

**Digital Resource Use and Accessibility in Public Libraries: A Survey Report**

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### **Digital Resource Use and Accessibility in Public Libraries: A Survey Report**

Public libraries can generally be defined as organizations that are “established, supported and funded by the community” (Koontz & Gubbin, 2010, p. 1), and provide services and resources to support lifelong learning, and the acquiring of knowledge and information. In addition, the services and resources should be accessible equally in various formats to all community members to meet their particular needs (Koontz & Gubbin, 2010). Online services have been developing for some time, and Chowdhury et al. (2006) suggested that libraries should utilize developing web technology to their advantage, considering both local and remote resources users. However, online services and resource access requires digital literacy. Digital literacy has been defined by the American Library Association’s (ALA, 2019) Digital Literacy Task Force as “the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills”. Regarding digital literacy, public libraries have been fundamental in digital literacy promotion and instruction (Bertot, et al. 2016), including skills needed to access online services, catalogues, and databases, as well as virtual reference services.

However, accessibility is fundamental, and not all communities and individuals have access to broadband internet services, potentially resulting in exclusion from online public library services (Clark & Visser, 2011). Thus, it is necessary for libraries to ensure they are well-positioned to support digital literacy and internet provision for their communities to ensure accessibility for all (Clark & Visser, 2011). Similarly, Liu and Wnuk (2009) reported that digital services and resources should be enhanced to service the needs of library communities. In addition, Strover (2019) suggested that libraries should ensure that they meet community needs regarding rapidly evolving online information-seeking behavior. With the development of the

Covid-19 pandemic, it has become necessary for public libraries to expeditiously adapt their remote services and online accessibility to meet community needs (The Hunt Institute, 2021). Consequently, it is necessary to continually assess if these services are meeting the needs of the library communities. Therefore, this survey was designed to assess if digital resources are used and easily accessible at various public libraries in the US.

## **Method**

### **Participants**

One hundred and two participants took part in the study, including 29 males and 67 females. Most participants (60.8%) were aged 25–39, followed by 40–59 (17.6%). Participants were library patrons from many different libraries based on their diverse geographical locations. All participants were obtained via an e-mail or text to friends and family members that explained the purpose of the study and asked recipients to participate. Most participants were employed (73.5%), whereas 9.8% were retired.

### **Materials and Procedure**

An online survey was used to collect data from July 12 until July 13, 2021. The survey contained 39 questions (see Appendix A) and was divided into 5 sections: 1, 2, 3, 4, and 5. Section 1 assessed library use; an example question was “How often did you visit your public library before Covid?”. Section 2 assessed preferred format; an example question was “What format do you prefer to read materials in?”. Section 3 assessed technology use; an example question was “Please select all of the devices that you use”. Section 4 assessed library website use and preferences; an example question was “How easy is it for you to navigate your library’s online catalogue?”. Section 5 assessed library digital resources; an example question was “What technologies would you like to see in the library in the future?”. Most questions were answered

via multiple choice requesting specific answers. Some questions were answered using a 7-point Likert scale, ranging from “extremely difficult” to “extremely easy” or “strongly disagree” to “strongly agree”. Some questions were open ended, allowing for participants to respond freely. One question was a Net Promoter Score (NPS) to assess if participants would recommend the library’s digital collection to others.

## **Results**

### **Public library use**

Data collected and analyzed from the survey\* indicated that of the 102 survey participants, 73 had valid library cards (library patrons) and 29 did not. The primary reasons for those without library cards included the use of online resources such as eBooks and audiobooks, independent of the library; having moved recently; and Covid-19 restrictions hampering in-person library accessibility.

### **Technological enhancement suggestions**

Regarding technology, participants would like to see online services promoted, for example “[the library does] a terrible job of promoting their services and capabilities”. In addition, several participants would like increased streaming services, including “movies, shows, music, and audio-books”. Furthermore, some participants felt that there should be “an easier method of checking out books”, and “a more accessible digital catalogue with a user-friendly interface”.

### **Preferred reading format and resource use behavior**

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\* The survey responses collected from Qualtrics were downloaded by Matthew Hughes to SPSS for statistical data analysis.

The results from the survey revealed that 29% of library patrons preferred print materials, whereas only 2.9% preferred digital material. In addition, 39.2% of library patrons utilized both print and digital materials. Analysis revealed that 44.1% of library patrons agreed that they utilized more online resources during the onset of Covid-19, whereas only 5.9% disagreed that their online resource use changed.

