

Manuscript for:

Title: Understanding the Governance Challenges of Public Libraries Subscribing to Digital Content Distributors

Authors: Yunhee Shim and Shagun Jhaver

Journal: The Library Quarterly

Version: Author's Submitted Manuscript (ASM)

Status: Accepted on March 29, 2025

Understanding the Governance Challenges of
Public Libraries Subscribing to Digital Content
Distributors

Yunhee Shim, Rutgers University

Shagun Jhaver, Rutgers University

Abstract

As popular demand for digital information increases, public libraries are increasingly turning to commercial digital content distribution (DCD) services, such as Hoopla and Overdrive, to save curation time and costs. We conducted interviews with 15 public librarians in the US to examine their experiences with these subscriptions. Our findings revealed that subscribing libraries face many digital governance challenges, including the sub-par quality of received content, a lack of control in the curation process, and a limited understanding of how these distribution services operate. We also found that DCD subscriptions induce a fundamental shift in librarians' curatorial focus from 'what to include' to 'what to exclude.' We discuss how building robust and transparent DCD content governance policies and facilitating collaborations among librarians can help address data governance challenges within the DCD model. We also examine the role that library users, lawmakers, and library associations can play in alleviating librarians' curation labor.

1 INTRODUCTION

Public libraries provide users with carefully curated and reliable information on various topics (Mansourian 2020; Scott 2011). Librarians usually curate the offered content by following their library's collection development policies. Such policies incorporate values essential to the libraries' public service goals, such as community engagement, inclusion, freedom of expression, and diversity of thought (Stenstrom, Cole, and Hanson 2019; Lor, Wiles, and Britz 2021). In enacting their policies, librarians carefully select and provide safe, credible information that shields users from potential harm. Users depend on the meticulously curated information libraries provide. Support by such users, in turn, fosters a sense of trust that helps sustain libraries (Jaeger and Fleischmann 2007).

In recent decades, public library users' demand for digital content, such as e-books and streaming videos, has proliferated. In response, many public librarians have turned to large-scale digital content distributors, such as Hoopla¹ and OverDrive (Libby).² According to the Public Library Association, over 3,300 US libraries currently subscribe to the Hoopla service. Globally, more than 88,000 libraries across 109 countries subscribe to Overdrive services (Fernandez 2023; Over Drive 2024)

These services provide libraries with vast amounts of preconfigured digital content that is immediately available to the public. However, such external subscription services mean that libraries outsource the content curation of their digital offerings. Doing so raises questions about the quality of their offered content, the labor of maintaining content quality, the distribution of responsibility between librarians and distribution service staff, and the extent to which the curated digital content aligns with libraries' public service goals.

1. <https://www.hoopladigital.com>

2. <https://www.overdrive.com>



Figure 1: Examples of e-books promoting hate against women choosing abortion (above) and misinformation and conspiracy theories about COVID-19 (below). At the time of data collection, these e-books show up among Hoopla's top search results for queries on 'abortion' and 'COVID-19'.

Concerns about the US public libraries' reliance on digital content distribution (DCD) services are rising due to the growing number of anecdotal examples where inappropriate materials have been found on DCD platforms (Library Freedom Project 2023). For example, Hoopla's website shows e-books that include hate speech against women choosing abortion and misinformation about COVID-19 when searching for the keywords "abortion" and "COVID-19," respectively (see Figure 1). Such titles would likely violate most libraries' content curation policies and be excluded from their collections. However, the Hoopla service provides library users access to such titles. Worse, such problematic materials appear among the top search results on its platform. In such cases, it is concerning that some users may believe these materials are authoritative sources since they are available through trusted libraries.

This curation problem has not escaped the attention of public librarians. Popu-

lar librarian groups, such as the Library Freedom Project and Library Futures, have raised concerns about this issue (Library Freedom Project 2023; Library Futures 2023). Despite calls for change by many librarians, relatively little is presently known about libraries' overall experiences subscribing to digital distribution services. Since libraries still subscribe to them even though DCD services may provide inappropriate content for users, we must first understand their appeal to the libraries. We therefore ask:

***RQ1:** What factors drive libraries to subscribe to digital content distribution services?*

Librarians usually curate the physical collections themselves. However, when they rely on the pre-configured DCD packages for their digital offerings, they effectively outsource content curation to those services. Doing so raises the question of how well the librarians understand these distributors' content curation processes. We sought to explore what librarians think about the transfer of curation control and how they view DCD services' moderation practices. Therefore, we ask:

***RQ2:** How do librarians perceive digital content distribution services' content curation and moderation practices?*

Subscribing to DCD services may introduce new content governance challenges for libraries, such as identifying inappropriate ebooks. Therefore, we explore how such subscriptions create new tasks for librarians. We ask the following question:

***RQ3:** How does subscribing to digital content distribution services affect the work of librarians?*

To answer these questions, we interviewed 15 public librarians with experience managing or servicing at least one DCD service. The scope of our research is limited to the US public libraries. This report details our findings from these interviews and discusses their theoretical and practical implications.

2 BACKGROUND AND RELATED WORK

In this section, we offer background information on digital content curation in public libraries and identify the critical gaps in our understanding of libraries' use of DCD services.

2.1 Public Libraries in the Digital Era

The public library was originally conceived as a way of collecting, preserving, and distributing a scarce and expensive resource—written information (Garmer 2016). Libraries served as valuable local islands of information and faced little competition, and their patrons were a captive audience (Ross and Sennyey 2008). Librarians' primary responsibilities included curating and classifying library materials, such as printed books, serials, and newspapers (Barreau 2001). The definition of “library materials” was later expanded to encompass information stored on other physical media, including microfilm, audio cassette tapes, video tapes, computer disks, and DVDs (Phillips 2005).

