Digital Home-lessness: Exploring the links between, public internet access, technological capital, and social inequality *

Walter Goettlich
Surveillance Studies Research Center
Department of Sociology, University of Kansas
IDSF, 2022-06-01

Thought Exercise

- Are there things you do on your own computer that, if you couldn't do them, would diminish your life quality?

- What would you do if you did not have home (or office) access to a reliable computer, fast internet, a printer?

- Have you ever felt the welling terror of losing an afternoon's work because a file just 'disappeared'?

- Who do you go to when you can't figure out *just what the hell is going on with this stupid computer*?!?

- Are there things you do using the internet that you don't want someone else to know about?

Our Team

Bill Staples, PI, Sociology
Drew Davidson, co-PI, EECS
Perry Alexander, co-PI, EECS

Walter Goettlich, GRA, Sociology
Matt Comi, GRA, Sociology [co-author]
Erin Adamson, GRA, Sociology

Bailey Srimoungchanh, GRA, EECS
Jon Volden, GRA, EECS

Matthew Weich, UGRA, Sociology
Natalie Mertens, UGRA, Sociology

Project Timeline

2017-2019

- Active participant observation and interviews at Lawrence and Kansas City (KS) Public Libraries
- Findings feed PUPS [Personal User Privacy and Security] device design

2020-2022

- PUPS development
- Active participant observation, PUPS testing, and interviews at Johnson County, Kansas Public Libraries

Research Questions

- Why do people use public library computers?
- What are these users' digital needs (access, support), and what challenges do they face having those needs met?
- What kinds of solutions are best suited to meeting the needs and addressing the challenges of this user group?
- What role(s) do public libraries play in realizing those solutions?
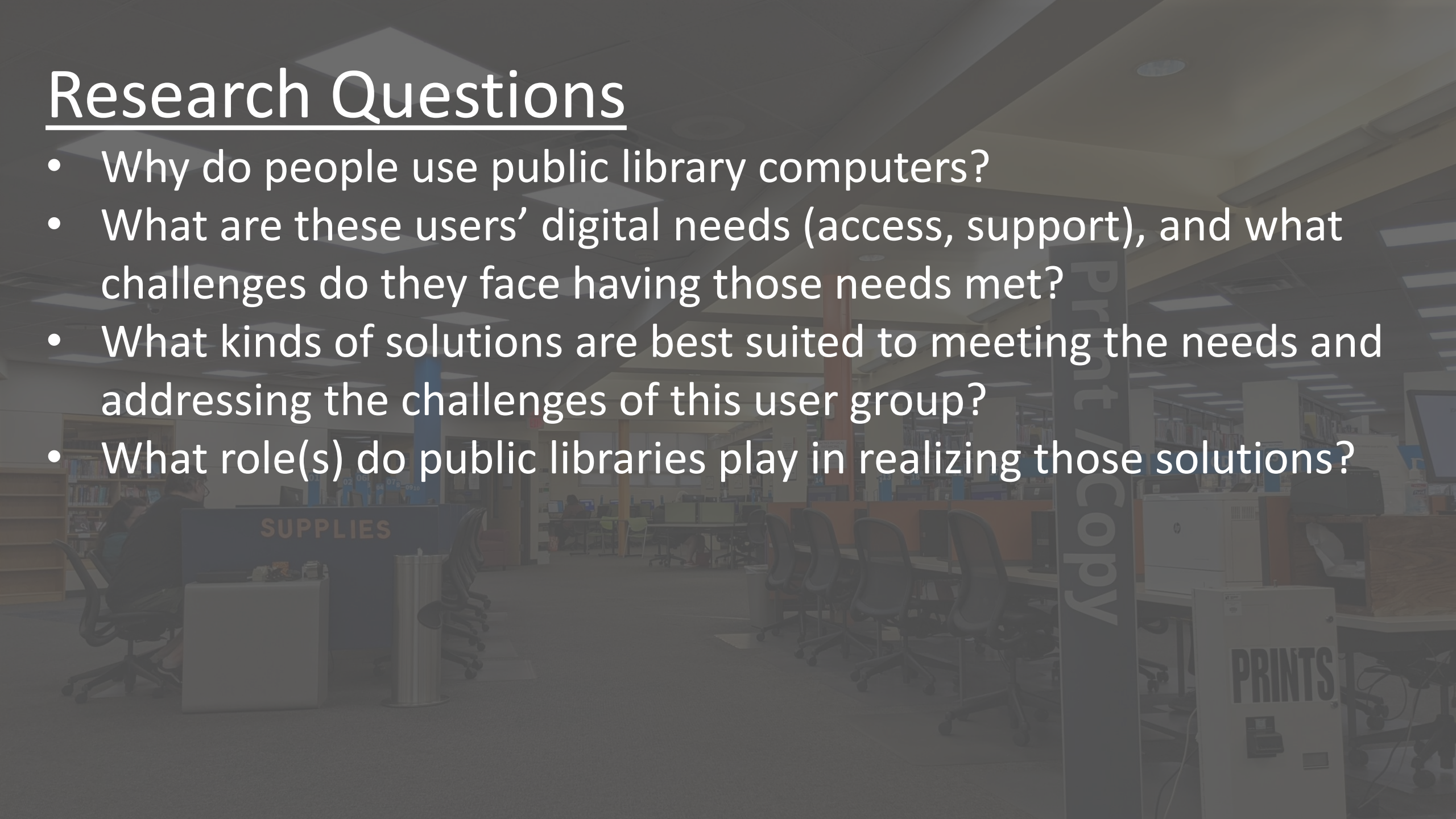
Methods

