

Copyright Issues Relating to Database Use

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Abstract

Databases are being created for dissemination of information in various sectors such as industry, tourism and hotel, culture development, planning, agriculture, health, environment, science and technology, geography, population, etc. This paper focusses on issues related to copyright protection of these databases.

1. INTRODUCTION

During the past few decades, institutional infrastructure has been created in the country for collecting collating and disseminating information in a variety of sectors such as industries, tourism and hotel, culture development planning, agriculture, health, environment, science and technology, geography, population, etc. As a natural consequence, issues concerning database protection have become important.

1.1 The Central Issue

The intangible nature of information products and services makes it difficult to protect them by traditional means of protecting physical properties. Legal mechanisms are required to be established to ensure that these are not copied and used without legitimate permission.

The key issue in the protection of databases is the conflict of interests between the developers and authors of the databases on the one hand and the users of the databases, on the

other. Authors or developers are interested in receiving remuneration from databases which is based on their intellectual and skill inputs. Thus, they want to restrict copying from databases while users are keen to make use of the information either without paying for it or would like to have copying rights at a relatively lesser cost.

1.2 Approaches of Protection

Three broad approaches used for database protection are

1.2.1 Protection of Databases Through Contracts

Protection of databases through contracts permits a user to use the database under a license from the database owner on payment of a fee, based upon the amount of usage and or royalty. License does not pass the ownership of the database to the user. A contract may be used in addition to the protection of database under the copyright laws.

1.2.2 Database Protection Through Copyright Laws

Most countries have accorded protection to databases under the copyright laws. Definitions of databases and legal interpretations of the protection under copyright vary considerably

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from one country to another. The question of intellectual skills involved in the creation of databases has been debated. Many databases do not qualify basic conditions for being protectable under the copyright laws.

1.2.3 *Sui generis* System of Protection for Databases

Sui generis protection of databases is largely guided by the European Community Directive on the legal protection of databases. The Directive was passed by the European Parliament on 11 March 1996¹. A similar proposal, based on the bill (H.R.3531), was also introduced in the 104th United States Congress. The emerging focus is on the proposed WIPO treaty on intellectual property in respect of databases which is due for discussion in 1997.

2. COPYRIGHT PROTECTION

2.1 Key Principles Concerning Copyright

Following are key principles concerning copyright protection:

- ✦ Copyright protects the manner of expression of information, not the idea or information itself.
- ✦ The work need not to be of very high quality for protection under the copyright. It only needs to be original.
- ✦ In principle, it is the skill, labour, and judgement of the author that is protected under the copyright laws irrespective of the form in which the product appears.
- ✦ The copyright in literary, dramatic, musical and artistic works belongs to the author of the work.
- ✦ The author has to be a person and not a corporation.
- ✦ In case, a work is produced with the aid of or is generated by computer, the person who undertakes the arrangements necessary for the creation of the work is considered as the author.
- ✦ In case, a work is produced by someone in the course of his employment, then the normal

rule is that the copyright is owned by the employers. Copyright will belong to the employer only if it is part of the employee's duties to produce the work.

- ✦ No formalities such as registration are required to protect a work under copyright. No copyright notice need to appear on any work.
- ✦ The copyright owner can give a license to use the work by others. Any assignment of copyright is to be in writing.
- ✦ Copying or making adaptations, of a work or verbatim reproduction of a substantial part of it done without the permission of copyright owner, is a breach of copyright.
- ✦ Use of copyright works for the purpose of research and private study is generally permissible. There is no requirement of sufficient acknowledgement.

2.2 Salient Aspects Concerning Database Copyright

The salient aspects concerning database protection under copyright are:

- ✦ Under the copyright laws, databases are protected as collections or compilations of literary and artistic works. The essential requirement is that a database should be the result of its creator's own intellectual effort and that it achieves a sufficient level of originality.
- ✦ The intellectual skill involved in copyright protection is the conceptual approach to classification and data organisation, which facilitates quick retrieval and various analyses of the data.
- ✦ Many databases do not satisfy such stringent requirements of originality and the interpretation of the law varies in different countries. A minimum expenditure of time, money and labour (the Sweat-of-the-brow theory) in compilation of databases was once considered eligible for protection under the US Copyright Laws; negated in 1991 in the *Fiest* case. In contrast, a similar effort in India could receive protection under copyright laws. These limitations have implied the need for new initiatives for protection of the databases.

2.3 Protection Under Indian Copyright Act

The Indian Copyright Act was amended in 1994 to extend more effective protection to computer programmes as literary works and for the protection of computer generated works. The meaning of 'literary work' included works such as computer programmes, tables and compilations including computer databases².