### **Library website and digital resource use and support**

Library patrons in general reported the library website easy to navigate ( $M = 5.17, SD = 1.47$ ). A one-sample  $t$  test indicated that this mean value was significantly different from the midpoint (neutral) value of 4.0,  $t(71) = 6.72, p < .001$ , indicating that library patrons found it significantly easy to navigate the website. Similarly, library patrons found it relatively easy to navigate the online catalog, check out digital resources, and found the library offered sufficient digital resources ( $M = 4.92, SD = 1.63; M = 5.00, SD = 1.55; M = 4.51, SD = 1.06$ , respectively). A one-sample  $t$  test also indicated that these mean values were significantly different from the midpoint (neutral) value of 4.0,  $t(71) = 4.76, p < .001, t(71) = 5.48, p < .001, t(71) = 4.11, p < .001$ , respectively, which indicated that library patrons found it significantly easy to navigate the online catalog, check out digital resources, and that the library had sufficient resources. Analysis also revealed a significant positive correlation between the likelihood of library patrons recommending the digital resources in the library to others and ease of website navigation ( $r = .30, p = .011$ ). A paired-samples  $t$  test was conducted to determine if library patrons were more concerned with whether the library promoted its digital collection, or if they were provided with technical support regarding digital materials from the library. The results indicated the mean concern for promoting digital materials ( $M = 2.03, SD = .90$ ) was significantly greater than the mean concern for technical support regarding digital materials from the library ( $M = 1.74, SD =$

.44,  $t(71) = 2.41$ ,  $p = .019$ ). Finally, the NPS revealed that only 13% of library patrons would promote the library's digital services to others, whereas 32.4% would not.

### **Discussion**

The results revealed that although library patrons used both print and digital resources, online use increased during the Covid-19 pandemic. This was possibly owing to limited alternatives, and enhanced creativity by librarians to ensure continued service as suggested by The Hunt Institute (2021). In addition, although library patrons found the website, online catalogue, and digital resource checkout relatively easy to navigate, they found the promotion of these digital resources limited. However, as ease of website navigation increased, the likelihood of library patrons recommending the digital resources to others also increased. This indicates the importance of a functional user-friendly website, as noted by Potter (2012) to effectively market library resources, and therefore enhance accessibility. One of the most noteworthy findings of the survey was the result from the NPS, indicating that most participants would not recommend their library's digital resources to others. Therefore, it was determined that although digital resources were relatively easy to access by the library patrons surveyed, these patrons indicated that these resources were not adequately promoted and hence not as accessible as they could be. Therefore, librarians could focus on enhancing the marketing of their digital resources and services in the future. To provide more depth to the survey, it should have also included questions on ethnicity, home language, and visual impairment, which would have provided further insight into digital resources and their accessibility to library patrons.

### References

- American Library Association. (2019, June 18). *Digital literacy*. <https://literacy.ala.org/digital-literacy/>
- Bertot, J. C., Real, B., & Jaeger, P. T. (2016). Public libraries building digital inclusive communities: Data and findings from the 2013 digital inclusion survey. *The Library Quarterly (Chicago)*, 86(3), 270–289. <https://doi-org.libproxy2.usc.edu/10.1086/686674>
- Chowdhury, G., Poulter, A., & McMenemy, D. (2006). Public Library 2.0: Towards a new mission for public libraries as a “network of community knowledge.” *Online Information Review*, 30(4), 454–460. <https://doi-org.libproxy2.usc.edu/10.1108/14684520610686328>
- Clark, L., & Visser, M. (2011). Chapter 6. Digital literacy takes center stage. In: ALA Office for Research and Statistics. The transforming public library technology infrastructure: A library technology report. *Library Technology Reports*, 47(6), 38–42.
- Koontz, C., & Gubbin, B. (Eds.). (2010). Chapter 1. The mission and purposes of the public library. In: *IFLA public library service guidelines* (Vol. 147, pp. 1–20). De Gruyter. <https://doi-org.libproxy2.usc.edu/10.1515/9783110232271-003>
- Liu, Y. Q., & Wnuk, A. (2009). The impact of digital resource and service use on urban residents in New England public libraries - A survey report. *Public Library Quarterly (New York, N.Y.)*, 28(1), 4–23. <https://doi-org.libproxy2.usc.edu/10.1080/01616840802675242>
- Potter, N. (2012). *The library marketing toolkit*. Facet. <https://doi.org/10.29085/9781856048897.002>
- Strover, S. (2019). Public libraries and 21st century digital equity goals. *Communication Research and Practice*, 5(2), 188–205, doi: [10.1080/22041451.2019.1601487](https://doi.org/10.1080/22041451.2019.1601487)

