Unit 4: Intellectual Property

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Intellectual Property:

Intellectual property is a term used to describe works of the mind—such as art, books, films, formulas, inventions, music, and processes—that are distinct and owned or created by a single person or group.

It is protected through copyright, patent, and trade secret laws.

Copyright law protects authored works, such as art, books, film, and music;

Patent law protects inventions; and

Trade secret law helps safeguard information that is critical to an organization's success.

Together, copyright, patent, and trade secret laws form a complex body of law that addresses the ownership of intellectual property. Such laws can also present potential ethical problems for IT companies and users—for example, some innovators believe that copyrights, patents, and trade secrets suppress creativity by making it harder to build on the ideas of others.

Meanwhile, the owners of intellectual property want to control and receive compensation for the use of their intellectual property. Should the need for ongoing innovation or the rights of property owners govern how intellectual property is used? Defining and controlling the appropriate level of access to intellectual property are complex tasks. For example, protecting computer software has proven to be difficult because it has not been well categorized under the law. Software has sometimes been treated as the expression of an idea, which can be protected under copyright law. In other cases, software has been treated as a process for changing a computer's internal structure, making it eligible for protection under patent law. At one time, software was even judged to be a series of mental steps, making it inappropriate for ownership and ineligible for any form of protection.

Copyrights

Copyright protection is established through The Copyright Act, 2059 (2002) and amended in 2063.

A copyright is the exclusive right to distribute, display, perform, or reproduce an original work in copies or to prepare derivative works based on the work. Copyright protection is granted to the creators of "original works of authorship in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device."

The author may grant this exclusive right to others. As new forms of expression develop, they can be awarded copyright protection.

Copyright infringement is a violation of the rights secured by the owner of a copyright.

Infringement occurs when someone copies a substantial and material part of another's copyrighted work without permission.

Copyright Term

Copyright law guarantees developers the rights to their works for a certain amount of time.

The Copyright Act 2059 of Nepal defines that the economic and moral rights available to the author shall be protected throughout the life of the author and in the case of his/her death until fifty years computed from the year of death. For the work prepared jointly shall be protected for fifty years computed from the year of death of the last surviving author.

The work published anonymously or with pseudonym name shall be protected until fifty years from the date of first publication of such work or the data on which the work is made public, whichever is earlier.

The economic and moral right of a work relating to applied art and photographic work shall be protected until twenty-five years from the year of preparation of such work.

In US, since 1960, the term of copyright has been extended 11 times from its original limit of 28 years. The Copyright Term Extension Act, also known as the Sonny Bono Copyright Term Extension Act (after the legislator, and former singer/entertainer, who was one of the cosponsors of the bill in the House of Representatives), signed into law in 1998, and established the following time limits:

- For works created after January 1, 1978, copyright protection endures for the life of the author plus 70 years.
- For works created but not published or registered before January 1, 1978, the term endures for the life of the author plus 70 years, but in no case expires earlier than December 31, 2004.

- For works created before 1978 that are still in their original or renewable term of copyright, the total term was extended to 95 years from the date the copyright was originally secured.

These extensions were primarily championed by movie studios concerned about retaining rights to their early films. Opponents argued that extending the copyright period made it more difficult for artists to build on the work of others, thus stifling creativity and innovation.

Eligible Works

The types of work that can be copyrighted include architecture, art, audiovisual works, choreography, drama, graphics, literature, motion pictures, music, pantomimes, pictures, sculptures, sound recordings, and other intellectual works, as described in Title 17 of the U.S. Code. To be eligible for a copyright, a work must fall within one of the preceding categories, and it must be original.

As per Copyright Act 2059 of Nepal, Copyright protection shall be extended to any work. Any translation, arrangement, sequential arrangement of work or collection of works presented as original from viewpoint of presentation, collection or expression, data or database readable with or without support of machine, any derivate work based on folktale, folk song, folk expression shall be protected as original work.

Copyright law has proven to be extremely flexible in covering new technologies; thus, software, video games, multimedia works, and web pages can all be protected. However, evaluating the originality of a work is not always a straightforward process, and disagreements over whether or not a work is original sometimes lead to litigation.

Copyright infringement lawsuits are common in the world of music, with many of the major artists having gone through such a lawsuit at some point in their careers. For example, former Beatles member George Harrison was entangled for decades in litigation over similarities between his hit “My Sweet Lord,” released in 1970, and “He’s So Fine,” composed by Ronnie Mack and recorded by the Chiffons in 1962. Harrison was found guilty of “subconscious plagiarism” and had to pay $1.6 million of the earnings from “My Sweet Lord” to Bright Tunes (songwriter Ronnie Mack had died in 1963).

Some works are not eligible for copyright protection, including those that have not been fixed in a tangible form of expression (such as an improvisational speech) and those that consist entirely of common information that contains no original authorship, such as a chart showing conversions between European and American units of measure.

As per Copyright Act 2059 of Nepal, Copyright protection shall not be extended to any thoughts, religion, news, method of operation, concept, principle, court judgment, administrative decision, folksong, proverb, and general data despite the fact that such matters are expressed or explained or interpreted or included in your work.