- Active participant observation, in partnership with public libraries
- 50+ semi-structured interviews
- Conversations with library staff and organizational observation
- PUPS device usability testing

Interview Participant Population*

- 50% own functional personal computer
- 50% have home broadband access
- 94% own mobile phone; 78% own a smartphone
- Median age 54 years
- Median household income $20,000 to $39,999; mean household size 2 (1.5)
- 40% household income $0 to $19,999; 56% live alone

*Most of those patrons who

Technological Capital

- Draws on Bourdieusian theorizations of forms of capital (Bourdieu 2021; Bourdieu and Richardson 1986)

- Denotes the interplay of an individual's digital access and know-how with their social relationships (Gilbert 2010; Chen 2013; Carlson and Isaacs 2018)

- Corrective to limitations of the *digital divide* concept: its multiplicity of levels and differential experiences; descriptive but not sufficiently analytical; embedded normative expectations (van Dijk and Hacker 2003; Sparks 2013; Ragnedda 2017; Aydin 2021)

Digital Home-lessness

The everyday, lived experience of those living with low technological capital, emergent at the intersection of digital and material spheres.

1. <u>Lifeline</u> encompasses the diverse set of activities that require computer and broadband access

2. <u>Negotiating Access</u> focuses on usability, privacy, and security disadvantages among these users

3. <u>Risky Business</u> concentrates on the multiplicities of insecure internet and computing practices exacerbated by low technological capital

Lifeline

- Encompasses the diverse set of activities that require computer and broadband access, many of which are essential for socioeconomic mobility and participation in social life.
  - Employment
  - Public Assistance
  - Education & Training
  - Social Connections

Lifeline: Employment

Approximately 75% of our participants said they've used library computers to search and/or apply for employment.

I've been coming here at least three days a week...minimum. I always have to check my email to see if [company] is contacting me...The only way that they communicate with you is [through] email. –Lois (62, KCKPL)

The main reason that I would want to use the [library] computers is to use Microsoft Word, because I have a Chromebook at home, but the formatting isn't the same and when I'm doing job stuff, I like to use Microsoft Word because that's what companies use to look at stuff. –Hannah (29, KCPL)

Negotiating Access

Those requiring library computers are obliged to negotiate a host of access, usability, privacy, and security issues in these settings not typically experienced by those fortunate enough to compute from home.

- Time limits
- Starting from Scratch
- Physical Setting

Negotiating Access: Starting from Scratch

Disk reimaging processes, which are necessary for system security, compound the restrictions of user session limits.

This is really infuriating because it happened twice in three days: I was working on a pitch and stepped out to use the restroom, and while I was in the restroom [the computer] cycled off...I had spent like an hour and a half creating content, and then I asked the [staff member] if there was any way possibly to get it back, and she said "no." –Roger (36, KCKPL)

Negotiating Access: Physical Setting

PCs are usually situated in close proximity to one another. In most cases—but not all—None of the PCs at sites we observed were fitted with monitor privacy screens. Many users were not aware of the screen lock feature available via the PC session management software.