The meaning of 'publication' included making a work available to the public by issuing copies or by communicating the work to the public. The act provides for certain exemptions which do not constitute an infringement of copyright. For example, a fair dealing with a literary work (not being a computer programme) for the purposes of private use and research and preparations of criticism or review.

Purposes of teaching, research or scholarship include (i) purposes of instructional activity at all levels in educational institutions including schools, colleges, universities and tutorial institutions, (ii) purposes of all other types of organised educational activity.

Purposes of research does not include purposes of industrial research, or purposes of research by bodies corporate (not being bodies corporate owned or controlled by government) or other association or body of persons for commercial purposes.

2.4 International Conventions

✦ The Berne Convention provides for the protection of collections and compilations of literary or artistic works by reason of the selection and arrangement of their contents constituting intellectual creations. The protection is without prejudice to the copyright in each of the works forming part of such collections. WIPO Copyright Treaty adopted by the Diplomatic Conference on December 20, 1996, extended the provisions of the Berne Convention to the compilations of databases following the same principles of protection³.

✦ The TRIPS Agreement under World Trade Organisation (WTO) provides protection to the databases on similar lines.

✦ WIPO Draft Databases Treaty of December 1996 aims to harmonise national laws in respect to protection of databases⁴. The treaty recognises increasing risks due to the possibilities of making exact copies of whole databases or parts thereof with little costs. The treaty establishes a new form of protection of databases granting rights to enable the makers of databases to recover the investments made.

3. KEY ISSUES IN COPYRIGHT PROTECTION OF DATABASES

3.1 Digital Agenda

A work is copyrightable if described as being fixed in a tangible medium of expression when its embodiment in a copy or phonorecord is sufficiently permanent or stable to permit it to be reproduced, or otherwise communicated for a period of more than transitory duration. In other words, if a work is created on a word processor so that it is projected briefly on screen or captured only momentarily in the memory of a computer that work is not fixed and cannot be protected by copyright.

✦ There is a view that taking a database and simply rearranging the data, and creating something new is not infringement of the original database copyright. The other view is that, now a days, the data in a database are not placed in the computer memory in any particular order, and is simply available for retrieval; so the rearrangement of data implies an infringement of the original database. Another view states that if there was no skill in selecting the individual items that go in a compilation of database and if there is no skill involved in the arrangement (no addition of keywords or indexing terms, simply a listing), then such a compilation should not justify copyright protection⁵.

✦ The emerging new technologies like CD-ROM, multimedia and cyberspace have enabled storage and transmission of information/databases and made them easily accessible for a variety of users. The key issue is that of downloading.

3.2 Issue of Downloading

Databases are treated—whether in online form, CD-ROM form, or any other form—as standard copyright works. Such compilations should not be downloaded or copied in any other way without prior permission (except for small portions only for fair use purposes such as research or private study); They should not be distributed through local or wide area networks to multiple key stations without prior permission. 'Downloading' is the electronic transfer of information from one database to another including that from an online database service through one's own local microcomputer. The key issue is whether downloading should be permitted. The issue is not settled. One view is to work out ways to pay reasonably for the use and reuse of the information resource in case downloading is permitted, while others oppose it.

Remote access through telecommunication links is also becoming important for commercial online databases. This technology gives users remote access to a database stored in a central computer system. There are copyright issues involved in transmission of data through satellites which are not yet settled.

3.3 Computer Generated Works

Ownership of the works that are generated by computers is an important issue. Are these works proper subject matter for copyright? If so, who owns the copyright—the person who runs the computer program or the person who developed the software?

Does 'fair use' apply to computer-generated works? This means that the user could retrieve and use information derived from the database, such as a citation, just as he would with any other copyrighted work. The act of storing a computerised database in the memory of a computer is the exclusive right of the copyright owner.

3.4 Protecting Personal Information in Databases

These days many databases are established which contain personal information about

individuals, e.g., members of a library or business card holders. Such databases have raised issues regarding protection and misuse of personal information of individuals. Many countries have responded to privacy concerns of such databases by introducing data protection legislation allowing individuals the right to know what records are there about them and the contents of those records⁶.

3.5 Databases of Abstracts of Published Articles

A lot of debate has ensued whether a database of abstracts infringes copyright of original authors. In this case, two questions are asked:

- (i) Do the abstracts simply report facts?
- (ii) Do the abstracts act as substitutes for the original texts?

