Vol. 11, No. 2, December 2025

http://ejournal.undip.ac.id/index.php/lpustaka

Research Article

Received: 16 July 2025, Revised: 31 October 2025, Accepted: 1 November 2025, Online: 19 November 2025

Implementation of Digital Rights Management in the eBook Collection at Digital Library "X"

Nitzah Nitzah¹⁾, Heriyanto Heriyanto^{2)*}

¹⁾²⁾Library and Information Science, Faculty of Humanities, Diponegoro University, Indonesia ¹⁾nitzaahh@gmail.com, ²⁾heriyanto@live.undip.ac.id

Abstract

Background: This research is motivated by issues and problems related to copyright infringement, including theft, copying, and the unauthorized distribution of content in libraries. The American Library Association (ALA) developed a technology to control access, track, and limit the use of digital content called Digital Rights Management (DRM). Unfortunately, the research on the implementation of DRM as an effort to protect e-book collections is still limited in Indonesia.

Objective: This research aims to analyze the implementation of DRM e-book collection protection as a form of protection for digital content.

Methods: A qualitative method with a case study approach. Data collection was carried out through interviews, observation, and document study methods. The data analysis technique used is thematic analysis.

Results: The results of the data analysis show that the digital library DRM e-book collection at Digital Library "X" does not meet the technical implementation of DRM. This can be seen from the purpose of holding the digital library itself, namely, to provide collections without limiting access to users, so that the technical implementation of DRM, which includes access, use, and distribution, has not been fulfilled.

Conclusion: These results indicate that the Digital Library "X" seeks to protect digital collections by not allowing users to download and copy content from DRM e-book collections. Further research should focus on the research by choosing one of the aspects to answer the DRM challenge in libraries in Indonesia

Keywords: digital rights management; digital collection; e-books; copyright

INTRODUCTION

One of the impacts of information technology developments is the massive increase in digital content production (Handisa, 2020). Digital content creation is integrated into the function of telecommunication devices connected to the internet. According to a survey conducted by the Indonesian Internet Service Providers Association (APJII), in 2023, internet penetration in Indonesia reached 78.19 percent (Asosiasi Penyelenggara Jasa Internet Indonesia, 2023). Currently, with the development of information technology and the large number of internet users, libraries are encouraged to develop services digitally. This is because libraries as information institutions must be able to adapt in providing relevant and targeted services (Mabruri & Triyanto, 2022). Therefore, many libraries are starting to build digital libraries.

Digital libraries consist of basic objects, including digital collections, digital library management staff, and user communities (Wahdah, 2020). The information managed by digital libraries is available in digital format and can be accessed if connected to the network (Wahdah,

^{*} Corresponding Author

Vol. 11, No. 2, December 2025

http://ejournal.undip.ac.id/index.php/lpustaka

2020). The existence of digital libraries has also led to the conversion of library collections to a digital format. Currently, the development of digital collections is an important point for libraries because it can make it easier for users to access information in it. The American Library Association (ALA) developed a technology concept called Digital Rights Management (DRM) to control access, track, and limit the use of digital content (American Library Association, 2003). DRM is a technology that regulates user access to limit the use of features from digital tools (Aji et al., 2022). DRM technology allows libraries to restrict users from accessing their digital content, and can serve as a protective effort against illegal theft, copying, and dissemination of content that infringes copyright. This is because libraries in the digital era must adopt more collections and service activities in electronic form (Tyas, 2023), so libraries must pay attention to copyright in developing digital collections.

Digital Library "X", one of the public libraries in Central Java province, Indonesia, implements the DRM system. Collections that use the DRM system are reserved only for users who are registered as library members. Users can register as a member by filling in personal data, such as name, email, phone number, and password on the account registration page. The uniqueness of DRM e-book collections compared to other digital libraries lies in the management and the type of collection itself. The DRM e-book collection is managed directly by the librarian of the Digital Library "X" because the library wants to have a collection that is tailored to the user's request. In addition, not all collections use DRM. The use of DRM is reserved for one collection only namely, DRM e-book collections that have an ISBN or are licensed. However, the DRM e-book collection can still be screenshot. Unfortunately, one form of copyright infringement is the recording of part or all of other people's creations without permission from the copyright holder (violating the agreement) (Munawar & Effendy, 2016). This is interesting to research on the DRM e-book collection protection efforts carried out by Digital Library "X". This is because e-books are a form of digital collection that is very easy to duplicate and distribute (Guo & Meng, 2015).

