# Intellectual Property Rights and Copyright issues in the context of Electronic Information

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## Introduction

The enormous growth and developments in information technology, particularly in the field of computers, communications and mass storage have made it possible to handle large volumes of digital information and data with ease. Libraries and information centres are taking advantage of these developments to meet their users' requirements. There is a gradual increase in the digital information component in the holdings with a growing dependancy on electronic resources, particularly in science and technology and academic libraries. The users are provided with more and more digital information resources which are made available through networks, particularly over Internet and the web. These developments have practically given birth to virtual libraries.

The easy availability of electronic information resources, proliferation of personal computers with network facilities and telecommunication links, decreasing costs of primary and secondary mass storage media etc. made it possible for any person to transmit, download, store, despise and print electronic information at his will. Further, downloaded documents can be forwarded to others without the knowledge of its rightful owner. Therefore, the major problem that is being faced recently by the authors, professionals and users as well is how to protect the Intellectual Property Rights (IRPs) including the copyright in the digital/virtual library environment.

## Intellecutal Property Rights

Intellectual Property Right is a general term which covers copyright, patents, registered designs and trademarks. It also covers layout designs of integrated circuits, geographical indicators and anti-competitive policies in contractual licenses. Since money and efforts are involved in R&D work, any research, innovation or invention leading to a product, process, design, method, literary and artistic work etc; which may result in financial gains to its authors or creators, are generally registered under one or the other of the various heads of IPR. The authors or creators resort to legal remedies when the IPRs of their works are infringed. TRIPs (Trade Related Intellectual Properties) Agreement lays down minimum standards for the protection of intellectual property rights as well as the procedures and remedies for their enforcement.

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### Copyright

Copyright stands for the legal rights exclusively given for a definite period of time to the authors or creators of intellectual work such as a publication, or an artistic or a literary work for sale or any other use. Copyright provides the creators (like writers, poets, composers, etc.) of literary or artistic works rights of ownership on their works and legal protection against unlawful reproduction of such works. Besides providing the legal protection against unlawful reproduction and use of their works, the Copyright Law also recognises the right of the authors or creators of the works to the benefits accrued by the reproduction or usage of their creative works by others. This obviates an agreement between the authors and the publishers (or users). The time span for which the law provides the copyright protection varies in different countries depending upon their regulations. It extends a total of the life time of the author and a term of 60 years after the death of the author in India, 50 years in UK and USA and 70 years in the European Union. After the expiry of the copyright period, the work falls into the public domain and then it can be used by anyone without authorization. The salient features of copyright protection are :

- It protects aesthetic creations without formalities.
- Registration is not necessary...
- It protects forms of expression of ideas only, not the ideas themselves.
- It is not concerned with the quality of the work.
- It gives protection to original works only.

## **Provisions of Indian Copyright Act**

Section-14 of the Indian Copyright Act, 1957 (as amended from time to time) enumerates certain activities which are 'exclusive' rights for the authors of the works who can do or otherwise someone to do all or a part of those activities. These, when done by unauthorised persons or without the explicit permission of the copyright holders, amounts to a breach or infringement of copyright. These include :

- To produce the work in any material form including the storing of it in any medium by electronic means;
- To perform the work in or communicate to public;
- To issue the copies of (publish) the work to public not being in circulation.
- To produce and publish any translation of the work;
- To make any translation or adaptation of the work;
- To make any cinematography film, or a sound recording; and
- To do in relation to a translation or adaptation of the work any of the above specified acts.
- In case of a computer programme, in addition to the above mentioned provisions, the Act also means to do or authorise:

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  - To sell or give on hire, or offer for sale or hire any copy of the computer programme, regardless of whether such copy has been sold or given on hire on earlier occasions.

#### Exceptions to copyright infringement

Section 52 of the Indian Copyright Act enumerates five categories of acts which when performed do not fall under the infringement of the copyright. They are :

- Reproduction in the course of fair dealing (i.e. private use, research, criticism, review, reporting, broadcast, etc.);
- Reproduction for educational purposes;
- Reproduction for official (judicial, legislative, etc.) purpose
- Reproduction where there is remote relation to the original which does not cause any loss to the copyright holder; and
- Reproduction for private entertainment.

The technological developments taking place the world over pose a constant challenge to the copyright protection. To check the piracy of the literary or artistic works, necessary provisions have been made treating piracy of books, computer software etc. a non-bailable offense. Incase of infringement, the publishers or authors (or both) have to file a suit in a court of law against the infringer of copyright who can be an individual, a company or an institution.

## Copyright to electronic information

Copyright to protect the ownership right was initially rooted in printing technology. The concept of copyright originally excluded from protection of many new communication technologies. More recently, copyright has also been applied to computer softwares including software encoded on microchips. From the copyright point of view, printed material has certain advantages over the electronic information :

- it is permanent and authenticated,
- its ownership is easy to ascertain,
- it facilitates easy identification of piracy or plagiarism.

However, electronic (digital) information has certain characteristics which are easy for copyright infringement :

- it is not so permanent,
- it is easily amenable to revise, modify, re-revise, re-modify without leaving any resemblance to the original,
- its ownership is non-ascertainable and sometimes questionable,
- large volumes of data can be copied and stored in different media without difficulty.

The Indian law extends protection to computer programmes i.e. computer software and computer generated artistic or literary works, and treats storing of a work in any

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medium by electronic means as infringement of the copyright. The law has no provisions for electronic and online books, journals and electronic information. Copyright protection is provided to computer databases, treating them as literary works. Multimedia works are categorised under audio visual works for which the law provides copyright protection.