The Hunt Institute. (2021, April 30). *Impact of Covid-19 on public libraries*. <https://hunt-institute.org/resources/2021/04/impact-of-covid-19-on-public-libraries/#:~:text=Following%20the%20onset%20of%20the,%2C%20access%20internet%2C%20and%20socialize.>



### Appendix A: Digital Resources Survey

Welcome to this study on digital resources in public libraries. We value your opinion on the questions asked. There are no right or wrong answers - we are just interested in learning your opinions and perceptions. Your answers are confidential and anonymous.

Q1 What is your age group?

- 18 - 24 (1)
- 25 - 39 (2)
- 40 - 59 (3)
- 60 - 79 (4)
- 80 or older (5)

Q2 What gender do you most identify with?

- Male (1)
- Transgender Male (2)
- Female (3)
- Transgender Female (4)
- Non-binary (5)
- Prefer not to say (6)
- Other (7) \_\_\_\_\_

Q3 What is your professional status? Please select all that apply.

- Student (1)
- Parent (2)
- Self-Employed (3)
- Employed (4)
- Unemployed (5)
- Retired (6)
- Other (7) \_\_\_\_\_

Q4 Do you have a library card to your local public library?

- Yes (1)
  - No (If no, please specify why below) (2)
- \_\_\_\_\_

#### Section 1 – Library use

Q5 How often did you visit your public library before Covid?

- Not at all (1)
- Daily (2)
- Weekly (3)
- Every two weeks (4)
- Monthly (5)
- Other (6) \_\_\_\_\_

Q6 Will you go back to visiting your public library at pre pandemic levels or has your visiting tendency changed?

- I will go back to my pre pandemic levels (1)
- My visiting tendency has changed (2)

Q7 If your visiting tendency has changed, do you utilize more online resources?

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q8 Do you consider yourself a regular library user?

- Yes (1)
- No (2)

Q9 When was the last time you visited your local public library? (Please use MM/DD/YY format.)

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Q10 When was the last time you read print material? (Please use MM/DD/YY format.)

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Q11 Have you ever read digital material (book, magazine, newspaper)?

- Yes (1)
- No (2)

*Display This Question:*

*If Have you ever read digital material (book, magazine, newspaper)? = Yes*

Q12 When was the last time you read digital material? (Please use MM/DD/YY format.)

Q13 Which physical materials do you utilize in your library? Please select all that apply.

- Books (1)
- Magazines (2)
- Newspapers (3)
- Movies (4)
- Music (5)
- Other (6) \_\_\_\_\_

Q14 Which resources does your library offer in digital format? Please select all that apply.

- Books (1)
- Magazines (2)

- Newspapers (3)
- Movies (4)
- Music (5)
- Other (6) \_\_\_\_\_

Q15 How frequently do you check out materials (print or digital) from your library?

- Not at all (1)
- Daily (2)
- Weekly (3)
- Bi-Weekly (4)
- Monthly (5)
- Every few months (6)
- Other (7) \_\_\_\_\_

## Section 2 – Preferred format

Q16 What format do you prefer to read materials in?

- Print (1)
- Digital (2)
- I like using both. (3)

Q17 Select the statement that best applies to you.

- I prefer to check out materials from the library (1)
- I prefer to purchase materials (2)

Q18 Is there a specific genre that you prefer to read in digital format?

