ABSTRACT

For many patrons, libraries are synonymous with books and reading. However, people don’t always take advantage of reader’s advisory services offered by libraries. Rather than approaching librarians for suggestions of what to read, most people instead turn to their personal networks or express a preference for more passive approaches to recommendations. As a halfway point between in-person reader’s advisory interactions and algorithmic recommendations, Worthington Libraries staff leveraged the NovelList and Polaris APIs to create custom book recommendation kiosks. Recommendation Stations, as we call them, allow people to scan a book barcode, browse read-alikes, check local availability and print shelf locations, all in the guise of an interactive fortune teller.

INTRODUCTION

Worthington Libraries is a busy suburban library system in central Ohio. Our three branches serve a community of just over 70,000. As of 2022, we ranked eleventh in the state for total circulation of physical materials, behind Ohio’s major metropolitan libraries.1 We take a data-driven approach to serving our community. In 2018, we completed a mixed-methods research study, using an online survey and semi-structured interviews to ask current library patrons about a variety of activities they undertake at the library and elsewhere in the community.2 To compare people’s habits at the library with similar outlets in the community, activities were matched into pairs, such as attended a program or event at the library and attended a program or event at a community center, park, museum or other location. We repeated the study in 2023 to see how the pandemic impacted library use.3

Both pre- and post-pandemic, we found that the top activities that people undertake at the library all have to do with borrowing. In 2018, virtually everyone we surveyed reported checking out items, using the library catalog and browsing the shelves (Figure 1). Since the pandemic, we saw a decline in the share of people who reported completing each of these activities at the library. However, larger shares of people reported undertaking these borrowing activities at the library than elsewhere in the community, both before and since the pandemic. As we like to say, borrowing is our brand. For patrons in our community, libraries are the preferred source for books and reading.

About the Author

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Figure 1. Survey respondents who undertook borrowing activities in the last year, at the **LIBRARY** and **ELSEWHERE** in the community

However, it’s a different story when it comes to asking for help or looking for book recommendations. Virtually everyone reports getting information from family, friends, and neighbors and looking for reading recommendations online, with modest increases from 2018 to 2023 (Figure 2). A smaller share of people talked to a librarian in person or looked for recommendations on the library website, with sizable decreases from 2018 to 2023. In our community, the library isn’t necessarily front of mind for reference or reader’s advisory.

Figure 2. Survey respondents who undertook reference and reader’s advisory activities in the last year, at the **LIBRARY** and **ELSEWHERE** in the community

We’re not alone. When researching life decisions, half of Americans use digital tools, a quarter consult other people, and a meager 2% turn to the library.\(^4\) Nationally, the number of people visiting the library website to read book reviews or get book recommendations has been on the decline and librarians lag behind other sources as a method of book discovery.\(^5\)

Our research study also asked a series of questions about use of and interest in a range of library services. When it comes to personalized book recommendations from the library, both use and interest were on the rise over the last five years (Figure 3).
On the one hand, people think of the library as a place for borrowing and are interested in personalized book recommendations. On the other hand, they don’t approach library staff for reading recommendations. If people aren’t looking for traditional reader’s advisory, what do they want? Our 2018 interviews offered us some clues. One patron described how she uses the library for recommendations:

I enjoy the recommendations on the website. I will pivot off of authors and recommendations. Usually, I’m looking for a specific thing, but recently we’ve been exploring recommendations.

Further, when asked to envision what the library could offer that would make their lives better, two interview participants discussed personalized recommendations. One young woman sought recommendations based on her borrowing and search history, offered in print:

Recommendations for items... but not in email form because I just delete them. Maybe when searching the catalog or when I come and pick things up. Recommendations based on my searches—if I was handed a personalized flier every month... I’d want the options presented in gentle way.

Taking it further, a young man wanted nothing less than clairvoyance:

If there was a way the library could just know what I wanted to read next and just tell me.

Considering these findings, an idea started to emerge. What if you could start with books you liked and then get recommendations printed out that you could immediately borrow? And thus, the Recommendation Station was born!

**DEVELOPMENT**

Conceptually, the Recommendation Station is straightforward. We have integrated NoveList with Polaris—our ILS—to create a web application that retrieves read-alikes with real-time item availability. Patrons interact with a touchscreen kiosk with a barcode scanner and receipt printer as well as a wireless network connection, using it to print or email lists of recommendations or to reserve recommended books.
The Recommendation Station supports three primary use cases:

1. A **Print** option is geared toward patrons who want to check out books today. After scanning a book (Figure 4), the Recommendation Station displays a list of similar books marked “IN” or “OUT,” to indicate which are on the shelf right now (Figure 5). Using checkboxes, a patron can select individual books and print a list of titles. Shelf location and call numbers are included on the print receipt to locate the books for check out (Figure 6).

2. An **Email** option is meant for patrons looking for ideas to add to their to-be-read list. A patron can mark books that catch their eye and email selected titles to their inbox. Links to the library catalog allow them to come back to the recommendations when ready.

3. A **Reserve** option caters to patrons who discover a book they like that is not on the shelf on the day of their visit. A patron can select books and reserve them right to their library account.

The software behind the Recommendation Station is a web application built with the Drupal content management system. The software’s heart and soul are the NoveList Select and Polaris APIs. The former serves as the primary recommendation engine, while the latter provides item availability and patron authentication. In addition to these core services, the Recommendation Station software is comprised of several functional integrations.