Previous research focused on DRM elements, namely access policy, user authentication, and identification and authentication of digital content in the iPusnas digital library (Sakila, 2017). The results of the study show that iPusnas, with the help of a third party, Aksara Maya, in developing its digital library, has implemented DRM technology with a focus on rights management consisting of licenses, bonds, and restrictions (Sakila, 2017). Another study illustrates the methods that university libraries in Jordan are applying to protect digital libraries using DRM technology (Sirhan et al., 2019) study shows that most universities in Jordan use protection methods, such as coding, identification, authenticity, and digital watermarking (Sirhan et al., 2019).

Previous studies examined policy and authentication, but few explored technical implementation within Indonesian public digital libraries. That is the novelty of the research because the technical implementation of DRM can be an important point to study. This is because DRM techniques can be applied to control matters related to e-books such as access, use, and distribution (Roncevic, 2020). Access refers to how users or readers get the content inside the e-book file (PDF, ePub file, or others); use refers to what users can do with content after accessing it; and distribution refers to on how the content can be shared or forwarded to others.

Vol. 11, No. 2, December 2025

http://ejournal.undip.ac.id/index.php/lpustaka

Based on the phenomenon and availability of literature that have been mentioned in the previous paragraph, research on the implementation of DRM in e-book collections in digital libraries is an important thing to do. This is because it can make digital books recognized as an item that has valuable value and must be protected (Aji et al., 2022). Unfortunately, the Digital Reference Guard (GARUDA) platform notes that research on the implementation of DRM as an effort to protect e-book collections is still limited in Indonesia (Garba Rujukan Digital, 2023). This is the basis for conducting research with the aim of analyzing the implementation of DRM e-book collection protection as a form of protection for digital content.

LITERATURE REVIEW

The presence of DRM impacts libraries as institutions that provide free access to information. This is because libraries, in respecting the copyright of content owners, require technology to protect digital collections, for example, technological protection for e-books. Applying DRM to e-book collections can help libraries control access to content, how long users can read content before it disappears from their devices, and how many users can read content simultaneously (Roncevic, 2020). The research that has relevance to the research being studied is as follows:

TABLE 1
Previous Studies

No	Previous Research	Methods	Results
1	(Sakila, 2017)	Qualitative	The results of the study show that iPusnas, with the
	T. I D D. I.		assistance of a third party, Aksara Maya, in
	Implementasi Digital Rights		developing its digital library has implemented
	Management dalam Memproteksi		DRM technology with a focus on rights
	Konten Digital: Studi Kasus Ipusnas		management consisting of licenses, obligations and
	(01.1		restrictions.
2	(Sirhan et al., 2019)	Qualitative	The results of the study show that the majority of
		descriptive	universities in Jordan use protection methods, such
	Digital Rights Management (DRM) in		as coding, identification, authenticity, and digital
	Libraries of Public Universities in		watermarking.
	Jordan		
3	(Aji et al., 2022)	Qualitative	The results of the study show that librarians at the
			Central Java Provincial Library are competent and
	Perlindungan Hak Cipta pada Layanan		knowledgeable in using DRM to protect e-book
	Koleksi e-Book di Perpustakaan		collections and avoid copyright infringement.
	Provinsi Jawa Tengah		
4	(Scharf, 2022)	Literature review	The results of the study show that copyright
			remains a very important thing and can indicate the
	The Evolution and Consequences of		formation of a recording industry power that is
	Digital Rights Management in		allied with streaming platforms.
	Relation to Online Music Streaming		
5	(Devi & Kumar, 2023)	Literature review	The results of the study indicate that librarians must
			be aware of the accessibility implications of DRM
	Digital Rights Management and		and look at the DRM limitations applied by
	Accessibility of Libraries Electronic		publishers so that negotiations can be carried out to
	Resources for Blind and Visually		make it easier for people with disabilities to access
	Impaired Users: A Review		digital collections, such as allowing the process of
			creating text, audio description, subtitles, and
			dubbing.