Economic Right

As per the Copyright Act 2059 of Nepal, only the author or the owner of copyright shall have the exclusive right to carry out the following acts in respect of the work:

a) To reproduce the work,
b) To translate the work,
c) To revise or amend the work,
d) To make arrangement and other transformation in the work,
e) To sell, distribute or rent the original and copy of the work for the general public,
f) To transfer or rent the right of audiovisual work, work embodied in sound recording, computer program or musical work in graphic form conferred to that author or owner,
g) To import copies of the work,
h) To have public exhibition of the original or copy of the work,
i) To perform the work in public,
j) To broadcast the work,
k) To communicate the work to the general public.

Fair Use Doctrine

Copyright law tries to strike a balance between protecting an author's rights and enabling public access to copyrighted works. The fair use doctrine was developed over the years as courts worked to maintain that balance. It allows portions of copyrighted materials to be used without permission under certain circumstances. Title 17, Section 107, of the U.S. Code established that courts should consider the following four factors when deciding whether a particular use of copyrighted property is fair and can be allowed without penalty:

1. The purpose and character of the use (such as noncommercial use or nonprofit, educational purposes)
2. The nature of the copyrighted work
3. The portion of the copyrighted work used in relation to the work as a whole
4. The effect of the use on the value of the copyrighted work

The concept that an idea cannot be copyrighted but the expression of an idea can be key to understanding copyright protection. For example, an author cannot copy the exact words that someone else used to describe his feelings during a skirmish with terrorists, but he can convey the sense of horror that the other person expressed. Also, there is no copyright infringement if two parties independently develop a similar or even identical work.

For example, if two writers happened to use the same phrase to describe a key historical figure, neither would be guilty of infringement. Of course, independent creation can be extremely difficult to prove or disprove.

Since 2004, Google has scanned and converted into machine readable form over 20 million books as part of a project to create an electronic searchable database of books. Users of the Google Books service can enter search queries and view full pages from books in which the search terms

appear, provided that either the book is out of copyright or the copyright owner has given permission for the work to be included in the database. If the book is still under copyright, a user sees “snippets” of text around the queried search terms. The Authors Guild, a professional organization that advocates for authors on issues of copyright, fair contracts, and free speech, sued Google saying that serving up search results from scanned books infringes on publishers’ copyrights. In April 2016, the Supreme Court let stand a lower court decision that rejected the writers’ claims on the basis that such usage represented noninfringing fair use. The ruling allows Google to continue with its scanning project and may encourage other digitization projects.

The Chapter 4 of Copyright Act 2059 of Nepal specifies certain circumstances where the copyrighted materials can be used without authorization:

Section 16. Reproduction allowed for personal purpose – no authorization shall be required from the author or the copyright owner to reproduce some portion of any published work for personal use.

Section 17. Citation allowed

Section 18. Reproduction allowed for teaching and learning

Section 19. Reproduction by library and archives

Section 20. Reproduction, broadcast and other communication allowed for purposes of information to the general public

Section 21. Reproduction of computer program - in cases where the objectives for which a computer program was acquired could not be achieved or with a view to maintaining records or where the computer program acquired legally is lost or destroyed or is incapable of being used, one copy of the computer program can be reproduced without authorization of its author or copyright owner.

Section 22. Importation allowed for personal purposes

Section 23. Public exhibition allowed

Software Copyright Protection

The use of copyrights to protect computer software raises many complicated issues of interpretation. For example, a software manufacturer can observe the operation of a competitor’s copyrighted program and then create a program that accomplishes the same result and performs in the same manner. To prove infringement, the copyright holder must show a striking resemblance between its software and the new software that could be explained only by copying. However, if the new software’s manufacturer can establish that it developed the program on its own, without any knowledge of the existing program, there is no infringement. For example, two software manufacturers could conceivably develop separate but nearly identical programs for a simple game such as tic-tac-toe without infringing the other’s copyright.

Registering a copyright for a software program is a simple process. The individual or organization that owns the software must complete a brief application form that requests basic information such as the title of the program, who created the program and when, and who owns the copyright. The copyright holder then just needs to send the application, along with a small fee and a copy of the program, to the U.S. Copyright Office.

Java is a widely used programming language developed at Sun Microsystems during the early 1990s. Today it is one of the popular programming language for developing Android smartphone applications and is also used to code the software that runs many routers, switches, and other network devices. Google wrote its own version of Java to implement the Android OS used in smartphones, but in order to allow developers to write their own programs for Android, Google's implementation used the same names, organization, and functionality as the Java application program interfaces (APIs). (An API is a set of codes and protocols that enable programs to interact with one another. For example, when you read an article online and click on an icon to share that article via Facebook, you are using a Facebook API that the website hosting that article got from Facebook.)

Google and Sun originally discussed a potential partnership that would include licensing deals for Java, but were unable to reach an agreement. Software giant Oracle purchased Sun in 2010 and continued to discuss a licensing deal with Google, but, again, could not reach an agreement. Oracle then sued Google for copyright and patent infringement. In the initial hearing of the case, the jury found there was no infringement whatsoever. Oracle appealed to the Federal Circuit Court of Appeals, which reversed the district court, sending the case back to the district court for reconsideration—with Oracle seeking damages of up to $9 billion. In May 2016, the jury found that Android did not infringe Oracle-owned copyrights because Android's reimplementation of Java APIs represented fair use. Oracle appealed this decision in October 2016.

