

IPR Problems In The Digital Sphere: The Best Methods For Libraries

Anvitha H. K.^{1*}, B. S. Biradar², Vinay Kumar D.³

¹Department of Library and Information Science, Kuvempu University, Jnanasahyadri, Shankaraghatta – 577451

²Bidar University, Bidar, Karnataka 584-541

³Poornaprajna College (Autonomous), Udupi

ABSTRACT

This research project explores the evolving role of libraries in the digital age, focusing on the management, preservation, and ethical use of digital scholarly works. As print publications give way to digital ones, libraries must deal with new issues like copyright regulations and licensing contracts while archiving and making electronic materials accessible. This paper illustrates the legal frameworks related to copyright issues with digital documents in India, including fair use clauses and digital rights management (DRM) technology.. It emphasizes how libraries may help promote digital literacy, educate people about copyright laws, and create guidelines for responsible usage of digital content.

Keywords: Intellectual Property Rights, Digital Documents, Digitization, Digital Rights Management, Copyright Law.

INTRODUCTION

The unpredictable advancements of technology have led the information industry to produce the knowledge in digital format. The production, organization, and dissemination of digital content are the most convenient task like never before (Brusoni, 2001). The publication industry has been relying on publishing digital information than in physical format due to the low cost of production, quickest way of reaching larger readers. This eventually creates impact on the information users to look for digital form of information. Meanwhile, the availability of electronic gadgets to acquire, arrange, and refer the digital content also determining the fate of use of digital information (Larivière et al., 2015).

Understanding intellectual property rights, particularly copyright, is necessary when using any kind of creative work, whether it be digital or physical. Since digital content is produced and distributed far more quickly than print resources, copyright infringement is a problem while using and acquiring digital content. (Varian, 2005).

In the quickly evolving digital landscape, libraries are facing more challenges in protecting and archiving

digital intellectual publications. Libraries must implement best practices to guarantee the long-term accessibility and preservation of these materials as the number of digital publications keeps increasing (Reiger, 2008). In order to efficiently manage and preserve digital academic works while managing intellectual property rights challenges, this article will examine some of the best practices that libraries can apply in the digital context. One of the key best practices for libraries in the digital environment is to establish clear policies and procedures for the preservation of digital resources. Creating policies for the procurement, use, and long-term preservation of digital content is part of this. In order to guarantee interoperability and sustained access to digital resources, libraries should also give top priority to the creation of standardized metadata and file formats.

In order to share resources, knowledge, and expenses related to digital preservation initiatives, libraries should also aggressively pursue partnerships and collaborations with other establishments and groups. By collaborating, libraries can improve the preservation and accessibility of digital intellectual works by utilizing their combined resources and expertise. To facilitate the management and

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preservation of digital resources, libraries should make sufficient investments in technology infrastructure and resources. This entails setting aside enough money for the purchase and upkeep of backup, storage, and digital preservation equipment. To guarantee that librarians have the abilities and know-how to efficiently manage and maintain digital resources, libraries should also place a high priority on staff training and development (Masenya, 2018).

Present day libraries should stay informed about current copyright laws and regulations to navigate intellectual property rights issues effectively. By staying up-to-date on copyright laws, libraries can ensure that they are compliant with regulations while also advocating for the rights of their patrons to access and use digital scholarly works. Another important best practice for libraries in the digital environment is to establish clear policies and procedures for copyright compliance.

2. Libraries in the Digital Era

Print publications have historically been the responsibility of libraries, but as digital scholarly works have grown in popularity, these institutions are increasingly having difficulty conserving and archiving these materials for future generations. To address these challenges, libraries can follow best practices in the digital environment. Libraries, as institutions that have played a crucial role in preserving print publications, are now faced with the task of preserving and archiving digital scholarly works as well. These digital resources pose various challenges due to technical and licensing constraints, as well as economic concerns (Reed, 1999). Libraries have significantly evolved to adapt to the digital age, actively participating in capturing and providing digital information. Libraries are increasingly digitizing their collections, preserving valuable resources in digital formats. This ensures easier access and dissemination of historical documents, rare manuscripts, and other materials that may have been previously restricted to physical access. Digital archives also enable libraries to conserve fragile materials while making them accessible to a broader audience.

