

# **RESPONDING TO RAPID CHANGE IN LIBRARIES**

A User Experience  
Approach

**CALLAN BIGNOLI AND LAUREN STARA**

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# Introduction

## Why This Book?

**A**s we wrapped up the manuscript for this book, it was May 2020, months into an unprecedented global health crisis with far-reaching consequences we still can't comprehend. The outbreak of the highly contagious novel coronavirus disease COVID-19 closed countless businesses and organizations—gyms, bars, restaurants, movie theaters, retail stores, college campuses, and thousands of libraries. Surging unemployment and market volatility were devastating the economic prospects of millions of Americans, from new graduates to service workers who were prohibited from doing their jobs. Huge budget shortfalls were projected for every state. We're still only at the beginning of a long crawl back to normalcy, and we don't have a clue how this will reshape our own lives, let alone the trajectory of our profession.

We wrote the majority of this book long before the first rumblings of COVID-19 came onto the radar in the United States, and at first it seemed like there was no possible way what we had written could stand up to the expectations of a book about change in libraries published during a pandemic. But as we reread the draft in preparation for sending it off to our editor, we realized that the motivation that drove us before the beginning of this year is the same motivation that will keep us going in response to the new world we'll be living and working in by the time this book is published.

Patience and Fortitude are the lions that flank the front steps of the New York Public Library's main branch on 5th Avenue in Manhattan. Their iconic grace is emblematic of the calm and strength needed to guide change. We

pulled in a third imaginary lion, Passion, to guide the change we write about in book. The book's structure was sketched out long before we knew where we'd be in 2021, but it feels even more relevant now. Passion, patience, and fortitude are what will keep our heads in the game as we confront the challenges that we're already facing in the aftermath of COVID-19.

As for our own passion, patience, and fortitude, we are both dedicated to libraries as an institution. Both of us have spent years working in all kinds of libraries: public, academic, and special. One thing that all of them struggle with is constant change.

Why? On the one hand, librarianship has deep roots as a rules-based profession. Librarians make order and organization where there was none before. We like consistency because it makes things more findable for patrons and makes our work lives easier. On the other hand, we are often scraping by without enough staff, funding, or time to do everything our communities need from us. Because of that scarcity, it can be hard to prepare for uncharted territory when we're barely feeling able to stick to the current map.

We have come to understand that rather than just being disruptive and difficult, change can also be an incredible force for good. Learning to embrace change—making it a thread that runs through and informs everything we do—can invigorate our libraries and our lives. Sure, the process can be challenging and sometimes a little scary, but it's also inspiring and really fun.

Our goal with this book is to talk about embracing change as a constant in libraries and librarianship. As we navigate the impacts of COVID-19, we think these strategies are more important than ever. In part I, "Passion," we'll start at a more philosophical level by explaining the mind-set we're suggesting you bring to this work. Next, in part II, "Patience," we'll move to applying that mind-set to specific topics ranging from hiring practices to security concerns and from technology to physical space. Finally, in part III, "Fortitude," we'll examine how to problem-solve and manage projects while contending with constant change and discuss the threats and opportunities that await us as a field in a transforming world.

## CHANGE

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*The library is a growing organism.*

—S. R. Ranganathan

Constant change is nothing new. However, it's a fact that we are living in a time of accelerated change, and libraries, despite their traditional image as history's gatekeepers and preservationists, are along for the ride. The ways people seek and consume information have become very different in the past two decades, and they will continue to evolve quickly in response to technological and cultural developments.

Over the past fifty years, technology has become the backbone for public library services. Online information has largely replaced print for rapidly changing information, such as government documents and research and developments in medicine, science, and technology. Libraries will continue to need to adapt to new technologies, and this means incorporating as much flexibility into services as well as buildings, furniture, and equipment as possible.

Patron expectations are now shaped by megacorporations such as Amazon, Starbucks, and Netflix. Public spaces are becoming increasingly scarce, and in many urban centers in the United States, rents are skyrocketing while housing options are shrinking. The cost of living and the weight of debt are crushing people's ability to accumulate expendable income. This impacts how Americans are spending their leisure time as they seek room, equipment, and supplies to explore new hobbies and interests beyond what they can afford (or have room for) in their own homes; this trend was highlighted during the COVID-19 pandemic in 2020. In order to remain relevant and respond to emergent needs, libraries are shifting their service models to become more nimble, expansive, and adaptable to these cultural shifts.