Over the past three decades, the growth of computing technologies has changed the information landscape. The internet has reduced the cost of distributing information to nearly zero, which in turn has diminished the significance of local collections and services (Ross and Sennyey 2008). The digital revolution has exploded the volume, forms, and accessibility of information via open source and open data networks (Candela, Castelli, and Pagano 2012). Today, users can rely on internet-based search engines (e.g., Google, YouTube) to access a vast array of materials sorted in a relevant order (Marchionini 2022). The simplicity, efficiency, and transparency of these new information resources serve as an ever-present competition for librarians who now face disruptive innovation as a regular challenge (Ross and Sennyey 2008).

Public libraries have responded to these developments and embraced the collection, management, and delivery of digital content, including e-books, video, audio, and streaming media (Hawthorne 2008). While some libraries have chosen a more selective approach to curating digital content, others have strived to be as comprehensive as possible (Grahn 2022). Although the latter approach facilitates freedom of choice and autonomy—values that Western politics and culture often idealize—it is important to note that unlike much of human history, scarcity of information and access are no longer the primary concerns today; instead, the challenge lies in filtering and selecting from an overwhelming amount of digital content and sorting them in a relevant order (Audunson et al. 2020). Further, the sheer scale of online publishing and the fact that almost anyone can become a publisher raises concerns about the reliability and quality of the information being made available (Phillips 2005).

Traditionally, librarians served as information experts addressing users' information concerns through in-person communication (Marchionini 2022). However, the introduction of online library platforms has empowered users to navigate information more independently than before, thereby reducing their dependency on librarians and even eliminating the need to physically visit libraries (Holm and Kantor 2021). Users now engage with the information-seeking process through libraries' web interfaces, fundamentally changing the nature of traditional librarian-user interactions. This shift in patrons' reliance on online platforms for information search and consumption also highlights the need for libraries to better address patrons' evolving needs (Wahler, Rortvedt, and Saecker 2022), including offering appropriate web interfaces to access library content and promote information literacy (Ross and Sennyey 2008).

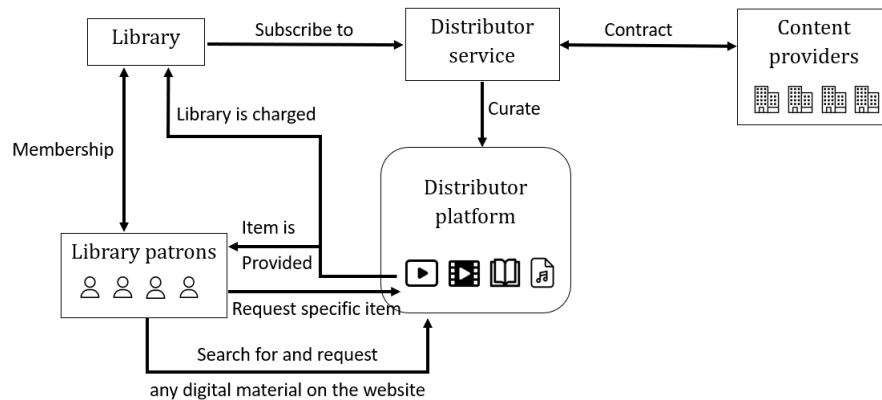


Figure 2: Pay-per-view model (used by Hoopla): DCD contracts with content providers to curate digital content for their platform. When a library subscribes to the service, its users can access all content offered by that service. The library only pays the service for the content that users access.

2.2 Libraries' Reliance on DCD Services

Hosting digital materials introduces complexities in many librarians' tasks, which now require knowledge of areas such as information access management, device interoperability, intellectual property, and copyright issues (San Jose Montano 2014). To address the growing information demands and challenges of scale, many public libraries subscribe to large-scale packages of digital services. These services variously manage different aspects of information collection and distribution, including package licensing, price negotiation, and interface accessibility (Ross and Sennyey 2008). Some of these services also offer an online platform where library users can search for and access the available content (Morris and Sibert 2011). In recent years, the most popular packaged digital services that offer large-scale electronic resources to public libraries include Overdrive and Hoopla, which refer to themselves as DCD services.

DCDs vary in their pricing mechanisms. For example, Hoopla offers a *pay-per-view* model (Figure 2), in which libraries make all the content curated by the DCD

services available to their users and pay these services only for the content their users access. In contrast, Overdrive adopts a *selection* model in which distributors curate the digital content to configure a package; librarians select to pay for access to specific items in the package, and users can use only the paid-for items.

In this research, we focus on the pay-per-view subscription model, which offers more restricted curation control to the subscribing libraries than the selection model. In this model, librarians cannot independently remove any material within the DCD package. However, they can request the DCD service to remove package materials they deem problematic. The service usually accepts librarians' requests and removes access to such materials for the requesting library's users. Many libraries adopt this model because of its advantage of incurring relatively low costs to obtain each title (Costello 2016). Prior research on electronic content in libraries has shown how library administration can achieve cost-effectiveness by subscribing to similar digital content services (Hawthorne 2008; Morris and Sibert 2011). We explore in this paper the additional benefits that the DCD subscription model offers to libraries.

While many public libraries subscribe to pay-per-view distribution services, it is unclear how these subscriptions shape information consumption. This paper aims to fill this gap by examining librarians' perspectives, focusing on the challenges they encounter in fulfilling users' digital content needs within this model. Prior research has addressed quality control challenges in handling large sets of purchased e-books (Waugh, Donlin, and Braunstein 2015). Building on this foundation, we examine the intricacies of quality control challenges libraries face when using DCD services. We explore how librarians perceive the issues of data accountability, curation transparency, and users' freedom to read in the context of reliance on these services (Audunson 2005).