Based on these five previous studies, research on the implementation of DRM collection protection in digital libraries demonstrates its urgency. This is because creative

Vol. 11, No. 2, December 2025

http://ejournal.undip.ac.id/index.php/lpustaka

works in the digital era still require legal protection (Jaman et al., 2021). However, DRM implementation in digital libraries has not been recognized as a key element in digital collection protection efforts. Therefore, this research is expected to raise awareness among other libraries about implementing DRM, thereby reducing theft, copying, and distribution of digital content that can threaten copyright.

METHODS

This research method uses a qualitative research method with a case study approach. A case study is a study that explores a problem with detailed limitations, has in-depth data collection, and includes various sources of information (Rony, 2017). The data collection method is carried out through observation, interviews, and document studies. The informant in this study is the librarian of the Digital Library "X" who is in charge and responsible for the management of the DRM e-book collection in 2018-2023. The data was analyzed using the thematic analysis method through the stages of coding, grouping, and themes (Braun & Clarke, 2013).

TABLE 2
Thematic Analysis Results

Code	Grouping	Themes
Require membership for access	Digital Library "X" Membership	Accessibility of Digital Library "X"
Digital content protection	Digital Content Protection	
No abuse detection system	Digital Content Protection	
No access restrictions	DRM Policy	Use of Digital Library "X"
No loan duration	DRM Policy	
No book viewing limits	DRM Policy	
No user restrictions	DRM Policy	
Adding books via OS	Collection Additions	
Additions based on user selection	Collection Additions	
Addition based on budget	Collection Additions	
Procurement through SPK	Collection Additions	Collection Distribution of Digital Library "X"
Upload an e-book collection	Collection Additions	
Buy-and-sell system for DRM	Collection Copyright	
collection	-	
Enforce buy-to-let copyright	Collection Copyright	

Table 2 is an example of the analysis process using thematic analysis. Data obtained from interviews with informants were transcribed. After the data is transcribed in writing, a code is given to the informant's answer that is felt to be able to answer the formulation of the problem. Code was derived to identify important patterns or meanings. The codes are grouped into a single group. Then the groups collected produce a theme of research results.

FINDINGS

Digital Access Collection of Digital Library "X"

Digital Library "X" members-only collections require users to be members. The collection consists of DRM e-books, paid journals, theses, lecturer research results, and school books. The obligation to be a member of the Digital Library "X" is conveyed by the informant in the following quote,

Vol. 11, No. 2, December 2025

http://ejournal.undip.ac.id/index.php/lpustaka

"If we have members and non-members, yes. If the member is like DRM, we enter the DRM into the member, so it must be a member first, which means that the member must register to log in using an email or phone number." (Librarian of Digital Library "X", Tuesday, September 12, 2023).

Based on the above quote, it is known that users can log in by typing an email or phone number. Here's what the page looks like to log in to your account.



Figure 1. Account Login Page Source: Data processed, 2024

Figure 1 shows that users who are already registered as members can log in by filling in their email and password. If the user does not remember the password, the user can press the "Forgot Password" feature so that later they will be directed to change the password.

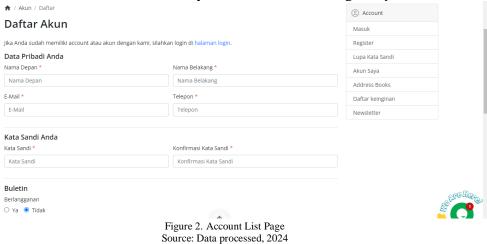


Figure 2 shows that users who are not yet registered as members can register by filling in personal data, such as first name, last name, email, phone, and password. Next, users can choose whether or not they want to subscribe to the newsletter.

Vol. 11, No. 2, December 2025

http://ejournal.undip.ac.id/index.php/lpustaka



Figure 3. DRM Book Collection Source: Data processed, 2024

Figure 3 shows that users who are already registered as members can access a special collection of members of the Digital Library "X". This can be a disadvantage of digital libraries because it does not make it easier for users to access special collections of members of the Digital Library "X".

