who's doing what you want to do, make sure to "friend" that person. You can also email or call and ask someone to share. Most of us love describing what we do and will gladly share knowledge with others.

Another way to directly connect is to pile in the library van, take a road trip, and tour a library to experience their project or service firsthand. By visiting the library, you can see the facility, service, or technology in action, and you can talk directly to the staff involved in maintaining the service or resources— rather than talking primarily with a manager or library director, who might not have firsthand knowledge of the ins and outs of the service or offering.

Conducting a Technology Process Review

So far, we've looked at ways to incorporate new technology into a library and ways to see what other libraries are doing. Now let's look at a great way to improve current technology and technology processes at your library: a process review.

A process review is just what it sounds like—it's a way to examine the technology you have in place, figure out if that technology still works for your library or your customers, and discover if there's something different your library should do.

There are four steps in a process review:

1. Gather information.
2. Obtain feedback.
3. Categorize responses.
4. Plan for next steps.

Step 1: Gather Information

The first step in a process review is to figure out what's working and what's not. One way to do this is to use a Plus/Delta.

Often used as a tool to evaluate meetings, a Plus/Delta is a simple evaluation tool that you can use to determine what works and what needs to be changed or improved.

The steps in a Plus/Delta review include these:

- Gather a group of staff.
- Find something to write on, preferably large enough for the group to see. My library often uses flip charts.
- Make two columns, and mark one as the "plus" side. Write positive things on the plus side, like things that went well, positive customer comments, or improved service.
- The other side is the "delta" side. List things that did not go well, that need to be changed or updated, or what you would like to see changed.

Once you have your Plus/Delta list, start looking through the delta side. Figure out why something didn't work well, and start brainstorming how to fix it. Then you can move to the next step: obtaining feedback.

Step 2: Obtain Feedback

During this step, you will need to create some focused questions to ask staff and customers about the product or service. For example, if you want to ask staff or customers about your library's website, don't just ask, "So, what do you think about the library's website?"

Instead, ask more focused questions like "What do you want to do on the website but can't?" or "What's missing?" or "What's there, but seems to be clunky or confusing?" or "What frustrates you?"

These questions can be asked in a variety of ways, including face-to-face in a focus group or online, through surveys. Write down everything staff and patrons say, and then move to the next step: categorize responses.

Step 3: Categorize Responses

At this point you have done your brainstorming session and your Plus/Delta work. You have probably talked to some staff and maybe even to some customers about ways to improve the service.

How to Stay on Top of Emerging Technology Trends for Libraries   **David Lee King**

Look through the information you have gathered for similarities. Most likely you will find one to five major areas that can be improved. Rank those areas in the order of importance. What has the biggest bang for the buck? What process improvement will positively affect the most staff or customers? What might be cheap but useful?

Then, make a list of priorities and begin planning the next steps.

Step 4: Plan for Next Steps

Now comes the hardest part: deciding what processes to focus on and starting the improvement work. This step will depend largely on the library's budget, staffing levels and expertise, and goals.

Thankfully, sometimes a small tweak to an existing process might make a great improvement. For example, my library's IT department has participated in a departmental process improvement review. One area we needed to improve was our help desk process. We discovered that non-IT staff sometimes felt the answers they were receiving from the help desk were not fully addressing their problems.

The IT department's process improvement for that issue was to create a simple follow-through procedure for help desk issues. Now, when someone calls or emails our technology help desk, whoever takes the call or email owns the problem, and that person will follow it through to completion. If the problem is passed to someone else to work on, the IT staff member who originally took the call or email will follow up with the staff member who sent the original message to make sure everything was fixed to their satisfaction. This allows the IT department to make sure our customers (staff) get the answers they need so they never feel like their request goes into a black hole.

This simple change has made a huge difference in our library!

Dealing with Technology Overload

Finally, let's discuss technology overload. It's easy to feel overloaded when you are trying to stay on top of ever-changing technology trends. Thankfully, there are some simple tips you can use that will help achieve balance.

Here are some ideas to help:

- **It's OK if you miss something.** So far, I have encouraged you to monitor RSS and email feeds and to find information from social media sites like Twitter. Even though you have been a good reader and have set up all these listening tools (you did, right?), it really is OK if you miss some important technology news. If something is truly

a game-changer for your library, I guarantee that you will eventually hear about it. So, if you miss something the first time around, don't worry. You will have more than one opportunity to encounter the idea and to make that change in your library.
- **Skim the headlines.** I would advise you to treat news feeds and other online learning the same as browsing headlines in a newspaper. You don't have to read everything word for word. Instead, skim headlines, and then read what seems important or interesting. You'll be surprised at how much you can pick up that way.
- **Schedule your skimming.** Why not schedule times to keep up? For example, set your calendar to remind you to skim news feeds or social media at regular intervals (e.g., every day or once a week). This can save time and help you more fully focus on other, more important projects.
- **Unsubscribe selectively.** As I mentioned, I follow around 500 news feeds. I know some people who keep track of over 1,000 feeds. That's a lot of information flying by a news reader! Sometimes it's good to go through news feeds and email lists and delete the ones that are no longer beneficial to you. If you miss something important that was shared on a resource that you removed from your news feed, you will most likely be introduced to the idea in another way.
- **Use time-saving tools.** Using tools like news readers, search engine alerts, or email lists can save time since the updated news from each site comes to you. You can then read on your own schedule.

Here are a couple of sources for more tips on how to avoid trend watching overload:

- Simplyzesty.com. "10 Tips & Tools to Deal with Information Overload." TeachThought website. Accessed November 28, 2017. https://www.teachthought.com/technology/10-tips-and-tools-to-deal-with-information-overload.
- Elizabeth Harrin. "5 Steps for Dealing with Information Overload." *iMindQ Blog*, January 12, 2015, https://www.imindq.com/blog/5-steps-for-dealing-with-information-overload.

Notes

1. "Mission, Vision, Commitment, and Goals," Topeka and Shawnee County Public Library, accessed November 28, 2017, https://tscpl.org/about/mission-statement.
2. "2012–2014 Strategic Plan Progress Update," Evanston Public Library, Board of Trustees Meeting Minutes, draft, June 20, 2012, pp. 17–18, www.epl.org/wp-content/uploads/2016/10/20120620BoardPacket.pdf.