2.3 Content Curation Goals and Policies

One key to understanding the current landscape of digital curation in public libraries lies in recognizing the differences in the content curation goals of libraries and DCD services, reflected in their respective policies. While DCD services prioritize curating broad information with minimal constraints to engage a diverse set of platform users through participating libraries, individual libraries prioritize offering selective, reliable, and valuable content. Prior research has shown that incorporating a mass volume of information into packaged e-resources without a thorough evaluation introduces content that may not align with the library's curation criteria (Kaplan 2012; Ball 2004). We examine how similar problems occur with DCD services, focusing on how they place an additional burden on library staff to voluntarily conduct evaluations of the subscribed content.

Acknowledging the significance of policy as a fundamental pillar of content governance, we examine librarians' perspectives on the tensions between the curation policies and goals of public libraries and DCD services. We add to ongoing conversations about how the changing landscape surrounding libraries' information services and the deficiencies of libraries' traditional curation models in handling inappropriate digital content (Sullivan 2019) requires librarians to explore novel approaches to their digital content management (Marchionini 1995). Ross and Senyey (2008) noted that a shift toward prioritizing simple and efficient access to vast information requires a reallocation of human resources within libraries. Our research investigates the labor issues that librarians encounter within the DCD model and examines how we can address them.

The governance of libraries' digital content is relevant to many stakeholders, such as library users, librarians, funding organizations, publishers, distribution service employees, library consortium staff, library associations and lawmakers. We consider the multi-stakeholder nature of the DCD model and examine the role that

some key stakeholders play and could play in digital content curation.

3 METHODS

To examine the nuances and consequences of content curation through DCD services, and to address our three research questions, we conducted 15 semi-structured interviews with public librarians who work at libraries that subscribe to large-scale DCD services such as Hoopla and OverDrive. These interviews constituted our primary data source and facilitated an in-depth analysis of the librarians' perspectives. We have complemented this interview data by reviewing content curation information available on the DCD service websites and news articles about their curation operations to further enhance our understanding of these services' content management practices. The IRB at our University³ approved this study on 22 September 2022.

3.1 Participants

We interviewed 15 public librarians with experience working in a library setting with a DCD service subscription. We limited our participant sample to public librarians because public libraries serve users from all walks of life, including vulnerable individuals such as children, immigrants, and the homeless (Audunson 2005). The diversity of individuals they serve also informs the practices of public libraries, with their focus on providing balanced, accurate, democracy-supporting information (Garmer 2016). Our focus on public libraries helped us explore how librarians seek to uphold these values when working with DCD services.

We recruited participants and conducted data analysis simultaneously. Our analysis of interview data often raised additional questions, and we engaged in further communications, typically via email, with our participants to get answers. Due to

3. University name will be revealed after peer review.

the overall similarity in practices and experiences among participants, coupled with the detailed interview sessions, we reached theoretical saturation with 15 participants. All participants were White and had received a Master's degree education. Of the 14 libraries our participants were affiliated with, 13 currently have Overdrive subscriptions, and 12 currently have Hoopla subscriptions. Most participants were familiar with both subscription models.

3.2 Data Collection

To recruit participants for this study, we first contacted a librarian at our institution who connected us with a New Jersey-based consortium of public librarians in her professional network. We requested staff members at this consortium to disseminate our recruitment message to relevant librarians. To get more diverse perspectives, we similarly contacted consortiums based in New York, Boston, and Philadelphia. These consortiums assisted us by distributing our recruitment message on their library community listservs and message boards. They also connected us with librarians who could serve as interview participants. Additionally, we used snowball sampling after the interviews began to elicit recommendations from some participants about who else we could interview.

The interviews lasted between 52 and 92 minutes and were conducted over Zoom, an online conferencing tool. We recorded all interviews with the participants' consent. Our semi-structured interviews consisted of three phases: first, we asked participants which digital distribution services their libraries subscribe to, the librarians' involvement in DCD package curation, and the details of communication between librarians and the DCD services. Second, we asked questions about their perspectives on the content curation of DCD services and the benefits, deficiencies, and challenges that the subscription model presents. Finally, we asked participants about their collection management policies and how DCD services can modify their

policies and practices to address the prevalent problems.

As the interviews progressed, we revised our interview guide to gain deeper insights into some emerging concepts. Participants freely shared their experiences and ideas during interview sessions. They were allowed to skip questions and encouraged to reflect more on any issues that arose in the discussions before the end of the interview.

3.3 Data Analysis

All interviews were conducted in English and subsequently transcribed. Next, we applied interpretive qualitative analysis to our transcripts (Merriam 2002). First, we uploaded all interview transcripts to NVivo 12 software for qualitative coding. Soon after each interview, we read its transcript multiple times to familiarize ourselves with the interview data. After this, the first author performed line-by-line open coding to identify emerging concepts and maintain a strong connection between codes and raw data. A set of initial codes emerged during this process. Both authors collaboratively reviewed the codes and their corresponding quotes on a regular basis, discussing their relevance to address the research questions. This was followed by multiple iterative rounds of coding, with the first author leading the process and the second author providing guidance. Subsequently, both authors employed a memo-writing process to enhance the clarity of each code's definition and refine the relationships among codes. Our iterative memo writing helped us describe the nuances of emerging themes and deepen our reflection on the relationships among them.

As our analysis matured, we grouped the preliminarily found codes and assigned each group a parent code. For example, we labeled quotes discussing librarians' views on discovering inappropriate content as 'Librarians' concerns about finding inappropriate content in the DCD package.' This parent code included child codes like 'Accountability for inappropriate content' and 'Losing users' trust.' Our analy-

sis finally yielded 11 parent codes and 45 child codes. We distilled these codes into three key themes, which we present next as our findings.

4 FINDINGS

4.1 Transforming Libraries in the Digital Era: Benefits and Challenge of DCD Subscriptions

Our participants recognized several benefits of digital content distributor (DCD) subscriptions, including extensive digital resources and multi-user access to those resources. However, they also reported often encountering inappropriate content (e.g., pornography, outdated materials, and misinformation) within DCD packages. They worried about their users accessing such content, holding librarians responsible, and expecting librarians to resolve such content curation problems. They expressed concern about how such experiences may affect users' trust in libraries.