Use Collections of Digital Library "X"

In DRM e-book collections, users are limited by not being able to download and copy the content. The restriction is one of the efforts to protect digital collections carried out by the librarian of the Digital Library "X", as conveyed by the informant in the quote, "Now we already have a protection system that cannot be downloaded and cannot be copied." (Digital Library Librarian, Tuesday, September 12, 2023). Based on the quote, it is known that Digital Library "X" has a protection system that restricts users from accessing DRM e-book collections.

The weakness of Digital Library "X" is that the collection can still be screened and the library does not have a digital content misuse detection system to monitor existing violations. Therefore, to be able to find out the shortcomings of the digital content protection system, the librarian of the Digital Library "X" tries to become a user and see what features users can access. This is in accordance with the submission of the informant in the following quote,

"Currently, there is no one, only sometimes we test it first. It's really trying to be a user, you know, this can be downloaded or not, it turns out that you can't. In the past, it turned out that when we first entered, we could continue to convey it to the programmer, but now it has been protected like that." (Librarian of Digital Library "X", Tuesday, September 12, 2023).

The Digital Library "X" DRM collection is dedicated to books that have ISBNs or are licensed. Users who are already registered as members can read DRM e-book collections without the duration of borrowing time. In addition, Digital Library "X" has no limit on readers in a single book. This is as the informant said in the quote, "Free. [Digital Library "X"] there is no limit, 1 book can be read by 1000 people, what is open is not limited here, right. If you have entered the website in America, you can open it." (Librarian of Digital Library "X", Tuesday,

Vol. 11, No. 2, December 2025

http://ejournal.undip.ac.id/index.php/lpustaka

October 24, 2023). Here is a look at one of the DRM e-book collections of the Digital Library "X".



Figure 4. Looking for Laskar Cinta e-book Collection Source: Data processed, 2024

Figure 4 shows that the "Looking for Laskar Cinta" collection is one of the DRM e-book collections and contains publishers, ISBNs, reviews, and brief book summaries. The summary can make it easier for readers to select the collection they need.



Figure 5. DRM e-book Collection Info Display Source: Data processed, 2024

Figure 5 shows the display of information from the "Looking for Laskar Cinta" collection. Book info is displayed in full starting from ISBN, book category, publisher, review, number of books read, "Read" and "Add to Favorites" features, description, and book reviews. The "Read" feature of the "Looking for Laskar Cinta" collection makes it easy for users to

Vol. 11, No. 2, December 2025

http://ejournal.undip.ac.id/index.php/lpustaka

directly read the collection. Users can open the collection view based on thumbnails and table of content. The unfortunate thing is that the DRM e-book collection of Digital Library "X" does not have a collection update. Because, currently the addition of DRM collections has not been done. This is in accordance with the submission of the informant in the following quote,

"Now for the addition of books, we used to DRM, actually if it is in other city libraries it means [...] also it's already DRM. So, one book is read by one person, but in us now it is not like that [...]. We want everyone to be able to read books without having to queue. So, everything, for example, one book can be read by several people, so we don't use DRM anymore. In 2021, yesterday Mr. [...] said that in 2023 it must be taken down, it's just that there is still no contact from the publisher, this must be taken down again." (Librarian of Digital Library "X", Tuesday, September 12, 2023).

Based on the quote, it is known that in 2023 the DRM collection is not allowed to be republished. Currently, the addition of the e-book collection is done by making a cooperation agreement with the publisher without any time limit. This is as stated by the informant in the quote, "If the one after on our website is indeed not limited to years. So we can broadcast his book forever." (Librarian of Digital Library "X", Tuesday, October 24, 2023).

Collection Distribution of Digital Library "X"

The addition of collections to the Digital Library "X" is carried out through the website, Work Order (SPK), and user selection. The addition of collections through a special website for open-source collections that can be accessed by the public, as conveyed by the informant, "The process is ours, we procure the digital. If it's free, we can download it on several platforms on websites such as the Ministry of Education and Culture or PSE." (Librarian of Digital Library "X", Tuesday, September 12, 2023). The addition of collections through SPK is carried out through two stages, namely selection based on users and budget, as explained by the informant in the quote, "So from the provider, we will give some of the catalogs containing PDF files, later we will choose based on the selection from the user. After we choose, we continue to adjust to the budget." (Digital Library Librarian, Tuesday, September 12, 2023).

