# Introduction to Gadgets in the Library

### Abstract

We are in the midst of an information revolution that has profound implications for libraries. This chapter of "Gadgets and Gizmos: Personal Electronics and the Library" lays the foundation for this report, summarizing why gadgets are so important for libraries and which types of devices will be covered in this report.

t's a fairly safe assumption that when people think of libraries, they generally think of books. To many people, it's not obvious that libraries predate books as a mechanism for sharing knowledge. If we think back, we can imagine a time before the book and how, once books became inexpensive and widespread, how revolutionary and democratizing the book was as a tool for sharing information. It must have been incredible to think that you could have so much text in such a compact form, and so many of them!

The technological revolution that we are going through now will make that look like a blip in history.

That sentiment may not be looked upon favorably by every librarian, but the last ten years have seen more information created, shared, and collected than in the rest of human history combined. (I can't cite a source for that, but I think it's a tough statement to argue with.) The digital revolution has been the enabler, beginning with the personal computer and continuing through to the creation of the Internet and now the rise of the mobile device. We've seen a huge shift in the last twenty years, as Moore's Law has pushed microchips smaller and smaller, and cheaper and cheaper, to the point where even the least expensive digital toy you can buy has more computing power than the machines that were used to crack the German Enigma codes during World War II.

It's this level of power and portability that I'm interested in exploring in this issue of *Library Technology Reports*. Personal electronics, or as I'm going to refer to them, gadgets, are something that our patrons are using, but more important, they are a part of the future of information retrieval and sharing. They are becoming an increasingly important and even critical component of the way that information is generated and disseminated, and it's important that librarians be aware of the what gadgets are available, what they can do, what they cost, and how practical they are in different settings.

## The Scope of This Report

In this report, I'm going to be concentrating on a few general categories of gadget: e-book readers, multimedia capture devices and players, scanners, and note-taking devices. I'm also going to devote a section to odd or unusual devices, since there are always plenty of gadgets that don't fit neatly into a particular category. I'm going to conclude my discussion of each gadget with a wrap-up of what I saw at the Consumer Electronics Show 2010 and what we can expect to see over the next twelve to eighteen months.

There are several general categories of gadget that this book will cover, including electronic book readers (e-book readers) like the Amazon Kindle and the Barnes and Noble Nook. We'll also dive into personal multimedia players, media capture devices like the Flip video camera and the Zoom H2 audio recorder, as well as scanners and note-taking helpers. If you can consume or produce it, I'm going to try to find an electronic device that lets you do so more easily and cheaply than you thought possible.

We'll also cover more unusual gadgets that may not have popped up on your or your library's radar, like the Nabaztag (a multimedia rabbit) and the Chumby (a small wireless Internet-connected widget machine). How can an electronic rabbit help your library? We'll see if we can't get to that answer.

The goal here is to describe these different gadgets and then show you how they fit into the library world with a few use cases. I'll not only show that these devices are popular with patrons, but that there are good reasons for them to be used in the library by the librarians themselves.

One important note–I won't be talking about one of the most popular sorts of gadgets these days–the mobile phone–unless it's in quick comparison to one of the areas I mentioned above. In addition to constraints on the length of this report, there has already been a great deal written about that subject, including my own book *Mobile Technology and Libraries*, and Ellyssa Kroski's July 2008 issue of *Library Technology Reports*, titled "On the Move with the Mobile Web: Libraries and Mobile Technologies." For the purposes of this report, our scope is the "other" cool personal technology–devices like the Kindle, the Nook, the Archos Tablet, the iPod, and the Zune.

## Why Are Gadgets Important?

So why gadgets? Moore's Law is still driving the price down and the complexity of computing devices up to such an extent that we are now seeing portable devices that truly would have been unimaginable not that long ago. For instance, for \$150 you can buy a portable video camera that can capture higher quality video than an entire television studio could just two decades ago. There are devices that allow you to carry thousands of books with you and give you the ability to search and annotate them. You can buy pocket-size glass screens that pump out high-resolution movies and television, practically on demand, for hours on a charge. These devices are the miracles of the modern technological age, and they are enabling the creation and consumption of content in truly remarkable ways.

These silicon wonders are significant to librarians for three key reasons. First of all, our patrons are using them more and more ubiquitously. In the same way that we began to build library websites as more patrons took to the Web, we need to be fluent in the language of gadgets as they become more common among patrons. As libraries move from "temples to the book" to a service-based collection of information resources, using the things that your patrons are familiar with is more and more important. Especially as we move to digital collections, we have to stay on top of the methods of accessing those digital collections, which are almost universally personal electronics. Gadgets and libraries are going to become much more tightly integrated as we move through the digital conversion in the next decade or so.

Second, these devices can make librarians more effective and efficient at our jobs. They can give libraries new venues for the distribution of content. They can make complex tasks simpler, can help librarians share information with one another more rapidly and efficiently, and can help us provide better, more advanced service. Libraries have always been the democratizers of content. We step in to distribute the economic burden of information and allow access to those who could not afford to own the information themselves. As our content becomes increasingly digital, these gadgets give us the delivery mechanism for the content. In the traditional library, the content and the delivery device were one and the same: the book, the magazine, the journal. In the digital world, the two are distinct, but that doesn't give libraries the liberty of continuing to be interested in only one of the two pieces of the access puzzle.

More generally, no matter what your profession, these devices are the future of media consumption. For a librarian, ignoring these gadgets is tantamount to the monks of the Middle Ages saying "Yes, the book is a nice technology, but we really think we'll just hold onto these scrolls."

Finally, these devices often change the nature of information interactions. They provide interesting opportunities for the delivery of content, something libraries should always be interested in. You have a much richer, multimodal experience with a number of these gadgets than you do with the traditional print world. When it's possible for you to read text, click a link to a video, and then leave a comment correcting something about the original text, your relationship with the consumption of media has changed. Libraries and librarians need to understand this changing landscape, and the windows through which we interact with this new world of information are gadgets.

# **Gadgets in This Report**

If you're like me, you're always going to feel like you left something out. Unfortunately, there were only so many devices I could cover in one report. So why were these specific devices chosen? One key concern was the price of the devices. There's really no limit to how much you *could* spend on gadgets, but most librarians are on a fairly tight budget, especially these days. I tried to keep the average price for the gadgets covered to less than \$300, and we won't look at anything that costs more than \$500. The average price is probably much closer to \$150, and we will do a cost-benefit analysis for the gadgets where there is competition for capabilities and the price difference between the two is significant.

Another important concern is the fact that any technology, no matter how new, will become obsolete some day. I want to look at devices that are current, so I'm going to look at devices that have only very recently been adapted for library use or that may not even be used in libraries at the time this report is being written. I'm hoping that this is valuable not only for what is being used, but for what might be used, and gives you ideas for new services and technologies that your users can embrace.

In order to stay relevant in the modern digital age, we need to understand both sides of the information delivery ecosystem—not just the digital content, but the physical interfaces that deliver the content to our patrons. Speaking to the latter half of that duality is what I hope this issue can do. Let's go!