This case is of interest to many in the software development industry. If owners of APIs are able to use copyright law to control how programming is done, it would result in a major change in software development practices. According to Mitch Stoltz, an attorney for the Electronic Frontier Foundation, such a ruling would "create a radical shift in how software is developed worldwide. If it requires permission each time APIs are used and code calls other code, then you've upended the economics of software."

Infringement of Protected Right and Punishment

As per the Section 25 of Copyright Act 2059 of Nepal, anyone who carries out the following shall be considered to have infringed the right protected:

a) To reproduce copies of a work or sound recording and sell and distribute them or publicly communicate or rent them with commercial or any other motive with or without deriving economic benefits without authorization of the author or the copyright owner or by infringing the terms contained in the agreement or license notwithstanding that such authorization has been obtained,

b) To do advertisement or publicize by copying a work belonging to another person with a motive of taking advantage of the reputation gained by that work,
c) To make work of another subject or nature by changing the form and language of a work belonging to another person with a motive of deriving economic benefit,
d) To make an attempt to take benefit by adapting any work directly or indirectly with intention of making the viewer, listener or reader believe it to be another work through advertisement or by any other means,
e) To import, produce or rent any equipment or device prepared with intention of circumventing any device designed to discourage the unauthorized reproduction,
f) To produce or import, with intent to sell, any equipment facilitating unauthorized reception of a program broadcast by encrypting it in a code language,
g) To import, sell, distribute and use a mechanical device prepared with a sole object of infringing the copyright, except those mentioned in Clauses (e) and (f).

No one shall, with knowledge of publication of any work or sound recording or where there is adequate ground to believe it, sell and distribute and rent copies of work or sound recording so published.

In cases where any person infringes Section 25, such a person shall be punished with a fine of a sum from ten thousand to one hundred thousand rupees or with imprisonment for a term not exceeding six months or both and with a fine of a sum from twenty thousand to two hundred thousand rupees or with imprisonment for a term not exceeding one year or with both for each instance from the second time. The materials so published or reproduced or distributed or devices used to reproduce such materials shall be seized.

Compensation for the loss caused to the copyright owner by the infringer of the protected right shall also be realized and provided to the copyright owner.

The WTO and the WTO TRIPS Agreement (1994)

The WTO is a global organization that deals with the rules of international trade based on WTO agreements that are negotiated and signed by representatives of the world's trading nations. It is headquartered in Geneva, Switzerland, and has 159 member nations as of September 2021. The goal of the WTO is to help producers of goods and services, exporters, and importers conduct their business globally.

Many nations recognize that intellectual property has become increasingly important in world trade, yet the extent of protection and enforcement of intellectual property rights varies around the world. As a result, the WTO developed the Agreement on Trade-Related Aspects of Intellectual Property Rights, also known as the TRIPS Agreement, to establish minimum levels of protection that each government must provide to the intellectual property of all WTO members. This binding agreement requires member governments to ensure that intellectual property rights can be enforced under their laws and that penalties for infringement are tough enough to deter further violations. The table below provides a brief summary of copyright, patent, and trade secret protection under the TRIPS Agreement.

Form of intellectual property	Key terms of agreement
Copyright	Computer programs are protected as literary works. Authors of computer programs and producers of sound recordings have the right to prohibit the commercial rental of their works to the public.
Patent	Patent protection is available for any invention—whether a product or process—in all fields of technology without discrimination, subject to the normal tests of novelty, inventiveness, and industrial applicability. It is also required that patents be available and patent rights enjoyable without discrimination as to the place of invention and whether products are imported or locally produced.
Trade secret	Trade secrets and other types of undisclosed information that have commercial value must be protected against breach of confidence and other acts that are contrary to honest commercial practices. However, reasonable steps must have been taken to keep the information secret.

Many developing countries have taken the position that the TRIPS Agreement favors developed countries and transnational corporations at their expense. These countries argue that TRIPS imposes higher costs on developing countries in the form of more expensive drugs, agricultural products, and foreign-owned technologies.

The World Intellectual Property Organization Copyright Treaty (1996)

The World Intellectual Property Organization (WIPO), headquartered in Geneva, Switzerland, is an agency of the United Nations established in 1967. WIPO is dedicated to "the use of intellectual property as a means to stimulate innovation and creativity." It has 185 member nations and administers 25 international treaties. Since the 1990s, WIPO has strongly advocated for the interests of intellectual property owners. Its goal is to ensure that intellectual property laws are uniformly administered.

The WIPO Copyright Treaty, adopted in 1996, provides additional copyright protections to address electronic media. The treaty ensures that computer programs are protected as literary works and that the arrangement and selection of material in databases is also protected. It provides authors with control over the rental and distribution of their work and prohibits circumvention of any technical measures put in place to protect the works.

Patents

A patent is a grant of a property right to an inventor. A patent permits its owner to exclude the public from making, using, or selling a protected invention, and it allows for legal action against violators.

Unlike a copyright, a patent prevents independent creation as well as copying. Even if someone else invents the same item independently and with no prior knowledge of the patent holder's invention, the second inventor is excluded from using the patented device without permission of the original patent holder.

The Patent, Design and Trade Mark Act, 2022 (1965) of Nepal defines the legal arrangements in respect to patents, design and trade-marks for the convenience and economic benefit of the general public.

Section 3: Acquisition of Patent Rights

(1) A person desirous of obtaining right over any patent shall register such patent in his/her name under this Act.
(2) No one shall copy or use or cause to use in the name of the others without transforming the ownership or written permission.