- |   |  |
|---|--|
| <input type="checkbox"/> Nonfiction (1)       | <input type="checkbox"/> Speculative fiction (10)  |
| <input type="checkbox"/> Literary fiction (2) | <input type="checkbox"/> Science fiction (11)      |
| <input type="checkbox"/> Mystery (3)          | <input type="checkbox"/> Fantasy (12)              |
| <input type="checkbox"/> Thriller (4)         | <input type="checkbox"/> Dystopian (13)            |
| <input type="checkbox"/> Horror (5)           | <input type="checkbox"/> Magical Realism (14)      |
| <input type="checkbox"/> Historical (6)       | <input type="checkbox"/> Realistic literature (15) |
| <input type="checkbox"/> Romance (7)          | <input type="checkbox"/> Graphic Novel (16)        |
| <input type="checkbox"/> Western (8)          | <input type="checkbox"/> Other (17) _____          |
| <input type="checkbox"/> Bildungsroman (9)    |  |

## Section 3 – Technological use/behavior

Q19 Please select all of the devices that you use

- Laptop (1)
- Desktop Computer (2)
- Tablet (3)
- Smartphone (4)
- Kindle (5)
- E-reader (6)
- Other (7)

Q20 What kind of Internet access do you have at home?

- Dial Up (1)
- Broadband (2)
- High speed wireless (3)
- High speed wired (4)
- None (5)
- Not Sure (6)

Q21 Which of the following best describes you?

- I usually avoid using new technologies (1)
- I often take a while to use new technologies (2)
- I use new technologies the same as other people (3)
- I generally use new technologies before others do (4)
- I always use new technologies before everyone else (5)

Q22 Have you ever visited your library's website?

- No (1)
- Yes (2)

Q23 How much time do you spend in the library or on the library website per week?

- None at all (1)
- A little (2)
- A moderate amount (3)
- A lot (4)
- A great deal (5)

Q24 Would you like the library to provide check-out services for mobile hotspots?

- Yes (1)
- No (2)

Q25 Would you use a streaming service provided by your library?

- Yes (1)
- Maybe (2)
- No (3)

*Display This Question:*

*If Would you use a streaming service provided by your library? = Yes*

Q26 What content would you prefer?

- Indie (1)
- Blockbuster (2)
- TV Shows (3)
- Other (4)

Section 4 – Library website and preferences

Q27 How easy is it to navigate your library's website?

- Extremely difficult (1)
- Moderately difficult (2)
- Slightly difficult (3)
- Neither easy nor difficult (4)
- Slightly easy (5)
- Moderately easy (6)
- Extremely easy (7)

Q28 How easy is it for you to navigate your library's online catalogue?

- Extremely difficult (1)
- Moderately difficult (2)
- Slightly difficult (3)
- Neither easy nor difficult (4)
- Slightly easy (5)
- Moderately easy (6)
- Extremely easy (7)

Q29 How easy is it for you to check out digital materials from your library.

- Extremely difficult (1)
- Moderately difficult (2)
- Slightly difficult (3)
- Neither easy nor difficult (4)
- Slightly easy (5)
- Moderately easy (6)
- Extremely easy (7)

Q30 Should your library provide more digital materials?

- Yes (1)
- No (2)
- Unsure (3)

Q31 Does your library promote its digital collection?

- Yes (1)
- No (2)

Unsure (3)

Q32 What material would you prefer to read digitally

- Book (1)
- Newspaper (2)
- Magazine (3)
- Other (4)
- None (5)

Q33 Please select any eBook services you have used

- Libby (1)
- Audible (2)
- Other (3)
- None (4)

#### Section 5 – Digital resources in library

Q34 How much do you agree with this statement. My library offers enough digital resources.

- Strongly disagree (1)
- Disagree (2)
- Somewhat disagree (3)
- Neither agree nor disagree (4)
- Somewhat agree (5)
- Agree (6)
- Strongly agree (7)

Q35 Do you get technical support from your library?

- Yes (1)
- No (2)

*Display This Question:*

*If Do you get technical support from your library? = Yes*

Q36 How useful is the support you receive?

- Extremely useless (1)
- Moderately useless (2)
- Slightly useless (3)
- Neither useful nor useless (4)
- Slightly useful (5)
- Moderately useful (6)
- Extremely useful (7)

Q37 What technologies would you like to see in the library in the future? Please list them below and explain how they would benefit you.

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Q38 How likely are you to recommend your library's digital collection to a friend or colleague? (0 = not likely; 10 = highly likely).

- 0 (0)
- 1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)
- 6 (6)
- 7 (7)
- 8 (8)
- 9 (9)
- 10 (10)

Q39 Who forwarded you this survey?

- Amanda Roberts (1)
- Matthew Hughes (2)
- Shay McGroarty (3)
- Sarah Tribelhorn (4)