So, how can we write a book about constant change that, once it's published and printed, will instantly render itself unchangeable? The web designer and writer Erin Kissane states this in her book *The Elements of Content Strategy*, a treatise on keeping websites well-curated and usable: "If newspapers are 'dead tree media,' information published online is a live green plant." Libraries and their collections are live green plants, too, and as Kissane writes, "Plants are more useful if we tend them and shape their futures to suit our goals." We've done our best to write this book in a way that will help you tend your live green libraries, making them more useful as you work to shape their future and reach your goals.

Andrew K. Pace's *The Ultimate Digital Library*, an ALA Editions title published in 2003, focuses on the anxieties that struck librarians when the internet as we know it began to reshape society. It was a useful read as we were writing this book, giving us a frame of reference for the strange ways that technologies change and yet also manage to remain the same. Pace wrote then about problems we still have today—overpriced academic literature, lack of usability in software interfaces, and pressure from Google and Amazon, just to name a few.

Pace identified the biggest challenge to libraries in 2003 as something he calls "disintermediation," a trend toward libraries and librarians being taken out of the process of finding and providing information. While some might try to argue that Google and Amazon have won that battle, libraries are so much more than information service providers. We'd say one of the biggest challenges to libraries today is figuring out all the ways in which we can go above and beyond that role while still keeping our core values and goals of inclusion, equal access, and community in mind. We hope this book will help you find a clear path forward in the face of constant change.

## NOTES

1. Erin Kissane, *The Elements of Content Strategy* (New York: A Book Apart, 2010), 12.
2. Kissane, *Elements of Content Strategy*, 12.
3. Andrew K. Pace, *The Ultimate Digital Library* (Chicago: ALA Editions, 2003).



## PART I

# Passion

**W**hy did you choose to work in a library? We'd guess it's at least in part because you want to help people and give them access to the resources they want and need. This book is grounded in user experience principles, attitudes, and practices. We'll start with a crash course in how user-centered design connects us to our patrons and aligns our goals with their own. These concepts will help you connect your passion for libraries to simple, concrete ways of making it real.

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# 1

## Customer Service Expectations in the Twenty-First Century

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**L**ibraries are responding to changing user needs by shifting their service model to become more nimble and adaptable. Customer service expectations, in libraries as much as everywhere else, are shaped by a handful of tech and retail corporations with outsized influence on American life. It's not easy for libraries to stay competitive and responsive in areas where those companies are fighting them for ground.

To break that down a bit more, paid services like Amazon's Kindle Unlimited and Audible provide easy access to e-books and audiobooks for a monthly fee; Spotify and Netflix provide streaming services for music and television. People subscribe to digital editions of magazines and newspapers, often without realizing their local library is already paying for the same subscription. In libraries, we can request books and articles we don't own on behalf of our users with a turnaround time that's not half bad, but people accustomed to overnight delivery might get tired of waiting and opt to buy or illegally download the material.

Aside from these content concerns, libraries have long served their role as a *third place*, the term sociologists use for the social areas in life outside home and work. But this third place could also be a coffee shop or a social media site. Any way you slice it, whatever you attribute it to, patrons have higher

expectations of their libraries. More and different types of space are required to offer the types of programming and services that have become increasingly standard in recent years, such as quiet and collaborative study spaces, creation or tinkering spaces of various types, community meeting spaces, and self-service options. As if that isn't enough pressure, the ways people seek and consume information are not static. They will continue to evolve quickly in response to technological and cultural developments. In turn, libraries need to constantly adapt to new technologies and service expectations, and this means that flexibility and community needs must be at the foundation of every decision.

If we peer outside of librarianship, much of the current research about customer service expectations—and other aspects of marketing and business in the digital age—puts an inordinate focus on the preferences of millennials. Of course, we're not serving only millennials—and we never were—not to mention the whole generation of young adults that follows them now. A 2015 report from Nuance Communications, a software company that builds voice recognition and automated phone systems, shows that there's not so much of a difference between generations when it comes to what people expect and what frustrates them.<sup>1</sup> Members of different generations reported unified frustration when they couldn't reach a "real person" at the end of a phone call or e-mail transaction. They also reported an equal adoption of self-service options and agreed that self-service has generally improved customer service quality. All of this is relevant to libraries, as we invest in self-checkout machines and explore the possibility of staffless hours or branches.

