IPR FOR DIGITAL CONTENT IN INDIA: STATUS, STRATEGIES AND CHALLENGES

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ABSTRACT

Copyright infringement is a problem closely tied to technology. In most ways this is quite obvious. Since much of the copyright law was written with pre-digital technology in mind, artifacts of these assumptions continue in the law despite attempts to modernize it. This paper looks particularly at the relationship between technology and copyright enforcement and begins with the three key technology factors that matter to rights holders who want to earn money from their creative works: copying technology, distribution technology, and sales technology.

This paper covers the traditional intellectual property rights (IPR) laws and associated concepts from printed to digital works, and discusses how the characteristics of digital replication pose problems for traditional IPR systems. It provides some insight into the Indian software industry by discussing the scope of Indian copyright law, the rights of owner, infringement, penalties etc. Also the paper discuses the distinction between "public" infringers who make works available to others, either for free or for profit, and "private" infringers who are making a personal copy. The copyright law in most countries allows copying for private use, which makes most private infringement legal.

Keywords: *Intellectual Property Right, Copyright, Digital content, IPR law, Copyright law.*

INTRODUCTION

Intellectual property is an area of law that has evolved with development of technology. The increasing use of both computers and communication technology has given rise to a digital economy. This new economy is changing the way products are produced, the nature of products and their distribution. Certain distinctive qualities of the digital medium have given rise to challenging legal issues. Thus, intellectual property rights (IPR) have come to be recognized as an important tool for economic dominance. The objective of this paper is to analyze an emerging digital IPR regime with respect to copyright protection.

As libraries move from the physical medium to the digital, library staffs are increasingly confronted with the challenges of addressing copyright and other intellectual property rights (IPR) issues related to digital information. Copyright has become a hot topic and a vexing issue for all those who have a stake in scholarship and scholarly communication. In the digital world, the very premises and philosophy

of copyright are being questioned and voices are being heard reviewing its tenets. What is so different in the digital age that has made it an engaging topic for all the stakeholders in the scholarly communication process? Balancing conflicting "private" and "public" interests is neither easy nor explicit. This issue is further accentuated in the world of academic research, where the private and public concepts are very nebulous. The issue of rights ownership transgresses into the realm of hairsplitting issues of creativity, work for hire and other equally contentious matters[3]. In the world of scholarship and intellectual heritage, libraries play a very important role: libraries are the voices for the "public good". But, in the digital millennium, how do we balance often conflicting interests? How are libraries and library services affected? This paper attempts to examine copyright issues and their exceptions, especially in the context of academic research, with a view to highlight the issues that are of concern to libraries, scholarship and to society.

We are living in the Information Age, where information is a vital resource. There are various means through which a person can gain information. One of the best sources of information is a book. Books are the unparalleled instruments for setting down man's knowledge and wisdom.

Many libraries in India acquire information sources in different media, one of which is digital media. The digital form enables the information sources to be easily copied and transferred over the network. Digital media requires specific modifications in the Indian Copyright Law or altogether different law to ensure that the creator's rights are protected by fair use of such media [4].

IPR – INTELLECTUAL PROPERTY RIGHTS

Today books and other information resources are available in print as well as non-print form. As more and more information resources are being made available in non-print form, the concept of Intellectual Property Rights and thereby, Copyright is gaining importance.

Intellectual goods – information and cultural products- often require considerable upfront costs to develop and produce. Once produced, however, they can be easily replicated and disseminated by others[2].

INDIAN IPR LAW

India is a member of both Universal Copyright Convention (UCC) and the Berne Conventions. The GATT negotiations led to agreement on Trade-Related Intellectual Property Rights (TRIPS) that included provisions relating to protection of computer software and databases under copyright law. The Indian IPR for computer software is covered under the provisions of the Indian Copyright Act 1957. Several amendments to Indian copyright law were introduced in 1994, which came into effect on 10 May 1995 as one of the toughest in the world. For the first time in India, copyright law clearly explained the rights of the copyright holder, the position on software rental, and the rights of users to make backup copies. It imposed heavy punishments and fines for the infringement of software copyrights.

