COMMUNITY TECHNOLOGY PROJECTS
Making Them Work
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One evening in February 2009, I opened the door to a small storefront on the side of a large theater building. The room was filled with a big table, and the walls were lined with shelves of paperbacks and zines. This was my first look at the Chicago Underground Library (now known as the Read/Write Library Chicago), which was founded as a grassroots independent library in 2006 to bring together works by disparate artistic communities in Chicago. I was fresh out of graduate school at the University of Illinois Urbana-Champaign, having graduated in May 2008—at the same time as a massive economic downturn. After a disheartening job search which had ended in part-time work with bad hours, I was attracted by the idea of a library I could make my own.

During my first volunteer meeting at the Read/Write Library, I got so excited about the project that I agreed to migrate the website to the Drupal content management system to create a new kind of library catalog, which I accomplished over the course of the next year. Over that year and in years following, I kept showing up to perform activities such as staffing the space during open hours, scrubbing the toilets, filling out the IRS paperwork, and developing the website. This work led to new professional opportunities, but more important, it gave me a vision of what a library community could be and the amount of work it takes to make one successful. I remain on the board of directors, even though I am less hands-on these days.

The library is still attractive to new volunteers today precisely because it offers an appealing community experience and showcases the ways in which Chicago—still a city divided by race and class—can come together. Working with the Read/Write Library Chicago helped me feel empowered to bring that same sense of community and do-it-yourself approach to my day jobs and to the other groups with which I have worked throughout my career.
My empowerment has translated well to participating in technology communities, including stints on boards, working groups, local technology meetup groups, and conference planning committees, as well as posting on social media about digital collections. Participating in these many ways has given me firsthand knowledge of how library technology communities work. What I have learned is that the work is done by those people who show up and keep showing up. This is true of library work in general, but especially so for technical projects. Some types of library work have decades (such as MARC cataloging) or centuries (such as bibliography) of consensus on how they should be performed. Consensus is still in the making when dealing with tools or projects that have only existed for a few years. Active engagement in communities that are creating new tools and practices is the only way to stay current and to help shape those tools and practices.

In any type of library and any type of job, library workers rely on rapidly shifting technology. Everyone must be aware of how to get help or give it, ask for changes, and shape best practices. Everyone needs to develop skills to become comfortable engaging with communities, finding appropriate leadership roles, and maintaining sustainable and positive communities. The problem is that for many people, even those who want to be part of the work, it can feel impossible to discover how to get started in technical communities. I wrote this book because I have had many conversations with people who see communities they admire but cannot figure out how or where to get involved.

This book is a guide for people who want to get started with community technology projects, understand what their options are, learn how to find and create communities, and decide which skills to learn. For those who are already engaged with communities, it will be a guide to creating a welcoming community for new people and maintaining a motivated community in challenging times. I want everyone to be inspired to make better library technology communities.

I am very grateful to the Loyola University Libraries for allowing me so much time and latitude to work on this book. Thanks to the many colleagues at Loyola, and in particular Hong Ma, who were understanding about my need to shift projects around to complete the work.

All my communities were essential to this book, both in teaching me how to be a member of a community and by listening to my ideas as I have worked through them over the past few years. My LITA and Code4Lib...
friends and colleagues who have worked to improve those communities have been especially educational and inspirational. I appreciate that the women of LITA who make up so much of my professional support network never allow me to leave any idea unexamined.

Thanks to my editor Patrick Hogan of ALA Publishing for asking me to write this book and for providing helpful guidance throughout the process. I can hardly thank Chris Martin enough for his help with the book, for reading the manuscript and always being willing to listen.

And last, but certainly not least, thanks to my husband Mike Birnbaum for his many excellent suggestions and forbearance with my challenging schedule. My parents and parents-in-law were instrumental in the process, providing weekend childcare and helpful advice. My children, Ira and Julian, gave up many hours with me so I could work on the book.
WHAT SUCCESSFUL COMMUNITIES DO

Definition of Community

Community projects are about people working together to solve a problem. Successful communities become so because the appropriate people have found each other, identified a problem, and figured out some solutions to it. Community technology projects may suggest a certain type of development and collaboration—for instance, a distributed network developing open source software. But because of the nature of library work, I use the word “community” more broadly, as encompassing any technology project with a collaboration between multiple individuals and/or libraries or library-related organizations.

Library technology communities can take many forms. A collaboration can be as small as an informal group in a single city, or as large as an international association. It can be a formal entity with a board of directors, or a group that exists primarily via an e-mail list. Communities such as user groups or support networks can form around commercial projects. Large associations such as the American Library Association or Society of American Archivists have divisions and sections focused on technology issues. And certainly, many library technology communities take the form of open source software developed by distributed networks.
Communities go in cycles. Communities may start small, become large, and then break apart into smaller communities. They may remain stable for years, only to experience upsets in funding, staffing, or mission, which, once resolved, restore stability. Choosing the appropriate techniques or tools at each stage of the cycle can be a challenge. The life cycles of community projects were illustrated in *It Takes a Village: Open Source Software Sustainability* (LYRASIS 2018), a recent guide to open source sustainability for projects related to cultural heritage and scientific information. According to this model, life cycles are a series of phases and facets. Phase 1 is “Getting Started,” Phase 2 is “Growing/Getting Established,” and Phase 3 is “Stable but Not Static.” Within each phase are facets, which are specific considerations for the project. For open source technology projects, this guide identified for the following facets that will apply to any technology community: governance, technology, resources, and community engagement (LYRASIS 2018). We will return to these ideas throughout the book as we consider various types of communities and see how successful communities adapt and evolve.