Section 4: Application for Acquiring Right over Patent

(1) A person desirous of having any patent registered in his/her name shall submit to the Department an application containing the particulars mentioned hereunder, along with all available evidence in his/her possession:
   a) Name, address and occupation of the person inventing the patent.
   b) If the applicant him/herself is not the inventors, how and in what manner he/she acquired title thereto from the inventor.
   c) Process of manufacturing, operating or using the patent.
   d) The theory of formula if any, on which the patent is based.
(2) Along with the application, applicant shall also submit map and drawings along with particulars, of the patent, as well as the fee specified in Schedule-3

*Schedule-3

Application Registration and Renewal Fees In Respect to patents, Designs and Trade-marks

s.n.	Details of fees	Patant	Design	Trade-Mark
1.	Application of Registration fees for the patents, Designs and Trade-marks	Rs 2000/-	Rs 1000/-	Rs 2000/-
2.	Application Amendment fee	Rs 500/-	Rs 500/-	Rs 500/-
3.	Registration fee	Rs 10000.–	Rs 7000/-	Rs 5000/-
4.	Transfer fee	Rs 5000/-	Rs 3000/-	Rs 2000/-
5.	Endorsement fees for Amendment on record and Certification except transfer	Rs 2000/-	Rs 1000/-	Rs 1000/-
6.	Fees for the information of registration details	Rs 750	Rs750	Rs 500/-
7.	Fees for complain and objection	Rs 1000/-	Rs 1000/-	Rs 1000/-
8.	Fees for the copy of the registration certificate	Rs 1000/-	Rs 1000/-	Rs 1000/-
9.	Renewal Fees			
(a) Annual rate for the first time		Rs 5000/-	Rs 1000/-	–
(b) Annual rate for the second time		-Rs 7500/-	Rs 2000/-	–
(c) Annual rate for the Trademark each time		–	–	Rs 500/-

Section 5: Investigation by the department

(1) On receipt of application submitted, the Department shall, on advice of experts if so considered necessary, conduct all investigation or study to ascertain whether the patent investigation in the application is a new invention or not, and whether it is useful to the general public or not, and thereafter decide whether or not to register such patent.

(2) In case the Department concludes that any patent should not be registered, it shall give a notice to the applicant to the effect that the patent cannot be registered according to his/her application.

Section 6: Circumstances which patent cannot be registered

(1) The Department shall not register any patent under this Act in the following circumstances:-
   (a) In case the patent is already registered in the name of any other person, or
   (b) In case the applicant him/herself is not the inventor of the patent sought to be so registered nor has acquired rights over it from the original inventor, or
   (c) In case the patent sought to be registered is likely to adversely affect the public health, conduct or morality or the national interest, or
   (d) In case it is contradictory to the prevailing laws (the registration of the patent) will constitute a contravention of existing Nepal law.

(2) In the circumstances mentioned above, the Department may cancel the registration of any patent which had been registered. Provided that the Department shall, before cancelling the registration of any patent, provide reasonable opportunity to the patentee to show the cause, if any, why the registration of this patent should not be cancelled.

Section 7: Registration of Patent

(1) On receipt of applications filed under Section 4 for registration of a patents, the Department shall, after completing necessary investigations under Section 5 issue a registration certificate in a format as specified in Schedule 2 (a) to the applicant, except in the circumstance mentioned in Section 6.
(2) For obtaining the certificate mentioned in Sub-Section (1), the applicant shall pay the registration fees as to the department specified in schedule 3 (1) (b).

Section 7A: Registered patents to be published

(1) Patents registered under this Act, other than those which must be kept secret in the national interest, shall be published by the Department in the Nepal Gazette for the information of the public.
(2) In case anybody desires to see or copy the particulars, maps, or drawings of a patent published under Sub-Section (1), one may be allowed to do so after paying the fees prescribed by the Department.
(3) In case anyone has any objection to such a patent, one may file a complaint with the Department within a period of 35 days from the date of seeing or copying the patent under Sub-Section 9(2).
(4) In case any complaint is received under Sub-Section (3), the Department shall take necessary Action after conducting inquiries

Section 8: Term of Patent

(1) The title of the patentee to the patent shall be valid only for a period of seven years from the date of registration thereof under Section 7, except when it is renewed under Section 23 B.
(2) Notwithstanding, anything contained in Sub-Section (1),in the case of patent registered before the commencement of this Section, the term fixed according to the provision in force at the time of registration thereof shall be valid After the expiry of that term, the patent must be renewed under Section 23B.

Section 9: [Deleted in the amendment 2063]

Section 10: Submission of design or model of Patent to government archives:

The patentee shall submit to the National Archive also a copy of the design or model of the article manufactured according to the patent registered under this Act.

Section 11: Penalty for violation of Section 3

A person, who commits any of the acts, shall be fined as per gravity of offense by the order of the Department and the goods or commodities related to the offense shall be confiscated:

(a) A fine of upto Five Hundred Thousand Rupees for committing an offense mentioned in Sub-section 2 of Section 3.

(b) A fine of upto Two Hundred and Fifty Thousand (Two lac fifty thousand) Rupees for committing an attempt or abetment of an offense mentioned in Sub-section (2) of Section 3.