4.1.1 Factors driving public libraries to opt for DCD subscriptions.

First, our participants noted that DCD services offer library users immediate, multi-device (computers, phones, tablets, TVs, etc.), 24/7 access to digital content. As library services continue to expand their spectrum of content offerings into a wide array of electronic resources such as e-books, audiobooks, movies, TV shows, magazines, and music, the appeal of DCD subscriptions increases. Participants especially noted the benefits of the pay-per-view subscription model in improving access to digital content:

“Hoopla, the items are always available; you don't have to wait on hold for them. And there is also not the model that Libby (OverDrive service) uses where you get 25 checkouts, and then you have to purchase it again.” - P7

Second, our participants appreciated the managerial benefits that DCD subscriptions offer in providing access to massive volumes of electronic materials. The shift of library services from focusing primarily on physical information to digital information presents challenges in setting up user-facing web interfaces as well as the storage and security of digital content (Marchionini 1995). However, by subscribing to DCD services, libraries can alleviate such concerns. For example, these services often have their dedicated websites that users of subscribing libraries can use. Further, the DCD servers host the offered content, so libraries need not devote any server space to store it. Libraries only pay for the content that their users access, thereby eliminating the cost of unused items. Thus, subscribing to DCD services becomes a more cost-effective way to offer digital content than purchasing individual items separately. As one participant observed:

“It’s just very difficult to replicate that [volume] in any other way.
I think that is what drives the popularity of Hoopla in our library and
other libraries as well.” - P6

Third, libraries have limited choices in their selection of digital content providers. Our participants mentioned that most libraries subscribe to one of a few large-scale distributor services, such as Hoopla and OverDrive. With their distinctive business model and the lack of competitors that offer similar services, these few DCD companies have gained a competitive market advantage. P7 told us that few other digital distributors could compete with these large-scale content providers.

“So, unfortunately, there seems to be a little monopoly on e-book content and audiobook content. There are really not that many other models or companies to go to.” - P7

Our participants expressed concern that this marketplace monopoly creates a power imbalance between DCD services and libraries. Given the lack of compe-

tition, DCD services lack any motivation to improve their service models as their dominant market position allows them to exert greater autonomy in curation practices. This leads to situations where librarian concerns regarding these services often remain unresolved.

4.1.2 Challenges of having inappropriate content in distributor packages

Libraries that subscribe to the pay-per-view subscription model receive the distribution service's pre-configured package wholesale. While the benefits of distributor packages listed above appeal to many public libraries and drive their subscriptions, participating libraries often face quality control challenges.

“They just provide access to everything, which is what they advertise as their attraction, which also means there's a lot of junk.” - P3

Several participants described finding content in the subscription packages that they felt was unfit for their users' consumption. They also presented us examples of such inappropriate content. For example, P2 pointed out:

“They have some materials on there, and you don't initially know what it is until you do some digging. Um, but if you begin digging into that collection a little bit, you realize there are some kinds of pornographic and obscene materials in that collection.” - P2

Such inappropriate content risks harming users who encounter it (e.g., minors may get exposed to violent pornography). Our participants were especially apprehensive about users' access to misinformation. One critical mission of public libraries is to deliver reliable and accurate information to their users (Lor, Wiles, and Britz 2021). However, our participants noted that achieving this mission becomes challenging when relying on DCD packages because they often contain outdated content or misinformation:

“I think Hoopla could be a lot more selective about what is in the collection because I don’t think that they pay any attention to how old titles are and whether the information is outdated.” - P3

Participants discussed the challenges of how DCD subscriptions render libraries seemingly accountable for hosting inappropriate content that they do not curate. Within the pay-per-view DCD model, distributor services hold exclusive authority in curating digital content. Librarians are unable to pre-select or exclude the content in the packages and find their authority constrained in serving their users. However, users often hold the library staff responsible for any inappropriate content.

“The users have no sense that we didn’t buy those titles. A lot of users don’t even realize that the vendor is a vendor. They just see the [library name]. And to them, Hoopla and Libby are us. So, they come to us for any questions that they have.” - P6

As this quote shows, users may not distinguish between titles selected by their library and those included in DCD packages, perceiving all content as curated by the library. Accordingly, they ascribe the inclusion of inappropriate digital materials to library services. Our participants reported that some elements of the distributor service’s web interfaces further bolster the perception that the library staff is accountable for all included content. For instance, P9 noted that the DCD platform often directs users to seek help from the library staff to resolve any problems they face. The lack of direct communication channels between users and DCD services further raises librarians’ burden of addressing users’ challenges regarding DCD services.

“[Content providers do] not [conduct] as much one-on-one interaction with the library customer. And virtually no interaction with the user customer.” -P11

4.2 Concerns About Curation Policy of Distributor Services

Our participants noted that DCD services operate without disclosing the criteria and procedural details guiding their content curation, a stark contrast to the meticulous curation process of public libraries known for their transparent policies. As librarians discover inappropriate content, they feel concerned about the misalignments between DCD packages and their own digital content curation policies. Additionally, librarians perceive that DCD services lack effective protocols for regulating inappropriate content.

4.2.1 Mismatch between DCD service offerings and library goals

Traditionally, librarians have tailored content curation to the needs and interests of their communities through their ‘collection management’ policy (Barreau, 2001). All our participants also confirmed that their libraries have established content curation policies for physical collections.

“We have a collection development policy, which I can share with you.

I think it’s on our website.” – P6

Libraries meticulously craft and administer their content curation policy to align with their overarching goals and missions, which include safeguarding vulnerable populations, promoting diversity, and disseminating credible information. The inclusion of obscene and outdated materials through DCD packages poses a significant challenge to libraries in achieving these essential goals. Given the heightened importance of providing accurate health information more recently, exacerbated by the influx of misinformation during the COVID-19 pandemic, participants felt especially concerned about distributor services offering misleading health-related content.