COPYRIGHT LAW

Copyright laws have been developed to protect the authors' and publishers rights. Copyrights evolved as a response to the threat posed by copying to the trade in books. It was founded on the notion of the 'author' and the distinctive nature of human creativity. In time, and with the expansion of the publishing enterprise into a global industry and the world-wide growth of culture industries, the locus for the right to 'authorship' shifted from an individual to a corporate rights. The **Berne Convention (1971)** on copyright does give individual authors rights that transcend contractual obligations to their employers. However, this framework is steadily being displaced in favor of one that bestows unconditional 'copy rights' to corporate owners of

information. The Trade Related Intellectual Property Rights Agreements' (TRIPS) which came into effect on 1 January 1995 recognizes previous standards such as the Paris and Berne Conventions with the exception of Article 6b is of the Berne Convention that recognizes that-

- "Independently of the author's economic rights and even after the transfer of the said rights, the author shall have the right to claim authorship of the work and to object to, the said work, which would be prejudicial to his honor or reputation"[12].

Today copyright is being extended to our digitized environment and to all digital products. The industry has been forced to respond to the IP challenges posed by a digitized environment.

In a library, an information resource is used by a large number of users. The Copy Right law consider, for educational and research purpose, making copies to some extent as "fair use". Fair use depends upon the percentage of a document that is copied.

COPY RIGHT OF INDIA

The copyright law of India gives moral rights to the authors of an original literary work. Moral rights under the Indian Law have been conferred upon the authors of an original work, and include the combination of three rights, viz. *droit de divulgation* (**Right of Publication**); *droit a la paternite* (**Right of Paternity**); and *droit au respect de loeuvre* (**the Right of Integrity**). It is pertinent to note that moral rights stand independent of the economic rights flowing through authorial creations, and vests with the author even after the transfer of his copyright.

The aspect of moral rights in India has been as author specific right bestowed upon him rights to prevent mutilation of work in any form[5].

These days more and more books and journals are being printed in electronic form in addition to print form. This has been made possible by the development in information technology. The rapid advances in the field of IT are affecting the society in

more than one way. The new technologies have brought in considerable changes in almost all activities of human life be it manufacturing, trade and business, art or culture etc. The publishing industry is also no exception as we see the traditional printing and publishing services are fast giving way to electronic publishing.

Electronic publishing is a process where activities relating to publication such as submission of manuscript, formatting, editing, printing and even distribution are carried out with the help of computers and telecommunication technologies. In its simplest form, electronic publishing describes a situation where use of computers is confined to formatting and editing etc. but the final output is processed in the conventional print forms.

The latest trend, however, is towards paperless publication where the entire flow of information from the authors to the readers takes in machine-readable form. Technologically, electronic publishing is taking two prominent forms, viz. Optical Disk (popularly known as CD-ROM) publishing and network publishing[6].

DIGITAL LIBRARIES AND CONTENT CREATION

Digital libraries, by virtue of how content has been created and made available, can be broadly grouped into three classes: *born digital, turned digital and gained digital libraries*[1].

BORN DIGITAL

The advent of the internet has seen the voluminous growth of born digital material. In born digital libraries, the content is created in digital form with the purpose and understanding that the content is primarily meant for storage and use in digital form. The tools for creating such born digital content can include simple word processing package or complex multimedia content authoring and development tools. In the past, i.e. in the print based traditional

library era, the role of library as a publisher has been marginal. Leaving aside the bibliographies, catalogues, guides, and other masses of printed ephemera that such libraries have been producing, the concept of publishing a booklet or book with the library's imprint have not been common. However, in the present digital age it has become possible for libraries to play a more indulgent role as publisher. The content creation job itself being left to the students, researchers or faculty of the institution concerned. The libraries are usually entrusted with the responsibility of publishing or hosting the content on the digital library or digital repository of the institution.

Wherever, the library wants to be directly involved in content creation, the libraries can do so themselves or commission or collaborate with content creators to develop user specific contents. And depending on the agreed upon modalities for content creation, the digital libraries can ensure that the copyright rests with the digital library.

