# Copyright Issues in Digital Era

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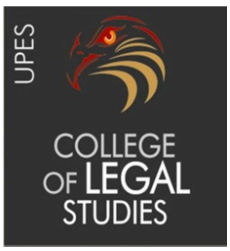


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## DECLARATION

I declare that the dissertation entitled **"COPYRIGHTS ISSUE IN DIGITAL ERA"** is the outcome of my own work conducted under the supervision of PROF. CHARU SHRIVASTVA, at College of Legal Studies, University of Petroleum and Energy Studies, Dehradun.

I declare that the dissertation comprises only of my original work and due acknowledgement has been made in the text to all other material used.

Signature & Name of Student

Date

# CERTIFICATE

This is to certify that the research work entitled **"COPYRIGHT ISSUES IN DIGITAL ERA"** is the work done by SUMIT MAMGAIN under my guidance and supervision for the partial fulfilment of the requirement of B.A., LL.B. (Hons.) degree at College of Legal Studies, University of Petroleum and Energy Studies, Dehradun.

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# ABSTRACT

The new technology has increased the importance of intellectual property. This new technology may be in the field of Patent, trade mark, Copyright etc. When we talk about copyright protection it comes in our mind that it is generally granted to original literary, musical, dramatic or artistic works. But the growth of new technology has given rise to new concepts like computer programs, computer database, computer layouts, various works on web, etc. So it is very necessary to know more about copyright with regard to computer programs/software, computer databases and various work in cyber space. Copyright is key issue in intellectual property rights in digital era. This paper aims to show that the work related to computer can be protected under copyright law. While discussing the issue, this paper has been divided into three parts based on various types of computer related works i.e. computer program, computer software, computer databases and works on internet

**ACKNOWLEDGEMENT**

The completion of this dissertation could not have been possible without the participation and assistance of so many people whose name may not all be enumerated. Their contributions are sincerely appreciated and gratefully acknowledged.

However, I would like to express the deepest appreciation to my mentor Professor Charu Shrivastava, without his guidance and persistence help and support for me to work on a topic that was a great interest to me and it was a great learning experience working under his supervision.

In addition I am also thankful to all my friends for the continuous help in research and support they showed while during this

THANK YOU

SUMIT MAMGAIN

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# LIST OF ABBREVIATIONS

**DBMS**- Database Management System

**IT Act**- Information Technology Act

**TRIPS**- trade related aspect of intellectual property rights

**DMCA**- Digital Millennium Copyright Act

**EU**- European Act

**WIPO**- World Intellectual Property Organizations

**IPR**- Intellectual Property Rights

**TPMs**- Technological Protection Measures

**MEXT**- Ministry of Education, culture, sports, science and technology

**CDPA**- Copyright Designs and Patent Act

**ROM**- Read only Memory

**ILO**- International Labor Office

**GATT**- General Agreement on Tariffs and Trade

**UNESCO**- United Nation Education, Scientific Cultural Organization

**UCC**- Universal Copyright Convention

**WCT**- WIPO Copyright Treaty

**WPPT**- WIPO Performaces and Phonograms Treaty

**CRPC**- Code of Criminal Procedure

**IEA**- Indian Evidence Act

**IPC**- Indian Penal Code

# CHAPTER-1 INTRODUCTION

The use of Internet is growing very rapidly over the last recent years, particularly in the mobile area. Internet is an area where content producers face vibrant technological discovery and commercial development. Internet is an online platform where digital information i.e. movies, books, news, music etc. are delivered and the access to the same is done by every person globally. Thus it is the wide possibility of infringement of original work and in the digital era and it is important to bring such original content which is published in the internet under the purview and law of copyright. The term copyright is associated with the rights that creators have over their artistic and literary works. Works are covered by copyright range from books, music, and painting, films to computer programs, database, advertisement, maps and technical drawing[1]. With the advancement of technology the importance of intellectual property has been increased whether in the field of Patent, Copyright, trademark etc. When we talk about protection of copyright Section 2 of the Copyright Act comes in our mind which provides to "original literary, musical, dramatic or artistic works" and due to the rapid increase of upcoming technologies, the new concepts have arisen such as "computer programs, database, layouts, various other works on internet, etc". Thus the importance of Copyright comes into role and it becomes necessary to know more about it in respect of computer programs and software, databases and other works in cyber space. This dissertation aims to show that computer related work are given recognition under copyright law and are subjected to copyright protection. While discussing the issue, the paper has been divided into 5 parts. Chapter I discusses about meaning, history and how databases are protected under copyright. Chapter II discuss about software and program and protection. Chapter III discusses about comparative analysis between various countries. Chapter IV contains the observation of Copyright in International Frameworks and Lastly, Chapter V deals with Internet Protection in India and what are the applicable law that governs the copyright related aspect and issues arising in the digital era.

[1] World Intellectual Property Organisation (WIPO) available at http://www.wipo.int/copyright/en/, accessed on 8 Feb. 2016

## RESEARCH METHODOLOGY

**STATEMENT OF PROBLEM:** The Intellectual laws of a country is an important factor to protect the rights of a person in real as well as in digital world . In India, the laws are not well established in consideration with other countries because the digital era is the newly developed era. Thus, the research would focus on the lacunas in the existing regime and would propose suggestions to make India's market an investor hub.

**OBJECTIVE:** The purpose of this dissertation is to identify and study the laws that regulate the copyright issues in digital era in India. This dissertation would also focus on the lacunas in the existing Intellectual laws in India and would propose suggestions to make it more efficient.

The dissertation would explain the different laws dealing with copyright issues in digital era in India and with the help of few case studies and the relevant treaties that India had signed.

### KEY RESEARCH QUESTIONS

Whether the national laws in India and the relevant treaties that regulate the Copyright issues digital era in India are effecient?

a. What are the national laws dealing with copyright issues in digital era in india ?
b. What are the scope of aforementioned act of parliament and the International Framework therein as well as current problems being faced digital era in India.?
c. What are the measures taken against Internet Protection in India dealing in copyright issues.?

The Dissertation would focus on the study of the copyright issues in digital era in India, understand the lacunas in the existing regime and propose suggestions to make it more reliable.

## HYPOTHESIS

The prominent issues in the digital era are related to reproduction, distribution , communication to the public of work through digital media and management and administration of copyright in digital environment

## RESEARCH METHDOLOGY

The nature of research is purely doctrinal which involve analysis of existing statutory provisions and cases laws as well as analytical methodology is opted to carry out study relying mainly on secondary data which includes journals, articles, commentaries, textbooks, reference books, internet sources, e-books, committee and law commission reports. Citation method used is Bluebook 19th Edition.

The methodology is adopted, as there are already voluminous literatures and research works available on the particular topic that could come handy in bringing reforms in capital market vis-à-vis investor protection regime. Further, the research methodology is futile because the objective of this dissertation is to analyse the existing legal framework pertaining to copyright protection in digital era in Indian and to analyse the challenges faced therein.

For the mentioned purpose, the Researcher will analyse the existing legislative provisions, decided judgment, scholarly articles and comments on various areas connected with the issue. Researcher has collected materials from various sources i.e. primary as well as secondary sources available at the UPES Library and UPES online e-resources database.

## LITERATURE REVIEW

1. **Priyanka Vishwakarma and Bhaskar Mukherjee report on *Knowing Protection of Intellectual Contents in Digital Era (2013)***

   The New technological innovations have made the publishing of ideas easy, while maintaining protection of the published contents has become a concerning issue. Plagiarism is an emerging issue in digital era. The intention of writing this is to explore various tools and projects that enable an author to know that their work is original, best possible option to maintain rights on intellectual work etc.

2. **Jatindra Kumar Das, *Law of Copyright* (2015)**

   The book attempts to critically analyse the cases on the law of copyright, decided by the Indian Courts as well as Courts of other countries, specially English and American Courts. Also evaluates the relation between statutory copyright law as well as case law on the subject.

3. **Dr. R. Radhakkrishnan and Dr. S .Balasubramanian, *Intellecutal Property Rights Text and Cases (2008)***

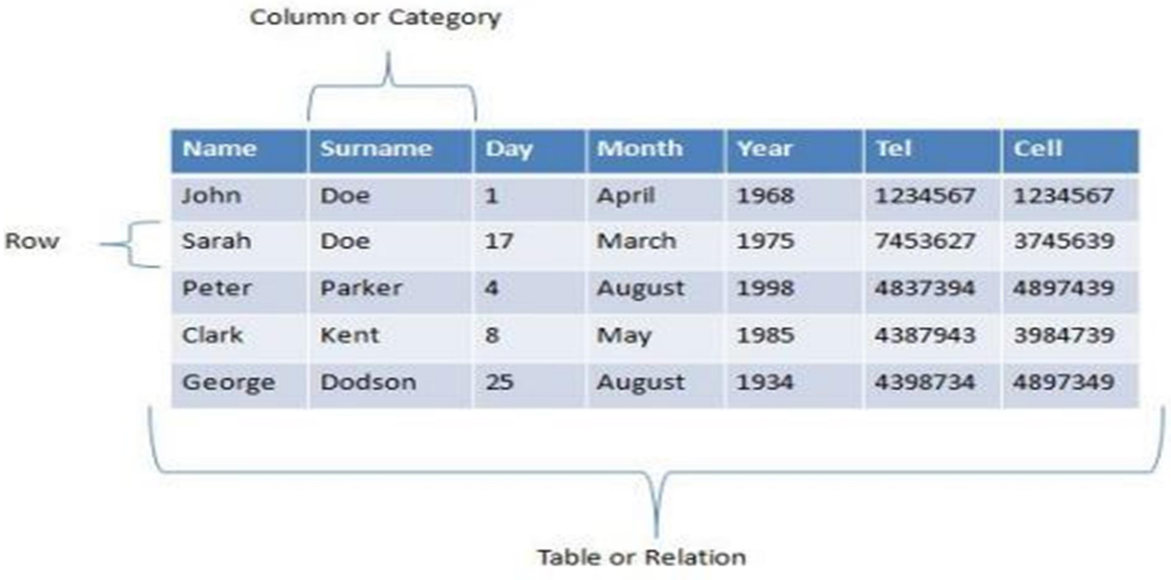
   The books addresses in depth about the fundamentals of Intellectual Property Rights and well established statutory, administrative and judicial framework to safeguard intellectual property rights in India, whether relating to patents, trademarks, copyright or industrial design. The author also deals with the issues dealing with the digital era and covers broad no. of topics from database protection to software copyright.

# CHAPTER-2 DATABASE AND PROTECTION IN INDIA

A database is an electronic form which is compilation of systematic arranged data for the accessible and efficient retrieval of information. A database shall not be confused with database system (DBMS) as it is a "*software or program which governs the database'*. Thus while considering what is protected under database, it's an important distinction between the two which should be kept in mind.

"Computer Database" means a representation of information, knowledge, facts, concepts or instructions in text, image, audio, video that are being prepared or have been prepared in a formalized manner or have been produced by a computer, computer system or computer network and are intended for use in a computer, computer system or computer network[2].

Database can be understood as a "collection of records, each containing one or more fields about an entity". For example database of company x for the people working under organization might include the name, address, contact number, identity number, salary etc. of each worker.




| Name | Surname | Day | Month | Year | Tel | Cell |
|---|---|---|---|---|---|---|
| John | Doe | 1 | April | 1968 | 1234567 | 1234567 |
| Sarah | Doe | 17 | March | 1975 | 7453627 | 3745639 |
| Peter | Parker | 4 | August | 1998 | 4837394 | 4897439 |
| Clark | Kent | 8 | May | 1985 | 4387943 | 3984739 |
| George | Dodson | 25 | August | 1934 | 4398734 | 4897349 |

[2] Information Technology Act (Amended 2008) available on www.tifrh.res.in/tcis/events/facilities/IT_act_2008.pdf, accessed on ____

Database is a collection of facts which includes collection of works, data and other materials that are arranged in a systematic way or by logical principles way. Thus Database include literary, artistic, musical or collections of works or materials in the form of text, images, sound, facts, numbers and data. In copyright if certain level of creativity is shown by the author than the order and organization can be protected but not the facts.

According to Lord Atkinson, "the purpose of copyright is to protect from misappropriation the skill and labor of the author which is expended on the production of the original work. Anyone can copy the source material. As regards copyright in textbooks containing excerpts from existing works with notes for students: 'it is the product of the labour, skill and capital of one man which must not be appropriated by another, not the elements, the raw material, if one may use the expression, upon which the labor and skill and capital of the first have been expended. To secure copyright for this product it is necessary that labour, skill and capital should have been expended sufficiently to impart to the product some quality or character which the raw material did not possess, and which differentiates the product from the raw material[3]. Thus it is very essential to differentiate between creative and non-creative databases as each of them is dealt under a different set of legal rules"[4].