“We found a lot of problematic medical COVID books that were put out by either non-medical professionals or people who, once we began to research them, had lost their medical licenses, and been discredited. But the books were being cataloged in Hoopla as medical information.”

- P6

4.2.2 Lack of transparency in the curation policy of distributor services

Our participants’ understanding of how the distribution services curate their content suffers because these services do not provide sufficient details about their curation policy. For example, Hoopla offers little information about its digital content curation on its website (Hoopla). While the webpage notes that Hoopla “*includes content that reflects the diversity of the many different communities that libraries serve,*” it does not provide specific implementation details on how this objective is achieved. This lack of transparency also extends to DCDs’ data collection practices.

“As far as I know, they don’t really reveal anything to us about how they’re collecting. They build the content for their collections – I don’t know.” - P2

Public libraries usually post the curation policy in a physical place or on their website to inform users how they curate their collections. This measure illustrates how libraries prioritize policy transparency as service providers to their users. However, the absence of policy transparency coupled with the frequent presence of harmful content in DCD packages sparked suspicions among some of our participants that these services may have no curation policy in place.

“For Hoopla? I think they accept everything and anything. I honestly do believe that there are no stipulations. I think, whatever is submitted to them as a published title, they take.” – P7

P3 similarly noted this lack of policy transparency and argued that the distribution services should publish their content curation policy and methods and communicate them to the library staff, especially those who directly face the users.

Given these deficiencies in the curation policy of distributor services, many of our participants were eager to offer assistance. For example, P6 suggested that libraries can assist DCD services with policy creation by sharing their library's carefully designed policies for content curation and moderation.

“We sent them our collection development policy, And we made it clear these are the standards we're holding ourselves to. This is why we're holding your collection to a similar standard because, on the user end, your collection is our collection, and vice versa.” - P6

4.2.3 Contrasting libraries' “weeding” practices with deficiencies in DCD moderation

Our participants noted that the availability of inappropriate electronic content in distributor packages also suggests deficiencies in service practices regarding content moderation (Grimmelmann 2015). They emphasized that DCD services should implement rigorous processes for reviewing the included content, removing inappropriate materials, and explaining their removals. However, the distribution services currently offer only rudimentary support pages that our participants deem insufficient to satisfy users' content review needs:

“I'm not seeing anything called out on their [distributor's] help page for objections. It just says, ‘contact support,’ and when you click on that, it says, ‘Need more help? Access the Help form.” - P11

Our participants noted that public libraries, in contrast, traditionally employ a detailed weeding process for their curated collections. This process is usually con-

ducted on a regular basis, but may also begin with user objections regarding specific content. Librarians thoroughly investigate such objections and make decisions based on their policies. In some problematic cases, the content review is escalated for further deliberation with an executive board or a review committee before a final decision is reached. Once librarians decide on content review, they do their best to explain their reasoning to their users. Participants felt that such efforts help users better understand how their library curates its contents. These actions demonstrate the library management's commitment to fulfilling their accountability in content governance.

“If someone complains about a book, we talk to the people first and try and explain to them that we carry books on all different viewpoints.” -

P14

In contrast to libraries' sophisticated and closely monitored 'reconsideration process' for the collections they curate, participants pointed out the deficiencies in moderation protocols and actions of DCD services. They want these services to pay more attention to quality control of included content in their packages, especially through constructing policies regarding content curation and moderation.

4.3 Labor Involved in Regulating Offered Content in DCD Packages

The presence of inappropriate content within DCD packages alters the scope of librarians' digital content management work. Our participants mentioned that although they cannot independently remove any specific content from the DCD package, they often voluntarily review the included content to identify inappropriate materials. Once they identify any inappropriate content, they request its removal from DCD services, and these requests are usually complied with. However, this requires librarians to dedicate considerable time and expertise to identify inappropriate content and achieve quality control of included materials in DCD packages.

4.3.1 Reverse curating of DCD packages

Discovering inappropriate content within DCD packages and dealing with ambiguities regarding DCDs' curation policy exacerbate librarians' concerns regarding the quality of materials within DCD packages. Therefore, some participants emphasized the need to actively audit the digital content in response to the new materials included in the subscription packages to ensure that their users do not encounter any inappropriate content:

“Hoopla, they don't consult us on what they buy every month. They release a whole bunch of new content. So, what I have done is I've made a calendar reminder to myself to look once a month to see what they've added in the last 30 days.” - P5

One participant characterized such new moderation tasks as 'reverse curation.' She felt this ex-post evaluation work is a more significant burden than the routine ex-ante curation tasks for librarians. Librarians lack knowledge about the materials collected by distributor services and the criteria guiding their selection process. Consequently, they face challenges in comprehending the composition of materials within the package. This task is unfamiliar to librarians since their conventional role involves deciding what to include in the library collections rather than determining what to exclude.

“So, I definitely feel that regardless of adding things, choosing what's in my collection is simpler than having to fish around for things I might want to suppress.” - P15

The moderation work regarding the distributor package requires cognitive labor, typically placing an additional burden on the library staff. However, many libraries do not officially recognize this task as part of librarians' responsibilities. Some

participants were overwhelmed by the labor involved in evaluating digital content. For example, one librarian detailed the difficulty of fitting moderation work into her regular tasks, admitting that this work often remains undone as a result:

“I haven’t, for instance, gone in there and searched to see if there are any horrible books by people who are denying that the Holocaust happened or anything. It’s just not with this job. Having so many things going on at once, I don’t go looking for trouble until it finds me.” - P5

Several participants argued that DCD services must shoulder the burden of moderation work, not librarians. For example, one participant suggested that distributors hire staff to carefully monitor digital content to ensure quality control before supplying the content to the libraries. Another participant recommended that DCD services take on moderation tasks while allowing subscribing libraries to influence how these services implement moderation, proposing the creation of a steering committee of librarians for this purpose:

“I think it would be good if they [distributors] had like a steering committee made up of librarians ...it would be good if libraries had a voice in the process.” - P3

4.3.2 Strategies to reduce labor involved in moderation tasks

A thorough review of digital material such as e-books or movies would require fully reviewing the content of each included item—a task too time-consuming given librarians’ limited resources. To address this challenge, our participants identified two strategies to reduce the labor involved in moderation—leveraging content patterns and fostering collaboration among librarians. We detail them below.

