

Course: Professional Issues in Information Technology

Week 4: Intellectual Property Rights

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Lecture learning outcomes

At the end of this lecture, the learner should be able to:

1. Define Intellectual Property (IP)
2. Describe Copyrights, Patents, and Trademarks and protection offered by each
3. Describe basic requirements for patent, and copyright qualifications

1.1 Intellectual Property Rights

1.1.1 Definition:

Intellectual property (IP) refers to the intangible creations of the mind, that result from the expression of an idea.¹

IP rights are the exclusive legal possessions of the creator for a specified period of time.

Examples of these creations are: - Inventions, Literary and artistic works, Symbols, Names, Images and Designs used in commerce

The importance of IP rights is to promote the progress of science and useful arts, by securing exclusive right for limited times to authors and inventors to their respective writing and discoveries.²

1.1.2 Intellectual Property Categories

Intellectual property has three major categories that help define the type, extent and duration of the intellectual property protection. These are: -

- a) Copyright.
- b) Trade mark and
- c) Patent,

World Intellectual Property Day

¹ . Professional Issues in Information Technology. Bott, F. *British Computer Society, UK.* (2005) Pg. 114

² Ethics in Information Technology, 4th ed. Reynolds, G. Course Technology, Boston, USA. (2011) Pg. 220

This day is marked worldwide on April 26th every year and it is an annual event founded by the World Intellectual Property Organization (WIPO), to raise awareness on the role of intellectual property rights in creativity and innovation. In Kenya, the event is normally organized under the auspices of the Kenya Copyright Board

1.2 Copyright

This is an exclusive grant from the government which allows the owner to reproduce (copy) the original work partly or wholly, to distribute, perform, or display it to the public in any form or manner including the Internet.³

These exclusive rights granted to the author or creator lasts for a certain time period after which the work is said to enter the public domain. The work(s) include: literary, dramatic, musical and artistic works.

The protection lasts for a stipulated period of time, usually for the lifetime of the author with an additional fifty or a hundred years after their death.

Term for individual is life plus 50 years; for organizations, publication plus 75 years⁴

Ones' work is from the moment it is created and fixed in a tangible form that it is perceptible either directly or with the aid of a machine or device.

What does a Copyright protect?

- i. written and literal works such as novels, book layouts,
 - ii. dramatic and theatrical works such as dance and choreography,
 - iii. musical works such as albums, films, sound recordings and broadcasts
 - iv. artistic works such as photographs and artworks.⁵
- Copyright is granted immediately the work is recorded on a physical medium such as paper or magnetic disk.
 - Registering with the Copyright office is not mandatory for protection though its recommended since registered works may be eligible for statutory damages. This may save on attorney's fees in successful litigation in case of any damage.
 - Copyright protection act is available for all unpublished works excepts for works that have not been fixed in a tangible form of expression. i.e. titles, ideas, procedures,

³ Ethics in Information Technology, 4th ed. Reynolds, G. Course Technology, Boston, USA. (2011) Pg. 225

⁴ Ethics in Information Technology, 4th ed. Reynolds, G. Course Technology, Boston, USA. (2011) Pg. 226

⁵ Ethics in Information Technology, 4th ed. Reynolds, G. Course Technology, Boston, USA. (2011) Pg. 227

methods, systems, processes, concepts, principles, discoveries, or devices and common property containing no original authorship⁶

- Copyright covers the expression of an idea in tangible form but not the idea itself but does not protect facts, ideas, systems, or methods of operation.
- The work must be recorded in a physical medium to be considered for copyright protection.
- The fair use doctrine allows for the limited unauthorised use of copyright material under certain circumstances: quotations are allowed for the purpose of review or criticism;
 - i. brief quotation in a news report;
 - ii. reproduction by an educator of a small part to illustrate a lesson; and
 - iii. reproduction of the work in legislative or judicial proceedings.⁷

Copyright: The Problem of Perfect Copies and Encryption

- Copyright law protects original forms of expression such as writings, art, drawings, photographs, music, motion pictures, performances, and computer programs from being copied by others for a minimum of 50 years
- “Look and feel” copyright infringement lawsuits are precisely about the distinction between and idea and its expression

Copyright: The Problem of Perfect Copies and Encryption

- Doctrine of fair use permits teachers and writers to use copyrighted materials with permission under certain circumstances
- Fair Use Considerations to Copyright Protection
 - ✓ Reason for use – Is it for educational purposes(non-profit) or for profit
 - ✓ Amount of work used– e.g. a stanza in a poem or a page in a book is allowed but not the entire poem or a whole book chapter
 - ✓ Context of use– last minute (e.g. submit a class assignment) or planned infringement
 - ✓ Market effect – will the use harm the marketability of the product?
 - ✓ Nature of work– Creative works like plays have greater protection⁸

⁶ Ethics in Information Technology, 4th ed. Reynolds, G. Course Technology, Boston, USA. (2011) Pg. 224

⁷ Ethics in Information Technology, 4th ed. Reynolds, G. Course Technology, Boston, USA. (2011) Pg. 225

⁸ Ethics in Information Technology, 4th ed. Reynolds, G. Course Technology, Boston, USA. (2011) Pg. 222

2. **Patent**

- This is a document that grants the holder exclusive rights on an invention for a fixed number of years.⁹
- A patent usually refers to a right granted to anyone who invents or discovers any new and useful process, machine, article of manufacture, or composition of matter, or any new and useful improvement thereof.
- An *Invention* is a successful technical solution to a technical problem which must be new, non-obvious and capable of industrial application