- Book covers are central to the experience of the Recommendation Station, and we rely on Content Café as our primary source for jacket images with ChiliFresh as a back up.
- We use OpenLibrary to fill in any bibliographic data that may be missing from Polaris or NoveList Select.
- In order to display availability information based on location, each kiosk has its own assigned IP address that is associated with our library branches.
- Item barcodes are also associated with ISBNs, so patrons scanning a barcode can receive results no matter which they scan.
- The JSPrintManager app allows for seamless printing without any additional onscreen prompts.
- Integration with Google Analytics via custom dimensions and events provides tracking of which elements in the user interface are tapped.
- Finally, we use PRTG Network Monitor along with Drush to monitor each third-party service to check for latencies so kiosks can be taken offline in case of downtime.

Together, these services allow us to create a dynamic and engaging experience.
**Figure 4.** Scanning the book *You’re an Animal* at a Recommendation Station kiosk.

**Figure 5.** After being scanned, *You’re an Animal* appears on screen at left; read-alike titles are displayed to the right, marked with “IN” or “OUT” to indicate current availability; the title *Home* has a box with a check mark to indicate it has been selected; the “Print” button at the bottom displays a “1” badge to indicate that one title is ready for printing.
USER EXPERIENCE

As we embarked on this project, we had many conversations about how to make the interaction with the technology feel personal, conversational and fun. Early in the process, we noticed that receiving the printed book titles from the kiosk felt like being given a fortune, reminiscent of the Zoltar Speaks arcade game featured in the 1988 Tom Hanks movie *Big*. Once we made that association, we used the idea of magic as a jumping off point. Using the Recommendation Station is meant to feel like consulting a fortune teller who dispenses book recommendations like fortunes.

The Recommendation Station’s logo is a crystal ball. Both the print receipts and the emails offer a “fortune” at the bottom (Figure 6), pulled randomly from a pool of more than 20 library and literary puns, such as “So many books, so little time” or “Believe in your shelf” or “It was bound to happen.” The receipts act as a finding aid, but also a keepsake of the experience of using the Recommendation Station.

We carried this feeling of enchantment throughout the interface, including a hidden Easter egg. Tapping the crystal ball logo in the upper left corner of the screen (Figure 5) loads a video of a cat or a dog sitting at a crystal ball along with buttons that offer recommendations with a magical or humorous punchline. The button that reads “What does the future hold?” leads to a book titled *Good Fortune*. The button that reads “What is the secret to true happiness?” leads to either *Sit in the Sun: And Other Lessons in the Spiritual Wisdom of Cats* or *Sit, Stay, Heal: What Dogs Can Teach Us About Living Well*.

USAGE

We launched with seven kiosks deployed at our three libraries at the start of our 2023 summer reading program, giving us nearly a year of usage history to date. We developed a report in Looker Studio to view the number of sessions and events over time (Figure 7). We take advantage of IP
information to filter usage down to the kiosk level in order to determine whether certain locations within our buildings are more successful than others.

**Figure 7.** Looker Studio report of Recommendation Station sessions

The software also logs a count of the types of recommendations being made at each kiosk, whether they’re printed, emailed, or reserved. (For privacy reasons, we chose not to log titles or patron details.) We weren’t surprised to find that the print option is by far the most popular (Figure 8). Finding books to borrow today appears to be the most compelling option to our patrons.

**Figure 8.** Total number of Recommendation Station recommendations generated by action
WHAT'S NEXT

As we enter our second year with the Recommendation Station, we’re consulting with colleagues who are passionate about reader’s advisory to talk about what we can do to take the kiosks to the next level. The ideas primarily center around using the Recommendation Station kiosks as promotional spaces, like digital power walls. We recently introduced a system that allows us to schedule timely lists of featured titles by adding start and end dates for particular data feeds. We plan to schedule staff-curated lists throughout the year, such as romances in February, scary stories in October and holiday cookbooks through November and December as well as African-American authors in February for Black History Month or LGBTQ+ authors in June for Pride Month and so on. The system also adds the ability to target specific kiosks with featured titles. Kiosks placed in children’s or teen areas can feature age-appropriate titles.

We can also pull in titles from Polaris bibliographic record sets that staff members can update directly, even on the fly. If we feature hot books with long hold lists, when a patron comes in asking about one of them, a staff member can walk them to a Recommendation Station and help them find read-alikes that are on the shelf right now to tide them over while they wait. Or children’s librarians could feature titles they read in their storytimes that week so families leaving the story room could browse similar books they could go home with. Or an outreach librarian visiting a middle school could feature the titles she booktalks and then encourage students to come in and try the Recommendation Station to find those titles and more.

For its next phase, we hope the Recommendation Station can act as a conversation starter between patrons and staff, a tool for our staff members to have reader’s advisory interactions with our patrons who may be reluctant to approach library staff, closing the gap we noted in our research. The Recommendation Station can build on the fact that people think about the library as a place for books and reading and nudge them to take advantage of reader’s advisory and more of what the library has to offer.

ACKNOWLEDGMENTS

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ENDNOTES


3 Kara Reuter and Lisa Fuller, Envisioning What’s Next: Worthington Libraries and People’s Lives after the Pandemic, October 2023,
Erica Turner and Lee Rainie, “Most Americans rely on their own research to make big decisions, and that often means online searches,” Pew Research Center, March 5, 2020, https://www.pewresearch.org/short-read/2020/03/05/most-americans-rely-on-their-own-research-to-make-big-decisions-and-that-often-means-online-searches/.


Videos of the Easter Egg screens are available on the @worthingtonlibraries TikTok account: https://www.tiktok.com/t/ZPRw2Ncs3/ and https://www.tiktok.com/t/ZPRw2mLYh/.


Jon M. Sweeney, Sit in the Sun: And Other Lessons in the Spiritual Wisdom of Cats (Minneapolis: Broadleaf Books, 2023).