Many participants leverage certain content patterns to identify inappropriate materials in DCD packages. For example, some librarians assess the reputation of content publishers to guide their audits. However, this requires an understanding of

publishers and authors and hinges on knowledge accrued through professional experiences. Through this approach, participants have become adept at quickly identifying low-quality content. Equipped with these skills, librarians function as human moderators (Roberts 2019), cautiously assessing the suitability of materials for their users. Based on such audits, some of our participants sent DCD services a list of low-quality publishers and asked the services to block them.

“We have certain publishers we’ve asked them [distribution services] to block. We have certain titles that we have asked them to block. My staff specifically went through a publisher list ...and looked up each one to see if they were a reputable publisher.” - P6

Despite librarians dedicating their time and expertise to moderating materials in distributor packages, their contributions typically remain confined to the scope of their respective libraries. Therefore, several participants suggested that DCD services could reduce the moderation labor for individual librarians by sharing each librarian’s evaluation outcome for digital content with other librarians who subscribe to the same service.

“It would be great if ... a company like Overdrive or Bibliotheca could enable librarians to put stars on different books, um, so librarians could see what other libraries thought.” - P2

Some participants noted that many smaller, stand-alone libraries have only a few librarians who simultaneously perform numerous tasks, from facility maintenance to overseeing reference services. Such libraries would significantly benefit from access to other librarians’ moderation outcomes. Participants mentioned that they already engage with other librarians when making curation decisions on digital content, so sharing mechanisms for moderation tasks would be popular:

“If I came across anything really awful on Hoopla, I would probably consult with other librarians in my consortium. Should we ask them [content distributors] to remove this? Is this spreading false information? You have to be really careful in situations like that.” -P5

Participants felt that such sharing of evaluation outcomes could reduce the duplicate effort of staff from different libraries reviewing and removing the same content independently.

5 DISCUSSION

5.1 Moving to DCD Subscriptions: The Current Transformative Moment for Public Libraries

Over the past few years, and especially since the 2016 US presidential elections, panics over widespread fake news, hate speech, and misinformation have raised calls for librarians and other information professionals to take leadership in providing solutions by holding up traditional services (Jacobson 2017). This highlights a need for librarians to examine their strategies for guarding against inappropriate content and analyzing whether their traditional services work. As our study shows, these information crises are occurring during a period when public libraries are turning to large-scale DCD services to address their users' information diversity needs. This has further complicated librarians' desire to achieve tradeoffs between their values of protecting the freedom to read while meeting the needs of marginalized communities.

Our analysis suggests that librarians appreciate the many benefits that DCD services offer, such as their provision of web interfaces and server space and the multi-device, round-the-clock access to their content. At the same time, these services are quickly becoming indispensable because of the expenses associated with libraries

independently procuring access to large volumes of digital content. It is important to recognize that this move to the subscription model represents *a fundamental shift in how libraries curate* their content—they become largely reliant on the curation decisions of DCD services. Thus, content curation becomes more centralized, which can lead to a homogenization of holdings and a standardization of library services across institutions. As Quinn (2000) points out, such homogenization risks excluding librarians from decision-making to the point where they become “disaffected individuals incapable of initiative and vision.”

A few large-scale DCD services now make vital decisions on what all subscribing libraries offer to their users. Given the influence these services have on shaping the public information diets, we argue that they also bear substantive responsibilities for ensuring the inclusion of appropriate content. At the same time, libraries using DCD services need to reengage their core values and determine how to resolve the tensions between providing unrestricted information access and adopting a selective approach that enables greater quality assessment, tailoring, and cataloguing (Phillips 2005).

Best practices about how libraries should respond to these shifts are still evolving, but our analysis highlights that librarians have significant concerns regarding inappropriate content within DCD offerings. To address these concerns, librarians spend a significant amount of effort and leverage their domain expertise to identify and request the removal of inappropriate materials. Our findings show that within the DCD subscription model, librarians have lower control over their content curation outcomes, and their *focus shifts from ‘what to include’ to ‘what to exclude.’* This reverse curation is more burdensome for librarians than their routine ex-ante curation tasks. Yet, these tasks are often not formally recognized as part of librarians’ duties. Thus, we call for greater official recognition and formalization of the librarian tasks associated with regulating DCD content.

5.2 Building Comprehensive and Transparent Content Curation Policies for DCD Services

As our findings show, subpar experience with the curation of digital content coupled with a lack of specificity about DCD policies can impact users' overall experience of library services. Therefore, to build accountability, we suggest that distribution services develop clear and comprehensive policies governing their data collection and curation practices. However, these services currently do not seem to be sufficiently incentivized to hold themselves accountable. Therefore, this realignment would need to take into account the distinct business models and service goals of libraries and DCD services.

Our findings show that librarians would prefer that DCD policies be designed to align with the core values of library services, such as community building, protecting vulnerable populations, and promoting diversity. Well-designed and detailed policies that cater to the public libraries' service goals could reduce the problem of users encountering inappropriate digital content. In our participants' view, successful collaborations between public libraries and distributor services are key to developing an appropriate digital content curation and management policy. However, a critical issue in establishing such a cooperative policy is the power imbalance between libraries and distributor services. Our findings highlight that the increased influence and monopolization of distributor services in library operations makes it challenging for library staff to pressure services to modify their current practices, such as developing descriptive policies. Given these power dynamics and their effects on the user experience, we suggest that future legal and advocacy efforts explore how to motivate DCD services to build more mutually cooperative relationships with libraries.