Trade Secret

A trade secret is defined as business information that represents something of economic value, has required effort or cost to develop, has some degree of uniqueness or novelty, is generally unknown to the public, and is kept confidential. Trade secret protection begins by identifying all the information that must be protected—from undisclosed patent applications to market research and business plans— and developing a comprehensive strategy for keeping the information secure.

Trade secret law protects only against the misappropriation of trade secrets. If competitors come up with the same idea on their own, it is not misappropriation; in other words, the law doesn't prevent someone from using the same idea if it was developed independently.

Trade secret laws protect more technology worldwide than patent laws do, in large part because of the following key advantages:

- There are no time limitations on the protection of trade secrets, as there are with patents and copyrights.
- There is no need to file an application, make disclosures to any person or agency, or disclose a trade secret to outsiders to gain protection. Hence, no filing or application fees are required to protect a trade secret.
- Although patents can be ruled invalid by the courts, meaning that the affected inventions no longer have patent protection, this risk does not exist for trade secrets.

Trade Secret Laws

Trade secret protection laws vary greatly from country to country. For example, the Philippines provides no legal protection for trade secrets. In some European countries, pharmaceuticals, methods of medical diagnosis and treatment, and information technology cannot be patented. Many Asian countries require foreign corporations operating there to transfer rights to their technology to locally controlled enterprises. (Coca-Cola reopened its operations in India in 1993 after halting sales for 16 years to protect the "secret formula" for its soft drink, even though India's vast population represented a huge potential market.) American businesses that seek to operate in foreign jurisdictions or enter international markets

must take these differences into account. The misappropriation of trade secrets is estimated to cost U.S. companies somewhere between $160 billion and $480 billion each year.

Employees and Trade Secrets

Employees are the greatest threat to the loss of company trade secrets—they might accidentally disclose trade secrets or steal them for monetary gain. Organizations must educate employees about the importance of maintaining the secrecy of corporate information.

Trade secret information should be labeled clearly as confidential and should only be accessible by a limited number of people. Most organizations have strict policies regarding nondisclosure of corporate information.

Because organizations can risk losing trade secrets when key employees leave, they often try to prohibit employees from revealing secrets by adding nondisclosure clauses to employment contracts. Thus, departing employees cannot take copies of computer programs or reveal the details of software owned by the firm.

Defining reasonable nondisclosure agreements can be difficult, as seen in the following example involving Apple. In addition to filing hundreds of patents on iPhone technology, the firm put into place a restrictive nondisclosure agreement to provide an extra layer of protection. Many iPhone developers complained bitterly about the tough restrictions, which prohibited them from talking about their coding work with anyone not on the project team and even prohibited them from talking about the restrictions themselves. Eventually, Apple admitted that its nondisclosure terms were overly restrictive and loosened them for iPhone software that was already released.

Another option for preserving trade secrets is to have an experienced member of the human resources department conduct an exit interview with each departing employee. A key step in the interview is to review a checklist that deals with confidentiality issues. At the end of the interview, the departing employee is asked to sign an acknowledgment of responsibility not to divulge any trade secrets.

Employers can also use noncompete agreements to protect intellectual property from being used by competitors when key employees leave. A noncompete agreement prohibits an employee from working for any competitors for a period of time, often one to two years. When courts are asked to settle disputes over noncompete agreements, they must weigh several factors. First, they must consider the reasonableness of the restriction and how it protects confidential and trade secret information of the former employer. Second, they must weigh the employee's right to work and seek employment in the area where the employee has gained skill, experience, and business contacts. The courts also consider geographic area and the length of time of the restriction in relation to the pace of change in the industry.

Intellectual Property Issues

Some of the issues related to intellectual property are: plagiarism, reverse engineering, open source code, competitive intelligence, trademark infringement, and cybersquatting.

Plagiarism

Plagiarism is the act of stealing someone's ideas or words and passing them off as one's own. The explosion of electronic content and the growth of the web have made it easy to cut and paste paragraphs into term papers and other documents without proper citation or quotation marks. To compound the

problem, hundreds of online "paper mills" enable users to download entire term papers. Although some sites post warnings that their services should be used for research purposes only, many users pay scant heed. As a result, plagiarism has become an issue from elementary schools to the highest levels of academia.

Plagiarism also occurs outside academia. Popular literary authors, playwrights, musicians, journalists, and even software developers have been accused of it.

Despite codes of ethics in place that clearly define plagiarism and prescribe penalties ranging from no credit on a paper to expulsion, many students still do not understand what constitutes plagiarism. Some students believe that all electronic content is in the public domain, while other students knowingly commit plagiarism either because they feel pressure to achieve a high GPA or because they are too lazy or pressed for time to do original work.

A recent survey reported that 55 percent of university presidents felt that plagiarism has increased over the past decade in spite of increased efforts to combat the practice. Plagiarism by students taking free online courses from Coursea has become so widespread that one professor felt compelled to post a request for his 39,000 students to stop the practice after many of the students complained about their fellow students.

Some instructors say that being familiar with a student's style of writing, grammar, and vocabulary enables them to determine if the student actually wrote a paper. In addition, plagiarism detection systems (see Table 6-2) allow teachers, corporations, law firms, and publishers to check for matching text in different documents as a means of identifying potential plagiarism.