As mentioned above, database is a collection of facts which includes collection of works, data and other materials that are arranged in a systematic way or by logical principles way which summarizes that databases to be covered under protection of copyright even if they are compilation of non- original works but still it is the outcome of skill and labor efficiently employed by author in creating the work[5]. E.g., a database containing various articles on 'Indian Intellectual Property Laws' shall be given copyright as they are the work of "hard labor, skill and capital employed and arranging the articles" by the creator

[3] Macmillan and CO Ltd vs Cooper (1924) 40 TLR 186, (1923) 93 LJPC 113 available at http://swarb.co.uk/macmillan-co-ltd-v-cooper-pc-1923/ , accessed on 8th February 2016

[4] http://www.unc.edu/courses/2006spring/law/357c/001/projects/dougf/node1.html, accessed on 8th February 2016

[5] Pandey Sangeet Rai,, Copyright & Trademark Laws relating to Computers. (2005) at page 45

of the database. This is why many countries are treating database as a literary work and copyright protection are extended to databases also, provided they should be original[6]. In India, the Copyright Act, 1957, Section 2(o) defines “literary work” includes computer programs, tables and compilation including computer databases. Thus database are treated as literary work.

In Australia the Federal Court has clarified that databases can be protected under the Copyright Act as literary works but there is no need to have full level of creativity and originality instead a low level of creativity and originality is sufficient enough for protection. As under the Copyright Act literary work includes "a table or compilation, which is expressed in words, figures or through symbols". Thus in this case the literary works which were under consideration before the federal court was the White and Yellow Pages which were published by Telstra and other various unpublished Telstra headings books[7].

## HISTORY

The Paris Act 1971 of the Berne Convention for the Protection of Literary Works[8] is the main backbone for database copyright protection. Current argument with respect to database security can be easily seen as expansion of historical conflict between two clashing parts of protection of copyright for compilations. The main viewpoint contends, databases and compilation gets protection as such, i.e., with no appearing of innovativeness or unique creation otherwise called as "sweat of the brow" or "innovative collection" principle, which gives justification to the argument, by conferring that the database should be given protection under the copyright as they are the outcome of hard

[6] Ibid, at page 47
[7] Telstra Corporation Ltd Vs Desktop Marketing System Ltd (2001) FCA 612
[8] The Berne Convention on 9th September 1886 for the Protection of Literary and Artistic Works completed on May 4th 1896 , which again was revised on 13th November 1908 at Berlin, completed at Berne 20th March 1914, again revised in 2 June 1928 at Rome and on 26th June 1948 at Brussels, reprinted in UNESCO Copyright Law and Treaties.

work and huge capital invested. If such protection is given than it will be treated as an incentive which will help in developing new databases.

Second part of intellectual, rejects thought that databases with no inventiveness or imagination ought to be ensured. Rather, advocates to second model would just stretch out copyright security to "expression contained in the database", which is constrained to the first determination, coordination, or game plan of truths in the database yet not the realities themselves[9]. Most courts declined to give protection for databases that did not contain any "inventiveness" in the choice or course of action of actualities, and Congress embraced the perspective in 1976 Copyright Act.

Congress unequivocally expressed that a copyright in an accumulation stretched out just to the first choice, coordination in game plan of material in the compilation. Nonetheless, a minority of courts previously, then after the fact the 1976 Act received the "sweat of the brow" principle and ensured databases that did not have any component of innovativeness or unique

The eligibility of database copyright protection is that it should be the result of skill, labor and great effort and thus for such protection, database has to fulfill the requirements of test of originality. The term original does not merely mean the work should be original or an inventive thought but compilation of non-original works is also the requisite originality. Form where the idea originated, what was the reason behind such idea are irrelevant under copyright law as it main focus with the expression of thought i.e. how the thought has been expressed and under literary work, expression in writing or in print.

Three elements to be kept in mind while compiling the individual items of database[10] i.e.

1. It should be in proper manner
2. Such an arrangement of items to be effectively available for the users
3. Such a compilation shall be sufficiently original.

[9] Before 1991, expansion of protection for databases and other authentic compilations which remained an unsettled issue in U.S. courts

[10] Shefalika and Samaddar, Intellectual Property Rights Issue in Digital world

As understood, originality is directly related to expression of thoughts and copyright law does not require an expression to be in original form only. An author to prove the originality should show that the work done is more than a merely trivial variation and it should be recognized as his own work.

The Indian Constitution under Article 21 which guarantees every citizen to personal liberty. The term personal liberty is very wide and Indian Courts through various judgments have interpreted it and includes Right to Privacy to the extent that private data not to be available at public domain. The following act explains the further protection of database in detail.

## INFORMATION TECHNOLOGY ACT, 2000

The Union Cabinet on 13th May 2000 approved the bill of Information and Technology and on 17th May 2000 the bill was finally passed by both houses of the parliament. On 9th June 2000, the said act received President Assent which shall thereby be called as Information and Technology Act, 2000. Through this act, the aim to regulate and control all digital activity over the country was achieved efficiently but the scope of database protection provided under this act is limited[11].

Under the act, Section 43 imposes only the liability over the person who without the permission of the authorized user, downloads, copies, or extract any data, database or information from such computer system, network or computer shall be liable to pay damages by the way of compensation which shall not exceed one core rupees and further defines database as the "representation of information, facts, knowledge, concepts which are prepared in a formalized manner. Section 43 imposes only a civil liability whereas if the same act is done with the intention of fraud so as to cause wrongful gain or wrongful loss or damage to the public or if any person knowingly alters, destroys any information

[11] Ranjit Kumar, The European way-Database Protection and its impact on India

the computer system, network or diminishes its value by the mean of "hacking" than criminal liability is imposed[12]. Under IT Rules 2011, protects information relating to:-

1. Passwords of Individuals
2. Persons Financial Information
3. Medical Records and their Biometric Information etc.

## COPYRIGHT ACT 1957

Many countries have recognized the computer database and software protection under their own Copyright laws. In India Copyright Act 1957 (amended on 1994), gives effective protection to computer programs as literary works and give equal protection to the owners of the copyright. Section 2(o) includes computer database under the definition of literary work. Since India is a member of Berne Convention and Trips Agreement, the Test of Originality is essential and required for the copyright protection i.e. any selection of contents or arrangements will be given copyright protection if the test of originality is fulfilled. The compilation of work to come within the ambit of Copyright protection, it must to be proven that such selection or arrangement of contents has some creativity and originality. In Indian Copyright Act, the term originality has not been defined and Indian Courts decide each case on the basis of facts and its circumstances.

India follows the theory of "Sweat of the brow" i.e. the art of skill and labor. If there is compilation of work or content leading to literary work then the same shall be protected under copyright law if such a compilation has been developed through devotion and dedication of time, money, energy and skill, though taken form a common source.[13] The main focus of the courts were on the principle that no one is allowed to take benefits from another person hard work, skill and even a small amount of creativity was protected in a compilation.

[12] Section 66 of Information and Technology Act (2000)

[13] McMillan Vs Suresh Chander ILR 17 (Calcutta) 951, 961 and Govindan vs Gopalkrishna (1995) AIR 42 (Madras) 391, 393

Thus the cases itself shows that the Indian Courts are following the principle of Sweat of the the brow. Recently Delhi High Court examined the applicability of the section dealing with the database protection in the case Diljeet Titus Adv.& Ors vs. Alfred A. Adebare & Ors[14]. In this case the court held that "copyright in a database made by an junior advocate working under the office of senior advocate and using the expertise, resources and investment of the senior would vest with the employer advocate i.e. Senior. Section 17(1)(c) was in question and the court observation was that in the absence of any agreement, a work produced during the course of employment under a contract of service or apprenticeship, the employer shall be the absolute and first owner of the copyright.

[14] (2006) 32PTC 609 (Delhi)

# CHAPTER- 3

## Software Program and Copyright Protection

Software means for a computer to start and to work efficiently, it has to be programmed with various set of instruction that a computer understands, i.e. binary code, set of algorithms etc. and so these programs are known as "software".[15]

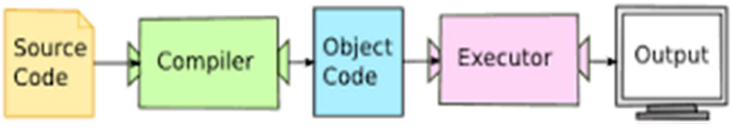
Software is different from “Hardware”- it is the physical objects that are used to make up a computer system are encoded with software installed in it, such as microchips, processors, the keyboard, etc.

Example of Software- Microsoft Windows, Linux, Android which are an Operating system and it is the computer program that organizes:-

1. All of the other computer programs.
2. General Software in everyday use, such as Web browsers, processors, spreadsheets, power point for making presentations, etc.
3. Specialized software, such as computer-aided design software, software for statisticians, software for accountants, etc.
4. Software through which the Internet system works, i.e. Web server software (which sends Web pages to your Web browser on demand)

To understand the law of software copyright, it is very essential to understand the terms:-

1. Source Code- it is written in the language of Perl or C by the programmer and is converted by the compiler known as software.
2. Object Code- A Complier converts the source code into object code into the form in which a computer will run and perform.




[15] "software" and "computer program" will be treated as synonyms

Source code is form which written by a person and the object code is the form in which a computer is able to understand and performs its running. Computer program which is concern the ambit of copyright covers both these codes. These two are forms are equal to each other that means if a person has a copyright over the source code than automatically object code is also covered in the same copyright. Thus source and object are code is equivalent.

## COPYRIGHT PROTECTION OF SOFTWARE

During late 1970's and 80's, an issue regarding whether the protection of computer software should be governed under Patent Law, Copyright Law or sui generis system but later the principle was accepted that the computer software are subjected to copyright but the apparatus using the software should be governed by patent. Thus these two phenomena provide different types of protection. As mentioned above copyright is all about the expression of idea whereas patent gives an absolute exclusive right to the owner over the invention of a product or a process.

TRIPS Agreement mentions computer programs as to be copyrighted just like any other literary work and also in other form also including patent, which is done in some countries e.g. US.

In computer programming industry copyright is very essential to the off-the-rack business applications segment. Technological market is huge market where all kind of software or programs are made making the programming applications vulnerable as these can be effortlessly duplicated. Thus with the help of copyright protection, it empowers such organizations in the market to prevent duplicity, limit rivalry and charging monopoly prices over the programs. In developing nations, two main issues are present.

1. There is as of now broad replicating together with low nearby buying power in creating nations, there is a worry that more grounded assurance and requirement could mean a more constrained dissemination of such advancements. This might be a specific danger on the grounds that the system impacts of business applications tend to re-uphold the strength of existing programming makers.

Looking at the proof, notwithstanding, we reason that this issue is not impossible for creating nations, if the right steps are taken. For instance, governments and giver associations could survey their product acquisition approaches with a perspective to giving more prominent thought to minimal effort business programming items, including bland and open source items that are broadly accessible.

2. Where the source code of programming is likewise secured, this might make it harder to adjust the items for local needs. It might likewise control rivalry being developed of between working applications, through take after on advancement by figuring out. Under TRIPS, creating nations are allowed the adaptability to permit figuring out of programming, so this issue might be stayed away from if national copyright laws are drafted fittingly. As another down to earth measure, more across the board utilization of the different open source software items, where source code is made accessible not at all like restrictive programming, might be considered[16]. Then again, some industry contends that if there is a stronger and better copyright law mechanism, closed source developers shall be more willing to produce source code to the software developers in the developing countries.

## PROTECTION IN INDIA

The technological advancement increased its pace in India after 1990, much software and programs were developed and the export of such software was above 50 percent. In time of 2009 to 2011 India's market share has increased to 58 percent. So to have proper control over such software business, Government of India enacted Information and Technology Act 2000 which have been timely and duly amended depending upon the case to case. However under IT Act, there is no specific provision which specifically deals with computer software.

[16] "Linux", famous example of an open source code, it is an operating system for personal computers which was made in the University of Helsinki in 1991 and was free available worldwide.

These software's are protected under Copyright and Patent Laws and also subjected to the trade secrets, but despite all these efforts legislature has still not developed law to computer software. Digital signatures, electronic records and to prevent crimes are under the Information and Technology Act 2000 (Amended 2008) but does not deal with protection to the same.

