THE EXPERIMENTAL LIBRARY

A Guide to Taking Risks, Failing Forward, and Creating Change

Cathryn M. Copper

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Cathryn M. Copper works at the intersection of libraries, architecture, and technology. As the head of the Eberhard Zeidler Library at the University of Toronto, her current research explores technology and experimentation in libraries. She has spoken on the topic of experimentation at several national and international conferences including the Association of College and Research Libraries and SXSW EDU. Her talk on the use of artificial intelligence and augmented reality in libraries was featured as one of the "biggest and most pressing ideas" at SXSW EDU.

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For my most important experiments,
Leonard and Otis.

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INTRODUCTION

How do technology companies innovate so rapidly?

What infuses start-ups with the ability to take big risks? These are the questions I sought to answer when writing this book. Many of the changes libraries have responded to over the last two decades were born from technology companies and innovative start-ups. Understanding what fuels these sectors could help information professionals respond better to change. Libraries have, to a notable extent, responded to the technological and societal changes of the twenty-first century. Still, as someone who started studying the profession in the early 2000s, I have spent much of that time in response mode. Thus, I wondered if experimentation could be the tool that could move librarianship from a reactive to a proactive profession. Serendipitously, as my research unfolded, experimentation grew even more prevalent as a method used by innovative companies to test and launch new products, and I started to explore the idea of adapting this concept in libraries.

The beauty of experimentation is that anyone can do it regardless of budget. You do not need to be a computer scientist to conduct an experiment, which is fantastic because I am not one. The thread throughout my career has been working with and learning from architects and designers. As an architecture librarian, most of my experience comes from the academic realm, at institutions that vary dramatically in scale and scope. I started my career as a professional librarian at a small, private teaching institution in Southern California. Beyond offering a daily dose

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of vitamin D, the region was a haven for young, aspirational twenty-somethings. Many of my peers embarked on careers with technology giants or quit steady jobs to launch the next great start-up. Around the same time, mobile technology was taking off, and I began experimenting with how architecture education could utilize this new technology. Inspired by my peers' ability to take risks, my interest in new technologies, and my work at an institution that offered flexibility and autonomy, a foundation for approaching librarianship as an experiment incubator was born.

More recently, my experience landed me at leading public research universities with a bigger budget but less autonomy. Having worked with no budget and with big budgets, with limited freedom and endless freedom, and under traditional leadership and progressive leadership, I can confidently say that experimentation is possible anywhere. Experimentation is about more than lucrative funding and fancy technology. It is about taking an iterative approach to trying new things. What I have learned from supporting the design disciplines over the years is the value of a process of opening yourself up to wild ideas, having those ideas critiqued (sometimes harshly), adapting your ideas based on feedback, and then doing it all over again until you have something ready to present to the world. As explained in *The Experience Book: For Designers, Thinkers & Makers*, "The 'designed experience' is not a product, at least not in the finished sense. It is an ever-evolving platform for collective action(s)."[1] Therefore, in the same way architects think about their designs and the built environment, which are constantly in flux based on how people perceive them and use them, experiments offer libraries opportunities to adapt too—by trying ideas, gathering input, and making informed decisions.

This book is intended for an audience beyond librarians. Any mildly risk-averse sectors can benefit from experimentation. Although many come from academia, examples of experimentation highlighted in the book are drawn from public and school libraries and non-library government sectors. There is no limit to who can implement experiments or at what level of an organization somebody can introduce them. Some chapters speak directly to the role of leadership and management in creating cultures of experimentation. In contrast, other chapters encourage a

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grassroots approach to experimentation, to emphasize that there is no single "right way" to experiment.

This book is organized into three iterative parts, each of which offers insight into an aspect of experimentation. Although not everything in each part must be implemented to create an organization that experiments, elements from each of the three parts are required in an organization that genuinely experiments. Trying, tweaking, and trying again the ideas presented in this book will help you decide what aspects of experimentation work best for you.

The book's first part focuses on creating cultures of experimentation, a core aspect of organizations that take risks and innovate. Looking at experimentation through the lens of technology companies and start-ups, it dives into the characteristics of these two sectors and disentangles the techniques that make them experimentative. Chapter 1 explains the importance of incorporating curiosity into work and daily life and speaks to how technology companies and start-ups encourage curiosity. Chapters 2 and 3 then examine what an experiment is, why it is necessary, and how it can become a part of everything you do.

Building on these ideas, the book's second part presents a method to take what we have learned from technology companies and start-ups and implement it in libraries. The process known as IDEEA—ideate, design, experiment, engage, assess—walks through five areas that you can develop when starting to experiment. (I actually consider IDEEA to be an anti-method because no "method" for experimentation could theoretically exist.) Chapter 4 discusses design thinking, which plays a leading role in the brainstorming or ideation phase. Once you identify a testable idea, prototyping allows for some experimentation with a minimal upfront commitment. The prototyping phase may have many or only a few iterations, but ultimately one (or all) of them will help solve the problem you are seeking to answer. Chapters 5 and 6 focus on the concept of prototyping by breaking it down into designing and experimenting. An experiment is only complete once you engage users in testing and identify the pros and cons of a prototype. Then you can decide how and when to move forward based on this data. Chapters 7 and 8, respectively, discuss these last steps—engagement and assessment.

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The book's final part is about bringing the culture and method of experimentation to your organization. Chapter 9 speaks directly to the importance of failure because no culture that encourages experimentation can exist without failure. The nature of experiments means there will be many failures, so the book presents thoughts on embracing and learning from them. Chapter 10 highlights the skills needed to experiment. Because information professionals already possess most of these, the focus of the chapter is on how to leverage those skills and create teams that thrive on experimentation. Finally, chapter 11 presents a roadmap to bring experimentation to your organization. It offers multiple paths to build a library that embraces risks and tries new things.

At the time I was writing this introduction, generative artificial intelligence became a buzz phrase in libraries. Everybody is eager to figure out what role libraries will play in using, developing, and teaching this new technology. I wonder whether this is also an experiment. I read an article in *TechCrunch* that described the brilliance of OpenAI's ChatGPT, an artificial intelligence (AI) text-generating tool, like this:

> The short explanation is that tech moves fast and big companies move slow, and while Google released paper after paper and tried to figure out how to fit AI into its existing business strategies, OpenAI has focused on making the best models and let people figure out their own applications.[2]

In this case, the laissez-faire approach of the underdog won. Instead of aiming for a finished product, which was the approach of some of the tech giants, OpenAI's style was to create a prototype, launch it, and see how it developed—a true experiment. Like OpenAI, we too are living in the age of experimentation and trying to figure it out as we go along. If you are willing to take the risk, you will likely reap the reward.

This book is not a how-to book but rather a toolbox of ideas that you can choose to implement. The tools in this book will help shift your approach to projects to one that is flexible and adaptable and will increase your appetite for risk-taking and experimentation. By doing experiments, you can acquire the skills needed for experimentation and innovation, so take what works for you and jump in.

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Notes

1. Adam Scott and Dave Waddell, *The Experience Book: For Designers, Thinkers & Makers* (London: Black Dog Press, 2022).
2. Devin Coldewey, "Google Takes on ChatGPT with Bard and Shows Off AI in Search," *TechCrunch*, February 6, 2023, https://techcrunch.com/2023/02/06/google-takes-on-chatgpt-with-bard-and-shows-off-ai-in-search.

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