We've found there's much to be learned from other types of service organizations and the dimensions of customer service they're finding to be most important today. While the end goals or services they're offering might be totally different, libraries have analogous touchpoints that can be just as important in determining their perceived success or failure as service providers.

Take airlines, for example. A 2017 article in the *Journal of Air Transport Management* notes that customers of Aegean Airlines were most satisfied with the company's quick self-service option for online check-in.<sup>2</sup> Those same customers reported that it was most important to them to be able to get on their way as quickly as possible upon landing, whether it's to a connecting flight or a taxi into town, with minimal confusion or slowdowns. Interestingly, the most satisfying part and the most important part of the service journey were identified as two different things. What might the most satisfying and most important parts of the library service journey be? Are these the same for everyone? How might they change?

Another industry to peer into is hospitality. In a 2019 article published in the journal *Tourism Management*, a group of researchers describes how hotel visitors' expectations change over time when they stay at a hotel more than once.<sup>3</sup> They found that room quality and appearance are most important for a

first stay and that good service becomes increasingly important during second and third stays. For these repeat visitors, service quality is the most important factor in decisions to revisit, beating out cleanliness and hotel location. How might libraries rise to the challenge of increased service expectations of their repeat patrons?

All trends, in libraries and everywhere else, are impermanent and subject to their own evolution. As Generation Z members take over the spotlight from millennials, what new insights will we discover? Will the fact that they grew up in the time of social media mean everything about serving them must change, or will their needs be largely the same as for the cohorts that came before? And how can libraries meaningfully compete on all of these fronts and keep up with this constant evolution?

We need to begin to adopt the mind-set that is comfortable with asking these questions. We can break down these big challenges into smaller chunks and be honest with ourselves about what our libraries can do better. We can ask our patrons to tell us what's working and what isn't. We can shore up our self-service options and work to make those experiences as frictionless as we'd want getting a boarding pass to be. We can think of ways to make it easy to get out of the library and back on the road when people drop by and expect to be in and out in just a second. Clearer signage, posted information about transportation options, and easier parking can all contribute to that. How can we make first-time patrons come back again? We can be approachable and attentive not only in our interactions with all patrons but also when crafting resources and road maps about our services online and in the building. We can focus on establishing our brand both when patrons first come in to register for their library cards and out in the community where they are already learning, living, and working.

## REFERENCE SERVICES: THE DE FACTO GENIUS BAR

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In 2001 Apple launched its first Genius Bar, an in-person tech support hub for the company's brick-and-mortar retail stores (see figure 1.1). Since then, these service points have evolved to include the Studio, a classroom of sorts staffed by trainers who show visitors how to use various Apple software and peripherals. Meanwhile, reference desks in public libraries around the world have become the de facto Genius Bars for technologies of all makes and models, including Apple's. There are 271 Apple Stores<sup>4</sup> and over 16,500 public library branches<sup>5</sup> in the United States. Reference staff field questions all day long about how to use the technology that's already in the library, not to mention the hodgepodge of different devices that patrons bring with them. And unlike the Apple Store, the library isn't tucked away in a fancy suburban mall and has no intention of selling you an \$800 tablet.

**FIGURE 1.1**

Launched in 2001, Apple's in-store Genius Bars provide personalized face-to-face tech support for the company's products.

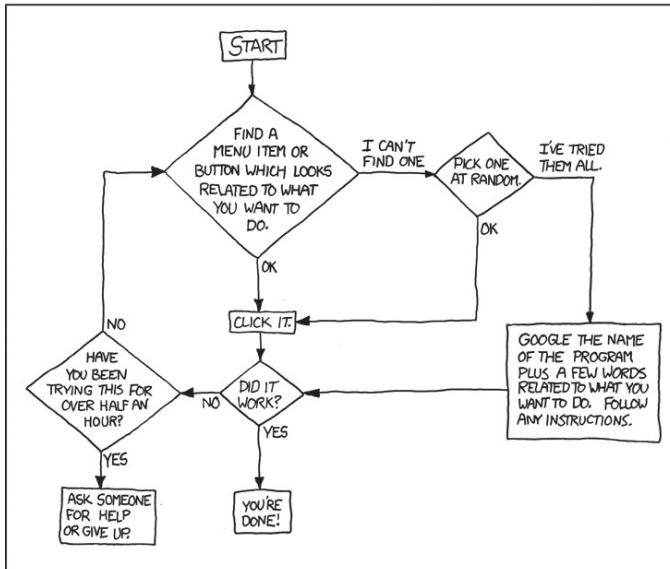
The questions that come to reference staff range from the very library-specific ("How do I borrow e-books on my Kindle?") to ones that aren't really being answered in any other public place ("What are the privacy risks of using Facebook?"). They can be as simple as a request to replace paper in the copier or as complex as asking for advanced training on 3-D printing software. The tech-savviness of patrons varies widely, just as it does for staff. We have some pointers for how to handle this influx of technology questions and a reminder: we're not likely to see this trend slow down anytime soon.