Born digital content can be categorized into exclusive digital wherein the analog version is not developed at all. This could include creating curriculum focused content, e-books, learning objects or other multimedia content where analog counterparts are not meant to be created or are not required. The other type of born digital content type is digital for print. In this type, the content is created in digital form for dual purposes, which include hosting the content in digital libraries and also having a print counterpart of the content so developed. Many books and journals publishers follow this model of content creation.

The problem with born digital content is that content creation can be a time consuming task taking a long time to populate the digital library. Further, resource requirement in terms of manpower and financial resources would be high for the content creation process. Recently, with institutional repositories and archives gaining popularity and in some instances being mandatory, the content creation keeps the digital requirements in perspective although a print counterpart such as a journal or a thesis is also produced.

TURNED DIGITAL

In the turned digital type, the contents that are in analog form such as the printed books are converted to digital form. Digitization technologies particularly the scanning technology is exploited to turn analog material existing on print media including paper, manuscripts, etc. to digital form and storing them in digital form only. Digitization technologies are also improving day by day making it easier to turn analog content into digital content. Major digital library initiatives in the world such as Project Gutenberg and the Million Book Project belong to the turned digital library kind. Based on the type of conversion involved, the turned digital kind can be categorized as turned digital with replica content and turned digital with modified content. In the former kind, the digital content is an exact replica of the print counterpart. Cover to cover scanning and digitized books, theses, etc. are exact digital copies of the print counterpart. But for some materials, this kind of scanning is not suitable such as for an abstracting publication. Such material is turned digital by keying in the entire content or doing an optical character recognition (OCR) scanning where editable text results from the scanning process. However, the accuracy levels of OCR scanning are low and require editing of the converted text. Turned digital content, the scanned image or the OCR text are the most common types of content in digital libraries particularly for dated content that exist in print form only and require to be converted to digital form. The disadvantages of turned digital content include the large size of the resultant scanned file which can become time consuming to download for voluminous publications. With regard to copyright issues, digitizing "out of copyright" material and institution owned copyrighted material such as dissertation and thesis is easier but obtaining permissions from copyright owners of other desired materials is a daunting task.

GAINED DIGITAL

In the gained digital type, the content per se might have been born digital or turned digital at some source but the library is not associated with the creation of content. The library only acts as a facilitator to access the already available content. This could include licensed resources such as the e-journals, e-books, databases, etc. to which through licensing mechanisms, the library facilitates access to these resources but do not own the content themselves. The content is hosted by the licensors such as the publishers themselves and the libraries facilitate access to the content without the library actually owning the content. In another form, the library could have acquired or purchased the digital content on media such as CD-ROM and DVD-ROM and have hosted it on the library computing infrastructure. Though very high costs are involved in developing a gained digital content in the library collection, the consortium access ensures that high-quality resources can be made available to the users in the shortest time and content is easier to manage. However, considering that content is usually licensed, the perpetuality of the digital content can be a problem area. Furthermore, the users should be sensitized about the copyright issues involved as the library is likely to have entered into licensing agreements with publishers or other intermediaries with regard to the usage of the content.

COMPLEXITIES OF DIGITAL NETWORKS AND COPYRIGHT LAW

The prominent copyright issues in the digital era can be classified into three groups[9].

- Issues relating to a whole new set of work, namely, computer programs, databases and multimedia works.
- Issues relating to reproduction, distribution and communication to the public of a work through digital media.
- Issues relating to the management and administration of copyright in the digital environment.

The key problems associated with copyright protection include:

- the protection of computer programs is too long; and
- Ideas cannot be protected, such as when a computer programmer looks at someone else's program and steals its ideas. If a programmer steals the form of expression from other computer programs, that programmer is liable for copyright infringement.