TABLE 6-2 Partial list of plagiarism detection services and software

Name of service	Website	Provider
iThenticate	www.ithenticate.com	iParadigms
Turnitin	www.turnitin.com	iParadigms
SafeAssign	www.safeassign.com	Blackboard
Glatt Plagiarism Services	www.plagiarism.com	Glatt Plagiarism Services

Turnitin, a software product developed by California-based iParadigms, supports 15 languages and is used by over 10,000 educational institutions around the world. It uses three primary databases for content matching with over 58 billion web pages, some 570 million archived student papers, and 150 million articles from over 110,000 journals, periodicals, and books.

iThenticate is available from the same company that created Turnitin, but it is designed to meet the needs of members of the information industry, such as publishers, research facilities, legal firms, government agencies, and financial institutions. Interestingly, four high school students brought a lawsuit against iParadigms, accusing the firm of copyright infringement. The basis of their lawsuit was that the firm's primary product, Turnitin, used archived student papers without their permission to assess the originality of newly submitted papers. However, both a district court and a court of appeals ruled that the use of student papers for purposes of plagiarism detection constitutes fair use and is therefore not a copyright infringement. A U.S. court of appeals ruled that such use of student papers "has a protective effect" on

the future marketability of the students' works and "provides a substantial public benefit through the network of institutions using Turnitin."

The following list shows some of the actions that schools can take to combat student plagiarism:

- Help students understand what constitutes plagiarism and why they need to cite sources properly.
- Show students how to document web pages and materials from online databases.
- Schedule major writing assignments so that portions are due over the course of the term, thus reducing the likelihood that students will get into a time crunch and be tempted to plagiarize to meet the deadline.
- Make clear to students that instructors are aware of Internet paper mills.
- Ensure that instructors both educate students about plagiarism detection services and make them aware that they know how to use these services.
- Incorporate detection software and services into a comprehensive antiplagiarism program

Plagiarism can also be an issue in the field of software development. Measure of Software Similarity (MOSS) is software used to measure the similarities among computer programs written in languages such as Ada, C, C++, Java, Lisp, and Paschal. MOSS is used to detect plagiarism in computer programming classes and commercial software.

Reverse Engineering

Reverse engineering is the process of taking something apart in order to understand it, build a copy of it, or improve it. It was originally applied to computer hardware but is now commonly applied to software as well. Reverse engineering of software involves analyzing it to create a new representation of the system in a different form or at a higher level of abstraction. Often, reverse engineering begins by extracting design-stage details from program code. Design-stage details about an information system are more conceptual and less defined than the program code of the same system.

Microsoft has been accused repeatedly of reverse engineering products—ranging from the Apple Macintosh user interface to many Apple operating system utility features that were incorporated into DOS (and later Windows), to early word-processing and spreadsheet programs that set the design for Word and Excel, to Google's methods for improving search results for its Bing search engine.

One frequent use of reverse engineering for software is to modify an application that ran on one vendor's database so that it can run on another's (e.g., from Access to Oracle). Database management systems use their own programming language for application development. As a result, organizations that want to change database vendors are faced with rewriting existing applications using the new vendor's database programming language. The cost and length of time required for this redevelopment can deter an organization from changing vendors and deprive it of the possible benefits of converting to an improved database technology.

Using reverse engineering, a developer can use the code of the current database programming language to recover the design of the information system application. Next, code-generation tools can be used to take the design and produce code (forward engineer) in the new database programming language. This reverse-engineering and code-generating process greatly reduces the time and cost needed to migrate the organization's applications to the new database management system. No one challenges the right to use this process to convert applications developed in-house. After all, those applications were developed and are owned by the companies using them. It is quite another matter, however, to use this process on

a purchased software application developed and licensed by outside parties. Most IT managers would consider this action unethical because the software user does not actually own the right to the software. In addition, a number of intellectual property issues would be raised, depending on whether the software was licensed, copyrighted, or patented.

Other reverse-engineering issues involve tools called compilers and decompilers. A compiler is a language translator that converts computer program statements expressed in a source language (such as Java, C, C++, and COBOL) into machine language (a series of binary codes of 0s and 1s) that the computer can execute. When a software manufacturer provides a customer with its software, it usually provides the software in machine-language form. Tools called reverse-engineering compilers, or decompilers, can read the machine language and produce the source code. For example, Reverse Engineering Compiler (REC) is a decompiler that reads an executable, machine-language file and produces a C-like representation of the code used to build the program.

Decompilers and other reverse-engineering techniques can be used to reveal a competitor's program code, which can then be used to develop a new program that either duplicates the original or interfaces with the program. Thus, reverse engineering provides a way to gain access to information that another organization may have copyrighted or classified as a trade secret.

The courts have ruled in favor of using reverse engineering to enable interoperability. In the early 1990s, video game maker Sega developed a computerized lock so that only Sega video cartridges would work on its entertainment systems. This essentially shut out competitors from making software for the Sega systems. Sega Enterprises Ltd. v. Accolade, Inc. dealt with rival game maker Accolade's use of a decompiler to read the Sega software source code. With the code, Accolade could create new software that circumvented the lock and ran on Sega machines. An appeals court ultimately ruled that if someone lacks access to the unprotected elements of an original work and has a "legitimate reason" for gaining access to those elements, disassembly of a copyrighted work is considered to be a fair use under section 107 of the Copyright Act. The unprotected element in this case was the code necessary to enable software to interoperate with the Sega equipment. The court reasoned that to refuse someone the opportunity to create an interoperable product would allow existing manufacturers to monopolize the market, making it impossible for others to compete. This ruling had a major impact on the video game industry, allowing video game makers to create software that would run on multiple machines.