## PROTECTION UNDER COPYRIGHT REGIME

Indian Copyright Act 1957, considers computer programmes as literary work which is defined under Section 2(o)- is expressed in writing. The main requisite is that it must be in a material form i.e. print or writing or any symbols which visually or audibly represents the original work. The act does not discriminate between source code and object code and they both are covered under the act, as these are the main element of computer programme[17] which is defined under the act. Computer printouts, punch card, discs, etc. are the items under the computer software which are very important for the functioning of the computer. If information is recorded by the mean of electronic impulse in floppies, disc and magnetic tape than it shall be known as database and comes within the purview of the literary work as by definition under the Copyright Act.

US Supreme Court in the case of Fiest vs Rural Telephone[18] followed the principle of "Sweat of the brow" and excluded the protection of white pages from a telephone directory stating that the copyright law only protects such works which involves creativity, skill, labor and judgment. The programs designed exclusively for the operation of computers are covered within the ambit of artistic and literary work. However such program shall be original.

The Indian courts in various cases have credited the same intending to "innovation" as under English law. Originality with the end goal of copyright law identifies with the

[17] Section 2(ffc( Copyright Act 1957- computer programmes are protectable under the copyright act in 1984.
[18] FEIST PUBLICATIONS, INC. v. RURAL TELEPHONE SERVICE CO., 499 U.S. 340 (1991)

statement of thought, not inventiveness of thoughts; and on account of scholarly work, with the declaration of thought in print or composing (in a solid structure). The level of inventiveness required for copyright assurance is negligible; the accentuation is more on the work, expertise, judgment and capital consumed in delivering the work. To obtain a copyright, no customs are required. It can be enrolled with the copyright office, however it is not obligatory. For the situation of PC projects, the law does not require the revelation of source code and copyright for programming can be enrolled without completely uncovering the source code.

## OWNERSHIP OF COPYRIGHT

The creator of a work is the main proprietor of the copyright as gave under the Act[19]. Be that as it may, in the instances of manager worker relationship, if a work is made over the span of business under an agreement of administration or apprenticeship, the business should be the principal proprietor of the copyright without any consent to the contrary[20]. These guidelines identifying with employer-employee relationship in a copyright work are pertinent, mutatis mutandis, to computer programs too.

The proprietor of the copyright has the selective right to recreate and appropriate his work and to make subsidiary works out of that. Any unlicensed stockpiling, multiplication, issuance of duplicates or adjustment of a thing of copyrighted programming would constitute an encroachment of programming under the procurements of Indian copyright law. Besides, if any individual other than the proprietor of the copyright or licensee offers on the other hand procures the system to whatever other individual, the previous is blameworthy of encroaching the copyright in the system and it makes a difference little whether such a deal is in admiration of a project that has on an prior event been sold by the proprietor of the copyright or not.

[19] Section 17 of the Indian Copyright Act

[20] V T Thomas v Malayala Manorama, AIR (1988) 291 Kerela

## SCOPE OF PROTECTING UNDER COPYRIGHT

Regardless of computer projects being perceived in the Copyright Act as an abstract work, its degree has remained to a great extent untested by the courts in this way. All things considered, the extent of insurance is firmly connected to the issue of encroachment. In spite of the fact that the Act secures the exacting part of the computer program, it is definitely not yet settled in the matter of what really constitutes the exacting part of a system. There could be non-exacting components of a programming that could be encroached. The duplicating of system outline and structure can likewise bring about copyright encroachment. This type of encroachment has its source in encroachment of different works, especially plays and stories, where courts have explicitly expressed that copyright security does not stretch out just to the words[21]. The inquiry in programming cases has been as for the breaking points of considerable duplicating, furthermore, concerning what bits of the system fall inside the extent of copyright protection[22].This issue has connections to the statute fundamental copyright law itself – specifically, the 'thought expression' dichotomy. Article 9(2) of the TRIPS Agreement gives that copyright security might reach out to expressions and not to thoughts, strategies, techniques for operation or numerical ideas all things considered.' The Copyright Act does not perceive the thought expression dichotomy in the security of copyright all things considered.

In R G Anand v Exclusive Films, the Supreme Court, aside from 'look what's more, feel' test, likewise went into the 'reflection test' as set down in the US in Nichols v Universal Pictures[23] by recognizing the simplification in the topic in the script of the play and the film. The Court found no infringement of copyright by the respondent, and finished up that there was nothing to demonstrate that the similitudes in the respondent's work were the consequence of replicating, however the after effect of the basic topic of both the

[21] Krishnan Arjun, Test for Copyright protection and infringement in non-literal elements of computer programs
[22] Microsoft Corporation vs Vijay Kaushik and Anr (2011) PTC 127 (Delhi)
[23] The case was not referred in the judgment.

works[24]. In ensuing cases likewise, the courts in India took after this way to deal with the grip, without including any further elucidation.

The Copyright Act secures the creator's monetary also, moral rights in the copyrighted work as expressed in Sections 14 and 57 separately, including the rights in PC programs. On account of PC programs, the copyright proprietor is qualified for duplicate the work, issue duplicates of the work to the open, make any cinematographic film or sound recording in admiration of the work, make any interpretation then again adjustment of the work, aside from the privilege 'to offer then again give on business rental or offer available to be purchased or for business rental any duplicate of the computer project.' Such business rental does not have any significant bearing in appreciation of computer projects where the program itself is not the key item of the rental. This procurement on rental rights is in line with Article 11 of the TRIPS Agreement and was included the Act in 1999. Despite the fact that the TRIPS Understanding does not particularly secure the good rights, these rights are ensured under the Copyright Act (Section 57).

The Act gives the 'reasonable utilization' and invert building exclusions to proprietor's rights as in the instance of 'literary work' (Section 52). In connection to programs, the accompanying demonstrations are definitely not considered as encroachment of copyright:23 '(aa) the making of duplicates or adjustment of a PC program by the legal holder of a duplicate of such PC program, from such duplicate –

1. So as to use the PC program for the reason for which it was supplied,24 or
2. To make go down duplicates simply as a makeshift security against misfortune, obliteration or harm all together just to use the PC program for the reason for which it was supplied.'

Reverse designing is allowed in Section 52(ab) – 52(ad). Note that turn around designing much of the time, especially in programming, is a formative need, and which would not be conceivable under patent administration.

[24] RG Anand vs. Deluxe Films AIR (1978) SC 1613, approach was compared with the British Case, John Richardson Computers vs Flanders (1993)

## LICENSE USE RIGHTS

The proprietor of a copyright has the privilege to allot or award permit in appreciation of his copyrighted existing or future work. The assertion for the same should be in composing to be legitimate. It might determine the length of time, regional degree, sovereignty, update, augmentation what's more, end of the task/permit. The task for the most part accommodates ownership of the programming for a particular timeframe. Toward the end of the time of task, all rights in the work/programming come back to the proprietor, unless the task is recharged (Section 30-A). The terms of the permit are administered by the commonly concurred terms between the gatherings. Be that as it may, the creator's uncommon rights (moral rights) can be practiced even after the task of the copyright[25]. The inquiry, be that as it may, arises whether a permit understanding can take away the 'reasonable use' rights from the licensee. Section 52 of the Act is quiet on this point; however, according to Section 57, moral rights can't be taken away by method for a permit assertion.

[25] Srimangal & Co vs Books (India) Ltd, AIR (1973) Madras

# CHAPTER - 4

# COMPARATIVE ANALYSIS

This chapter deals with how the copyright industries are appearing and developing in light of the modifications added approximately with the aid of the boom of the internet, digitization, and more and more globalized marketplace for highly effective virtual content material. The salient monetary houses of virtual content material are explained and the primary copyright-extensive industries are recognized. Country studies research provides objective records at the economic importance and value of copyright over time. Further to characterizing how copyright-in depth have proceeded, the studies of countries summarizes the principal traits of every country copyright legal guidelines, and it further explains why they have developed in the past recent years. In the end this study will provide a precise summary of the mainstream strategy negotiations presently taking in each and every financial system.[26]

The policy makers of every country focuses at how to maximize the tool of innovation and creativity by giving importance and recognition to the copyright legislation and these rules and framework were made before the rapid growth of internet revolution. Since issues arise every day and the law has to updates so to cover every issues and provide the solution for the same which makes important for every country to keep amending or to amend in time its copyright framework in order it to keep it up to date with the issues in the use of technology. The first amendment done was in United States to DMCA (Digital Millennium Copyright Act) which was enacted in 1998 and in 2001 EU (European Union) adopted Copyright Directives[27]. Copyright Modernization Act was passed in 2012 in Canada and currently several member countries in the EU are having debate over this topic.

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[26] Copyright, A plea for Empirical Research and Review of Economic Research on Copyright Isues

[27] Copyright in the Information Society available at http://ec.europa.eu/internal_market/copyright/copyright-infso/index_en.htm, accessed on ____

1. What is the scope of copyright?
2. What are limitations and exceptions in copyright?
3. How to do copyright registration?
4. How to enforce copyright?

These are most common grounds which are in the debate and also the common areas where most of the amendments are done over the time.

Currently, with the scope of database, it is important to note the issues in respect of coverage of data or datasets. With the rapid technological advancement, it is common that economic use of data will be done and in today's era only creative content i.e. creative compilation and creative database are under the ambit of copyright and many countries legal system protect this but some countries such as:-

1. EU (European Union)
2. United Kingdom
3. Italy and
4. Poland

Have also introduced a legislation to bring non creative database under the ambit of copyright and such a legislation is provided to strength the rights of database creators.

The concept of orphan works means the work which is done by the person and the identity of such person is indeterminate or can-not be found. So as to protect the work of the person copyright mechanism is used. With the rapid uses of internet, orphan work is most common issue and the question arises how to protect them. Countries such as Canada, Japan have approached a solution of "Public License" which is granted by the public authorities' i.e. Copyright office, after a party has proved that considerable efforts were made to contact the right owner but was not successful. Currently an EU new adopted rule on orphan works sets out certain permitted uses of such works but still many countries lack policy on orphan works.

In world of digitalization, the cost of distributing, transforming information and copying has led to increase in the copyright content and also availability of pirated content. Thus policy makers should keep in mind that the consumers should be careful and be flexible

to make reasonable use of such copyright content in the digital world. All countries have regarded the limitation and exception and for the same frameworks have been made so to allow use of certain unlicensed material for the purpose of review, criticism, educational purpose etc. Laws also include not using the contents of copyright material for the commercial purpose. This is done to protect the legitimate interest of the person of the original work. Thus in Limitation and Exception main two things shall be kept in mind.

1. It should not waive moral rights of the author and
2. It should not affect the technological progress.

Copyright registration is necessary to protect the interest and right of the person and it could be very helpful to protect the orphan work also but this mechanism is only voluntary as it is the discretion of the person whether to register his original work or not. Several countries such as United States, Canada, Japan, and Korea have made copyright registration as a voluntary mechanism. With the growing use of internet, consumers have access to the worldwide information and this also means that access to pirate content too. Thus the main aim of the legal framework shall be preventing digital piracy as they affect the behavior of main market persons and the laws shall be enforced to protect the interest of the right holder.

The scope of this chapter presents the various countries experience with respect to copyright framework in digital world. It will consist of three areas:-

1. Copyright as an economic perspective
2. Copyright and Internet dealing with the technological advancement over the years. (This will be dealt in chapter 5)
3. Country Study dealing with how copyright has evolved in countries and their legal frameworks.

## ECONOMIC PERSPECTIVE OF COPYRIGHT-

As discussed above the meaning of copyright, which is form of IPR that gives the creator of the work certain rights for his work for a limited time period. The holder of copyright work has certain exclusive rights which are:-

1. To reproduce his work in printed for or
2. In the form of sound recordings.
3. To broadcast the work or to make it available for everyone
4. To give license and to lent it or adapt i.e. to turn his work into book, movie or screenplay.

There are certain Economic Rights too which are given to the person that is:-

1. Right to Authorship
2. Right to Integrity
3. Right to be credited
4. Right to divulgation

And these rights are given to author even after his copyright work has been transferred to third party.

ECONOMIC PERSPECTIVE

The two important economic properties of creative work (music, books and music composition) are:-

1. Non- Rival- can be used by many people at the same time.
2. Non-Excludable- this means without having appropriate legal rights, authors can-not make use of unauthorized use of contents.

In the case of Non- Rivalry of creative works, there is less marginal cost of reproduction of the copyrighted property in the digital era i.e. without legal copyright protection, the

work would not exist[28]. Thus the argument for copyright is that an incentive to create and disseminate must be fostered by giving the creator some control over how the creation can be used by others. Authorial control through exclusive rights provides important economic incentives and gives the authors the possibility to make a living from their creative works. This in turn allows culture and creators to mutually flourish[29].