#### Problems and issues of copyright protection to electronic information

Some of the important issues that are generally raised while dealing with the copyright protection to electronic information are briefly mentioned below:

- i) Computer programmes generate abstracts and create databases. The programmes are copyrightable, but questions do exist who owns the generated text? The idea that machine is capable of intellectual labour is beyond the scope of copyright.
- ii) Although there is difference of opinion with respect to originality and treating a database as intellectual property, the contents and their selection, internal coordination between the structural elements, and the arrangement of elements in a database is generally treated as original intellectual work.
- iii) Most of the database vendors allow users, through license agreements, to download a portion of the database on to a 'temporary file' for research purposes. However, there is no guideline as to how much data should be downloaded at a time. Although the downloading is permitted for research purposes and under fair use, it is not possible to know the genuiness of the purpose and use of the data thus downloaded.
- iv) The electronic transmission of copyrighted material, without the permission of its rightful owner, is an infringement. Also retrasmission of downloaded information over communication networks is prohibited under copyright law. But it is difficult to ascertain the alterior motive of the person downloading the data i.e. for his personal use or for supplying the data to others.
- v) There are disparities in the Intellectual Property Right laws of different countries and need harmonisation to facilitate transborder flow of information and trading. For example, storing a work on electronic form by anyone in any manner for any purpose (i.e. research or private use) other than the copyright owner is treated as infringement in some countries (i.e. UK, USA and India) but permitted in some other countries (i.e. France). The French copyright law does not prevent the electronic copying and storing of information although it prevents electronic delivery to third parties.
- vi) The high-use of Internet resources has also resulted in an increased number of violation of rights, and data and network security problems. Since Internet facilitates easy mass distribution of digital (electronic) material, it is difficult to control them and bring them under the copyright protection.

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- vii) The most important problem in the virtual library environment is copyright in cyberspace. Existing copyright laws have not caught up with the technological developments in cyberspace. Many a times there is no clarity whether the content of electronic resources are free or priced.
- viii) Although access to electronic information particularly in case of e-journals are restricted to the use of passwords in many cases, it can not ascertain the genuine use of the information by the user who holds the password.
- ix) Protection from piracy of mass-produced, look-alike digital products on floppies or CDs containing software, applications, graphics and images, music, etc. is all the more difficult. Some companies take various steps to reduce losses. These include holographic emblems affixed on each copy (i.e. by Microsoft Inc.). However, such steps only help in establishing authenticity of the product and may not prevent their illegal copying.
- x) Participants in computer conferencing, sharing ideas with strangers risk having their own ideas taken and used. Computer conferencing is largely based on trust and electronic messages are implicitly copyrighted in the name of the person who inputs them, but there is no way of knowing their copying and reuse.
- xi) Although the electronic information can be protected through encryption during transmission over networks, once it is decoded at the receiver's end (for usage), it is amenable to manipulations. Even if the publisher or the copyright holder does not offer the work in electronic form, the users can always convert it into digitized or digital form using scanners and OCR technology in a short time. This digital information can be stored on a server and transmitted over networks in a few minutes to multiple destinations simultaneously.

### Copyright and computer software

Software poses peculiar problems to the copyright holders. Most of the software are amenable to piracy through illegal copying on floppies. The duplicate (illegal) copy thus created is as good as the original. This creates problems to copyright holders who resort to ways and means of preventing the piracy of the software. However, the Indian Copyright Act permits making of copies or adaptation of a computer programme by the lawful possessor, if the copies are made in order to utilize the computer programme for the purpose for which it was supplied, or to make back up copies purely as a temporary protection against loss, destruction or damage. But when a person knowingly makes use of a copy of a computer programme for (personal) gain in the course of trade or business, such act is treated as an infringement of copyright. The scope of the term 'literary work' in the Indian Copyright Act includes terms like computer programmes, tables and compilations including computer databases. In this case the author or the copyright holder becomes that person or organization who/which creates the above mentioned items. The Act also prohibits the sale or hiring of (or offering for sale or hiring of) any copy of computer programme without the authorisation of the copyright holder. Even

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though an organisation/institution purchases a legal copy of a software, the law prohibits its duplication or making multiple copies for use by different constituent divisions or units or users in the same organisation/institution.

National Association of Software and Services Companies (NASSCOM) with its offices located in various regions of the country, in association with the law enforcing authorities of the Government, is engaged in protecting the rights of the copyright holders of the software.

## Copyright protection for databases

The 'Directive on Databases' by the European Commission declares that regardless of the content, a database must be regarded as a copyrighted work provided that proper investment has been made in terms of data collection. It allows a period of 15 years of protection to such databases.

#### Projects on copyright management

For the management of copyright in the electronic environment several projects have been undertaken, such as

- Electronic Copyright Management Systems (ECMS)
- Copyright in Transmitted Electronic Documents (CITED), 1989.
- Copyright Ownership in Computer Assisted Training (COPICAT)

## Conclusion

In the face of technological developments, the present copyright laws will not be able to prevent piracy or infringement of rights. The digital environment is to be tightened to assure the creators, prevent piracy and plagiarism, and encourage use. Also, the current notions about copyright will have to be heavily modified to suit to the electronic environment. The IPR and the copyright laws should help in enhancing and not preventing the access and usage of electronic information. The library and information science professionals should have the same kind of fair dealing arrangement as in the case of printed books. They should be able to read or browse electronic information without having to pay for it; preserve in digital format copyright material held in their collections; and fulfil inter-library document requests electronically. They should sharpen their skills in meeting these challenges and should negotiate the same type of previleges as in case of printed documents for accessing the digital (electronic) information.

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