

The Digital Divide

This chapter introduces the digital divide and how it relates to mobile technology. First, I cover what the digital divide is, and then I'll discuss how libraries are helping bridge this divide by offering ways to check out equipment, partnering with local organizations and programs, and training people to better use mobile technology.

The digital divide is an important issue facing our communities. Think about your own daily technology use for a second. What do you normally do on your phone or tablet? I use everyday technology for reading, keeping up with the news, and keeping up with my checking account. I use it as a communication device: I can keep up with friends, family, and colleagues through e-mail, texting, social media, or the phone. I also use my phone as an easy-to-use reference tool. I probably look something up on Wikipedia every day, using the Wikipanion app.

I store photos, passwords, and thoughts throughout the day on my phone. I can access thousands of songs on any of my devices because everything is synced to iCloud. I use my phone for work and for fun (figure 4.1).

This level of use is probably fairly typical for many people. However, this level of use is possible only with two things: a mobile device (obviously) and a stable connection to the internet.

In contrast,

. . . the Federal Communications Commission estimates that more than 21 million people in the United States don't have that connection [the internet]. That includes nearly 3 in 10 people—27 percent—who live in such rural places as the out-reaches of Maine and the fertile fields of Indiana, as well as 2 percent of those living in cities.¹

That quote is talking about people who do not have access to the internet. If you add in people who don't have access to "acceptable internet"—an

internet signal that is fast and stable enough to do the types of activities I mentioned above—it's a much larger number:

And those estimates are on the low side. Other research, including analysis from Microsoft, suggests that the number of Americans without broadband—that's internet access with download speeds of at least 25 megabytes per second (Mbps) and upload speeds of at least 3 Mbps—could be over 163 million.²

There's definitely a digital divide in the United States. Even in Shawnee County, Kansas, where I live, there's an interesting digital divide that crosses different types of boundaries. Some people in Shawnee County don't have the ability to subscribe to broadband internet services or cell phone providers because of the cost. It's available to them, but they can't afford it.

A second issue is coverage. We have urban and suburban areas in the city, and we also have rural areas in the county. There are people with large, nice homes who live in rural areas of the county who can certainly afford broadband, but it's not available to them because the service doesn't extend to those areas.

The same thing holds true with cell phone signals: sometimes, they don't reach rural areas. Travelers may lose cell phone connection while driving through rural areas on major highways between cities.

As our world quickly moves online and mobile, adequate access to the internet becomes an important issue that libraries can help tackle.

Some Definitions

When talking about the digital divide, there is some terminology we need to nail down in order to

