



UX Research Report

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Assembled for
BookSystems, Inc

Compiled by
Redacted

Executive summary

User interviews and site observations were conducted in order to better understand the acquisitions process and accessibility needs of users. Our team conducted user interviews and site observations in order to meet the following goals:

- Develop an understanding of the library acquisitions process
- Identify pain points in the acquisitions process
- Understand the areas of Atrium users enjoy that could be expanded upon in future versions of the software
- Identify the accessibility needs of library patrons and staff

A total of 3 participants were recruited from BookSystems' client list. Participants were asked questions related to demographics, acquisitions, and accessibility. Then, they were asked to conduct their usual acquisitions tasks under observation. The data from these sessions was then analyzed using thematic analysis.

Research revealed the following conclusions:

- Librarians praise Atrium's cataloging module for its streamlined and user-friendly nature.
- Atrium users become frustrated and confused by the amount of options in the acquisitions menu as well as the number of steps required to complete an order.
- Librarians feel that the current Atrium acquisitions module does not work well with their libraries' workflow and the system is too inflexible to try adapting it into their process.
- Acquisitions librarians utilize various independent library vendors, meaning extra time must be dedicated to check for duplicate orders.
- Patron book requests are being received from a variety of sources both including and beyond Atrium's built-in patron request feature.
- Accessibility issues are an important consideration for librarians.

These trends in behavior and demographics were then used to create user personas, scenarios, and journey maps meant to reflect typical users and their experiences.

Methods

Participants

Participants were recruited from BookSystems' national client list. Via email, the course instructor established the participant's desire and ability to participate in a user interview and site observation. After participants agreed to be interviewed and observed, the team of researchers reached out via email to arrange a video conference.

The researchers recruited a total of 3 participants who were diverse in both the size of their libraries and their familiarity with Atrium's acquisitions system.

Procedures

Data was collected from participants in the form of user interviews and site observations. The researchers developed this combined user interview and site observation protocol around the following goals:

- Developing an understanding of the library acquisitions process
- Identifying pain points in the acquisitions process
- Understanding the areas of Atrium users enjoy that could be expanded upon in future versions of the software
- Identifying the accessibility needs of library patrons and staff

User interviews and site observations were conducted via Zoom video conferences (audio and video recorded). In attendance of each meeting were the participant and two researchers, one leading the session and the other taking notes.

Each session began with an introduction informing participants about the purpose of the research. As part of this introduction, participants were informed that they could stop participating in the research at any time for any reason. Then, the researchers conducted the user interview and site observation. Following completion of the site observation, participants were given the opportunity to provide the researchers any further information that they felt was not covered in the interview or observation.

The full script of research protocol and interview questions is listed in Appendix A.

User Interviews

During the user interview, participants were asked questions related to demographics, acquisitions, and accessibility. Demographic questions included the participants' years of experience, their role in acquisitions, and their library's size. Acquisitions questions covered the participants' acquisitions workflow, software, and statistics. Accessibility questions evaluated the role of accessibility at the participants' library.

Site Observations

During the site observation, participants were asked to share their screen with the researchers. Participants were then asked to go about their normal acquisitions process using their usual workflow as well as any software or other tools they typically utilize. The researchers observed the participants as they completed this task, asking clarifying questions pertaining to the participants' motivations.

Data Analysis

First, audio and video recordings were transcribed verbatim using Trint, a transcription software. The researchers then developed a coding scheme centered around the goals of the research and used these codes to conduct a thematic analysis of the transcribed data. Themes were also allowed to emerge organically during the analysis process. A complete list of the codes used, their descriptions, and the colors associated with each are shown in Table 1 below.

After thematic analysis concluded, researchers used the information to develop UX artifacts for BookSystems, including two user scenarios, two user personas, and a journey map.

Table 1: Coding Scheme

Code	Description
Joys	Things the users liked about the software
Frustrations	Things that users did not like about the software/areas the user struggled
Interviewee Demographics	Demographics about the librarians themselves including their years of experience, number and types of libraries worked,

Library Demographics	Size of the library, number of staff involved in acquisitions, ad
Acquisitions Processes	Steps the user took to carry out a task/goal
Outside Resources/Vendors	Any outside sites the user used in conjunction with their acquisitions software
Workarounds	Ways that users bypassed frustrations with the software
Accessibility	Things that the library is doing or needs to make reading, checking out books, or getting into the library easier for those who are differently abled.
Important Information	Any additional information deemed useful for understanding

Main Findings

Users enjoy the simplicity of cataloging in Atrium.

Several users indicated that one of their favorite features of the Atrium software is its quick and easy cataloging process. One participant commented:

I'll sit there and catalog while I was waiting for my recliner to be delivered and for this [interview] to start. I can do it so easily. It's just what we needed.

Another participant expressed their appreciation that Atrium does not require librarians to directly edit the code of a MARC record, instead allowing them to fill out a set of text fields and then formatting the code automatically.

One participant noted that the ability to catalog a book from anywhere was useful. They described how, when visiting a bookstore, they could quickly check to see if the library owned a particular book. If the book wasn't already in the library, the participant could order and catalog the book right there without even needing to return to their office.

