



DIGITAL
INCLUSION

Leadership Brief: Libraries Leading AI and Digital Citizenship

ABOUT THIS LEADERSHIP BRIEF

This Leadership Brief highlights the rapid growth of artificial intelligence (AI) and its impact on the economy, society and people. It calls on public libraries to assume a leadership role in this next wave of technological transformation – not as technical experts, but as respected thought leaders, trusted sources of reliable information and champions of equity and democracy.

OVERVIEW: AI is already an integral part of daily life affecting how people live, work and entertain themselves. Smart phones, voice-powered personal assistants like Siri and Alexa, streaming media services, ride-sharing and navigation apps and self-check-outs are built on AI foundations. A recent Gallup poll found that 85% of Americans are already using consumer products that employ elements of AI.¹

Popular AI consumer products in use today are designed to help people accomplish tasks quickly and accurately. More sophisticated self-learning AI networks which can analyze data and make informed decisions are increasingly common in our personal and business lives, contributing to concerns about privacy, security, equity and democracy. A recent *Washington Post* article explored the “secret life” of personal data on smart devices with this headline: “It’s the middle of the night. Do you know who your iPhone is talking to?”²

Libraries **must** step up now as leaders at the forefront of the AI revolution to provide individuals with programs, services and reliable information that will ensure they are empowered, not diminished, by this new technology wave.

If not libraries, then who?



“AI is happening faster than most people think, and the public is not adequately prepared for it. Everything we do will somehow be impacted by AI. The public library, in our teaching role, can play a very important part in preparing the public for what lies ahead.”

— Monique le Conge Zieshenne, Department Director, Palo Alto City Library



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KEY DEFINITIONS

- ▶ **Artificial intelligence (AI):** The use of data, machines and algorithmic processes to simulate or extend human capacity to perform tasks or make informed decisions.
- ▶ **Digital citizenship:** The full range of experiences, opportunities and responsibilities of individuals engaged in the virtual world including access, literacy, rights, responsibilities and security.

A PERSPECTIVE ON AI AND DIGITAL CITIZENSHIP

The following themes provide a framework for shaping library leadership in AI and digital citizenship.

The internet proved to be a turning point for libraries as technology leaders. And this is the foundation for an AI leadership role.

Libraries struggled to embrace the internet following its introduction 30 years ago. Madison Public Library Director Greg Mickells recalled libraries initially tried to “catalogue the internet” because that’s what they knew how to do. Some predicted the internet would make libraries obsolete. Instead, libraries found their internet footing and became critical anchors for digital access and equity.

The pace of AI-driven change is faster, broader and more complex than the internet, and the impacts on people, society and democracy will be more significant. Libraries must recognize the magnitude of these shifts and act accordingly to continue leading as community gateways to the digital universe and digital readiness.

While AI is already playing an active role in daily life, the breadth of its impact is still in an early stage.

Public attitudes toward AI are evolving as it moves from lurking in the background to a topic of popular conversation, if not widespread knowledge.

For example, among respondents to a recent Brookings Institution survey, only 14% said they were very positive about AI, and just 12% felt very optimistic. But, 38% expressed fear that AI will reduce jobs, 49% expected AI to reduce personal privacy and 32% said AI represents a threat to human beings.³

Technology experts are viewed as the key AI community leaders.

Nearly 64% of libraries that responded to a recent ULC survey identified technology companies and vendors as AI community leaders, followed by CIOs/technology experts (49%) and the business community (35%). Only 9% identified the library as an AI community leader and 4% selected the mayor/chief elected official. Nearly 22% said their communities didn’t have any clear AI leaders. That data suggests a significant leadership gap in many communities around AI and its implications.

Rapid expansion of AI as a central part of daily life will create new digital and economic divides.

A majority (65%) of respondents to a Northeastern University/Gallup survey on AI expressed worry that new technology will widen the gap between the rich and the poor and will exacerbate inequality.⁴ The loss of jobs, the need for new skills in a changing work environment and biases in the coding or application of algorithms will all disproportionately impact disenfranchised populations.

AI’s growing influence heightens the need for public leaders to focus on fostering, protecting and empowering digital-savvy citizens.

It’s easy to become intimidated and even overwhelmed by the complexity of AI. More important than the how-to of AI are its impacts on individuals as workers, voters, consumers and responsible human beings in today’s society. These impacts and implications align well with the library’s role as the public institution that fosters democracy through free access to reliable, trusted information.

“Libraries are about civic engagement and are the face of local government for many people. That reputation positions libraries to lead conversations about AI and its implications.”

— John Szabo, City Librarian, Los Angeles Public Library

LIBRARIES LEADING THE WAY

Most libraries are on the front end of defining an AI role in the community. Just as the internet prompted a rethinking of library roles, the breadth and complexity of AI and uncertainty about the best focus for library work – along with many competing priorities – have left AI on the backburner for many libraries. Some have connected AI to other capacities including STEM and STEAM education, workforce development, digital literacy and maker space programming.

The following examples highlight ways that libraries are addressing AI and digital citizenship:

Focusing on Privacy

Toronto Public Library's Digital Privacy Initiative focuses on giving individuals the knowledge and confidence they need to navigate digital spaces without compromising their privacy and security. Programs include:

- ▶ Algorithmic literacy workshops to help library users understand the complexity of their online environments
- ▶ Do-it-yourself machine learning kits that support self-directed tinkering
- ▶ A speaker series with leading AI researchers, experts and critics
- ▶ A digital privacy expo bringing together local experts to discuss data and personal security
- ▶ A stakeholders forum to share AI programming information and identify potential collaborations

Raising AI Awareness through Robotic Helpers

Roanoke County Public Library and **Palo Alto City Library** both have humanoid robots to carry out small tasks and introduce AI to the public. In Roanoke, “Pepper®” has been a catalyst for community interest in AI and for identifying potential AI partners. The library is also hosting community discussion groups around digital privacy rights, AI needs and expectations of the library. In Palo Alto, “Dewey” provides a valuable telepresence to raise awareness of AI and the potential value of robotic helpers. Beyond Dewey, Palo Alto's AI work is a continuation of its focus on digital literacy, technology and innovation.