Some select situations where copyright problems would not be resolved when accessing or using information includes:

- *Web publishing.* In case of copyrighted Web based information, the technical interchange from computer to computer during surfing could be in a form of transmission that infringes multiple copyrights.
- *Data revolution*. Library services have been based on ``fair use'' and the ``first sale doctrine''. Any library with copyright works on a Web site, gopher site, or FTP site could be liable for a lawsuit as a transmitter.
- *Resources* for the creation of technology based protection tools to safeguard digital copyrights may have to come from libraries and publishers of digital works.
- *Increase in information value.* Those who believe that information gains value through use and thorough manipulation by a multitude of users, should not claim copyright and should: push information to users as rapidly as possible; establish a reputation as a generator of quality data;
- *Reduce the time-to-market for research data*; build publication vehicles such as CDs, flash drive etc. that users use for faster retrieval;
- *Hyperlinks.* A hyperlink used by a site does not directly cause any substantive content to be copied, but merely provides a pointer to another site. Since readers are free to

click on a hyperlink, though, the owner of the linked site may feel that access should be direct, rather than through the link.

- *Use of library computer terminals*. Library users may make use of computer terminals to view movies, listen music on video/audio tapes or CDs, run software programs, or download and print copyright materials from databases. Since a library is a public place, there is potential for infringement if the users exceed the licensed number of people[11].

   Even though a library has purchased initial copies of these works, it does not mean that the library is free to make copies.

- *Electronic rights management:* Several digital copyrightable products ranging from electronic documents to multimedia products are emerging in the network environment. The components of electronic copyright management included in the National Information Infrastructure (NII) White Paper are: a registration and recording system, a digital library system with affiliated repositories of copyright works, a rights management system and a transaction monitoring system to check illegal use of systems.

- *Digital broadcasting and convergence*. In the past, broadcasting regulations primarily covered contents. In the USA, satellite based video services like Direct-To-Home are regarded as a telecommunication service, whereas in Europe they are treated as a broadcast service. The IPR framework may need to address various concerns from the broadcasters' and the right holders' point of view.

COPYING TECHNOLOGY

If the technology for making copies of a work requires expensive machines, large numbers of people, or financial resources beyond ordinary reach, then the infringement remains a relatively modest and manageable problem. Once the technology changes to make copying trivially easy, as is true at present with digital materials, then the traditional limiting factors that previously made the law enforceable cease to be effective. Ease of copying is often seen as the main problem in allowing infringement, but it is really only one factor.

DISTRIBUTION TECHNOLOGY

Access technology has two parts: one is the simple distribution of a work; the other is the ability of those receiving the work to make use of it. Distribution matters for any form of public infringement that has an effect on the value of a work. Both rights holders and public infringers need a cost-effective mechanism for getting copies to the point of sale. If a mechanical distribution technology makes distance a factor in the price, then gaps in the distribution of legitimate copies may appear and markets may grow up where the legitimate product cannot (or for pricing reasons does not) fill the demand. If technology drops distribution costs to virtually nothing, then the market becomes effectively global. Access to the contents can be more complex. In pre-digital times, it often meant language, and infringement often had to do with unauthorized translations. Today access means software, network access, and server space.

SALES TECHNOLOGY

The technology of sales determines how a rights holder or a profit-seeking public infringer can get money for a work. The technology can be a mechanical network of transfer payments from bookstores to publishers to authors. Within a common currency area it may function more smoothly than across currency boundaries and across certain economic boundaries sale may not function at all – such as during the cold war. Digital sales mechanisms certainly exist in today's internet, but they have cumbersome aspects, often for security reasons, that make them less attractive for some potential buyers than in-store payment[8].

EXCEPTIONS TO COPYRIGHT WITH RESPECT TO LIBRARIES

Copyright is not absolute. There are a number of limiting principles and exceptions to the rights. Those principles that are relevant for libraries in the digital age are listed below:

- **Archiving and copying -** Libraries and archives are permitted to make up to **three copies** of unpublished copyrighted works for the purposes of preservation, security or for deposit for research use in another library or archive. Libraries can also make up to three copies of a published work to replace a work in their collection if it is damaged, deteriorated or lost, or the format of which has become obsolete.

- **Fair use -** What constitutes "fair use" is debatable. However there are certain factors that govern fair use:
  - ✓ *Purpose and character of use*, i.e. is it for commercial use or for non-profit educational purposes?
  - ✓ *Nature of the copyrighted work* - The fair use principle is generally more lenient for fact-based works than it is for "fanciful" works, and also is broader for published works than it is for unpublished works.
  - ✓ *Amount or proportion of the whole that is to be copied* - Effect that the use has on market potential or the value of the copyrighted work.