If you don't mind broadcasting what you're looking at, go ahead and use [the community computer area], because people could walk around and look. –Peter (24, KCKPL)

I don't want anybody to look over my shoulder, so that makes me feel a little uncomfortable. –Olive (43, LPL)

Risky Business

Lacking adequate digital literacy, many participants described unsafe internet use/computing practices that risked compounding existing conditions of material inequality/disadvantage

- Low Digital Literacy
- Password Management
- User Attitudes
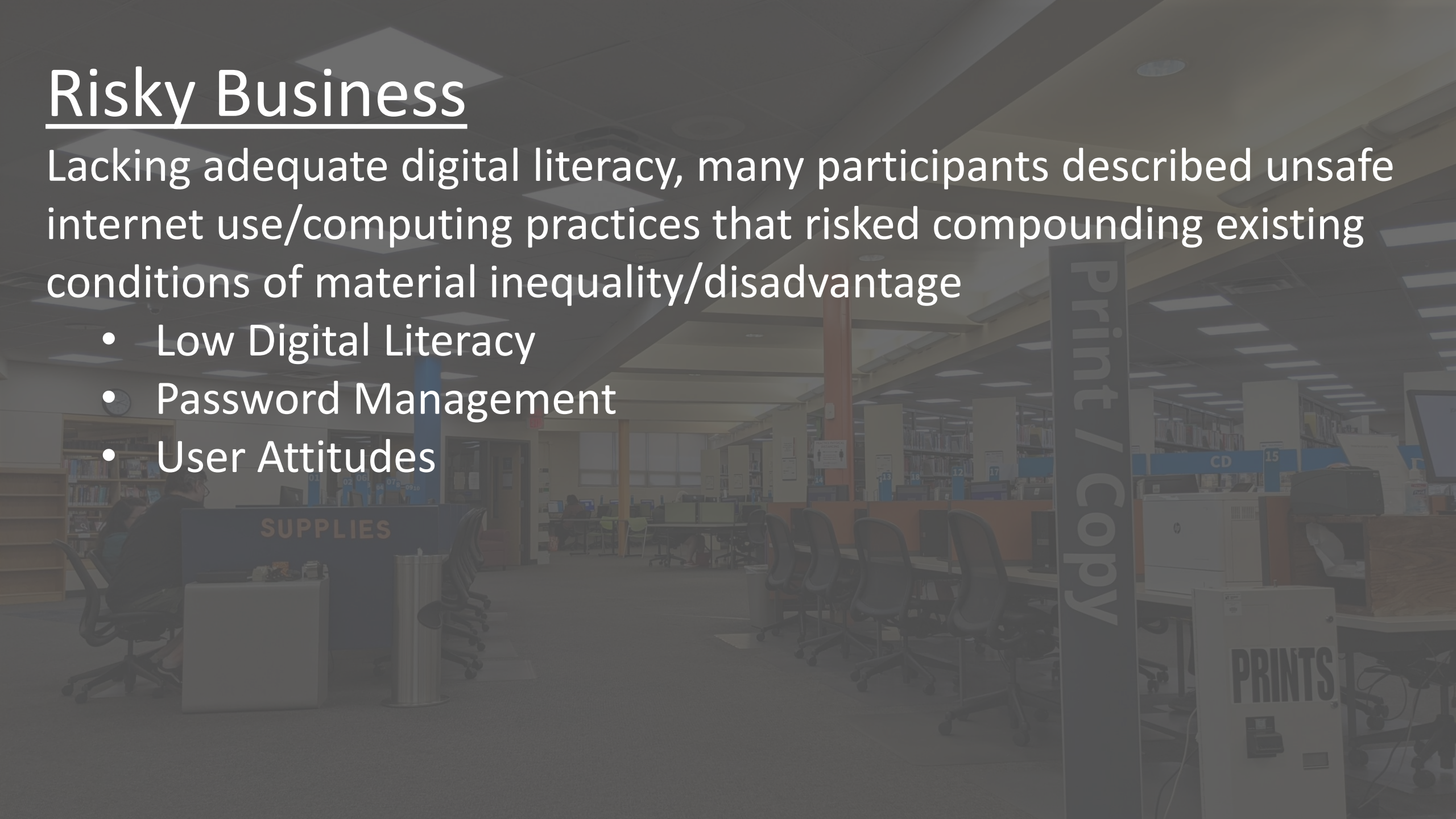
Risky Business: Low Digital Literacy

Secure password management is particularly problematic.

I've had the same [password] for 10 years and there's one variation...I know that that's not the thing to do but that's what I've done. I don't like to remember things.—Lois (57, LPL)

I may have left it [notebook of passwords] on the table, exposed...I may have left it there, but I try not to. –Deena (70, LPL)

Maybe because I have not handled computers. I am from a small island. I don't have that much exposure so I'm not always considering the dangers [...] I keep a small notebook and each password [and] I bring it to library in order to go to certain sites. –Linda (55, LPL)