The addition of collections based on the selection of users submitted by the informant was carried out through the Ulan Program. The librarian makes a list of user proposals and estimates them based on the SOP for the procurement of library materials. Collection procurement is carried out by sending a letter of request for book title proposals to the publisher, checking book title order data from users, receiving book procurement proposals from various parties, making a list of book title proposals, checking the completeness of bibliographic data, selecting book title proposals, checking the allocation of funds, making a list of book procurement proposals to the book procurement section, receiving purchase results, checking the order list with the goods received, Return inappropriate book titles and confirm replacement titles to the library, and submit checked books to the library's processing department.

Vol. 11, No. 2, December 2025

http://ejournal.undip.ac.id/index.php/lpustaka

The e-book collection that has been held by the procurement team is then handed over to the librarian who is responsible for displaying the collection. The e-book collection is added to the Digital Library "X" by uploading the collection in PDF form. This is in accordance with the submission of the informant in the following quote,

"This looks like this; the dashboard is like this. So, we know, the number of users, the number of people online, the last person who registers anyone. Here are our features. This is for us to upload through this, catalog, and then we continue to input books. Well, let's add more. Then we fill in the name of the book, description, and others. Then we upload the data here as well. For the maximum size of uploading our book is 20mb. If we can't, we usually compress it first at least 18mb. Then it can be uploaded. ISBN and others must be filled in related to intellectual property. It will be automatic after uploading it will automatically become a cover as well. So. So, the upload is actually simple, maybe what is a bit complicated for us is to compress the book. The problem is that the books are PDF, we use PDFs that can be 100mb to 300mb, that's a bit homework. That's it." (Librarian of Digital Library "X", Tuesday, October 24, 2023).

Based on these quotes, it is known that librarians input the collection by filling in the description of the book, such as the title of the book, the author's name, the size of the book, the ISBN, the cover, and others. The next step, when completing the collection is to ensure that the e-book collection is in PDF form so that it can be directly uploaded to the Digital Library "X" system.

The application of DRM e-book collections is carried out with a buy-to-sell copyright system, as conveyed by the informant in the following quote, "If the DRM used to be a buy-and-sell system and it was bought at once from the publisher, it was a license to be broadcast." (Librarian of Digital Library "X", Tuesday, October 24, 2023). The informant further explained that the DRM e-book collection with a buy-and-sell copyright system is a collection purchased in 2018. However, DRM e-book collections displayed on the website have a duration limit so DRM e-book collections in 2023 must be taken down.

Currently, the collection of e-books displayed in Digital Library "X" has a publishing license from the publisher. In the letter, it is explained that all written and printed works from publishers are submitted to Digital Library "X" in the interest of procuring digital books are fully published and broadcast rights owned by the publisher. The letter also gives the right to Digital Library "X" to distribute and distribute e-books attached to the Digital Library "X" application and on the official website. Therefore, it can be concluded that Digital Library "X" already has permission and the right to broadcast the e-book collection at the Digital Library "X" so that the broadcast of the e-book collection does not violate copyright.

DISCUSSION

The American Library Association developed DRM as a technology to control access, track, and limit the use of digital content. DRM in e-book collections can help libraries control access to content, how long users can read content before it disappears from their devices, and how many users can read content simultaneously (Roncevic, 2020). DRM is applied as a type

Vol. 11, No. 2, December 2025

http://ejournal.undip.ac.id/index.php/lpustaka

of collection, namely a DRM e-book collection which contains books with ISBNs or licensed to the Digital Library "X". This is in accordance with Article 40 of Law Number 28 of 2014 concerning Copyright which states that protected works are works in the fields of science, art, and literature (Indonesia, 2014). e-books have advantages in depth, functionality, and cost-effectiveness. However, as a digital object, e-books are vulnerable to duplication and distribution so that they can increase cases of copyright infringement in the digital era (Anshary & Labetubun, 2018). Therefore, libraries need to implement restrictions and controls in serving digital collections.