The economic rationale for copyright is that without this protection, others could free ride on the efforts of creators and hence suppress the supply of creative works. Accordingly, the lack of sufficient, well-established and properly enforced copyrights would discourage future investments in new literary, artistic and creative works. This clear economic rationale for copyright is well reflected in law. It is based on the fact that "an original book, film, music composition or any other literary and artistic work is difficult to create but easy to copy"[30]
Thus if the copyright protection is too high, then the incentives arising will automatically be high and on the other hand if copyright protection is too weak then few creative works will be produced and they would be of poor quality

*"Copyright protection- the right of the copyright's owner to prevent others from making copies- trades off the costs of limiting access to a work against the benefits of providing incentives to create the work in the first place. Striking the correct balance between access and incentives is the central problem in copyright law"*[31]

There is difference between copyright and means of delivery and its should not be construed as the same for example a song is made and is protected under copyright law

[28] Since the price close to marginal cost may not generate sufficient revenues to cover the fixed cost.

[29] Greenhalgh and Rogers, 2010, Innovation , Intellectual Property and Economic Growth.

[30] Raustiala and Sprigman, 2006, The Piracy Paradox: Innovation and Intellectual Property In Fashion Design.

[31] Landes and Posner (1989)- An Empherrical Analysis of Economics of Copyright, available at http://www.wipo.int/export/sites/www/ip-development/en/economics/pdf/wo_1012_e_ch_3.pdf, accessed on 12th March, 2016

but a CD of music is the means of delivery thus if we buy the CD, we own the CD but we do not have the ownership to the song in it.

## COPYRIGHT INTENSIVE INDUSTRIES

WIPO (World Intellectual Property) 2003 has introduced a methodology which divides copyright related activities and distinguishes a copyright intensive industry[32]. They are:-

1. Core Copyright Industries- which are engaged wholly for the purpose of creation, production, performance, communication or distribution and sale of copyright protected matter which thereby includes, literature, music, film, media, photography, software etc.[33].

2. Interdependent Copyright Industries- which deal with products jointly consumed with the core industries, or with facilitation equipment. They include the manufacture and sale of equipment such as television sets, CD recorders and computers; of musical and photographic instruments; of photocopying and recording material, etc. They provide the means for the production, dissemination and consumption of copyright goods and services[34].

3. Partial Copyright Industries- In which only a part of production is linked to copyright material, which includes design, architecture, jewelry, furniture and other crafts., etc.[35]

4. Non-Dedicated Support Industries- which only remotely rely on copyright material, and where copyright generates a very small portion of their business,

[32] Copyright-Based Industries: Assessing their Weight available at http://www.wipo.int/wipo_magazine/en/2005/03/article_0012.html , accessed on 12th March 2016.
[33] http://www.wipo.int/wipo_magazine/en/2005/03/article_0012.html
[34] http://www.wipo.int/wipo_magazine/en/2005/03/article_0012.html, Copyright Based Industries.
[35] Copyright Based Industries, available at http://www.wipo.int/wipo_magazine/en/2005/03/article_0012.html, accessed on 12th March 2016

such as telephony, transportation and general wholesale. The copyright-related contribution of these industries is calculated on the basis of an appropriately weighted copyright factor[36].

Industries which are wholly engaged in creating, producing and manufacturing, performing, broadcasting, communication or distributing and selling the works and other protected subject matter are known as core copyright-intensive industries. WIPO classifies the following as core copyright industries[37]:-

1. Press and Literature
2. Music, operas and theatrical production
3. Motion picture and video
4. Radio and Television
5. Photography
6. Software and Database
7. Advertisement
8. Visual and Graphic arts
9. Copyright Collective management societies.

[36] Copyright Based Industries available at, http://www.wipo.int/wipo_magazine/en/2005/03/article_0012.html, accessed on 13th March 2016

[37] National Studies on Assessing the Economic Contribution of Copyright Based Industries available at http://www.wipo.int/edocs/pubdocs/en/copyright/624/wipo_pub_624.pdf, accessed on 13th March 2016

## Country Studies

In the present world, many countries have protected software and programs under the purview of copyright.

### INDIA

IPR (Intellectual Property Rights) of software and programs in India are covered under the Indian Copyright Act, 1957. Recently over the years, the act has been amended and it has made it the toughest Copyright law in the world. The amendment introduced in June 1994 was the landmark in copyright area. As for the first time, the law clearly explained the positions relating to:-

1. Rights of a copyright holder
2. Position on Rentals of Software and
3. Rights of User to make backup copies.

The Indian Copyright Act 1957 describes such acts as illegal as of making or distributing copies of copyrighted software without having any proper and specific authorization. The person engaged in such acts will be tried for both civil and criminal law and heavy punishment and fines can be imposed by the court for infringing the copyright[38]. Under Chapter XIII of the Copyright Act 1957, offences are given which may be imposed on such person who knowingly infringes the copyright in a work or any other work as given under this act provided exception to Section 53A, which shall be punishable with a fine not less than R.S. 50,000 and imprisonment for a term not less than 6 months which may extend to 3 years[39].

Section 2(ffb) of Indian Copyright Act 1957, defines "Computer"- any electronic or similar device having information processing capabilities.

[38] Section 14 of Copyright Act 1957 (amended 1994), http://copyright.gov.in/documents/copyrightrules1957.pdf

[39] Section 63 of the Indian Copyright Act 1957 (amended 1994), http://copyright.gov.in/documents/copyrightrules1957.pdf

Section 2(ffc) defines the term "Computer Program" which means any set of instruction either expressed in words or in codes or in any other form, which is capable of causing a computer to perform a particular task or result.

Section 2(o) includes computer programs, tables and compilations as Literary works including computer database.

**AUSTRALIA**

Australia first Copyright Act was passed in 1968 regulating issues related to copyright and was amended several times. Before technology became prevalent in Australia, the framework to regulate copyright was designed to regulate the outcomes that could arise due to digital world. Since 1968, the day when first Copyright was passed, over 60 amendments (major or minor) have been made and 2006 was the recent significant amendment done to the act. The amendment strengthened the anti-circumvention laws and re-examined the issues to the copyright exceptions but it did not enable the personal copying of digital content, which was becoming a common practice at the time[40]

Copyright Protection in Australia provides for 70 years duration following the death of the last living author[41]. There are no copyright offices in Australia but Attorney-General's Department and Copyright Tribunal of Australia are the main institutions.

1. Attorney-General's Department- it governs the Copyright Act. Within the department are other two sub dept. i.e. Commercial law branch and Administrative law branch, which are responsible to develop new copyright policies. Where necessary Attorney-General's Dept. can consult other agencies for the efficient functioning such as Department of Foreign Affairs and Trade, The Department of Communications and the Department of Education amongst others.
2. The Copyright Tribunal- It has jurisdiction relating to licensing of copyright and is an independent body which is governed by the Federal Court of Australia

[40] Australia Copyright Act 2006.
[41] Martin Hinton, Daryle Rigney, Elliot Jhonston : Indigenous Australians and the Law, page 70

In relation to database protection, Australian Act does not provide protection to Sui Generis Database, instead database which are original are protected. Further, the exceptions provided in the act are to "Fair Dealing" which defines the use of copyright work that does not require a right holder permission and it covers:-

1. Non-Commercial Research such as study purpose
2. Review and Criticism
3. Professional Advice
4. Reporting the news
5. Parody

In relation to Orphan Works, there are no exceptions provided and no registration is required for copyright protection. For first, the infringement of copyright in Australia is a civil matter but under special circumstances it can be a criminal matter.

## CURRENT ISSUE IN AUSTRALIA

For several years debates are being held on "Copyright in the age of Internet". Recently, Australian Law Reform Commission has published a report on "Copyright and the Digital Economy" which recommends the Australian Government to introduce the concept of Fair Use exception and relax the statutory licensing provisions. On 14th Feb. 2014, the Attorney General of Australia[42] made a statement that "Government will be addressing the issue of online piracy".

[42] Senator Hon George Brandis

## CANADA

In Canada, Copyright Act was first passed in 1921, way before the technology was effective and Internet was born and the act has been amended several times. Rome Convention for Protection of Performers, Producers of Phonograms and Broadcasting Organizations was implemented in 1997, giving protection to performers and producers of sound recording and a new exception and limitation to copyright was introduced in the legislation. Again in 2007, the bill was passed in Canada, which amended the Criminal code and prohibited the recording of a movie in a movie theater without the owner's consent provided that act was committed for commercial purpose.

In 2012, Copyright Modernization Act was amended and WIPO's 1996 Internet Treaties were implemented in Canada. The main purpose of these amendments was to give the people a better copyright framework which would be flexible and will help in increasing creation and innovation in the digital world. Another aim was to give right holders new rights in the digital world. Now, copyright owners can apply TPMs (Technological Protection Measures) in the form of digital locks which will not allow unauthorized access to the copyright material. These new rules also prevent from manufacturing, and sale of devices that could break the digital locks. Now software producers of video games rely on these locks to protect their work.

The Duration of protection under Copyright Act in Canada is for 50 years following the death of the last living author but in case of sound recordings, non-dramatic cinematographic works protection of copyright ends 50 years following the year of First publications and same thing applies to communications signals. Copyright Office and Copyright Board are the two main institutions in Canada for regulating Copyright.

1. Copyright office shall be with the Patent office and the functions of the offices are registration and licenses of copyright and maintain the register of copyrights.
2. Copyright Board is a quasi-judicial tribunal and an independent body which performs as a regulatory body. The power of board is to establish royalties that

has to be paid for the use of copyright. Supervisory Role is given to the Board to adjudicate upon the agreements between users and licensing bodies.

As of Australia, Canada also does not give protection to Sui Generis Database. Compilation means a work which results from the selection of data or arrangement of data. Further, legislation also protects database as on unfair competition and Trade Secrets. Copyright Act comprises a supplemental licensing scheme for orphan works. In order to get a license, an applicant must demonstrate that "reasonable efforts" to locate copyright holders were made. The license is issued by the Copyright Board of Canada and is only valid in Canada for a specified amount of time and typically involves a royalty payment[43]. Registration of Copyright is not required in Canada.

**CURRENT ISSUE**

In 2009, the Canadian Government propelled open counsels on copyright strategy. It gave a stage to several topics to be discussed that took a glance at different parts of the planned reform, for example, "Copyright and You", "Test of Time", "Development and Creativity", "Rivalry and Investment" and "Computerized Economy". For instance, the topic "Copyright and You" searched for inputs on how Canada's copyright laws may influence singular customers and in what manner existing laws ought to be modernized. The subject "Development and Creativity" asked discussants what form of copyright changes would best cultivate to foster advancement and innovation in Canada. These debates pressurized Government of Canada to modernize the copyright legislation. Government launched its Digital Canada initiative in 2014 and the following mentioned objectives to be achieved by 2017:-

1. Access to high speed Internet at 5mbps (megabits per second) and latest wireless technologies
2. Protection from online threats and misuse of technology

[43] Section 77 of Canada's Copyright Act

3. To demonstrate leadership in the field of technology and open data
4. To give greater capabilities to copyright intensive industries, so as to seize digital opportunities and promote content.

**EUROPEAN UNION**

The copyright legislation of EU consists of many no. of directives which aim is to harmonize the different laws of copyright of the EU member states. Thus an obligation to the member state to include such directives in their national legal law. Following are the relevant directives:-

1. collective management of copyright and related rights and multi-territorial licensing of rights in musical works for online use in the internal market[44]
2. Certain permitted use of orphan works[45]
3. The legal Protection of Computer Programs[46]
4. Rental right and lending right and on certain rights related to copyright in the field of intellectual property[47]
5. The term of protection of copyright and certain related rights[48]
6. Enforcement of Intellectual Property Rights[49]
7. On the resale right for the benefit of the author of an original work of art[50]
8. The legal Protection of database[51]
9. Rights Related to Copyright applicable to satellite broadcasting and cable retransmission[52]

[44] 2014/26/EU, available at http://ec.europa.eu/internal_market/copyright/management/index_en.htm, accessed on 14th march
[45] Directives 2012/28/EC available at http://ec.europa.eu/internal_market/copyright/orphan_works/index_en.htm, accessed on 13th march 2016
[46] Directives 2009/24/EC available at http://ec.europa.eu/internal_market/copyright/prot-comp-progs/index_en.htm, accessed on 13th March 2016
[47] Directives 2006/115/EC
[48] Directives 2006/116/EC and 2011/77/EU
[49] Enforcement Directives 2004/48/EC
[50] Directive 2001/84/EC
[51] Directive 96/9/EC
[52] Directive 93/83/EEC

10. The harmonization of certain aspect of copyright and related rights in the information society[53]

The duration of copyright is of 70 years following the death of the last living author and neighboring rights is 50 years from the moment the protection was triggered e.g. fixation of phonogram[54] and in case of sound recordings to 70 years[55]. Database Protection was regarded in 1996 which aims was to provide harmonized protection of database and it also introduced a new form of sui generis right for the creators of database[56]. The registration of Copyright can-not be done at the European Union level.