Patents: Business Methods and Processes

- One may obtain a patent therefore, subject to the conditions and requirements of this title.
- Patent grants the owner an exclusive monopoly to the ideas behind an invention for 20 years
- A patent grants the inventor exclusive rights to the use and sale of the invention and the protection lasts for 20 years after the patent was issued.¹⁰
- Copyright differs from a patent in that copyright protects original works of authorship, while a patent protects inventions or discoveries

Types of Patents

1. Utility patents - may be granted to anyone who invents or discovers any new and useful process, machine, article of manufacture, or composition of matter, or any new and useful improvement of an existing idea
2. Design patents may be granted to anyone who invents a new, original, and ornamental design for an article of manufacture
3. Plant patents are granted to anyone who invents and asexually reproduces a new variety of plant e.g. patents issued for Genetically Modified (GM) foods.

Patent Qualifications

To qualify for a patent:

- i. The invention has to be new,

⁹ Ethics in Information Technology, 4th ed. Reynolds, G. Course Technology, Boston, USA. (2011) Pg. 228

¹⁰ Ethics in Information Technology, 4th ed. Reynolds, G. Course Technology, Boston, USA. (2011) Pg. 231

- ii. Capable of being made or used in an industry and
- iii. Should be a new arrangement that would not be obvious to anyone in the field.¹¹

The following are not eligible for patent protection:

- Scientific or mathematical discovery,
- Theory or method;
- Literary, dramatic, musical or artistic works;
- Ways of performing mental acts, playing a game or doing business;
- Presentation of information; and
- Methods of medical treatment or diagnosis.

3. Trademark

- This is a symbol used by businesses to identify their goods and services.
- Government registration of the trademark awards exclusive legal right to its use.
- It is also referred to as brand name or logo for goods denoted as ®™
- Trademarks are signs (like words and logos) that distinguish goods and services in the marketplace while designs protect the appearance of a product/logo, from the shape of an aeroplane to a fashion item.
- Trademarks and designs both help protect an organisation's public identity i.e. brand as well as distinguish its products and services from those of its competitors.
- Trademark is "any work, name, symbol, or device, or any combination thereof ... used in commerce ... to identify and distinguish ... goods ... from those manufactured or sold by others and to indicate the source of the goods.

Trademarks: Online Infringement and Dilution

- Trademark is a mark used to identify and distinguish goods and indicate their source
- Dilution is any behavior that would weaken the connection between the trademark and the product

¹¹ Ethics in Information Technology, 4th ed. Reynolds, G. Course Technology, Boston, USA. (2011) Pg. 229

Trademarks and the Internet

- Cybersquatting involves the registration of an infringing domain name, or other Internet use of an existing trademark, for the purpose of extorting payments from the legitimate owners¹²
- Cyberpiracy involves the same behaviour as cybersquatting, but with the intent of diverting traffic from the legitimate site to an infringing site
- Anti-Cybersquatting Consumer Protection Act (ACPA) creates civil liabilities for anyone who attempts in bad faith to profit from an existing famous or distinctive trademark by registering an Internet domain name that is identical, or confusingly similar, or “dilutive” of that trademark
- The use of trademarks in meta-tags is permitted if the user does not mislead or confuse consumers
- The permissibility of using trademarks as keywords on search engines is also subtle and depends both on the extent to which such use causes “initial customer confusion” and the content of the search results
- Linking refers to building hypertext links from one site to another site
- Deep linking involves bypassing the target site’s home page, and going directly to a content page
- Framing involves displaying the content of another Web site inside your own Web site within a frame or window

Laws of confidence

- These are laws based on the common law concept which deals with confidential information. They include trade secrets, government secrets and private personal information.¹³ Trade secrets are valuable commercial assets which do not have to be new ideas or information. Example, the Google Search Algorithm

¹² Ethics in Information Technology, 4th ed. Reynolds, G. Course Technology, Boston, USA. (2011) Pg. 233

¹³ Ethics in Information Technology, 4th ed. Reynolds, G. Course Technology, Boston, USA. (2011) Pg. 234

Review Questions

1. Briefly describe the following terminologies as they relate to IT and the Internet:
 - a) Privacy.
 - b) Intellectual property rights.
2. Describe the kind of protection offered by:
 - a) Copyrights,
 - b) Trade secret and
 - c) Patents
3. Discuss two benefits and two limitations of each protection type for developers of computer software

Content Covered in Week 4: Intellectual Property Rights

We have been able to cover the following:

1. Intellectual Property
2. The concept of copyright, patents and trademarks and protection offered by each
3. Basic requirements for patent, trademark and copyright qualifications

Course Text Books

1. Professional Issues in Information Technology. Bott, F. *British Computer Society, UK.* (2005)
2. Ethics in Information Technology, 4th ed. Reynolds, G. *Course Technology, Boston, USA.* (2011)
3. Computers in Society: Privacy, Ethics and the Internet. George, J.F. *Pearson Prentice Hall, New Jersey.* (2004)
4. Cyber-ethics: Morality and Law in Cyberspace, 5th ed., Spinello, R.A. *Jones & Bartlett, Burlington, Mass., USA.* (2013)
5. Contemporary Issues in Ethics and Information Technology. *Schultz, R.A. IRM Press, USA.* (2005)