Libraries subscribe to a wide range of electronic resources such as databases, e-books, e-journals, and multimedia content. The subscription to electronic

resources is on consortium platform also saving huge money. These resources cover diverse subjects and disciplines, catering to the informational needs of students, researchers, and teaching fraternity on a larger scale. By providing access to these digital resources, libraries enhance their relevance and utility in the digital age.

Libraries maintain online catalogues and databases that allow users to search for and access digital resources remotely. These catalogues provide comprehensive listings of available materials, enabling users to locate specific items quickly (Salaba and Chan, 2023). The advantage of digital resources lies in the capability to link the catalogue directly to full-text access, enabling users to search for and retrieve the required information directly on their screens (Dillon and Jul, 2020). Additionally, libraries often collaborate with other institutions to expand the scope of their digital collections, ensuring access to a wider range of resources.

Another area where libraries play a crucial role is digital preservation, ensuring the long-term accessibility and usability of digital content. Libraries safeguard the works on cultural heritage, scholarly works, and other valuable as well as rare resources for future generations through digitization and preservation techniques. By investing in digital preservation infrastructure and expertise, libraries can drastically reduce the problem of losing valuable resource that have physical format. The problem of technological obsolescence or degradation arises here which can be addressed through ICT support (Corrado and Sandy, 2017).

3. Objectives of the Study

- To examine key IPR issues in digital library environments
- To analyse copyright and legal challenges in the Indian context
- To identify best practices for managing digital intellectual property
- To propose a strategic framework for IPR compliance in libraries

4. Methodology

This study adopts a conceptual and analytical research design based on secondary data sources. Relevant literature, legal documents, policy reports, and scholarly articles were systematically reviewed. A thematic analysis approach was employed to identify recurring patterns in IPR challenges and library practices.

5. Copyright issues associated with digital documents

Copyright Protection: Indian copyright law provides protection to original literary, dramatic, musical, and artistic works. This protection includes digital documents such as eBooks, PDFs, and other digital formats.

Exclusive Rights: Copyright holders have the exclusive rights to reproduce, distribute, display, perform, derivative work, and adapt the digital works. This means that no one else can reproduce or distribute a digital document without the copyright owner's permission.

Duration of Protection In India, copyright protection typically lasts for the author's lifetime plus an additional 60 years. The period of protection varies for cinematographic films, sound recordings, pictures, and posthumous publications, and it is 60 years from the date of publication for anonymous or pseudonymous works.

Fair Use: Indian copyright law includes provisions for fair use, allowing limited use of copyrighted material without permission for purposes such as criticism, review, news reporting, teaching, or research. However, the extent of fair use in the digital realm is still evolving and subject to interpretation.

Digital Rights Management (DRM): Copyright owners can employ digital rights management technologies to protect their digital documents from unauthorized access, copying, or distribution. Circumventing DRM measures without authorization is prohibited under Indian copyright law. There are few key aspects associated with DRM which deals with access control, copy protection, encryption, usage restriction, watermarking, licensing.

Digital Performances: The law also covers digital performances, ensuring that artists and performers are protected against unauthorized recording, broadcasting, or distribution of their performances in digital form.

Online Infringement: Indian copyright law addresses online infringement, including unauthorized reproduction or distribution of digital documents over the internet. This includes measures for takedown notices and legal remedies against online piracy.

Registration is required for a creative literary or artistic work. While copyright protection is automatic upon the creation of a work, authors can choose to register their works with the Copyright Office for additional legal benefits in case of copyright infringement of the work. The digital documents can be registered electronically and the owner of the digital document holds all the protection and rights given by the Copyright law (Copyright Office, 2024).

6. The library's function in raising awareness and educating

Technology Integration for User Training

Libraries clinch technology to enhance user experience and facilitate digital literacy. Libraries offer online-training programs, workshops, and tutorials to help users navigate digital resources, evaluate information quality, and develop essential digital skills. Additionally, user training for the use of digital content, in compliance with IPR laws, can be conducted on the online platform.

Development of Policies

- Libraries must create explicit guidelines for the purchase, usage, and sharing of digital materials while upholding intellectual property rights. These regulations ought to specify rules for fair use, copyright observance, licensing contracts, and responsible information usage. The library must publish a policy on the usage of digital content in document format (Tutu, 2018). It is necessary to develop and disseminate policies about the following to the user community.