**JAPAN**

Copyright Act (No. 48) regulates the legal issue of copyright in Japan and it was passed in 1970 and has been amended several times in order to meet the technological advancement and cope up with the socio-economic changes and comply with international framework[57]. Act No. 43 was the recent amendment which introduced the provision related to use of "copyright material". The said amendment also strengthened protection of related rights and copyright so as to increase the efficiency of opposing piracy. The duration of copyright in Japan for cinematographic works ends 70 years following the publishing of the work and for other works such as performance, book and sound recordings it is 50 years following the death of its author.

Agency for Cultural Affairs is the agency which is responsible for the charge of copyright issues which belongs to Japanese Ministry of Education, Sports, Science and Technology (MEXT). Under Article 12-2 of the act database are protected under the copyright as Original Database that "selection or systematic construction of contents contained, constitutes intellectual creations". The act also provides for limitations and exception

[53] Copyright Directive, 2001/29/EC
[54] Directive 2006/115/EC
[55] Directive 2011/77/EU
[56] Database Directive 96/9/EC
[57] Copyright system in Japan available at www.cric.or.jp/english/csj/csj2.html, accessed on 14th March 2016

such as reproduction for private use, in libraries, school textbooks, teaching materials, private use[58]. Registration in Japan is voluntary and it can be done at the agency for Cultural Affairs. Copyright Infringement in Japan is a civil matter and upon the legal complaint by the owner, the prosecution can be done and for the same penalty may be imposed or imprisonment[59].

**UNITED KINGDOM**

The Copyright Designs and Patent Act 1988 (CDPA) regulates the protection of copyright in UK. The legislature of the United Kingdom has taken into account the relevant directives of the EU i.e. Directive 2006/116/EC[60] and Copyright Directive 2001/29/EC[61]. The recent amendment was done on 29th October 2014, in which EU Orphans Works was implemented[62]

The duration of copyright for literary, dramatic musical and artistic work is up to 70 years from the end of the year in which author dies and in case of sound recordings- 50 years from the end of year of making or it was published or was made available, 70 years in case of films, from the end of the calendar year of the death of the last to die of the principal director, the author of the screenplay, dialogue or the composer of music and 50 years in case of broadcast from the end of the year the broadcast was made.

If a database is original and meets the criteria of "Originality" then it is treated as Literary Work under the UK Copyright law and therefore is protected. "Database Right" protects all the databases in the United Kingdom thereby giving right to the owner to prevent his work from copying and unauthorized use of the database.

[58] CRIC, Copyright Research and Information Centre, available at www.cric.or.jp/english/qa/begin.html, accessed on 14th March 2016
[59] CRIC available at www.cric.or.jp/english/qa/begin.html#9, accessed on 14th March 2016
[60] Directive on the protection of copyright and certain related rights
[61] Directive on harmonization of certain aspects of copyright and related rights in the information society
[62] Directive 2012/28/EU

In UK, the office of UK Intellectual Property is responsible for the copyright policy and DCMS (Department for Culture, Media and Sport) has an interest in supporting and promoting cultural copyright-intensive industries and leads on some areas of broadcasting policy and on internet regulation. On June 1 and October 1 2014 amendments were done to introduce a new piece of exception in the copyright, to give a number of segments a framework fir for the digital age. These exceptions allowed the use of personal copying for private use; parody etc. Implementation of EU Directive which sets out common rules for an exception to copyright law allowing the digitization and online display of orphan works on October 2014.

**CURRENT ISSUE**

For several years, there has been public debate on "Copyright in the age of the Internet" and currently the main important issues under the debate are as follows:-

1. Potential Reform of Copyright at the EU level, with focus on Digital Single Market
2. UK's Copyright Reforms, within the EU Copyright Framework
3. Meeting the challenges for the enforcement of digital technologies.

**CASE STUDY**

In the case of Sega Enterprises Ltd. V. Richards dealing with the alleged copies of the computer game "Frogger", the trial judge observed that copyright act of UK gives direct protection to the source code program and indirect protection to the object code program as it is an adaptation of source code[63].

[63] (1983) FSR 73

**THE UNITED STATES**

Copyright Act of 1976 governs the protection of copyright related issues in the United States and over the year it has undergone through statutory amendments and enactments. The 1976 copyright act did not introduced computer programs as literary works but the amendment of 1980, introduced the definition of "computer program" and also laid down the exceptions. The methods and algorithms in a program are not protected. U.S. copyright protection for computer programs extends to no- literal elements including the structure, sequence and organization of a program, and to its graphical user interface. Together these elements are called look and feel. Most foreign jurisdictions do not yet recognize protection of these non-literal elements[64]. In 1998, Digital Millennium Copyright Act (DMCA) was passed. It was the implementation of WIPO Copyright Treaty and the Performances and Phonograms treaty which also included giving obligation to the Internet Protection and Right Management Information. It also addressed a no. of other significant issues, including, inter alia, the creation of qualified limitations on liability for online service providers when engaged in certain categories of activities, and exceptions pertaining to computer maintenance and repair, digital preservation by libraries/archives and ephemeral recordings. Further US Courts plays an important role for interpreting the US Copyright laws.

In the United States the copyright law automatically protects a copyrightable work that is created and fixed in a tangible medium of expression on or after January 1, 1978, from the moment of its creation and gives it a term lasting for the author's life plus an additional 70 years. This is only a general rule, however. Depending on when a work was created and whether a work was published, different rules may apply. Additionally, the terms of protection for anonymous, pseudonymous and works made for hire also constitute exceptions to the basic life plus seventy term.

As of Australia and Canada, United States does not give protection to Sui Generis Database i.e. there is no separate protection to database but if the originality test is

[64] http://www.niclawgrp.net/SpecialReports/InternationalCopyright.html, accessed on 13th March 2016

qualified, the database comes within the purview of the copyright and protection is given.'

**CASE STUDIES**

The court held that Copyright extends to operating programs as well as application programs too whether fixed in source code or object code or in (ROM)[65]. The broad definition for copyrightable subject of software was created: everything that is not necessary to the computer program's purpose or function, including its structure, sequence and organization[66]. In 1992 Federal Court of Appeals rejected the Simplistic Test regarding the scope of Copyright Protection formulated in Whelan. In Computer Associates the court developed a three part test for determining whether software is infringed under the copyright laws. The test cam to be known as "abstraction/comparison test"[67]

In United States the person can file an application for the registration of his work. It is voluntary and not a condition. Thus protection is automatically given to the author as soon as the work is fixed in any tangible form of expression.

[65] Apple Computer Inc v Franklin Computer Corp 714 F.2D (1983)
[66] Whelan Associates Inc v Jaslow Dental Laboratory Inc 797 F.2d 122 (1986)
[67] Computer Associates Int. vs Altai Inc 982 F. 2nd 993 (1992)

# CHAPTER- 5

# COPYRIGHT AND INTERNET: INTERNATIONAL FRAMEWORK

With the rapid growth of Internet, come a need of Copyright Protection, which is very essential and a necessity in the digital world. Earlier copyright laws were protecting the tangible form of work, but now it has been extended to the internet world too i.e. Items on internet if qualifies the test of internet, then copyright protection is extended to internet items. Thus the main focus of copyright is to protect original work that has been produced in tangible form (written, typed or recorded). With the development of the internet and worldwide utilization of the overall internet, it is probable outcome copyright will be infringed and it has ended up in brain boggling free and simple Access to the internet together with potential outcomes of downloading creates new major issues in world of infringement of copyright. Taking materials from one website and adjusting it or simply repeating it on another site has been made easily conceivable by advancement of technology and this has postured new difficulties for the customary understanding of individual rights and security.

Any individual with a computer and a modem can turn into a well-known publisher as downloading, transferring, and changing or creating a subsidiary work into another is just only one mouse click away. A website page is very little unique in relation to a book a magazine or a sight and sound CD-ROM and it will be qualified for protection of copyright, as it contains content which are in the form of graphics, sound and recordings. Copyright law gives exclusive rights to the owner of the original work to give authorization to reproduce the copy of original, distribution etc but the applicability of this idea on the internet can't be entirely connected to copyright. Duplication of content is a key in the transmission of data on the web and even plain perusing data at a work station i.e. which is same as reading a book or a magazine at store and it might bring out the production of an unapproved/authorized duplicate copy of the subsequent to a makeshift duplicate of the work is made in the RAM of the clients PC with the end goal of access. The law on the subject developing and the general perspective is that all the

accessing to a website page would not be called as an infringement as the duplicate copy created is interim or transient. Another issue amongst various website owners is to make connections to different destinations inside of the outline of their own website pages. Would such connecting be viewed as a duplicate right infringement as these connections offer access to other duplicate corrected destinations? Entirely speaking it might be an infringement of copyright but doctrine of public access is applied as for linking to other websites. The Internet was made on the essential of having the capacity to connect hypertext connections to some other area and it is accepted that once a page is put on the net, an implied assent is given, unless particularly disallowed by the site proprietor.

Until now, Berne Convention and TRIPS agreement of 1995 were vested with the international copyright law for protection of the literary and artistic works. Rome Convention[68] was addressed the time of issues relating to sound recording and performances which may be called as Related Rights. Now, from 1974, all the international Copyright instruments are governed by WIPO (World Intellectual Property Organization), which is special United Nation agency. The objective of WIPO is to promote the protection throughout the world with cooperation from member states and in help with other international organizations[69]. Currently 180 states are the member of WIPO and it governs 6 copyright treaties having the clear agenda and aim of "homogenizing national intellectual property protections with an ultimate eye towards the creation of a unified, cohesive body of worldwide international law."

[68] Rome Cinvention for Protection of Performers, Producers of Phonograms and Broadcasting Organization 1961

[69] Stockholm, July 14, 1967- Convention Establishing the WIPO

## BERNE CONVENTION

EMERGENCE OF COPYRIGHT FROM FIRST STATE LAWS TO BERNE CONVENTION

Beginnings of copyright was identified with the development of printing, which empowered quick and efficient regeneration of duplicates of books at a very low level of cost and very large demands for printed materials were seen and it was due to the development of literary rate made a vast changes for need of printed books, and subsequently, the protection from such unauthorized copying was recognized so as to protect the basic rights of author and publisher. The principal copyright laws were therefore established. In 1970, the British Parliament established- "The Statute of Anne" as very first copyright law in the world. Which provided: once the failure of a specific period, the benefit appreciated by the Stationers' for making and providing duplicates of works, will return to the creators of works, who then will have the privilege to allocate benefit to other publisher. The Statute of Anne served to advance rivalry in the distributed business by limiting imposing business models, and perceived the creator as the holder of the privilege to approve replicating. Form this law; copyright speeded to every country around the globe after England was the Denmark who recognized the Author's Right and it was through and an ordinance in 1741. After that United States in 1790, made first copyright statute Copyright principles were provided as set of rules in Germany which regulated the publishing agreements. Later in 20$^{th}$ century, many of the German states gave recognition to authors as the rightful owner in their work and enacted laws for the same. Thus the concept of territorial jurisdiction to the copyright was seen as; copyright protection was extended to the part of country and not beyond that. Thus to protected the works of authors outside the country, it became important for the countries to enter into Bilateral Agreements. So, in mid-20$^{th}$ century, among European Nations bilateral agreement was considered but due their non-comprehensive and inconsistent nature they were not uniformly applied. Need for uniform system for protection was emerged and on September 9, 1886 first international agreement for protection of right of

authors was adopted, in Berne, Switzerland[70]. Currently, WIPO administers the Berne Convention, in Geneva Switzerland. And the convention has been revised many times so include and consider the fundamental changes arising from creation, dissemination of literary and artistic works[71].

The revision of Stockholm was a reaction not just only to mechanical changes that had occurred subsequent to the Brussels modification of 1948, additionally a reaction to the requirements of recently autonomous developing nations for accessing to works with the end goal of national education; endeavor to redesign the managerial and basic structure of the Berne Union. Particular procurements for creating nations received in Stockholm were further amended at the Paris Revision Conference in 1971. The substantive procurements under the Stockholm Act never went into power; they were received by the Paris Revision Conference in significantly unaltered structure[72].

Compliance to the Berne Convention over the recent years has increased because of the increasing awareness and need of the copyright protection, in the global world. Developed countries and developing countries both were recognizing that it was to their best interest if they provided a very strong safeguard to the intellectual property so as to increase participating in trade and for this purpose there was boom in the international trade in goods and services which was given protection under the intellectual property.