We found that librarians were open to sharing their collection development policies and assisting DCDs in building their curation policies (Sec. 4.2.1). If DCD ser-

vices open themselves up to a collaborative approach, we anticipate that librarians will actively support them in integrating the public libraries' goals and practices into DCD curation approaches. Librarians currently handle end-user complaints about digital content and engage in ad hoc moderation tasks; they leverage their expertise to assess the accuracy and value of the materials included in DCD packages. These practices can be formalized and integrated into the curation policies and their implementations for DCD services.

Our findings show that libraries also need DCD services to be more accountable and transparent about their content curation and moderation decisions. Unlike public libraries, which construct publicly available policies to guide the curation of their collections, content distributors do not reveal their curation criteria (Sec. 4.2.1). We suggest that DCD services can enhance their governance transparency by making their policies available directly on their platform. Further, given the communication challenges our analysis highlights, we recommend that DCD services also improve how they interact with librarians and library users.

5.3 Alleviating the Moderation Labor for Librarians

Beyond developing transparent and comprehensive DCD content curation policies, we argue for a focus on addressing the questions of labor involved in enacting these policies. Distributor services themselves should, of course, take on the bulk of this responsibility as content moderation is implicitly one of their key offerings to the subscribing libraries. However, given that we do not know the extent to which their business models may accommodate the additional required labor, we focus here on how librarians and library users may help address the labor needs within the current subscription model.

Current DCD moderation practices involve librarians individually auditing all content in the distribution package (Sec. 4.3.2). We argue that libraries could soften

this burden by encouraging their users to report digital items that violate the library's curation policy. Empowering users with a reporting feature, similar to social media's flagging systems (Crawford and Gillespie 2016), would encourage them to actively involve themselves in reporting inappropriate items. Subsequently, the library staff may review these reports, identify whether each reported material violates libraries' curation policies, and, when warranted, request the DCD services to remove it from the library collections. Thus, such user assistance could substantially reduce the wider community's exposure to inappropriate content. Libraries could also organize educational sessions to enhance users' understanding of digital curation with DCD subscriptions and how they can actively contribute.

Public libraries often have overlapping goals and values that shape their content curation. Duplication of labor likely occurs when each public library exerts efforts to identify the same inappropriate DCD contents. As our findings show, another way to alleviate moderation labor is to develop collaborative efforts among libraries. We advocate for such librarian cooperation in content moderation, urging the sharing of content curation protocols and moderation results. Leveraging the historical practice of supporting each other through consortiums in content acquisitions and cataloging (Horton and Pronevitz 2014), librarians can streamline their efforts in digital content moderation and reduce moderation labor.

5.4 Role of Other Stakeholders: Library Associations and Lawmakers

Librarian associations such as the Public Library Association (PLA) and the American Library Association (ALA) could also help address digital curation challenges. They could publicize the problems among their constituent libraries and generate collective support for actions that could bring content distributors to the discussion table. They could also handle the distributor negotiations on behalf of participating libraries, giving them far more negotiating power in demanding changes from dis-

tributor services. These associations could also facilitate greater official recognition of the librarian tasks associated with managing DCD content.

We argue that regulatory attention to digital curation and moderation problems introduced by the subscription model is crucial to protecting users' access to high-quality information and promoting libraries' public service goals. The various benefits that DCD model offers public libraries (Sec. 4.1.1), including cost savings, suggest that it will continue to be adopted by the libraries, especially in the face of recent budget cuts (American Library Association 2024). Therefore, lawmakers might set minimum content quality thresholds that DCD services should meet in their products and require regular audits to ascertain the services' compliance. Laws could also be instituted to incorporate greater transparency into digital distributors' content curation and moderation practices. Finally, lawmakers could incentivize more firms to offer digital distribution services to break the current marketplace monopoly (Sec. 4.1.1).

5.5 Limitations and Future Work

Our focus on public librarians allowed us to understand their perceptions of how digital distributor services operate. While we attempted to conduct interviews with the distribution service staff by contacting them through various channels, we received no response. Future investigations that resolve this challenge and surface the perspectives and practices of distribution service staff should offer essential complementary insights to our work.

Most of our study participants were White and had more than ten years of work experience. Their duties included handling digital content, and most participants oversaw adult content. Most worked in libraries in the US Midwest and East Coast regions. These participant characteristics have shaped our findings. Recruiting a broader pool of librarians and employing complementary data collection methods,

such as large-scale surveys, should generate additional valuable insights.

6 CONCLUSION

This paper examined the problem of inappropriate content available in public libraries through DCD services and the content curation and moderation deficiencies of such offerings. Thus far, this issue has surfaced only in scattered media articles (Woodcock 2022), but its prominence and long-term effects on the broader public are likely to grow as libraries become increasingly digital. We anticipate that a few major distribution companies will continue dominating the content provider landscape. Therefore, we must begin addressing the challenges our research identified and ask these corporations to improve their practices and work with librarians as equal partners. We hope that our empirical research will help build advocacy and support for such initiatives.

References

- Audunson, Ragnar. 2005. "The public library as a meeting-place in a multicultural and digital context: The necessity of low-intensive meeting-places." *Journal of documentation* 61 (3): 429–441.
- Audunson, Ragnar, Herbjørn Andresen, Cicilie Fagerlid, Erik Henningsen, Hans-Christoph Hobohm, Henrik Jochumsen, Håkon Larsen, and Tonje Vold. 2020. *Libraries, archives and museums as democratic spaces in a digital age*. De Gruyter.
- Ball, David. 2004. "What's the "big deal", and why is it a bad deal for universities?" *Interlending & document supply* 32 (2): 117–125.