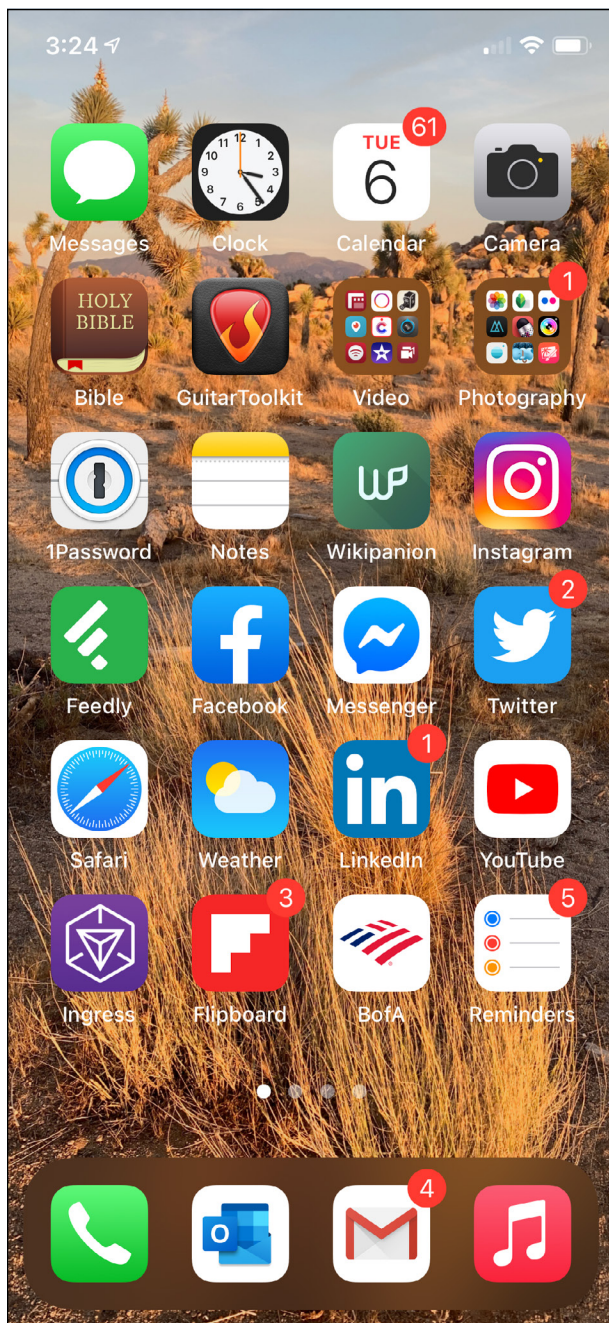


Figure 4.1
First screen of my iPhone

understand the issues involved.

- **Digital divide.** “A digital divide is any uneven distribution in the access to, use of, or impact of information and communications technologies (ICT) between any number of distinct groups, which can be defined based on social, geographical, or geopolitical criteria, or otherwise.”⁷³
- **Digital inclusion.** “Digital Inclusion refers to the

activities necessary to ensure that all individuals and communities, including the most disadvantaged, have access to and use of Information and Communication Technologies (ICTs). This includes 5 elements: 1) affordable, robust broadband internet service; 2) internet-enabled devices that meet the needs of the user; 3) access to digital literacy training; 4) quality technical support; and 5) applications and online content designed to enable and encourage self-sufficiency, participation and collaboration. Digital Inclusion must evolve as technology advances. Digital Inclusion requires intentional strategies and investments to reduce and eliminate historical, institutional and structural barriers to access and use technology.”⁷⁴

- **Digital equity.** “Digital Equity is a condition in which all individuals and communities have the information technology capacity needed for full participation in our society, democracy and economy. Digital Equity is necessary for civic and cultural participation, employment, lifelong learning, and access to essential services.”⁷⁵
- **Digital literacy.** Digital literacy is “the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills.”⁷⁶

Many of these concepts can be folded into the umbrella term *digital inclusion* because that definition includes connectivity, devices, training, and tech support needs.

How Are Libraries Bridging the Divide?

Libraries can help bridge this digital divide through offering different types of internet access, offering ways to borrow and use technology equipment, making partnerships in the community, and offering training programs aimed at teaching internet basics.

Access to Equipment

Traditionally, libraries have helped narrow the digital divide in relation to internet access and equipment. Libraries started purchasing computers for customers to use in the 1980s and have been offering internet access since soon after the World Wide Web was created in the early 1990s.

Today’s modern library generally offers up-to-date computers connected to the internet, usually with a wired network connection (figure 4.2). The library also offers public Wi-Fi access for customers who want to connect to the internet using their own devices.

Some libraries offer laptops and tablets for

customers to borrow. Mostly, this equipment can be used while in the library building. Some libraries allow customers to check out equipment to take home.

For example, Kings County Library, in the Seattle, Washington area, offers laptops for checkout.⁷ A library customer can check the laptops out only within the building. Even though the service is just available in-building, it's still a very nice option to go anywhere within the building with the equipment.

Other libraries allow patrons to check out Chromebooks and other types of tablets. Some libraries offer other types of devices that can be checked out, such as microphones or music-related MIDI keyboards.



Figure 4.2
Public computer at Topeka & Shawnee County Public Library

Access to the Internet

The ability to check out and use different pieces of equipment is a great service to offer customers. But what if someone could check out the entire internet? Well, that's exactly what some libraries are doing when they allow a customer to check out Wi-Fi hot spots, which allow internet access.

For example, DeKalb County Public Library in Decatur, Georgia, offers Wi-Fi hot spots for checkout for twenty-one days.⁸ Libraries that I've talked to that offer Wi-Fi hot spot checkout all report that this service is a popular one. Most say the biggest problem they have is that they don't have enough hot spots to check out. These devices always have hold requests placed on them and are in high demand.

In an article on the Google Fiber website, Jill Joplin, executive director of the DeKalb County Library Foundation, shares this information about DeKalb County Public Library's Wi-Fi hotspot service:⁹

- The library offers 200 Wi-Fi hot spots to check out.
- More than 50 percent of patrons who check out these devices do not have access to the internet in their home.
- Staff at the library realized a few years ago that patrons were accessing the library's Wi-Fi signal during times the library was closed by sitting in the parking lot or on the steps of the building.