Cognitive overload causes frustration among users.

A key pain point for users is the cognitive load required to use the Atrium acquisitions module. Participants expressed frustration at how many options there are in the acquisitions menu as well as how many steps are required to complete acquisitions-related processes.

In the case of one participant, their library had previously tried to use Atrium's acquisitions module. However, they found that the module complicated their process and ultimately decided to stop using it. The participant commented that:

We used it at [our library] because I kind of wanted to play with it and see what we thought. It made our job harder. There were too many steps.

During this participant's site observation, researchers noticed that they paused for an abnormally long time when viewing the acquisitions menu. After showing researchers what their initial step would be if they were trying to submit an order,

the participant became confused and wasn't sure where to go next. Notably, some time had passed since the last time they used Atrium.

Another participant displayed a similar hesitation at the acquisitions menu during their site observation. This participant did not regularly use Atrium's acquisitions module. During their site observation, however, they noted that their library patrons had the option to submit book requests through Atrium. However, when they opened the acquisitions menu to look for the administrative side of this feature, they expressed that:

See, I'm not even sure where it's at in here.

At another point during their site observation, this participant identified a specific location where they would like to see the number of steps reduced. If a library patron requests a book, this participant explained that they will create a temporary holding record in Atrium before the book arrives. They then use this record to create a reserve for the patron so that when the book does arrive, it can be borrowed by the patron as soon as possible. So, for each book request, the librarian has to create the holding record, then save the record, then copy its ISBN, then search for that ISBN, then create a reserve for the patron.

While showing off this process, the participant appeared to forget to save the record, which meant that when they first tried to search for its ISBN it did not work. Afterward, the participant expressed their wish for there to be a button for creating the reserve on the same page that they use to create the holding record so that the process could be simplified.

Atrium's acquisitions module is difficult to integrate into existing workflows.

Several participants indicated that part of their reasoning for not using Atrium's acquisitions module was not being able to easily adapt it into their preexisting workflow.

In the case of one participant, their library had been using Ingram for many years before Atrium began offering acquisitions-related features. When they considered

switching to Atrium for acquisitions, they decided against trying to learn how to use the module, considering it too difficult to learn a new acquisitions process on top of learning how to use their new Atrium software. This participant also expressed that they didn't know how Atrium could integrate with their city's budgeting software.

Another participant offered a similar story: though they had tried to implement the acquisitions module into their workflow, they found it difficult to keep track of the orders they had already placed and to incorporate their normal bookkeeping process into the Atrium acquisitions system.

Users utilize a variety of tools and vendors throughout the acquisitions process.

Each participant indicated that they use several, if not all, of the following vendors:

- Ingram
- Amazon
- Midwest Tapes
- Baker & Taylor
- CenterPoint
- Blackstone
- Thorndike

Ingram is by far the most used vendor among participants, with Amazon being the second most frequently referenced.

Participants noted that they choose vendors based on several factors. Certain vendors offer greater discounts while others provide better delivery dates. The circumstances of the order determine from where a book/DVD/other material may be ordered.

Further, a vendor may be chosen based on what they offer. For example, one participant explained that Ingram usually doesn't offer old titles. In such a case, this participant would turn to Amazon to get the book. In another instance, a participant

wants to purchase a large-print version of a novel. For these books they consider vendors like CenterPoint, Blackstone, and Thorndike.

One participant, who once tried using the Atrium acquisitions module but no longer does, indicated that they would like to have a service that connects their catalog directly to vendors. They wanted a tool that could import what was ordered from their variety of vendors directly into the catalog.

Each participant also named several sources of information for guidance on which books to order:

- NoveList/NoveList Plus
- Ingram's Monthly iCurate Lists
- Christianbooks.com
- Radio podcasts
- Church Librarians Network

NoveList Plus and Ingram's iCurate Lists were the two most commonly identified sources of information for participants.

One participant praised NoveList and Atrium for how NoveList Plus could easily integrate into an older version of the Atrium software to allow end users to see NoveList information on library books.

Patrons use several methods to submit book requests.

Each participant described varied methods that their library patrons can submit requests for books to order, including:

- In-person at the library
 - Speaking directly to librarians
 - Filling out paper slips
- Online
 - Via email
 - Via social media, such as Facebook
 - Using Atrium's built-in patron request feature

All participants implied that their patrons use these methods interchangeably.

One participant noted that it is easier for their patrons to simply send an email or speak directly to a librarian rather than logging into their library account and submitting a formal request. Because of this, most of their patrons use non-Atrium methods to submit their acquisitions requests. During their site observation, this participant was unable to recall how to even view patron requests from the internal side.

Users are concerned about accessibility and want to embrace it in a bigger way.

All participants expressed a desire to meet accessibility needs for both staff and patrons as those needs arise. Some participants shared that they were ignorant about many accessibility issues in their library, but wanted to learn more about it.

When asked about accessibility in their library, participants' first answers tended to refer to physical accessibility, such as the ADA requirements for library entrances, bathrooms, and stacks.