[70] The Berne Convention for Protection of Literary and Artistic Works

[71] " First major revision, Berlin-1908 which was followed under the Rome revision in 1928, Brussels Revision-1948 and Paris Revision- 1972"

[72] International Bureau of WIPO: International Protection of Copyright and Related Rights

## PARIS ACT OF BERNE CONVENTION- 1971

Under Berne Convention, the following two are the important elements of protection-

1. National Treatment- if work is originated in one member state and is protected than the same treatment shall be given by every other member states as if it was the work of their own country.
2. Minimum Rights- minimum level of protection shall be given by the law of member states.

Article 2 contains an illustrative list of protected works, which include "any original production in the literary, scientific and artistic domain, whatever may be the mode or form of its expression". Article 2(3) also protects works which is based on works of other i.e., translations, adaptations, and arrangements of music and other alterations of a literary or artistic work. Furthermore, Article 2(2) authorizes states that works shall be fixed in some material form i.e. written or typed so as to give protection For example, in a country with such a fixation requirement, a work of choreography could only be protected once the movements were written down in sound notation or recorded on videotape.

The convention provides for protection and benefit to author and his successors in title, which is given under Article 2(6). Some types of works, such as "cinematographic works ownership of copyright is a matter for legislation in the country where protection is claimed; for example, member States may provide that the initial owner of rights in such works is the producer, rather than the director, screenwriter, or other persons who contributed to creation of the work". Article 3 of the convention gives protection to the authors who are resident of the state which is a party to the "Berne Union" and also for those authors (not the resident or nationals of such nation provided they have to publish their works in any of the member states in the convention, then they will be given protection.

Following rights are protected under the convention:-

1. Article 6- Recognizing the Moral Rights
2. Article8- Exclusive Economic Right
3. Article 9- Right to reproduce in any form or manner
4. Article 11- Right of public performance i.e. dramatic works and musical works
5. Article 12- Right to adaptation
6. Article 14- The right to make adaptation of cinematography and reproduction of works, and right to distribute works that are adapted and reproduced.

Minimum duration of Protection is given under Article 7, is life of author plus 50 subsequent to his death. But Article 7 also provides for exception to the general rule i.e. For

- Cinematographic works, (50years after the work has been made available to the public)
- Photographic works (minimum protection is of 25 years)

There are many advantages attached to implementation of Berne Convention. The major advantage is that author's works are automatically protected in all the other states who are the party to the convention, which also resulted author's to derive benefits in financial form as from the expansion of markets. It also improved the competition to national authors in the domestic market because as soon as one country becomes a member state to the convention than the foreign author's works can be distributed with his permission/consent. The treaty also established ICJ that was empowered to have jurisdiction over any disputes amongst the member states but nations were free to declare their immunity, which was drawback to the convention and many states that time were doing so.

## TRIPS AGREEMENT

In 1994 it was established (as part of Uruguay Round under GATT now WTO). The Agreement on Trade-Related Aspects of Intellectual Property Rights contains detailed provision for protection of copyright and all the states who are member to this agreement shall comply with Article 21 given under this agreement and also with the Appendix connected thereto, the Paris Act of Berne Convention 1971. TRIPS Agreement included computer programs which earlier were ignored in Berne Convention and it provided that Computer Programs as Literary Works which are protected under the convention as subject of copyright. Compilation of data was also protected as the work of original creation, provided it should meet the Originality Test. The Agreement provides a right in respect of commercial rental of copies of computer programs and audiovisual works; the right does not apply to the latter works, however, unless rental practices have led to widespread copying which is "materially impairing" the exclusive right of reproduction[73].

50 years following the death of author and where in case of works, where the duration period could not be determined than in that case it would be 50 years from the end of the year of authorized publication or making of the work[74]. The agreement also contains provisions on enforcement of IP Rights which includes Copyright and also contains the provision on protection of Related Rights. Under this, performers were given the right to not give authorization (unless required) on phonograms, wireless broadcasting and communication to the public. They were also authorized to rental of copies of their phonograms.

Instead of authorizing, broadcasting associations are given the right to prohibit on the terms of fixation of their shows, the multiplication of such fixation, the remote

[73] Article 10.1 and Article 10.2 of the TRIPS Agreement

[74] "Copyright aspects in TRIPS Agreement available at http://www.iipa.com/rbi/2004_Oct19_TRIPS.pdf, accessed on 13th March 2016"

rebroadcasting of such telecasts. The commitment of member nations gathering to the TRIPS Agreement to give such protection to television associations is liable to an option, notwithstanding; nations might give the proprietors of copyright in broadcasting programming with the likelihood of preventing the same sit-ins and with subject to the Berne Convention provisions The term of protection provided for related rights is upto 50 years for entertainers and makers of phonograms and for broadcasting associations it is 20 years and, the same restrictions are also given under Rome Convention.

Article 18 of the agreement gives obligation to the all the nation legislation, who are the party of the agreement to implement the provision of the agreement and it shall also give protection to all performances and phonograms, which were earlier not under the public domain. At last, as seen above, the agreement gives definite provisions relating to enforceability of Intellectual rights which also include the provisions related to" related rights", and additionally it also provides a dispute settling mechanism among member states, concerning consistence with the compliance given under this Agreement.

## ROME CONVENTION

Phonogram Industry gave birth to the protection of the related rights under the copyright law against unauthorized copying. With the development in the phonogram industry, the expression for support of protection of rights of performers was expressed. In 1928, Rome Diplomatic conference was held so as to revise the Berne Convention and there the first proposal was made concerning the right of protection of producers of phonograms and performers. ILO (International Labor Office) took a deep interest in the status of performers[75]. Finally, in 1960 BIRPI, UNESCO and ILO met a Hague and drafted a convention called Rome Convention October 26, 1961.

[75] ILO considered status of performers as employed workers

## RELATIONSHIP AMONG COPYRIGHT AND THE REALTED RIGHTS

Under Article 1 of the Rome Convention, the diplomatic conference was set up which was called as supposed "safeguard clause," was established which gives protection allowed under this Convention shall be complete and intact and that it shall not in any way influence copyright protection which is given to literary and artistic works. Hence, any of the provisions given under Rome Convention shall not be given such and interpretation that might prejudice the copyright protection. Under Article 1, it is clear that at whatever point the approval of the author is required for further utilization of work, than the requirement for such approval will not be influenced by the Rome Convention. Under Article 24(2) of the Rome convention which provides that if any of the state wants to be the member of convention than, it shall not only be party to the United Nations but they should also be the member of the Berne Union and UCC (Universal Copyright Convention) and further given under Article 28(4), if any of the states stops being a party either to Berne Union or UCC than, they shall not be further called as member to the convention. In light of this connection with the copyright, the Rome Convention in some cases is also called as a "Closed" convention; as membership is open to every states if the they meets the above mentioned requirements.

Article 2(1) of the Rome Convention comprises fundamentally of national treatment that is given by State under its local law to local performers, phonograms and telecasts just like in the case of Berne Convention. Article 2 sub clause (2) deals with National treatment is, be that as it may, subject to the basic levels of protection particularly ensured by this Convention and furthermore to the confinements accommodated in the Convention. That implies that, aside from the rights ensured by this Convention itself as establishing the minimum protection, and is also subjected to particular exemptions or reservations took into account by this Convention, entertainers, phonogram producers and Broadcasting associations also appreciate the same rights in Contracting States as those nations gives to their national people.

According to Article 4 of the convention, performers are qualified for national treatment even if the execution happens in another Contracting State (independent of the nation to which the performer has a place in) or on the off chance that it is merged in a phonogram which is protected under this convention (regardless of the nation to which the performer has a place or where the execution really occurred) or on the off chance that it is communicated "live" (not from phonogram) in a broadcast duly protected under this convention (once more, independent of the nation to which the performer has a place). These options principles of entitlement for protection are proposed to guarantee proper compliance of the Rome Convention to the biggest conceivable number of performers. Makers of phonograms are too qualified for the national treatment on the off chance that they are nationals of another Contracting State (foundation of nationality), if the principal fixation was made in another Contracting State (fixation criteria), or if the phonogram was first or all the while distributed in another Contracting State (rule of production) which is given Article 5.

Broadcasting associations are also qualified for national treatment even if their home office is in another Contracting State (nationality principle), or if the transmission of broadcast was from a transmitter arranged in another Contracting State, regardless of whether the starting broadcasting association was in a Contracting State (territoriality principle). If both the nationality and territoriality principle is met than, the contracting States might proclaim that they will protect such broadcast in admiration of the same Contracting State (Article 6).

As per Article 13, it is the right to authorize or to prohibit by broadcasting association under:-

(i) The instantaneous rebroadcasting of broadcasts,

(ii) Fixation of broadcasts,

(iii) Reproducing of unofficial fixations of broadcasts or Reproducing lawful fixations for dishonest purposes, and

(iv) Communication with the public by means of receivers in places available to the public compared to payment.

It ought to be noticed this last-specified right does not reach out to correspondence to people in general of just sound broadcast, and that it is a matter for household legislation to decide the conditions under which such a right might be worked out. It ought to likewise be watched that the Rome Convention does not secure protection against cable conveyance of broadcasts,.

Under Article 14 of the Rome Convention, twenty years is the minimum period of protection what is given and it is from the end of the year in which:-

(i) At the time when fixation was made, (phonograms and performances)

(ii) At the time when performance took place, in respect of performances not combined in phonograms, or

(iii) The broadcast took place, for broadcasts.

"Pioneer Convention" is a term which is given to the Rome Convention. Toward the end of the nineteenth century, the copyright traditions finished up as followed in the wake of every nation laws, the Rome Convention explained instruments of related rights security during a period when not very many nations had operative law ensuring the protection of performers, makers of phonograms and television associations. Since 1961, the number of nations gathering to the Convention is developing, be that as it may, its impact on the advancement of national legislation has been noteworthy, various nations have administered on the protection of elated rights, expanding the quantity of national laws ensuring protection to makers of phonograms broadcasting associations. A developing number of States have likewise conceded particular security to performers.

## WIPO

In 1974, WIPO became specialized agency of United Nation organization. Before WIPO was established, there were many organizations which were established under individual organs such as:-

- Paris Union Assembly
- International Bureau of Berne also known as BIRPI[76] and Executive Committee

There are four kinds of activities which are undertaken by WIPO: first is registration second is promotion of inter-governmental cooperation in the administration of intellectual property, third are specialized program activities and last is the dispute resolution mechanism. The convention establishing WIPO comes into and BIRPI was transformed to become WIPO.

## WORLD INTELLECTUAL PROPERTY RIGHT INTERNET TREATIES

At Paris in 1971, the Berne Convention for the Protection of Literary and Artistic Works was revised and over the time, there was growth in the technological and commercial development in the fields of video technology, satellite broadcasting, cable television, and there was huge increase in the importance of computer system such as programs, databases and digital transmission system i.e. Internet which affected the works created. So for this purpose a new International norm was needed and later in 1980, worker stated at WIPO for the preparation of new instrument. At the time of the preliminary work that prompted the new instruments, it turned out to be clear that the most critical and pressing objective before the drafting members was to elucidate existing standards and how to offer new standards because of the questions raised by computerized technology, and especially the Internet. “Digital Agenda” was the name given to all the issues in this context.

[76] BIRPI- Bureau Internationaux Reunis Pour La Protection de La Propriete Intellectuelle

From December 2-20, 1996, Diplomatic Conference was held were two new treaties were adopted:-

- WIPO Copyright Treaty (WCT)
- WIPO Performances and Phonograms Treaty (WPPT)

These two treaties are directly related to "Digital Agenda" and deals with:-

- Reproduction Right in digital era
- The limitation and exceptions which are in the digital world
- Protection by technological measures
- Right Management Information (RMI)

**RIGHT TO REPRODUCTION-**

WPPT clearly gives exclusive reproduction rights for performers and for phonograms producers and WCT by incorporating Article 9 of Berne Conventions give reproduction right for authors[77]. The extent of privilege of reproduction in the technological world, an inquiry that pulled in broad contention within the readiness of the settlements, is not managed in the content of the treaties itself. Notwithstanding, Agreed Statements which are received by the Diplomatic Conferences express that the generation(reproducing) right is completely relevant to the computerized environment, just like the reasonable restrictions and exemptions to one side. The Agreed Statements additionally affirm that the capacity of a work in an electronic medium constitutes a reproduction are mentioned in the significant Articles of the Berne Convention and the WPPT.