In case of (i), there is no copyright in a fact or set of facts. If, on the other hand, the original item included some lengthy text, which is faithfully reproduced in the abstract, then it is likely to be considered a copyright infringement. The abstract should be significantly shorter than the original text, and should not act as a substitute for it.

4. ISSUES RAISED BY WIPO DRAFT TREATY

The WIPO draft database treaty has introduced new principles to cover protection to all databases that represent a substantial investment in the collection, assembly, verification, organisation or presentation of the contents of the database. The protection is irrespective of

- whether the database is in itself innovative or copyrightable
- the form or medium in which the database is embodied.

The 'substantial investment' means, any qualitatively or quantitatively significant investment of human, financial, technical or other resources in the collection, assembly, verification, organisation or presentation of the contents of the database. The introduction of

investment as a new norm for the protection of intellectual property dilutes the well established principles of intellectual property that stimulate creativity and aim at the social objectives of sharing of information with public.

The central issue is to develop mechanisms of protection for databases which are otherwise not amenable for protection under copyright laws. The laws of contracts could be used for such database protections.

Another contentious issue that the draft WIPO treaty has raised is that of the Fair Use Principle. This principle has raised doubts about the freedom of sharing information amongst the scientific community.

Free flow of information/data underlying scientific theories amongst scientists is essential for the development of science. The scientific community in the United States and elsewhere has voiced concerns that the proposed treaty limits any public-good exceptions—such as the fair use exemption traditionally enjoyed by the research and education communities. It is felt that the treaty is likely to inhibit researchers seeking to reuse and combine data for publication or for research as well as educators wishing to use portions of the data sets for instructional purposes and may even restrict uses by libraries and private users⁷.

Another implication of the proposed treaty in Indian context relates to the public domain/government owned information.

Government organisations are the repository to a vast amount of information of social and cultural value. The questions about utilisation of the public domain information or making the government owned information available to the database vendors are of central importance. The key issue is how the public interests will be protected once the information is made available to database vendors, particularly in case of transfer of information in electronic or digital form for commercial purposes?

The treaty also needs to be looked in the context of its importance in the development of information services and industry in the country.

In the field of science and technology information, S&T organisations and institutions

have extensive capabilities for development and exploitation of S&T information resources. The growing capability as a producer and as an user of the database, products and services is to be complemented with the similar services and products available from outside the country. In the absence of protection mechanisms at par with the international standards, it may be difficult to attract the foreign investments by the database vendors. Equally important is the need to provide protection to domestic databases from being copied by others.

5. CONCLUSION AND SUMMARY

The paper has examined different approaches to the protection of databases. The issues raised by protection of databases under copyright laws have been discussed. It considers attempts to evolve *sui generis* system of protection for those databases which are not amenable for protection under copyright.

In an open market economy, transparent and effective commercial laws are aimed at reducing interventions of the government into the working of the business. The economic policies in India are being liberalised for a competitive market economy. This has called for new relationships between science, law, commerce and trade.

The central question for database industry is the prevention of outright piracy or illegal commercially significant use of the databases. The laws for database protection would require a sufficient degree of certainty in their application to be effective in supporting the commercial activity. Equally important are the needs for scientific and technological enterprise for free exchange of information and that data and information in the public domain should not be lost to the private interests. Both interests should be balanced by any legal treaty or instrument for protection of databases.

REFERENCES

1. Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases,

- Official Journal of the European Communities, 1996.
2. Indian Copyright Act with amendments in 1994, 1994.
 3. WIPO Copyright Treaty. Final Document of the Diplomatic Conference on certain Copyright and Neighboring Rights Questions. Geneva, December 2 to 20, 1996.
 4. Basic Proposal for the Substantive Provisions of the Treaty on Intellectual Property in respect of Databases: Background Papers of Volume 1. Seminar on Implications of WIPO Copyright and Performances and Phonograms Treaties, Vol.1. February 7-8, 1997. Organised by the Ministry of Human Resource Development, Government of India, New Delhi.
 5. Sathyanarayana, NV. Copyright for Databases: India vs. USA. *U&I Newsletter*, November, 1995.
 6. LISLEX: Legal Issues of Concern to the Library and Information Sector. *Journal of Information Science*, 1995, 21(4), 300-04.
 7. Reichman, JH and Samuelson, Pamela. *Intellectual Property Rights in Data: An Assault on the Worldwide Public Interest in Research and Development: Background papers of Seminar on Implications of WIPO Copyright and Performance and Phonograms Treaties*, February 7-8, 1997. Ministry of Human Resource Development, Government of India, New Delhi.