One participant noted that older patrons generally required the most librarian assistance to use library technology. They explained this seemed to be due to unfamiliarity with the technology. For some older patrons, the technology appears to be unintuitive, meaning that they must ask a librarian to walk them through the process.

In comparison, another participant noted that children often struggle with the library computers. At this library, computers use a mouse and keyboard rather than a touchscreen. This participant had noticed that young children were often unfamiliar with how to use mouse-and-keyboard interfaces.

Participants also expressed concerns related to language accessibility and whether their library was accessible to the Spanish-speaking populations of their cities. One participant demonstrated how they use Atrium's Subject Headings to add subject headings in the Spanish language. This participant commented:

I could put in the additional headings [...] so that if a person was coming in to look for a particular thing, they could just type in their native language.

Across the board, participants indicated that they would like to learn more about accessibility and want to have the means to address accessibility concerns as they arise.

User Scenarios

Our scenarios showcase two stories of BookSystems users: Timon, a library director involved in acquisitions, and Cam, a deputy library director seeking to improve accessibility at her library. These scenarios take the findings we described above and turn them into narratives that can be utilized by BookSystems developers to inform their software design decisions.

For Scenario One, which features Timon, we considered a test participant's experience trying out the Atrium acquisitions module. We drew from this participant's interview to describe how Timon feels about the software and why they ultimately decide not to use the module.

Next, we addressed what we consider to be one of the most important details about the standard acquisitions experience, that being the use of multiple vendors. We address both how and why a particular vendor is chosen. Through the narrative of Timon ordering a boxed set of DVDs, we strove to show how the use of many vendors can complicate librarians' workflow.

Finally, we address the actual actions taken by Timon to complete an order. Because our participants always make sure to create a catalog entry for any books that were requested by patrons, we made sure that Timon does the same.

For Scenario Two, featuring Cam, we considered the information our participants provided on the topic of library accessibility. The ordering of topics throughout this scenario follows the general order of how our participants tended to answer questions about accessibility. That is, they usually began by addressing the physical accessibility of the library and related ADA regulations.

Cam considers older adults and children in particular because our participants noted that these are the age groups that tend to request technological assistance most often. Though our participants didn't consider their patron's hesitation to use Atrium's patron request feature as an accessibility concern, we feel that the topic is deserving of consideration. It raises the question of why patrons choose to use alternative methods. This scenario also addresses language accessibility since two of our three participants noted this as a key concern at their own library. The action that Cam takes to add Spanish Subject Headings to a BookSystems record was taken directly from one of our participants' site observations.

Finally, Cam expresses the desire to find more information and more resources on how to improve accessibility. This reflects the desires shared by our participants during their user interviews. Each of our participants indicated that they want to address any accessibility concerns as they arise for both patrons and staff members.

User Personas

Our personas are meant to showcase the data-driven profiles of our user research. Whereas our scenarios tell a story about users' activities, we wanted our personas to paint a picture of users' personal needs, goals, joys, and pain points in regards to their interaction with Atrium, their library's acquisitions workflow, or general accessibility at their library.

User Persona 1 describes Muriel, a deputy library director heavily involved in acquisitions. Her biography is based on the demographics of our participants. Their goals are those that we observed in our participants during their interviews and site observations. We assembled lists of Muriel's key joys and key pain points based on the specific joys and pain points shared by our participants during their interviews or otherwise observed by researchers during their site observations.

User Persona 2 presents Jean, a library patron. Though we did not interview a library patron during our research, we wanted to use the information from our participants to paint a picture of the other side of Atrium - that is, the patron-side. Jean's biography, goals, and pain points are derived from details our interviewees shared about their own patrons, particularly those details related to accessibility.

We hope that these personas can be used to inform you about the internal and patron sides of BookSystem's user base as you are redesigning your Atrium software.

Journey Map

Our journey map was created to show the workflow of a librarian, Alanna, ordering books. Specifically, it walks through the various softwares they may use and how they use each. We strove to create a clean design that clearly presents the process acquisitions librarians go through when deciding what books to order and where to order them from.

We felt that by making a journey map of this new character, Alanna, and focusing on a problem separate from the personas and scenarios, we could provide BookSystems with a more comprehensive view of their users. Therefore, our journey map is distinct from our personas and scenarios. We felt that separating each of our UX artifacts this way allowed us to share our findings better than creating an interconnected set of deliverables all about the same character or situation.

Our journey map's visual design uses elements of the BookSystem's style to effectively present the material in a modern way. We used gender neutral language to represent non-binary individuals in the library space. We also made sure to provide both positives and negatives within Alanna's workflow. Additionally, our journey map shows the process of a librarian ordering large-print books - a key type of library item identified by our interview participants as requiring special consideration. We felt this was important to include because different types of library materials might need to be ordered from different vendors, complicating the user's workflow.

We hope that this journey map illustrates useful information for the creation of new BookSystems software. We included the logos of vendors that we saw most commonly used by librarians so that their place would be easily identifiable in the acquisitions process. Alanna's thoughts and feelings were carefully curated from our findings to represent some of the recurring thoughts and feelings provided by our participants.