- Databases: e-collection, abstract, and citations
 - Consortiums
 - Fair usage
 - Access to electronic journals
 - Internet-based proprietary sources
 - Multimedia materials
 - Using social media to distribute electronic content
 - Electronic newspapers
 - Resources with open access
 - Library subscriptions to proprietary software
 - Software that is open source
 - Tools for information retrieval and discovery
 - Tools for Reference Management
 - Utilizing photocopying services
- the complexities of copyright laws, fostering a culture of respect for intellectual property rights within the library community.
- Furthermore, ongoing monitoring and assessment of digital resources should also encompass compliance with open access and fair use policies. Libraries can regularly review and evaluate the accessibility, functionality, and usage of digital materials to ensure that they adhere to established copyright regulations and fair use principles.
 - Libraries can efficiently administer fair use and open access policies in compliance with Indian copyright laws by implementing these tactics into their daily operations. thereby promoting the responsible and legal use of digital scholarly works within their communities. In addition, libraries should actively collaborate with publishers, content creators, and rights holders to negotiate reasonable licensing agreements that allow for the preservation and access of digital works.
 - The works that are of more than 60 years of the death of the author (in case multi-authors, death of last author is considered (Indian Copyright Act, 1957).

Open access and fair use policies

Regarding India's copyright regulations libraries need to manage open access and fair use policies in alignment with the legal framework to ensure compliance. One way to achieve this is by implementing open access policies that promote the availability of digital scholarly works while respecting copyright laws (Singh and Mukherjee, 2018). Libraries can establish guidelines for open access to certain materials, allowing for broader dissemination and use within the boundaries of fair use and other copyright exceptions.

- In addition, libraries should create clear fair use policies to educate users about the legal limits and parameters of fair use in India (Ginsburg, 2015). This can include providing guidance on what constitutes fair use, how to determine if a particular use falls within fair use exceptions, and the importance of respecting copyright holders' rights. This proactive approach can help users navigate

The copyrighted digital content is usable without permission under the following conditions

1. Making copies or adaptations of a computer program for:
 - Utilization for the purpose for which it was supplied.
 - Making backup copies for temporary protection against loss, destruction, or damage.
2. Acts necessary to obtain information essential for operating interoperability of independently created computer programs.
3. Observation, study, or test of the functioning of a computer program to determine the underlying ideas and principles.

4. Making copies or adaptations of a computer program from a legally obtained copy for non-commercial personal use.
5. Transient or incidental storage of a work or performance in electronic transmission or communication purely in the technical process.
6. As technology and file formats change, digital preservation faces challenges such as lack of experience, technical obstacles, a shortage of competent labour, and financial concerns.

Copyright Education and Awareness

Libraries should provide education and training programs to staff and users on copyright laws, fair use provisions, and ethical use of digital content. Workshops, seminars, tutorials, and informational materials can help raise awareness about IPR issues and promote responsible information use. Libraries can generate e-content in the form of lectures, special talks, interviews and the same shall be presented via digital medium.

7. The library's function in managing digital documents

Digital Licensing and Permissions

Appropriate licenses and permissions for digital content, ensuring compliance with copyright regulations should be negotiated and acquired by the libraries. This involves understanding licensing terms, restrictions, and usage rights associated with electronic resources and databases.

Digital Rights Management (DRM)

Implementing DRM technologies can help libraries control access to and usage of digital resources, protecting against unauthorized distribution and infringement. DRM solutions enable libraries to enforce copyright restrictions while providing secure access to licensed content (Panda, 2021).

Metadata Management

Proper metadata management is essential for identifying and tracking digital resources, including information about copyright status, ownership, and usage rights. Libraries should maintain accurate

metadata records to ensure compliance with IPR requirements and facilitate resource discovery.

Digital Preservation and Access Controls

Libraries must employ digital preservation strategies to ensure the long-term accessibility and integrity of digital content. Digitization is a process followed by many libraries to preserve the information. Meanwhile, copyright law says, no creative work can be manipulated. Digitization is merely considered as reprography which is just a transformation of original document into a digital content. However, implementing access controls, encryption, and authentication mechanisms helps safeguard copyrighted materials and prevent unauthorized use or modification.

Data Migration

The majority of organizations who intend to preserve digital items have migration as their main method. Therefore, it is crucial to identify the data that has to be moved. The ownership of the content that needs to be migrated must be determined by the library. Clarifications will eventually be required for both library-owned content and content that is acquired but has an external copyright.