### How I Researched This Book

Over the years during which I have worked with library technology projects, I heard certain stories about practices that worked or failed in community projects. But were these true? To test my impressions, I looked systematically at community-oriented projects in library technology that had been presented at national conferences over the past decade. My data included thirty-three projects, of which twenty-one are still active. I then expanded my examination to the larger bodies that sponsored these conferences or engaged community in other ways, and I explored published case studies about projects with a community focus. I grouped communities into four categories: small-scale distributed development projects, user groups, general technology associations and consortiums, and large-scale distributed development projects. The types of projects include discovery layers, bibliographic management systems, library technology management tools, integrated library systems, content management systems, infrastructure networks, and community libraries or support networks.

At first, I assumed that successful projects would share factors like external funding, professional staffing, or strong adherence to the same mission over the years. Instead, I found successful projects could be entirely
self-funded, volunteer-based, and willing to shift mission or focus as needed. Nor did the size of community or type of project seem to matter. What successful communities have in common is that they support their members both technically and emotionally. I tracked the types of support various communities offered and explored what the unsuccessful communities may have lacked. However, sometimes a community may have done everything right and still have been unsuccessful due to changing technical realities. It may have faced major challenges, as, for example, when an institution that employs the project’s developers no longer supports their work on the project. Nothing about developing an open source community is easy. Several case studies will help to illustrate the nuances of how communities run into problems.

What Successful Communities Need

It takes work to maintain communities. The process of creating communities requires clarity about what is important, dedicated effort to maintain that clarity, and a willingness to change or adapt over time. It necessitates setting aside individual egos in favor of larger ambitions while still ensuring that the community adequately meets the needs of its participants. Most communities fail when an individual vision, or a vision shared by only some of the members, is not meaningful to the group. Communities that grow and evolve require setting aside preconceived notions and sharing a vision that is compelling enough so that all involved will show up and do the work and keep showing up.

Communities need to have strong values. Community is especially important in libraries, because the mission of libraries includes sharing, which necessitates trust. For that reason, we must be particularly careful to create communities that are not exclusionary or exploitative. Some communities have failed or are at risk because of unethical practices. There are communities that are still active but have bad reputations. We are at a critical juncture in our society as we grapple with newly revealed history of institutions covering up unsavory behavior. We must assume libraries and library technology projects are not immune to these risks, and work to improve our own institutions.

Communities need to support their members. Working with others on technology projects—or any complex projects—requires mastering the complex interplay of personalities, ambitions, and knowledge. Success or
failure is dependent upon a multitude of external factors over which the participants may have little control. Companies go out of business, grants end, and institutional priorities shift. Despite those realities, the individuals who make up a community have their own perspectives and desires. Helping people find engagement within the community helps weather changing times.

■ Using This Book within Communities

I intend this book to address many levels of interest in community projects, but three groups of people will find specific content to meet their needs: participants, managers, and funders. Many readers will fit in multiple categories (e.g., people who work at funding agencies might participate in technical communities out of personal interest).

» Participants want to get involved with a community, whether for an existing or new project. Throughout I will point out avenues for engagement in various types of communities and tools that are useful to become proficient in community work.

» Managers want to encourage or support their staff’s community involvement. If staff are hesitant to enter that world, managers can use some of the tips in this book to motivate them. Understanding motivation and building engagement are critical to successful communities, and managers will find some techniques that can be used for motivating teamwork in their own organizations.

» Funders make many community projects possible. They can use the lessons from this book to help projects be more successful. As the technology world shifts, funders must be aware of changing realities about community sustainability, and not assume past solutions will continue to work.

Those who are working on starting up new communities will learn from the history of library technology and from established communities. They will have chances to try new things and avoid what were, in hindsight, obvious mistakes. They can avoid missed opportunities. I will go into more detail later about specific considerations for new communities, but in addition to everything else, it is important to pay special attention to choosing names
for communities, determining appropriate legal structures, and creating a strong ethical framework for members.

**Conclusion**

Library technology communities are not perfect. No community is. Looking for what we can improve, retool, or rethink in a constantly shifting community landscape is a job that will never end. However, the history of library technology proves that this is a worthwhile pursuit. There is a long and vibrant history of cooperation both within and among organizations to create solutions. Starting with that history will set up the background for how communities work and review what types of communities are most prevalent today. Of course, every day there will be new ideas for new communities—in the months during which I was researching this book, I became involved with several incipient communities in library technology and related areas. By the time you read this, there will have been many more great ideas. That should not be discouraging but should tell us that this is work worth pursuing.
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