LIBRARIES' KEY ASSETS IN LEADING ON AI

Public libraries are well-equipped to address AI from the human, moral, ethical and social perspectives. They bring significant assets to the work including:

- ▶ A commitment to privacy, equity and access
- ▶ Experience adapting to transformational change
- ▶ Status as trusted community anchors
- ▶ A track record of success connecting people and technology in meaningful, non-threatening ways
- ▶ Proven capacity to guide and educate residents on emerging issues
- ▶ Experience building strategic partnerships to enhance capacity and collective impact

Enhancing Capacity with Strategic Collaborations

Madison Public Library is a partner in the Local Voices Network (LVN) which combines in-person and digital listening to host, analyze and connect community conversations using an AI-powered device called the “digital hearth.” The digital hearth's creator, the nonprofit Cortico, leads the LVN.

Cambridge Public Library leverages its access to world-class universities and a strong startup ecosystem to enhance its AI capacity. Library programs introduce patrons to what they need to understand about new technology and questions they need to ask as digital citizens, including:

- ▶ A TED-talk style lecture series featuring local experts discussing ethical, philosophical and social implications of science and technology breakthroughs
- ▶ A “Laughing Room” art installation in the library, developed in partnership with MIT and Harvard metaLAB, that used an AI-driven laugh track to demonstrate how algorithms guide decisions
- ▶ Hands-on workshops with the Berkman-Klein Center for Internet and Society to explore AI issues and challenges



“AI is a huge harbinger of social change, and libraries must be part of it.”

— David Leonard, President, Boston Public Library

Making Digital Citizenship a Priority

Miami-Dade Public Library offers discussion programs designed to increase awareness of AI and how it affects individuals as digital citizens. Topics covered include responsible social media usage; safety and security risks of the internet and AI-connected devices; and the longer-term privacy issues that will emerge from expanded applications of machine and deep learning.

DC Public Library made digital citizenship a strategic focus area to ensure that residents have the skills they need to navigate in the digital world. Current programs include internet safety classes and maker programs that prepare residents for the technology of the future.

ACTION STRATEGIES FOR LIBRARIES

The following strategies offer libraries a framework for elevating leadership on AI and digital citizenship.

- 1. Build on library strengths.** AI and digital citizenship represent the next wave in a technology transformation that libraries have already embraced. Libraries can draw on their experience as education, literacy and civic engagement leaders to enter the AI arena. Example approaches include incorporating AI into existing STEM programming, expanding digital literacy classes to provide an AI introduction, launching community conversations about why AI and digital citizenship matter and convening local vendors or tech experts to share ideas.
- 2. Create partnerships.** Libraries will be most successful in the AI space if they focus on working with experts rather than trying to be experts. That means being smart about collaborating with institutions and individuals that share the library’s values and have expertise that will help the library achieve desired outcomes.

- 3. Focus on implications rather than the technology how-to.** The library’s AI sweet spot starts with raising awareness of how AI will affect people’s lives, focusing particularly on the democratic, social and economic impacts.
- 4. Engage staff.** Staff buy-in is critical for expanding and sustaining the library’s leadership in AI and digital citizenship. Provide staff with learning resources and creative opportunities to build their confidence and sense of ownership regarding AI issues. And, leverage the leadership strengths and deep community connections of staff members to build on existing capacity and provide a foundation for incremental action.
- 5. Embrace the leadership challenge.** Tech companies will continue to drive AI’s evolution, but they can’t be left to lead this technology transformation alone. More than any other public or nonprofit institution, libraries must be the reasoned, responsible, trusted voice on what AI is, how it will affect people’s lives and how to protect democratic values.

The **Urban Libraries Council** is an innovation and impact tank of North America’s leading public library systems. We drive cutting-edge research and strategic partnerships to elevate the power of libraries as essential, transformative institutions for the 21st-century. We identify significant challenges facing today’s communities and develop new tools and techniques to help libraries achieve stronger outcomes in education, workforce and economic development, digital inclusion and race and social equity. **Learn more at urbanlibraries.org.**

¹ RJ Reinhart, “Most Americans Already Using Artificial Intelligence Products,” Gallup, March 6, 2018, <https://news.gallup.com/poll/228497/americans-already-using-artificial-intelligence-products.aspx>.

² Geoffrey A. Fowler, “It’s the middle of the night. Do you know who your iPhone is talking to?” The Washington Post, May 28, 2019, https://www.washingtonpost.com/technology/2019/05/28/its-middle-night-do-you-know-who-your-iphone-is-talking/?utm_term=.f59ff0ead5a2.

³ Darrell M. West, “Brookings survey finds worries over impact on jobs and personal privacy, concern U.S. will fall behind China,” May 21, 2018, <https://www.brookings.edu/blog/techtank/2018/05/21/brookings-survey-finds-worries-over-ai-impact-on-jobs-and-personal-privacy-concern-u-s-will-fall-behind-china/>.

⁴ “Optimism and Anxiety: Views on the Impact of Artificial Intelligence and Higher Education’s Response,” Northeastern University and Gallup, January 2018. <https://www.northeastern.edu/gallup/pdf/OptimismAnxietyNortheasternGallup.pdf>.