In the context of copyright and patent laws in India, libraries can develop strategies to preserve their collections of digital resources by implementing robust backup systems and ensuring regular updates and maintenance of digital preservation tools. Overall, it is essential for libraries to stay informed, establish clear policies, engage in user training, collaborate with stakeholders, advocate for open access and fair.

- Before transforming physical items to digital form, copyright restrictions must be taken into account.
- The impact of IPR issues in metadata application in the digital scenario is a significant barrier.
- The fragility of digital data emphasizes the necessity of digital document preservation, with a focus on the legality of copying actions for preservation.

- Changing technologies and file formats present challenges for digital preservation, including a lack of experience, technical obstacles, a shortage of competent labour, and financial concerns.

It covers a range of activities to periodically copy, convert or transfer digital information from one generation of technology to subsequent ones. Migration may involve copying digital information from a medium that is becoming obsolete or physically deteriorating to a newer one (e.g., floppy disk to CD-ROM), and /or converting from one format to another (e.g., Microsoft Word to ASCII), and /or moving documents from one platform to another (e.g., VAX to UNIX), Migration certainly preserves the object.

8. Role of library in digital data usage

Monitoring: Libraries should regularly monitor digital usage and enforce compliance with copyright laws and licensing agreements. This may involve implementing usage monitoring tools, conducting audits, and addressing instances of copyright infringement or misuse.

Collaboration: Libraries should collaborate with publishers, content creators, and copyright organizations to promote IPR awareness and advocate for balanced copyright policies. Participating in industry initiatives, lobbying for legislative reform, and supporting open access initiatives can help shape a conducive environment for digital content sharing while respecting IPR (Klein, 2015).

Policies for Ethical Use: Libraries should establish and enforce ethical use policies that emphasize respect for IPR, plagiarism prevention, and responsible information use. Users should be informed about their rights and responsibilities when accessing and utilizing digital resources, fostering a culture of integrity and accountability (Rubin, R., & Froehlich, 2017).

Continuous Evaluation and Improvement: Libraries should continuously evaluate their IPR practices, policies, and technologies to adapt to evolving legal, technological, and societal trends. Regular assessments, feedback mechanisms, and stakeholder engagement enable libraries to identify areas for improvement and enhance their effectiveness in protecting IPR (Layman, 2017).

9. Library Strategies for IPR Compliance

Strategy	Description	Outcome
Policy Development	Creating clear guidelines for digital content usage	Ensures legal compliance
User Education	Conducting training and awareness programs	Ethical usage can be promoted through trainings
DRM Implementation	Applying access control and encryption	Unauthorized use can be prevented
Collaboration	Partnering with publishers and institutions	Access and compliance can be improved
Monitoring Systems	Tracking usage of digital resources	Reduces misuse
Digital Preservation	Backup and migration strategies	Ensures long-term access

CONCLUSION

Libraries are deeply involved in capturing and providing digital information by digitizing collections, subscribing to electronic resources, maintaining online catalogues, preserving digital content, and promoting digital literacy. These efforts align with the broader trend towards digitalization in the information industry, ensuring that libraries remain valuable hubs of knowledge and information in the digital age.

Safeguarding intellectual property rights (IPR) in libraries requires a multifaceted approach that

encompasses monitoring, ethical use policies, collaboration, and continuous feedback and its analysis. By implementing robust monitoring mechanisms, libraries can ensure compliance with copyright laws and licensing agreements which help to avoid the risk of infringement or misuse by users or library staff. Collaboration plays a major role in understanding and implementing the copyright laws while using the digital documents. Collaboration with publishers, content creators, and copyright organizations is essential for ensuring balanced copyright policies and promoting IPR awareness.

Key IPR Issues in Digital Libraries and Solutions

IPR Issue	Description	Impact on Libraries	Suggested Solution
Copyright Infringement	Unauthorized copying and distribution of digital content	Legal risks and loss of credibility	Awareness programs and strict access control
Licensing Restrictions	Limited usage rights imposed by publishers	Restricted access for users	Negotiation of flexible licensing agreements
Digital Piracy	Illegal sharing of digital resources online	Financial and legal implications	Implementation of DRM technologies
Fair Use Ambiguity	Unclear interpretation in digital context	Misuse of digital content	Clear institutional fair use policies
Metadata Rights Issues	Lack of clarity in ownership and usage rights	Difficulty in resource management	Standardized metadata practices

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