Ay Ay AI

At a recent info pro event, I was part of a conversation on the impact of artificial intelligence (AI) on our profession. Much was made of IBM Watson's trouncing of Ken Jennings during an epic *JEOPARDY!* competition, and while that was quite a show, I think the focus is misdirected. Rather than replacing librarians with a Watson app, AI will more likely play a strategic role in enabling us to address questions we couldn't answer before, using tools that we can't even imagine today. Already, "cobots"—collaborative robots designed to physically interact with humans in a shared workspace—are using AI-enhanced cameras to handle repetitive inspection tasks in factories, freeing up workers to handle non-routine tasks that require a human's creativity and problem-solving skills. Our computer overlords have already arrived, and they have an amazing tolerance for tedium.

I am reminded of the dire predictions of the demise of the bank teller with the introduction of ATMs. Instead, when banks discovered that ATMs enabled them to operate a branch with fewer tellers, they opened up more branches. As a result, there are more bank tellers today than there were when ATMs were rolled out in the early 1980s. Likewise, I remember the early days of the web and the hand-wringing that many of us went through when we were first confronted with the dreaded assumption of IAOTWFF—It's All On The Web For Free. Yes, we're still dealing with the problem of clients being satisfied with what they could find from a quick Google search, regardless of whether what they found was reliable or up-to-date. But we also learned how to embrace the web and build new search tools and resources to facilitate information discovery and transformation.

We had to stop seeing ourselves as information gatekeepers and protectors of access to expensive professional online services, and instead look at how we could enable better use of information resources throughout our organizations. (I recently saw the LinkedIn profile of a corporate librarian whose headline is "Cataloging corporate assets to enhance discoverability." That's a librarian who knows *why* she's doing what she does!)

Info pros can address the perceived threat of AI in the same way we addressed IAOTWF: by leveraging our real value—our ability to understand how our clients or patrons think about, find, and use information. Already, AI tools enable smart data visualization and better text and data mining projects of large datasets. Machine-learning tools are involved in generating more and better metadata to enable better discovery of an organization's digital content. Factiva's Intelligent Indexing was an early example of using AI to enhance retrieval. Visual pattern recognition tools enable better retrieval within libraries' image collections. (For more thoughts on the role of AI in libraries, see George Plosker's article, "Artificial Intelligence Tools for Information Discovery," *Online Searcher*, May/June 2018, pp. 31–35.)

In order to recognize where an AI tool could play a strategic role in an information center, we need a deep understanding of the flow of information within our organization and the information-seeking behavior of our various client groups. While we may have some hunches and we may have surveyed our users, we don't know what we don't know.

We have to find the unexpressed research questions that our users assume we do not have any relevant tools or resources to address. We have to find what shortcuts, hacks, and settling for (maybe) "good enough" take place within user communities who don't know what resources they can tap into. For example, when I spoke to a biochemist about her use of several high-end STM online services, she described the usefulness of YouTube videos when she needed to know how to perform an experiment in her field, which was quite a surprise to her organization's librarian. But knowing this could prompt the librarian to build an RSS feed of open-access instructional videos in areas relevant to the needs of her organization's researchers.

In order to understand where an AI tool could be transformative, we need to remove our assumptions about how our users find and interact with information. We have to go out and listen to our clients as they describe all the typical ways they consume information. This calls for open-ended informational conversations (not "interviews") to learn about our users' typical, quick look-up searches—whether that is finding all the articles by an author, finding discussions of a new technology, or populating a dataset. We have to ask them *why* they rely on the sources they do, what they can't do and wish they could, and what tool or resource they wish they had. Once we see the information landscape from our users' perspective, we can identify where the opportunities are when we see an interesting AI application.

Mary Ellen Bates (mbates@BatesInfo.com, BatesInfo.com) is in search of a yardwork cobot.

Comments? Email the editor-in-chief (marydee@xmission.com).