- Offer a variety of choices for patrons looking for tech help aside from reference interactions. Many libraries have seen success with bookable one-on-one sessions that give patrons a chance for more uninterrupted time with a helpful person who can assist with troubleshooting, accessing online resources, or building new skills. This model is especially beneficial for tech novices who might feel pressured or uncomfortable in a group learning setting. That being said, some people prefer to learn alongside others in a classroom format. These trainings should be offered at multiple times throughout the week to accommodate patrons' schedules.
- If you or your staff feel uncomfortable with technology or with playing the role of expert in these one-on-one, on-desk, or classroom settings, try to unpack why. Are you promising something that your team might not be able to deliver (i.e., training for a very specialized or complicated program)? You can say no to requests that are truthfully outside your area of expertise. Have you not used the technologies people are asking about? You could set up a "petting zoo" where you and staff have a hands-on opportunity to try out technology before working with a patron. Do you feel like you have to know everything about an app or a device before you offer training on it? Think of your training as an opportunity not to clutch the expert role but instead say, "I don't know, but let's find out together."

Providing technology help is not so very different from answering a more traditional reference question that requires you to find credible resources on a

DEAR VARIOUS PARENTS, GRANDPARENTS, CO-WORKERS,  
AND OTHER "NOT COMPUTER PEOPLE."

WE DON'T MAGICALLY KNOW HOW TO DO EVERYTHING IN EVERY  
PROGRAM. WHEN WE HELP YOU, WE'RE USUALLY JUST DOING THIS:



PLEASE PRINT THIS FLOWCHART OUT AND TAPE IT NEAR YOUR SCREEN.  
CONGRATULATIONS; YOU'RE NOW THE LOCAL COMPUTER EXPERT!

**FIGURE 1.2**

This XKCD Comic #627, "Tech Support Cheat Sheet," offers indispensable advice for today's reference desks.

topic you've never heard about before the minute you're consulted about it. Just as in that situation, take the time to listen to and understand the question. You are likely used to quickly tossing a few keywords into a search bar to get background information on topics with which you aren't very familiar. As the web comic XKCD put it in a flowchart on becoming "the local computer expert": "Google the name of the [software] plus a few words related to what you want to do. Follow any instructions."<sup>6</sup> (See figure 1.2.) The same rules apply here.

## Practice Empathy

We think one of the best pieces of writing on technology training remains Phil Agre's 1996 essay "How to Help Someone Use a Computer."<sup>7</sup> Agre reminds us that none of us were born knowing how to use computers, no matter how *born digital* we might be. He offers an often-forgotten reason

why people learning about tech can easily get frustrated or impatient: “A computer is a means to an end. The person you’re helping probably cares mostly about the end. This is reasonable.” And, maybe most important of all, he points out the underlying problems with the experience of using many technologies: “Whenever [people] start to blame themselves, respond by blaming the computer. Then keep on blaming the computer, no matter how many times it takes, in a calm, authoritative tone of voice.” Think about when you’ve seen patrons attempting to navigate the disjointed maze that is finding, borrowing, and accessing e-books or journal articles. They might take it out on themselves, blaming their lack of tech abilities, but no, that mess is all ours—or, well, our vendors’.

## Be Approachable

Another key part of providing good reference service is approachability, and in a technology-oriented sense, this includes the channels through which patrons can approach you. You should give them as many channels as you can, not only through the traditional ones of coming up to a desk in person or setting up a one-on-one, but by offering e-mail and chat reference services too. In chapter 4, we talk about communication between members of library IT (information technology) teams and how online ticketing systems facilitate online reference services; they often also include phone numbers to which patrons can text their questions. Another advantage of ticketing systems is the ease with which they help keep track of the kinds of questions being asked; they make it possible to generate a list of frequently asked questions (FAQs) that actually get asked—versus the FAQs we see all too often that read like lists of questions librarians *wish* their patrons would ask.