The results of the study found 3 major themes of research, namely access, use, and distribution of DRM e-book collections. The findings of the research show that DRM e-book collection access is limited by only allowing registered users to become members. Similar to other digital libraries, users who want to read collections in the iPusnas application must first have an account (Sakila, 2017). Login is useful for monitoring the identity of users who use digital library services, users who have logged in make it easier to monitor user activity (Aji et al., 2022). This is because passwords will prevent users from reaching information that they do not have the right to see (Sirhan et al., 2019).

In previous studies, users with disabilities, such as the visually impaired, needed other device assistance in accessing DRM collections. Users must download Adobe Digital Signature (ADS) to a computer before reading the e-book that is already equipped with a screen reader and text-to-speech (Devi & Kumar, 2023). However, the existence of e-books in the form of images makes it difficult for users to access the collection because they cannot detect screen readers and use text-to-speech. This shows that there are differences in accessing digital collections in libraries based on the type of user. Therefore, research findings from access to DRM e-book collections are known that restrictions are carried out with the obligation of users to become members.

Other findings from the results of research on the use of DRM e-book collections show that it is necessary to control the use of e-book content. This is because DRM is used to control how long users can read a piece of content before it disappears from their device, how many users can read content at the same time, and how much users can borrow in the library (Roncevic, 2020). However, Digital Library "X" librarians do not restrict the use of content control over DRM e-book collections. As long as they are still a member of the library, users can freely read the available e-book collection without any time limit. In contrast to the iJateng digital library, which has control over the use of content by limiting borrowing per day to 2 book titles and the duration of borrowing is valid for 7 days (Aji et al., 2022). Borrowing restrictions in iJateng aim to limit the length of time an e-book is borrowed and reduce the possibility of illegal misuse of content. This is not much different from another previous research, iPusnas applies restrictions in controlling users, namely copying limits, access time, and devices that can be used (Sakila, 2017). In libraries as mentioned earlier, iJateng and iPusnas carry the concept of one book one reader so that they have user limits in borrowing.

The user limit is also applied to other forms of digital collections, namely online music streaming. Previous research states that when a user plays music content, a license request is sent to the copyright owner's proxy to validate the user's rights to the content (Scharf, 2022). DRM in this context focuses more on managing the delivery of music content that is used to

Vol. 11, No. 2, December 2025

http://ejournal.undip.ac.id/index.php/lpustaka

design online channels so that users can consume. Spotify, Deezer, Tidal, and Amazon refer specifically to DRM actions related to content available through their services. As for Apple, even though it provides a DRM-free service, users are still limited by only allowing users to log in on a maximum of 5 devices.

The DRM e-book collection only provides a restriction that users cannot download and copy the content. Restrictions on users not being able to copy content are also imposed on university digital libraries in Jordan. Generally, university digital libraries in Jordan implement encryption to prevent users from copying text (Sirhan et al., 2019). These restrictions are carried out to avoid the misuse of digital content. However, DRM e-book collections still allow users to screenshot and libraries do not have a digital content abuse detection system to monitor for existing violations. In contrast to the iJateng digital library which cannot screen shoot on the e-book page, if the user tries to record through the screen, only a black screen will appear as a result (Aji et al., 2022). Based on this, it is known that the research findings on the use of DRM e-book collections are different from previous research. One of the reasons why Digital Library "X" is different from other libraries because the aims of using a digital library. Digital Library "X" does not apply content usage control restrictions to DRM e-book collections, allowing users to freely access the collection without collection and time duration restrictions. DRM e-book collections only restrict users by not allowing users to download and copy the content of the content.

The next finding in the results of the DRM e-book collection distribution research is that the process of adding collections is no longer carried out. This is because the contract agreement with the publisher has expired and the renewal of the e-book collection is no longer assisted by DRM. In contrast to the procurement of iPusnas digital collections, it is carried out by involving the National Library of the Republic of Indonesia and the Aksara Maya (Sakila, 2017). The collection is held based on the catalogue submitted by the publisher to Aksara Maya. Likewise, another previous research that iJateng is assisted in its development with the Mayan script (Aji et al., 2022).