Risky Business: User Attitudes

Most participants did not have a strong, empirical grasp of the objective risked they faced when using library computers; consequently they expressed feelings of ambivalence and resignation about those risks.
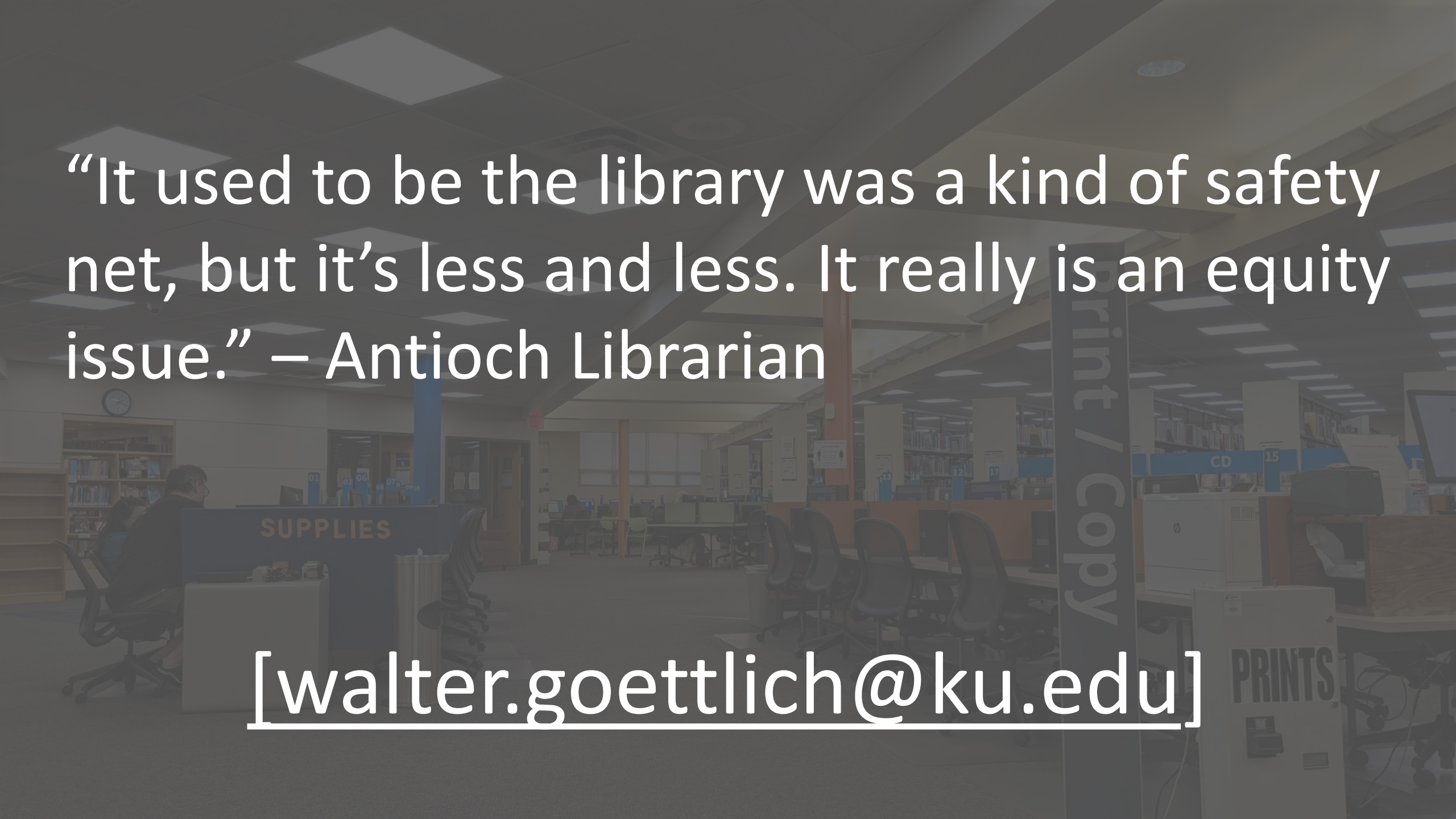
I'm not that very careful. –Linda (52, LPL)