Software license agreements increasingly forbid reverse engineering. As a result of the increased legislation affecting reverse engineering, some software developers are moving their reverse-engineering projects offshore to avoid U.S. rules.

The ethics of using reverse engineering are debated. Some argue that its use is fair if it enables a company to create software that interoperates with another company's software or hardware and provides a useful function. This is especially true if the software's creator refuses to cooperate by providing documentation to help create interoperable software. From the consumer's standpoint, such stifling of competition increases costs and reduces business options. Reverse engineering can also be a useful tool in detecting software bugs and security holes.

Others argue strongly against the use of reverse engineering, saying it can uncover software designs that someone else has developed at great cost and taken care to protect. Opponents of reverse engineering contend it unfairly robs the creator of future earnings and significantly reduces the business incentive for software development.

Open Source Code

Historically, the makers of proprietary software have not made their source code available, but not all developers share that philosophy. Open source code is any program whose source code is made available for use or modification, as users or other developers see fit. The basic premise behind open source code is that when many programmers can read, redistribute, and modify a program's code, the software improves. Programs with open source code can be adapted to meet new needs, and bugs can be rapidly identified and fixed. Open source code advocates believe that this process produces better software than the traditional closed model.

A considerable amount of open source code is available, and an increasing number of organizations use open source code. For example, much of the Internet runs on open source code; when you access a web page, send a text, or post a status update, you are likely using an open source program such as Linux, Apache HTTP, PHP, Perl, Python, or Ruby.

A common use of open source software is to move data from one application to another and to extract, transform, and load business data into large databases. Two frequently cited reasons for using open source software are that it provides a better solution to a specific business problem and that it costs less. Open source software is used in applications developed for Apple's iPhone, Android smartphones, and other mobile devices. See Table 6-3 for a partial listing of commonly used open source software.

TABLE 6-3 Commonly used open source software

Open source web browsers	Open source database management systems	Open source accounting applications
Chrome	MySQL	GnuCash
Firefox	PostgreSQL	SQL Ledger
Opera	SQLite	X Tuple PostBooks
Chromium	MongoDB	Compiere
Midori	Cubrid	Turbo Cash
QupZilla	MariaDB	KashFlow

Reasons that firms or individual developers create open source code, even though they do not receive money for it, include the following:

- Some people share code to earn respect for solving a common problem in an elegant way.
- Some people have used open source code that was developed by others and feel the need to pay back by helping other developers.
- A firm may be required to develop software as part of an agreement to address a client's problem. If the firm is paid for the employees' time spent to develop the software rather than for the software itself, it may decide to license the code as open source and use it either to promote the firm's expertise or as an incentive to attract other potential clients with a similar problem.
- A firm may develop open source code in the hope of earning software maintenance fees if the end user's needs change in the future.
- A firm may develop useful code but may be reluctant to license and market it, and so might donate the code to the general public.

There are various definitions of what constitutes open source code, each with its own idiosyncrasies. The GNU General Public License (GPL) was a precursor to the open source code defined by the Open Source Initiative (OSI). GNU is a computer operating system comprised entirely of free software; its name is a recursive acronym for GNUs Not Unix. The GPL is intended to protect GNU software from being made proprietary, and it lists terms and conditions for copying, modifying, and distributing free software. The OSI is a nonprofit organization that advocates for open source and certifies open source licenses. Its certification mark, "OSI Certified," may be applied only to software distributed under an open source license that meets OSI criteria, as described at its website, www .opensource.org.

A software developer could attempt to make a program open source simply by putting it into the public domain with no copyright. This would allow people to share the program and their improvements, but it would also allow others to revise the original code and then distribute the resulting software as their own proprietary product. Users who received the program in the modified form would no longer have the freedoms associated with the original software. Use of an open source license avoids this scenario.

Competitive Intelligence

Competitive intelligence is legally obtained information that is gathered to help a company gain an advantage over its rivals. For example, some companies have employees who monitor the public announcements of property transfers to detect any plant or store expansions of competitors. An effective competitive intelligence program requires the continual gathering, analysis, and evaluation of data with controlled dissemination of useful information to decision makers. Competitive intelligence is often integrated into a company's strategic plan and executive decision making.

Competitive intelligence is not the same as industrial espionage, which is the use of illegal means to obtain business information not available to the general public. In the United States, industrial espionage is a serious crime that carries heavy penalties. Almost all the data needed for competitive intelligence can be collected from examining published information or interviews, as outlined in the following list:

- 10-K or annual reports
- An SC 13D acquisition—a filing by shareholders who report owning more than five percent of common stock in a public company
- 10-Q or quarterly reports
- Press releases
- Promotional materials
- Websites
- Analyses by the investment community, such as a Standard & Poor's stock report
- Dun & Bradstreet credit reports
- Interviews with suppliers, customers, and former employees
- Calls to competitors' customer service groups
- Articles in the trade press
- Environmental impact statements and other filings associated with a plant expansion or construction
- Patents

By coupling this competitive intelligence data with analytical tools and industry expertise, an experienced analyst can make deductions that lead to significant information. According to Avinash Kaushik, self-described "analytics evangelist" for Google, "The Web is the best competitive intelligence tool in the

world." Kaushik likens the failure to use such data to driving a car 90 miles an hour with the windshield painted black, then scraping off the paint and realizing "you're going 90 but everyone else is going 220, and you're going to die."