The iJateng procurement process is carried out by selecting a catalog from the Aksara Maya and input from the user. In the selection with the Aksara Maya, the library is given a form to fill in the list of books needed and will be used before being submitted to the publisher (Aji et al., 2022). In short, the procurement of the iPusnas and iJateng collections is assisted by a third party and adjusted to the availability of books from Aksara Maya publishers. Even though the procurement process is different, the procurement of DRM e-book collections still pays attention to the copyright owned by the book itself. Currently, Digital Library "X" has permission and the right to broadcast e-book collections indefinitely in its digital library so that the viewing of e-book collections does not violate copyright. However, e-book collections are no longer categorized into DRM e-book collections.

The procurement of collections with attention to copyright was also applied to previous research. The library discussed with Aksara Maya related to the copyright protection of e-book collections (Aji et al., 2022). The e-book collection was purchased officially, transparently, and in detail from the publisher, resulting in an ongoing collaboration between the librarian of the Central Java Provincial Library, Aksara Maya, and the publisher. The librarians of the Central Java Provincial Library understand Copyright Law Number 28 of 2014 (Aji et al., 2022). Based

Vol. 11, No. 2, December 2025

http://ejournal.undip.ac.id/index.php/lpustaka

on this discussion, it is known that the findings of the distribution of the DRM e-book collection are that the librarian of the Digital Library "X" still pays attention to copyright in the process of procuring collections through collaboration with publishers. Although the collection procurement process differs from other libraries, because other libraries collaborate with third parties.

CONCLUSIONS

The findings of this study are different from previous research. As an informant, the librarian mentioned that the purpose of holding the Digital Library "X" is to provide collections without restrictions on collection access to users. This purpose is the basis for knowing that the technical application of DRM which includes access, use, and distribution in DRM e-book collections has not been fulfilled. The presence of DRM serves to protect copyright so that every library needs to understand that every book collection has copyright in it. Although the implementation of DRM e-book collection protection has not been maximized, librarians still try to protect by not allowing users to download and copy the content of DRM e-book collections.

The suggestions are aimed at researchers who have the same interest and want to discuss the implementation of DRM. The findings of this study have revealed practical things that can improve the enforcement of digital copyright management by focusing on the technical implementation of DRM. However, this study has not explored aspects of DRM challenges in Indonesia, namely control, contracts, and filing. So, in the next research, the researcher can focus on the research by choosing one of the aspects in answering the DRM challenge in libraries in Indonesia such as DRM policy vs ethical balance.

AUTHOR CONTRIBUTIONS

[Nitzah Nitzah]: play a vital roles to creating the concept, interviewing the informan, writing the original draft, review, and editing. [Heriyanto Heriyanto]: play a support roles to supervision the draft progress, giving example about analysist data, helping the presentation data, review and editing.

CONFLICTS OF INTEREST

The authors declare no conflict of interest.

FUNDING

This research received no specific grant from any funding agency.

ACKNOWLEDGMENTS

We would like to express our gratitude to the willing informants in this research. Their contribution helping the findings of the research.