I read that you should not do that [enter personal information] in the airport and in the library. [...] now, that was some years back. So, they could have improved the services since then, but I wouldn't, in the library. –Helen (64, LPL)
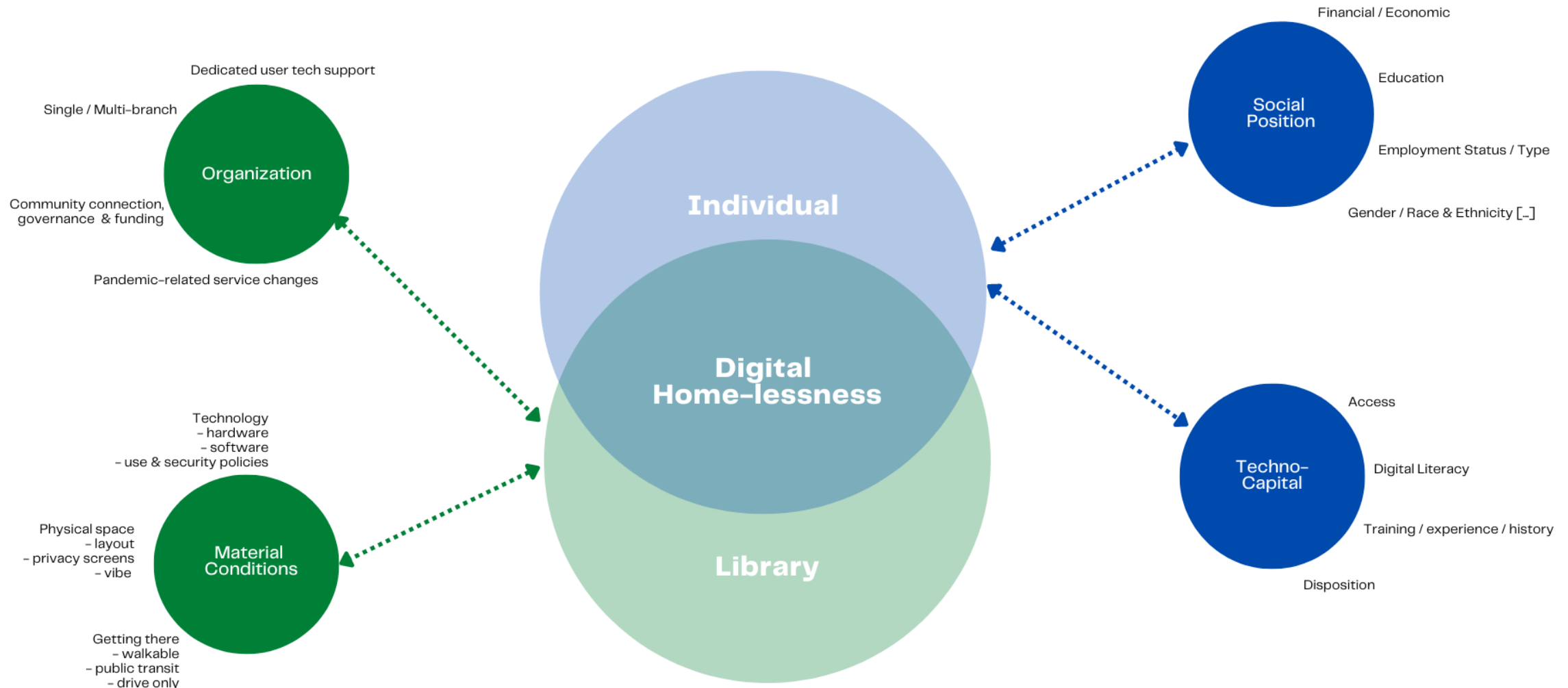
Provisional / Working Model of Digital Home-lessness Dimensions

"It used to be the library was a kind of safety net, but it's less and less. It really is an equity issue." – Antioch Librarian

[walter.goettlich@ku.edu]

Works Cited

Aydin, Mustafa. 2021. "Does the Digital Divide Matter? Factors and Conditions That Promote ICT Literacy." Telematics and Informatics 58(101536).

Bourdieu, Pierre. 2021. *Forms of Capital*. Cambridge, UK ; Medford, MA: Polity Press.

Bourdieu, Pierre, and J. G. Richardson. 1986. "The Forms of Capital." Pp. 241–58 in *Handbook of Theory and Research for the Sociology of Education*. Westport, CT: Greenwood Press.

Carlson, Andrew, and Alyssa M. Isaacs. 2018. "Technological Capital: An Alternative to the Digital Divide." *Journal of Applied Communication Research* 46(2):243–65.

Chen, Wenhong. 2013. "The Implications of Social Capital for the Digital Divides in America." *Information Society* 29(1):13–25.

van Dijk, Jan, and Kenneth Hacker. 2003. "The Digital Divide as a Complex and Dynamic Phenomenon." *Information Society* 19(4):315.

Gilbert, Melissa. 2010. "Theorizing Digital and Urban Inequalities: Critical Geographies of 'Race', Gender and Technological Capital." *Information, Communication & Society* 13(7):1000–1018.

Ragnedda, Massimo. 2017. *The Third Digital Divide: A Weberian Approach to Digital Inequalities.*

Sparks, Colin. 2013. "What Is the 'Digital Divide' and Why Is It Important?" *Javnost - The Public* 20(2):27–46.