- **First sale doctrine** - The matter of disposition of a particular copy of a copyright is limited by the first sale doctrine, according to which the owner of that particular copy of the work may sell or transfer that copy. Libraries' lending and marketing of used books are governed by the first sale doctrine.

Issues and concerns are complicated by the difficulty of defining what constitutes a "copy" in the digital age. The first copy may be the only copy for which the copyright receives an economic return. The paranoia of the holders of copyright stems from this fear of losing the market and the right to distribute. There are understandable concerns of users, including those of libraries, regarding loss of their rights as provided for in the above exceptions"[3].

SCHOLARLY COMMUNICATION, COPYRIGHT, LIBRARIES AND PRESERVATION OF INTELLECTUAL HERITAGE

The role that libraries play in the scholarly communication process is shaped by the provisions of the copyright. There are essentially three players:

- the creators, who have legal rights;
- the publishers, who have legal rights due to transfer; and
- the users (individuals and institutions such as libraries and academe), who have legal rights through exceptions and limits.[7]

Authors produce creative and intellectual works while the publishers create a market and distribute and sell the works. The functions of libraries have been well defined over the years – collection, preservation, organisation and dissemination of works of intellectual and artistic content in order to facilitate their use. One of the important distinctions between the roles of other intermediaries and libraries is the preservation function. Historically, libraries, as social and cultural institutions, have the mandate not only to ensure equity of access and availability to the present generation of users, but also have the responsibility of ensuring that access and availability for future users[10]. Libraries acquire, preserve, lend and provide access to works, including those that have lost market viability or are out of print. Often libraries are the only agencies that preserve public domain materials. Libraries are

the facilitators that enable users to exercise their rights to access copyrighted as well as public domain works.

CONCLUSION

Today the pace of digital technologies, their convergence, and their push in terms of gaining economic dominance in the global market, is taking place at a speed not known in history before. The legal and regulatory framework is having trouble coping with this. Judicious participation by one and all in the development of a globalized IPR regime would strengthen everyone's comparative and competitive advantages as part of a global digital economy.

The nature and use of copyright material in the digital environment differs from that of the print environment. Copyright materials in digital format can be accessed almost instantaneously from anywhere at any time. Advances in technology makes it possible for the digital content to be quickly and easily copied on a large-scale without the copyright owner's knowledge, without the use of intermediaries, transmitted, and used by multiple users. The new exploitation opportunities in digital environment have come with new challenges to provide protection to the copyright holders against unauthorized use of their contents in digital environment. Digital content created for different purposes and by different modes is not covered by copyright laws in equal and exhaustive terms. In the digital environment, it is commonly seen that copyright owners many times directly transact with consumers via contracts, licenses, etc.

Technology has long been recognized as a key factor in enabling copyright violation. Some new technologies attempt to restrict copying (e.g. Digital Rights Management software). Now internet software is being used systematically for discovery and policing. The future of copyright enforcement will likely continue to be a function of technology. Technology applications by infringers are unlikely to stop. Open networks can be closed, in which case

rights holders will need to find a (legal) means of entry. Sharing among a closed set of people also complicates the boundary between private and public infringement. It may not be in the interests of those who believe that private copying lies within fair use to encourage open abuses of closed networks.

The current concern in the Indian context is that at present Indian legislation does not deal with the intricacies of computer-based network systems. This is true for many countries, particularly developing ones. Digital content providers will have to conform to various jurisdictional laws and policies regarding the content provided as well as addressing differing intellectual property laws. Content providers in India need assurance of the proper use of intellectual property in the open internet environment and efforts in this direction are underway. There should be legal mechanisms to protect against the hacking of technological protection measures applied to copyrighted works in digital environment.

In the ever-changing global digital environment in which we live, it is important that libraries keep abreast of international copyright standards and domestic case law to ensure that their interpretation of current copyright legislation is appropriate and maintains a balance between the "public interest" and the rights of copyright owners to earn a living.

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