Vol. 11, No. 2, December 2025

http://ejournal.undip.ac.id/index.php/lpustaka

REFERENCES

- Aji, S. M., Heriyanto, & Dewi, A. O. P. (2022). Perlindungan Hak Cipta pada Layanan Koleksi E-book di Perpustakaan Provinsi Jawa Tengah. *ANUVA*, 6(4), 385–402. https://doi.org/10.14710/anuva.6.4.385-402
- American Library Association. (2003). *Digital Rights Management and Libraries*. https://www.ala.org/ala/washoff/WOissues/copyrightb/digitalrights/digitalrightsmanagement.htm#intro
- Anshary, M., & Labetubun, H. (2018). Aspek Hukum Hak Cipta Terhadap Buku Elektronik (E-Book) Sebagai Karya Kekayaan Intelektual. *Jurnal SASI*, 24(2), 138–149. https://doi.org/10.47268/sasi.v24i2.128
- Asosiasi Penyelenggara Jasa Internet Indonesia. (2023). *Survei APJII Pengguna Internet di Indonesia Tembus 215 Juta Orang*. https://apjii.or.id/berita/d/survei-apjii-pengguna-internet-di-indonesia-tembus-215-juta-orang
- Braun, V., & Clarke, V. (2013). Successful Qualitative Research: A Practical Guide for Beginners. SAGE Publication Ltd.
- Devi, R., & Kumar, S. (2023). Digital Right Management and Accessibility of Libraries Electronic Resources for Blind and Visually Impaired Users: A Review. *DESIDOC Journal of Library & Information Technology*, 43(3), 193–201. https://doi.org/10.14429/djlit.43.03.18544
- Garba Rujukan Digital. (2023). *Keywords Digital Rights Management*. https://garuda.kemdikbud.go.id/documents?select=title&q=digital+rights+management &pub=
- Guo, L., & Meng, X. (2015). Digital Content Provision and Optimal Copyright Protection. *Management Science*, 61(5), 1183–1196. https://doi.org/10.1287/mnsc.2014.1972
- Handisa, R. H. (2020). Studi Litelatur Tantangan Perpustakaan dalam Pelestarian Koleksi Digital. *LIBRIA*, *12*(1). https://doi.org/10.22373/7682
- Indonesia. (2014). *Undang-Undang Nomor 28 Tahun 2014*. Pemerintah Pusat; Pemerintah Pusat. https://peraturan.bpk.go.id/Details/38690
- Jaman, U. B., Putri, G. R., & Anzani, T. A. (2021). Urgensi Perlindungan Hukum Terhadap Hak Cipta Karya Digital. *Jurnal Rechten: Riset Hukum Dan Hak Asasi Manusia*, *3*(1), 9–17. https://doi.org/10.52005/rechten.v3i1.22
- Mabruri, Y. O., & Triyanto, A. (2022). Kajian Pengembangan Konten Digital Perpustakaan untuk Media Sosial: Perspektif Perpustakaan Nasional di Asia. *Media Pustakawan*, 29(3), 254–267. https://doi.org/10.37014/medpus.v29i3.3454

Vol. 11, No. 2, December 2025

http://ejournal.undip.ac.id/index.php/lpustaka

- Munawar, A., & Effendy, T. (2016). Upaya Penegakan Hukum Pelanggaran Hak Cipta Menurut Undang-Undang Nomor 28 Tahun 2014 tentang Hak Cipta (Law Enforcement Efforts Violation Copyright According by Law Number 28 Year 2014 of Copyright). *Al'Adl: Jurnal Hukum*, 8(2), 125–137.
- Roncevic, M. (2020). *Digital Rights Management and Books* (S. Imburgia, Ed.; Vol. 56). American Library Association.
- Rony, Z. T. (2017). Siap Fokus, Siap Menulis Skripsi, Tesis, Disertasi (Jurus Mudah Gunakan Metode Kualitatif Tipe Studi Kasus). Pusat Studi Sumber Daya Manusia (PSSDM).
- Sakila, F. (2017). *Implementasi Digital Rights Management dalam Memproteksi Konten Digital: Studi Kasus Ipusnas* [Undergraduate Thesis]. Universitas Indonesia.
- Scharf, N. (2022). The Evolution and Consequences of Digital Rights Management in Relation to Online Music Streaming. *Legal Studies*, 42(1), 61–80. https://doi.org/10.1017/lst.2021.26
- Sirhan, A. A., Abdrabbo, K. M., Al Tawalbeh, S. A. A., Ahmed, M. H., & Helalat, M. A. (2019). Digital Rights Management (DRM) in Libraries of Public Universities in Jordan. *Library Management*, 40(8/9), 496–502. https://doi.org/10.1108/LM-05-2018-0044
- Tyas, Z. W. (2023). Transformasi Peran Pustakawan dalam Mengelola Koleksi Digital di Perpustakaan Kabupaten Bandung. *Jurnal Pustaka Budaya*, 10(1), 10–20. https://journal.unilak.ac.id/index.php/pb/
- Wahdah, S. (2020). Perpustakaan Digital, Koleksi Digital dan Undang-Undang Hak Cipta. *Pustaka Karya: Jurnal Ilmiah Ilmu Perpustakaan Dan Informasi*, 8(2), 26. https://doi.org/10.18592/pk.v8i2.5132