I think it's great that this library noticed a need and responded to it by creating a service to help customers.

At Topeka & Shawnee County Public Library, we do a few things that help bridge the digital divide.

For starters, we offer fast Wi-Fi and wired broadband internet access within our building, and we have around 180 public computers for customers to use.

Outside the library building, we also offer connectivity in several ways. Our bookmobiles are equipped with public Wi-Fi hot spots. This allows our library customers to connect to the internet in and around a bookmobile without having to use their own data plan.

The library also maintains eight computer labs in community centers around the county. Each of these computer labs offers Wi-Fi access and computers that can be used with a library card.

Local Partnerships That Help Bridge the Digital Divide

The community computer labs example above illustrates how partnerships can help bridge the digital divide. This particular project was accomplished through two local partnerships: one with the local county parks and recreation department, which maintains the county's community centers, and one with our local public housing authority. The housing authority maintains a community center at one of its housing areas, and we placed a computer center there and have taught technology classes at the computer lab (figure 4.3). In our case, two partnerships turned into eight computer labs and approximately fifty computers for people in Shawnee County, Kansas, to use and enjoy.

Partnerships between like-minded organizations can be a great way to get devices and internet access to people who need it the most. For example, Kansas



Figure 4.3
Community computer lab partnership

City Public Library (in Kansas City, Missouri) participates in DigitalInclusionKC. Here is its vision: “Every citizen and household in the Kansas City metropolitan area has access to the Internet, the equipment needed to use it and the skills needed to take advantage.”¹⁰ The steering council of DigitalInclusionKC includes people from the library, city government, and local nonprofits focused on digital inclusion initiatives.

Partnerships can help with more than just basic technology and connectivity needs. Some organizations help get emerging technology to library customers. For example, the California State Library has offered grants to California libraries for a variety of technology needs.¹¹ In the past, it has offered grants

for libraries to receive virtual reality (VR) technology devices for use for library customers, a shared e-book platform, and broadband grants. Each of these grants helps an individual library, which in turn will be able to use that technology to help their local library customers.

Training Customers to Use Mobile Technology

Offering cool equipment like iPads, laptops, and gigabit internet connectivity does no good if your customers don’t really know what to do with those things. That’s why training is a vital aspect of bridging the digital divide.

As I stated earlier in this chapter, many libraries have traditionally offered technology training programs. Much of my own library career has been focused on training patrons and library staff to use technology: computers, mice, tablets, phones, apps, websites, software, and so on. Many libraries have built training labs, offer technology walk-in sessions, and offer other types of technology training that helps teach people how to utilize technology.

It's important for libraries to continue to offer technology training for emerging mobile technology devices. Some libraries have offered classes such as "how to use an e-book" or have given an introduction to an iPad, for example. We need to continue offering those basic classes, while also continually developing new classes around mobile technology needs. These classes might very well shift over time, as mobile technology continues to evolve.

For example, libraries can teach classes on how to use a smartphone to do basic tasks. But we can also offer classes on using the voice-activated virtual assistants that come with these devices. We can offer a class on using mobile devices to connect to the library and teach how to download and use each mobile app that we offer.

Next Steps for Digital Inclusion

This chapter really just scratches the surface on the issue of digital inclusion. What's next for a library? A good place to start is to read up on the issues surrounding digital inclusion. Some places to start include the following:

- Pew Research Center's Internet and Technology section. You'll find national statistics and issues surrounding technology trends and digital inclusion needs.
- National Digital Inclusion Alliance. This organization is working to close the digital divide.
- The American Library Association's Digital Literacy page. This page offers links to other websites that focus on digital literacy and inclusion.

Pew Research Center, Internet and Technology
<https://www.pewresearch.org/Internet/>

National Digital Inclusion Alliance
<https://www.digitalinclusion.org>

American Library Association's Digital Literacy page
<https://literacy.ala.org/digital-literacy/>

At your own library, start by simply asking customers what they need. See if your local municipality or a local nonprofit organization has done a local digital inclusion survey of needs.

Once you find out what customers need, see if you can start helping to meet those needs. For example, if your customers need basic internet connectivity, see if you can offer Wi-Fi hot spots for checkout. Maybe your library's customers have adequate internet connectivity, but they want more training on how to better use their mobile devices. If that's the case, you can ramp up a technology training program. Once you have some of these basics figured out, you are ready to map ways to help meet your customers' technology needs.

Notes

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