Social media platforms can also provide a way to engage with people, though we’d recommend using them mostly as a way of setting up a time to talk in another setting. Similarly, you can offer to continue chats or e-mail conversations in person or over the phone if a question might be better answered that way, offer one-on-one appointments, or mention upcoming workshops. Though it ultimately comes down to a patron’s preference and comfort level, tech troubleshooting can be much more effective and less abstract when both parties are looking at the same screen.

## NOISE, PHONES, AND FOOD

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Libraries are no longer places for silent study; we removed *shushing* from our job descriptions long ago. Cell phones as well as food and drink in the library are changing library culture very quickly. These concerns probably have the most impact on public libraries, though all types of libraries are seeing and responding to them.

Today's library patrons are not just comparing your library to other libraries, but also to Starbucks and Barnes & Noble, as well as their own living rooms. While there is a significant number of users who want and expect the traditional library environment (quiet, calm, that "book smell"), many others are looking for a place they can be comfortable in, sometimes for long periods of time. This means having easy access to power for charging devices, communicating via text and voice calls, and sipping their favorite caffeine-laden beverage. Some patrons want quiet, but others are looking to plug in to a new kind of social interaction: being alone together. Still others want to interact and collaborate and don't want to be quiet at all.

How can staff manage patron expectations in a busy, active environment? How can we accommodate all these behaviors along with differences in age and demographics? How can we compete with Starbucks and the like if we set extreme time limits, don't allow phone calls, or don't let people have their lattes?

One way is through zoning. Different areas of the building can be designated as active, silent, or in-between. Many libraries are allowing covered beverages throughout the building (with the exception of historical rooms or rare collection areas), and we encourage this. Food can be allowed in some areas (such as teen rooms and café spaces) and not others.

An efficient way to organize zoning in the library is to make the area immediately inside the entrance the most active and permissive area and then become progressively restrictive moving into the building. Many academic libraries and large public libraries configure zoning by floor, with the lowest level being the most active space and the top level as silent study space. If your library is only one floor and/or very small, zoning can work to some extent, but it's very important to provide at least one enclosed, acoustically separated space for those who want quiet—even with excellent acoustical engineering design, sound will carry.

If you don't already have policies around these issues (or if your policies are traditional and restrictive, banning all beverages and cell phone use), your staff and governing body should review different approaches and consider which could work in your library. It's essential that we be prepared to evolve along with patron expectations; the way people are using our buildings is changing, and we must change with them.

## NOTES

1. Retail Customer Service, "Generation Gap Narrowing When It Comes to Customer Service," May 14, 2015, [www.retailcustomerexperience.com/news/generation-gap-narrowing-when-it-comes-to-customer-service/](http://www.retailcustomerexperience.com/news/generation-gap-narrowing-when-it-comes-to-customer-service/).
2. Stelios Tsafarakis, Theodosios Kokotas, and Angelos Pantouvakis, "A Multiple Criteria Approach for Airline Passenger Satisfaction Measurement and Service Quality Improvement," *Journal of Air Transport Management* 68 (May 2018): 61–75, <https://doi.org/10.1016/j.jairtraman.2017.09.010>.

3. Feng Hu et al., "Evolving Customer Expectations of Hospitality Services: Differences in Attribute Effects on Satisfaction and Re-patronage," *Tourism Management* 74 (October 2019): 345–57, <https://doi.org/10.1016/j.tourman.2019.04.010>.
4. MacRumors, "Apple Stores," May 12, 2020, [www.macrumors.com/roundup/apple-retail-stores/](http://www.macrumors.com/roundup/apple-retail-stores/).
5. American Library Association, "Number of Libraries in the United States: Home," June 14, 2019, <https://libguides.ala.org/numberoflibraries>.
6. XKCD.com, "XKCD Comic #627," August 4, 2012, [www.explainxkcd.com/wiki/index.php/File:tech\\_support\\_cheat\\_sheet.png](http://www.explainxkcd.com/wiki/index.php/File:tech_support_cheat_sheet.png).
7. Phil Agre, "How to Help Someone Use a Computer," 1996, <https://pages.gseis.ucla.edu/faculty/agre/how-to-help.html>.



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