- Barreau, Deborah. 2001. "Information systems and collection development in public libraries." *Library Collections, Acquisitions, and Technical Services* 25 (3): 263–279.
- Candela, Leonardo, Donatella Castelli, and Pasquale Pagano. 2012. "History, evolution, and impact of digital libraries." In *Organizational Learning and Knowledge: Concepts, Methodologies, Tools and Applications*, 837–866. IGI Global.
- Costello, Laura. 2016. *Evaluating demand-driven acquisitions*. Chandos Publishing.
- Crawford, Kate, and Tarleton Gillespie. 2016. "What is a flag for? Social media reporting tools and the vocabulary of complaint." *New Media & Society* 18 (3): 410–428.
- Fernandez, Michelle J. 2023. "New Year, New Music Streaming Options for Libraries." Sep 17. <https://publiclibrariesonline.org/2023/01/new-year-new-music-streaming-options-for-libraries/>.
- Garmer, Amy K. 2016. "Public libraries in the community." *ISJLP* 13:1.
- Grahn, Matilda. 2022. *The Democratizing Potential of Library Digitalization: Re-inventing the democratic mission of libraries*.
- Grimmelmann, James. 2015. "The Virtues of Moderation." *Yale Journal of Law & Technology* 42:44–109.
- Hawthorne, Dalene. 2008. "History of electronic resources." In *Electronic resource management in libraries: Research and practice*, 1–15. IGI Global.

- Holm, Christina E., and Sarah Kantor. 2021. "Reference Is Not Dead: A Case Study of Patron Habits and Library Staffing Models." *portal: Libraries and the Academy* 21 (2): 299–316.
- Hoopla. *What is hoopla's content policy?*, April 18. <https://www.hoopladigital.com/help>.
- Horton, Valerie, and Greg Pronevitz. 2014. *Library consortia: models for collaboration and sustainability*. Chicago, IL: ALA.
- Jacobson, Linda. 2017. *The Smell Test: Educators can counter fake news with information literacy. Here's how*. Jan 1. <https://www.slj.com/story/the-smell-test-educators-can-counter-fake-news-with-information-literacy-heres-how>.
- Jaeger, Paul T, and Kenneth R Fleischmann. 2007. "Public libraries, values, trust, and e-government." *Information technology and Libraries* 26 (4): 34–43.
- Kaplan, Richard. 2012. *Building and Managing E-book Collections: A How-to-do-it Manual for Librarians*. 184. ALA.
- Library Freedom Project. 2023. *We Demand Accountability from Hoopla Digital and OverDrive Regarding the Platforming of Fascist Content*. Sep 3. <https://libraryfreedom.medium.com/we-demand-accountability-from-hoopla-digital-and-overdrive-regarding-the-platforming-of-fascist-c47c88e62ddc>.
- Library Futures. 2023. *Hoopla's Content Problem*. Sep 3. <https://www.libraryfutures.net/post/hooplas-content-problem>.

- Lor, Peter, Bradley Wiles, and Johannes Britz. 2021. "Re-thinking information ethics: truth, conspiracy theories, and librarians in the COVID-19 era." *Libri* 71 (1): 1–14.
- Mansourian, Yazdan. 2020. "Public libraries' services during a pandemic." *Qualitative and Quantitative Methods in Libraries*, 41–54.
- Marchionini, Gary. 1995. *Designing support for browsing: A research and development perspective*. Information seeking in electronic environments. UK: Cambridge University Press.
- . 2022. *Information concepts: From books to cyberspace identities*. Springer Nature.
- Merriam, Sharan B. 2002. "Introduction to qualitative research." *Qualitative Research in Practice: Examples for Discussion and Analysis* 1 (1): 1–17.
- Morris, Carolyn, and Lisa Sibert. 2011. "Acquiring ebooks." In *No Shelf Required: E-Books in Libraries*, 95–124. Chicago, IL: ALA.
- Over Drive. 2024. *Who We Are*. Sep, 24. <https://company.overdrive.com/company-profile/who-we-are/>.
- Phillips, Margaret E. 2005. "What should we preserve? The question for heritage libraries in a digital world." *Library trends* 54 (1): 57–71.
- Quinn, Brian. 2000. "The McDonaldization of academic libraries?" *College & Research Libraries* 61 (3): 248–261.
- Roberts, Sarah T. 2019. *Behind the Screen: Content Moderation in the Shadows of Social Media*. Yale University Press.

- Ross, Lyman, and Pongracz Sennyey. 2008. "The Library is Dead, Long Live the Library! The Practice of Academic Librarianship and the Digital Revolution." *The Journal of Academic Librarianship* 34 (2): 145–152.
- San Jose Montano, Blanca. 2014. "The new paradigm of collection management in university libraries: from crisis to revolution." *Collection Building* 33 (3): 90–97.
- Scott, Rachel. 2011. "The role of public libraries in community building." *Public Library Quarterly* 30 (3): 191–227.
- Stenstrom, Cheryl, Natalie Cole, and Rachel Hanson. 2019. "A review exploring the facets of the value of public libraries." *Library Management* 40 (6/7): 354–367.
- Sullivan, M Connor. 2019. "Why librarians can't fight fake news." *Journal of librarianship and information Science* 51 (4): 1146–1156.
- Wahler, Elizabeth A, Colleen Rortvedt, and Tasha Saecker. 2022. "Public library patrons' views of their psychosocial needs and how the library can help." *The Library Quarterly* 92 (2): 172–187.
- Waugh, Mike, Michelle Donlin, and Stephanie Braunstein. 2015. "Next-Generation Collection Management: A Case Study of Quality Control and Weeding E-Books in an Academic Library." *Collection Management* 40 (1): 17–26.
- Woodcock, Claire. 2022. *Ebook Services Are Bringing Unhinged Conspiracy Books into Public Libraries*. Feb 1. <https://www.vice.com/en/article/93b7je/ebook-services-are-bringing-unhinged-conspiracy-books-into-public-libraries>.