**RIGHTS IN RESPECT TO TRANSMISSION, ON DEMAND NETWORKS**

Maybe a standout amongst the hugest commitments of the "WCT and WPPT" gives acknowledgment of right to authors, entertainers and to phonogram makers, settled exhibitions and phonograms, as the case may be. The "WCT and WPPT" give authors,

[77] Article 1 of WCT

entertainers and makers of phonograms certain selective rights to approve the making accessible of their works, exhibitions settled on phonograms and phonograms, separately, by wire or remote means, in a manner that individuals from the general population might get to those works, exhibitions and phonograms from a spot and at once independently picked by them[78].

"Right of making available to public" is the right which is given by WPPT, whereas WCT incorporates it within the procurement on a general right of correspondence to the general population (wiping out the gaps in the scope of right that are directly under the Berne Convention). During the Diplomatic Conference, it was observed that Contracting Parties may implement the commitment to give a protection right in admiration of such "making accessible" by method for a privilege of dispersion i.e. right of distribution. Since in on-demand computerized transmissions, duplicates of works, exhibitions and phonograms are some of the time got obtained while receiving computers in a way that individuals from general society may not see the works, exhibitions and phonograms at the time of transmission[79]. "An Agreed Statement going with the WCT gives that the unimportant procurement of physical facilities for empowering or making such a communication that does not in itself add up to a communication within the context of the WCT or of the Berne Convention. This, obviously, does not reject obligation of access and, for service providers, for instance, on the premise of contributory risk. The same applies to the WPPT, in spite of the fact that the last does not contain such an Agreed Statement"[80].

Article 6(1) of the WCT accommodates writers to give exclusive right so as to approve the production of works easily accessible to general public and to provide duplicates of works either through sale or other exchange of possession, i.e., "exclusive right of

[78] WIPO:- "Understanding Copyright and Related Rights", available at http://www.wipo.int/edocs/pubdocs/en/intproperty/909/wipo_pub_909.pdf, accessed on 14th march 2016

[79] WIPO Performance and Phonograms Treaty (WPPT) Article 14, available at http://www.wipo.int/treaties/en/text.jsp?file_id=295578, accessed on 14th March 2016

[80] "Shahid Alikhan, Socio-economic Benefits of Intellectual Property Protection in Developing Countries, page 199"

distribution". Under the Berne Convention, it's just not in appreciation of cinematographic works that these privileges are allowed expressly, and under the TRIPS Agreement, it does not provide for "right of distribution". Article 6 sub clause (2) does not give obligation to contracting parties to choose any specific type of exhaustion (that is, national, local or worldwide exhaustion) or, actually, to manage the issue of exhaustion by any stretch of the imagination. Similar exclusive rights are given under Article 8 and Article 12 of WPPT to producers and phonogram producers[81].

Article 7 of the WCT grants right of commercial rental with respect to computer projects, cinematographic works and works exemplified in phonograms. But these rights are subject to certain important exceptions which are given under Articles 7 sub clause (2) and 7 sub clause (3). According to WPPT under Article 9, awards a selective right of commercial rent to, to begin with and as decided under national law, performers in appreciation to their exhibitions altered in phonograms and phonogram makers in appreciation of their phonograms[82].

Article 10- WCT and Article 16- WPPT incorporates the "three-stage" test to decide confinements and exemptions as accommodated under Article 9 of Berne Convention, which extends its applicability to all the rights. Agreed Statements going with WCT and the WPPT provides that such restrictions and exceptions as of now not given under the Berne Convention might be stretched out to digital world. Moreover, Contracting States may develop new special cases and restrictions fitting in the computerized environment. Obviously, the extension of existing or making of new restrictions and exceptions is just permitted on the off chance that it is adequate on the premise of the "three stage" test.[83]

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[81] "WIPO: Summary of WPPT and WCT available at http://www.wipo.int/treaties/en/ip/wppt/summary_wppt.html, accessed on 14th March"

[82] "The WIPO Copyright Treaty (WCT) and WIPO Performance and Phonograms Treaty (WPPT) available at http://www.wipo.int/export/sites/www/copyright/en/activities/pdf/wct_wppt.pdf, accessed on 14th march 2016"

[83] "Workshop on implementation issues of the WIPO copyright treaty (WCT) and WIPO Performances and Phonograms Treaty, available at http://www.wipo.int/edocs/mdocs/copyright/en/wct_wppt_imp/wct_wppt_imp_1.pdf, accessed on 14th march 2016"

**Right Management Information and Technological Protection Measures**

While arranging the two treaties, it was perceived that any new rights in a computerized domain in appreciation of computerized use of content would, all together be feasible, requires the provisional support for managing in accordance with technological procedures of protection and rights administration data. Thus, contracting parties to the treaty are under obligation to give satisfactory legitimate protection and successful remedies against an evasion of measures used to ensure the privileges of creators, entertainers and phonogram makers in their works, performance and phonograms, exclusively (examples of such will be called as "copy-protection security" or "copy management" frameworks, which contain specialized gadgets that either anticipate altogether the making of duplicate copies or make the nature of the duplicate copies so poor that they are unusable)[84].

In the case of Right administration data, contracting parties are under obligation to give satisfactory solution against evacuation or modification of rights administration data, and certain related demonstrations[85].

WCT Article 14and Article 23 of WPPT has same enforcement provisions and these provisions oblige the contracting parties to undertake adequate actions so as to ensure the correct application of treaties. These treaties include identical final and administrative clauses which are similar to other WIPO treaties clauses. WCT includes and gives recognition to computer programs and databases are a subject to copyright as Literary Work. All in all, the WPPT accommodates the equal protection for performers and producers of phonograms as given under the TRIPS Agreement. It is to be noticed that this additionally implies scope of the right of performers in the WPPT and stretches out just to live audio exhibitions and exhibitions altered under phonograms, aside from

[84] Article 11 of the WCT and Article 18 of the WPPT

[85] (Article 12 of the WCT and Article 19 of the WPPT, WIPO: Workshop on implementation issues of the WIPO copyright treaty (WCT) and WIPO Performances and Phonograms Treaty, available at http://www.wipo.int/edocs/mdocs/copyright/en/wct_wppt_imp/wct_wppt_imp_1.pdf, accessed on 14th march 2016.

privilege of television and correspondence to people in general of live exhibitions, which reaches out to all performances.

Article 12 of the Rome Convention and Article 15 of the WPPT gives performers and makers of phonograms a "remuneration right" in admiration of the broadcasting and communication to general population of phonograms, with the likelihood of reservations, as given under the Rome Convention.

## DIGITAL MILLENNIUM COPYRIGHT ACT (DMCA) - USA

It was adopted in October 1998 so as to implement the US Treaty Obligations under WCT and WPPT. This was done to take "US copyright law to the next level and into the digital age"[86]. The objectives of DMCA are as under:-

(i) Makes it a wrongdoing i.e. crime to bypass anti-piracy measures incorporated with copyrighted material, while allowing the splitting of copyright protection appliances to direct encryption research, evaluate item interoperability, and test computer security frameworks, and giving exclusions from anti-circumvention procurements for not-for-profit libraries, chronicles, and educational institutions under certain circumstances[87]

(ii) DMCA, outlaws the sale or distribution of code cracking machines used for illegal copy software and manufacturing of the same.

(iii) It protects service providers from the infringement of copyright liability for simply transmitting information and it also limits the liability of non-profit organizations of higher education when they serve as online service providers and under certain circumstances for copyright infringement by faculty

[86] The Digital Millennium Copyright Act, 1998 available at http://www.copyright.gov/legislation/dmca.pdf, accessed on 14th March.
[87] Christoher Wolf: Overview of Digital Millennium Copyright Act, page 29

members or graduate students, while requiring service providers to remove material from their systems that appears to constitute copyright infringement[88];

It was an update of Copyright Act 1976 but the act was limiting the liability of ISP's regarding activities and subject to their compliance with conditions and also it did not exempt then form any liability. Thus the up gradation to the act was needed[89]. The DCMA permits ISPs to maintain a strategic distance from both copyright risk and obligation to supporters by holding fast to specific rules set out in that which are known as 'Safe harbors.' Through these provisions, DCMA limits ISPs risk to four classes, viz., firstly, momentary digital network system communication, second, system caching, thirdly, data living on framework at the bearing of subscribers; and fourthly, information location tools[90].

[88] Christoher Wolf: Overview of Digital Millennium Copyright Act, page 30
[89] Report on Inter-Government Copyright Committee available at http://www.unesco.org/culture/copyright/images/IGCL1971XIII19.e.pdf, accessed on 14th March 2016
[90] Kahandwaarachchi Thilini: A study of the US and Indian Laws, Journal of Intellectual Property Rights

# CHAPTER- 6

# INTERNET PROTECTION IN INDIA

Under the Indian Copyright Act, 1957:

Indian Copyright Act, 1957 manages security of computer software yet the act doesn't have any specific provision for checking piracy of programming on Internet. Despite the fact that several amendments were made to the IPC 1860, IEA 1872, CRPC 1973 and the Banker's Books Evidence Act by IT Act 2000 yet the law of copyright stayed unaffected. Some applicable provision of Indian Copyright Act, 1957 are given underneath:

Meaning of Copyright:

Section 14 gives the meaning of copyright in following words:

For the purpose of this Act, "copyright means the exclusive right subject to the provisions of this Act, to do or authorize the doing of any of the following acts in respect of a work or any substantial part thereof",

a) **"In the case of a literary, dramatic or musical work not being a computer programme"-**

i. "To reproduce the work in any material form including the storing of it in any medium by electronic means"
ii. "To issue copies of the work to the public not being copies already in circulation"
iii. "To perform the work in public, or communicate it to the public"
iv. "To make any cinematograph film, or sound recording in respect of the work; v. to make any translation of the work"
v. To make any adaptation of the work;
vi. "To do in relation to a translation or adaptation of work, any of the acts specified in relation to the work in sub-clause (i) to (iv)"

**b) In the case of a computer programme-**

i. "To do any of the acts specified in clause (a);
ii. 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"

c) **In the case of an artistic work,-**

i. "To reproduce the work in any material form including depiction in three dimensions of a two dimensional work or in two dimensions of a three dimensional work;
ii. To communicate the work to the public;
iii. To issue copies of the work to the public not being copies already in circulation;
iv. To include the work in any cinematograph film;
v. To make any adaptation of the work;
vi. To do in relation to any adaptation of the work any of the acts specified in relation to the work in sub-clause (i) to (iii)"

d) **In the case of a cinematograph film,-**

i. "To make a copy of the film including a photograph of any image forming a part thereof;
ii. To sell or give on hire, or offer for sale or hire, any copy of the film, regardless of whether such copy has been sold or given on hire on earlier occasions"

e) **In the case of a sound recording,-**

i. "To make any other sound recording embodying in it;
ii. To sell or give on hire, or offer for sale or hire, any copy of the sound recording, regardless of whether such copy has been sold or given on hire on earlier occasions;
iii. To communicate the sound recording to the public"

**Infringement of Copyright in Cyber Space**

Section 51 of the Copyright Act, 1957 sets out "the provisions in connection to the infringement of copyright and it doesn't explicitly give in respect to whether such infringement happened in the internet or in physical world". In the event that we read the language of the section 51 alongside the Section 14 of the Copyright Act, 1957 it turns out that "repeating any copyrighted work, issuing copies of the work to public or communicating the work to people in public would sum to the copyright infringement under the Act".

However, at the time of 'linking or in-linking' there lies no propagation to any copyrighted work. Reproduction happens toward an end of users who will visits the linked page by means of link. Let's understand the concept of linking infringement in respect of copyright act. The word linking means "the joining of any two web pages on Web". It's an inserted electric location which indicates a different location and takes the user to the location. A link might lead to another file which is located in same website. Thus in short it means, a numbers of links show up on a single web page. Linking might be of two sorts, "deep linking and surface linking".

In the event of 'Surface linking the home page of any site is linked while Deep Linking implies bypassing the home page and linking to the internal pages inside of the website'.

Section 2(ff) of Act, 1957 defines the term "communication to public" as: "Communication to public means making any words available for being seen or heard or otherwise enjoyed by the public directly or by any means of display or diffusion other than by issuing copies of such work regardless of whether any member actually sees, hears or otherwise enjoys the work so made available."

"The explanation to this section further gives to incorporate any communication through satellite or cable. In this way, this definition covers the contents of a site on internet by virtue of expression "by any means for display". Thus, linking comes inside of the ambit

of Indian copyright law. On the off chance that any linking is done to the burden of any site, its owner can take plan of action to lawful cure under Indian Copyright act"[91]

The term 'In-lining' alludes to the summoning so as to make of another website page distinctive components from various pages or servers. In the event that any client searches this composite website page, this page will guide the browser to acquire the photos, graphics and so forth from the original sources.

If there should be an occurrence of inline linking the client might never come to realize that the substance of the composite page have not been stored at the site has been visited by him. The inline lining is not secured by the Section 14 and 51 of the Indian Copyright Act, 1957 as the individual employing an inline link on his site is not bringing on any reproduction of the copyrighted substance. Be that as it may, the meaning of the 'correspondence to public' as gave under Section 2(ff) of the Copyright Act can be interpreted to incorporate 'online linking' by virtue of the expression 'by any means for display'.

Then again Section 14(a)(vi) of the Act concedes the right of adaptation just to the creator of copyrighted work. By in-linking the connecting site could take a few components from the linked site's settings i.e. pictures, text, film clips and so on and make its own particular site. This sums to an infringement of adaptation rights of the creator.

In-linking makes moral issues moreover. Section 57[92] of the Copyright Act, 1957 insurances extraordinary rights of the author of any copyrighted work which is

[91] Explanation- "For the purpose of this clause, communication through satellite or cable or any other means of simultaneous communication to more than one household or place of residence including residential rooms of any hotel or hostel shall be deemed to be communication to public".

[92] Section 57 (1) Independently of the author's copyright and even after the assignment either wholly or partially of the said copyright, the author of a work shall have the right- (a) to claim authorship of the work; and (b) to restrain or claim damages in respect of any distortion, mutilation, modification or other act would be prejudicial to his honour or reputation: Provided that the author shall not have any right to restrain or claim damages in respect of any adaptation of a computer programme to which clause (aa) of sub-section

unfavourably influenced by the routine of in-linking. However, the Act does not explicitly accommodates making in-linking illegal, however any alteration or mutilation to the substance of a site without the express authorization of the owner of the copyrighted material adds up to an infringement in the eye of copyright law of India.

Under Indian Copyright Act, 1957 the legality of applying so as to be tested by applying provisions of Section 51 read with Section 14 of the Act. If there should be an occurrence framing of the framer of the other's site neither duplicates the copyrighted content nor making duplicate of the same in any case does he give just a visiting browser with guidelines to recover the content of that browser into composer's site. Accordingly, the framer of site cannot be held at liable for unauthorized duplicating or reproduction of copyrighted work under Indian Copyright Act yet he could be caught under Act 57(1) of the Act infringing the right to integrity of the copyright owner.

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India's development in the internet space has been commendable. India has additionally made colossal development in Information and Software technology and is having intensified development of more than 25% every year consistently. The expanding utilization of Information Innovation (IT), be that as it may, carries with it new challenges and threats. Amongst the most significant is the security risk, including data theft, hacking, identity theft, infringement of intellectual property rights, piracy, and so on. Given the commercial importance and capability of IT in India, there is a requirement for special efforts to battle such unlawful exercises. So as to keep the legal regime side by side with this adjustment in the society, the Indian Parliament legislated the Information Technology Act, 2000.

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(1) of section 52 applies. Explanation – Failure to display a work or to display it to the satisfaction of the author shall not be deemed to be an infringement of the rights conferred by this section.

## INTELLECTUAL PROPERTY RIGHTS OVER INTERNET

After the invention of Internet, the majority of the Intellectual Protection is held in the advanced structure as giving moderate access of all the IPR assets to people at large on the loose. Be that as it may, web has additionally made encroachment of IPR, specifically duplicating of Copyright material simple and simple. Internet is being termed as the world's greatest copying machine. India has particular enactments to manage different sorts of IPR infringement however these enactments are not outfitted to manage a percentage of the modern day copyright infringement. The Copyright Act, 1957 prohibits reproduction of the copyrighted work in any material structure including the putting away of it in any medium by electronic means, by any unauthorized person however is weakened to manage illegal duplication, importation, distribution and sale of pirated music as it gets to be hard to follow the location of information.

In this situation, where sharing of information among individuals has turned into the major function of the internet, the peer to peer file sharing services gave by different websites, linking, deep linking, framing and different innovations which have changed the way individuals offer information over the internet, have given rise to legal controversy. While the user downloading music, software, computer games and other copyrighted material are held liable for direct copyright infringement, the service provider go scot free as the current Copyright Act has no provisions for making a service provider liable in such a circumstance. The fast scattering of information over the internet implies that one needs to spend a lifetime and fortune finding duplicates of the work that infringes those rights, identifying the infringer and litigating in every concerned jurisdiction. The protection to computer software programming is inferred out of two Acts, the Indian Copyright Act, 1957 and the IT Act, 2000. While the Copyright Act stipends assurance to the computer software as it is conceded to different types of copyrighted work, the technological and complex nature of the PC programs calls for in fact powerful protection.

The Indian Copyright Act, 1957 accords an extraordinary status to Computer software as compared with different types of copyrighted work. The Copyright Act views the

computer programs as literary works and notwithstanding the general exclusive rights gave to other literary works, it grants extraordinary exclusive rights to the owners of the computer programs like right to sell or offer sale, and the right to give on commercial rental or offer for commercial rental. The Act has likewise exempted PC programs from 'fair dealing exception' (i.e. private use for examination, feedback or survey of that work or some other work) which is accessible in the event of other copyright works.

The IT Act, 2000 accommodates discipline for tempering with the 'source code' of a Computer program yet this protection applies to computer source codes 'which are required to be kept or kept up by law for now in force'. Subsequently, the protection accorded by the IT Act is just for 'source code' of PC projects of government offices and the 'source code' of Computer programs of private users still stand unprotected.

## CYBERCRIMES

The Technological advancement has additionally given another measurement to the different wrongdoings which navigate through different territories this making the issue of jurisdiction. Wholesale fraud, abuse of Visas, hacking, spilling of critical information and frauds are a portion of the issues which are being confronted by the Indian cyber consumers. Some of these cyber offenses are clarified beneath:

1. Spamming: Spamming implies sending unsolicited bulk/commercial mails over the net which stops up the system and diminishes the speed. . With IT Act having no provisions on spamming, the legal picture on this lays still vague.

2. Phishing and Pharming: Phishing means to misrepresentation on the internet, which might lead the user to reveal their own personal information at their own will. This is known as phishing and pharming and is not addressed to by the IT Act.

   Digital Stalking: Cyber stalking includes a person following a web-surfer through internet in spite of the complaints by the r later , which could result into creating serious mental anguish, anxiety and harassment to the individual being stalked.

While the IT Act does not address the issue, it could be directed by the Indian Penal Code, despite the fact that there exists a requirement for particular and fitting procedure to be incorporated into the IT Act for an effective check keep an eye on such exercises.

3. Credit card Frauds: The utilization of credit card through internet, for making payment of products or services, has opened significant courses for frauds against the cyber customers. As the transaction, while utilizing credit card through internet, happens CNP (Card Not Present), it opens the space for individuals taking data of cards and abusing it for making a purchase. As the IT Act does not manage credit card frauds, there exists a need express provisions to be detailed for checking such exercises.

## DATA PROTECTION AND PRIVACY

Internet technology encourages the social event of individual information. However, this additionally conveys a probability of a risk to the security of a cyber-consumer. With the bloom in online service provider companies in India, abusing of the individual information of a cyber-consumer has turned into a major menace. Be that as it may, there is no particular legislation to secure the individual information of a man however to a little degree protection might be given under the Copyright Act, 1957.

With US and EU having strict approaches identifying with privacy and protection of individual information it turns out to be imperative for India, considering the inflow of outside speculations and different business opportunities, to have particular information protection and privacy laws. The Information Technology Act protects privacy rights just from government activity and it's hazy if such protection can be reached out to private activities too.

The nonattendance of information privacy and protection law has additionally been making snags for Indian organizations while managing the EU as the data assurance

directives require an abnormal state of protection. India needs to adjust to the changing needs of the time and accommodate a far reaching data protection regime which won't just help in increasing purchaser certainty additionally build the measure of business that Indian BPO service provider get from the EU.

## INFORMATION TECHNOLOGY LAW

India passed the Information Technology Act, 2000 to deal with the emerging cyber issues. It aims to provide for the legal framework so that legal sanctity is accorded to all electronic records and transactions carried out by the means of electronic data interchange and other means of electronic communication (e-commerce). However, it does not deal with major issues like Spamming, Cyber Stalking, and Phishing etc.

## GREY AREAS

For the viable regulation of a phenomenon, the legal regime for it must be side by side with the most recent improvements occurring in that field, which gets to be troublesome on account of Information Technology as it has a quickened pace of advancement and thus the statute requires consistent redesigning.

Some grey areas in the Act which require extraordinary consideration are:

• The Act develops the utilization of its corrective provisions to persons outside India, independent of their nationality if the offense under the Act identifies with a computer situated in India. Such extra-territorial jurisdictions fraught with restrictions as to its enforcement

• The jurisdiction of a particular country over online transactions, which involves more than one jurisdiction, has been left open. This can lead to a conflict of jurisdictions.

• The Act neglects to address the issue of cross-border tax assessment that might emerge in international contracts.

• The Act does not address the issue of protection of intellectual property on the internet.

• The Act does not manage security and data protection issues on the internet.

• The Act neglects to cover cyber laundering of money, spamming, phishing, cyber stalking, cyber-squatting and other creative cybercrimes.

• The Act does not clear up the circumstance with respect to the liability of network service providers.

## Internet Service Providers Liability in India:-

In India, laws with respect to ISP liability are vertical i.e. liability would depend on the basis of law for the particular types of infringement. Thus with, it was a need to establish the liability of ISP under IT act and Copyright Act.

## Indian Copyright Act

As per Section 51 (a) (ii), the copyright infringement is defined[93]. Now all the servers and devices which are used to transmit and store the data comes under the expression of "any place" defined under the act and liability will be imposed for storing ad transmitting infringed data of the third party. Another term "Permits for Profits" makes it important that ISP to held liable he must be having benefits financially from such infringing activities

Section 63 of the Copyright Act deals with, any person who infringes or abets infringement of:-

- Copyright in a work or
- Any other right as given under the act

[93] Copyright in a work shall be deemed to be infringed, when any person without a license granted by the owner of copyright or the registrar of copyrights under this act or in the contravention of the conditions of license so granted or of any conditions imposed by a competent authority under this act permits for profit any place to use for the communication of the work to the public where such communications constitutes an infringement of the copyright in the work, unless he was not aware and had no reasonable ground for believing that such communication to the public would be an infringement copyright

Shall be punishable for a imprisonment for not less than 1 year or with fine or both.

## INFORMATION TECHNOLOGY ACT, 2000

According to Section 79 of the IT Act, Internet Service Provider is called as Network Service Provider and under the section as an "Intermediary". Section 2(w) defines the term intermediary i.e. any person who on behalf of another receives, stores or transmits that message or provided any service with respect to that message[94].

Section 79 deals with the cases wherein NSP are not liable if, it is proved that there was no knowledge of the infringement and due diligence was taken so as to prevent such infringement. Thus the legislative intention was to give immunity to the ISP which is absolute, if proven not guilty of the infringement.

Therefore, the major drawback of the Indian law, when the issue of online copyright infringement occurs is:-

- Section 79 of IT Act which is vague
- The term "due diligence" has not been defined in the act which creates confusion amongst ISP as how to interpret the term
- Neither the IT act nor the Copyright act gives the definition of an ISP.

[94] IT Act 2000 (amended on 2008) available at http://www.tifrh.res.in/tcis/events/facilities/IT_act_2008.pdf, accessed on 15th March

# CHAPTER- 7

# CONCLUSION

Copyright law is totally out of date. It is a Gutenberg artifact. Since it is a reactive process, it will probably have to break down totally before it is corrected" (Negroponte 1995, p. 58)

Almost every aspect of the world is digital today. From our classrooms to our offices, everything has become virtual. However, on one hand digitization is accompanied by its in numerous merits, but on the other hand it comes with some inherent dangers. One of the dangers that this dissertation has highlighted is the copyright infringement of the original work on an individual. Though computer related software and data have today come under the protection of copyright and in fact the Information Technology Act, 2001 gives protection to our data beyond copyright, we have not fully achieved protection. One of the major constraints has been the global nature of internet. The internet reaches far beyond boundaries. An infringement can be controlled within the countries however what happens when a violation is beyond our territory. Laws are given universal jurisdiction but practically with extradition treaties and other such complications in international law it becomes difficult to actually prosecute the offender or protect our resources. The law still remains very ambiguous and unclear. Internet is very vulnerable to threats because of this very reason for e.g. piracy. The only reason piracy is still so prevalent in countries is because of loosely framed laws, ineffective implementation and inadequate monitoring. It is also important that laws be technology neutral. Copyright law should give meaningful protection to the creators by being constantly and regularly being updated to keep up with the newest form of technology. The information technology act should complement the copyright act. Moreover, the public should be educated on the natural and purpose of the copyright act and its infringement.

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