A wide array of software applications, databases, and social media tools are available for companies—and individuals—looking for competitive intelligence data, including the following:

- Rapportive is software that can be added to your email application or web browser to provide you with rich contact profiles that show you what people look like, where they are based, and what they do. Such information can help you build rapport quickly by enabling you to mention shared interests.
- Crunchbase is a free database of technology of over 110,000 companies, people, and investors.
- CORI (http://cori.missouri.edu/pages/ksearch.htm) is an online database of more than 690,000 contract documents, most of which are executed agreements made public through SEC and other regulatory agency filings; users can access the database using a full-text search and retrieval system.
- ThomasNet.com is an excellent source for identifying suppliers and sources for products.
- WhoGotFunded.com is a comprehensive website of data about what organizations have received funding and for what purposes.

Competitive intelligence gathering has become enough of a science that over two dozen colleges and universities offer courses or even entire programs in this subject. Also, the Strategic and Competitive Intelligence Professionals organization (www.scip.org) offers ongoing training programs and conferences.

Without proper management safeguards, the process of gathering competitive intelligence can cross over to industrial espionage and dirty tricks. One frequently used dirty trick is to enter a bar near a competitor's plant or headquarters, strike up a conversation, and ply people for information after their inhibitions have been weakened by alcohol.

Competitive intelligence analysts must avoid unethical or illegal actions, such as lying, misrepresentation, theft, bribery, or eavesdropping with illegal devices.

Trademark Infringement

A trademark is a logo, package design, phrase, sound, or word that enables a consumer to differentiate one company's products from another's. Consumers often cannot examine goods or services to determine their quality or source, so instead they rely on the labels attached to the products.

The Patent, Design and Trademark Act, 2022 provides the legal framework related to trademark in Nepal. The law gives the trademark's owner the right to prevent others from using the same mark or a confusingly similar mark on a product's label.

Provisions related to Trademark in Nepal

Section 16: Acquisition of title to trade marks

(1) A person may acquire, under this Act, title to the trade-mark of his business, upon registration in the department under Section 18.

(2) No one shall copy or use or cause to use in the name of the others without transforming the ownership or written permission pursuant to Section 21d, the trademark registered in the name of any person pursuant to this Act.

Section 17: Application for registration of trade mark

(1) A person desirous to register the trademark of his business registered under Section 18 shall submit to the Department an application in a format as specified in Schedule 1(c), along with four specimen of such trade-marks, shall conduct necessary investigation and provide sufficient opportunity to defend him/herself and also conduct further inquiry based on the dense made and if finds it appropriate to register it.
(2) The person submitting application under Sub-section (1), shall pay an application fee to the department as specified in Schedule 3(3) (a).

Section 18: Registration of trade mark

(1) In case any person files an application under Section 17 for registration of trademark, the department shall register such trademark in the name of the applicant the specimen form indicated in Schedule 2 (c), shall conduct necessary investigation and provide sufficient opportunity to defend him/herself and also conduct further inquiry based on the cense made and if finds it appropriate to register it. Provided that in case it is felt such trade-mark may hurt the prestige of any individual or institution or adversely affect the public conduct or morality or undermine the national interest or the reputation of the trade-mark of any other person, or in case such trade-mark is found to have already been registered in the name of another person, it shall not be registered
(2) To obtain a certificate as mentioned in Sub-Section (1), the applicant shall pay registration fees as specified in Schedule 3 (3) (b) to the Department.
(3) The Department may cancel the registration of any trade-mark, if it is satisfied that any of the circumstance prescribed in the provision of Sub-Section (1) exists. Provided that the Department shall, before cancelling the registration of a trademark provide a reasonable opportunity to the holder of the trademark to show cause if any, why his/her trademark should not be cancelled.

Section 18A Classification of Goods and Services for Trade-Mark Registration

(1) For the purpose of registering trade-marks related to any goods or services, Government of Nepal may classify such goods or services by a notification in the Nepal Gazette.
(2) Separate application shall be submitted to register trade- marks of goods or services placed in different categories.
(3) The trade-mark registered for goods or services in one category under Sub-section (1) may be registered for goods or services under another category if it so falls.

Section 18B Prohibition to Use Trade-marks:

No trade-mark may be used as a registered trade-mark without registering it at the Department.

Section 18C. Time Limit for Use of Trade-marks: In case a trade-mark registered at the Department is not brought into use within one year from the date of registration thereof, the department shall conduct necessary inquiries and cancel such registration.

Section 18D Term of Trade-Marks: The title of the person in whose name a trade-mark has been registered under Section 18 shall remain valid for a period of seven years from the date of registration thereof, except when it is renewed under Section 18.

Section 19 Punishment for illegal use of trade mark:

In case anyone who, violates Sub-Section (2) of Section 16, or brings into use a trademark which has been cancelled under Sub-section (3) of Section 18, or violates Section 18B, may be punished with a fine not exceeding is One Hundred Thousand Rupees and articles and goods connected with such offense confiscated on the orders of the Department as per the gravity of offense.

Cybersquatting

Companies that want to establish an online presence know that the best way to capitalize on the strengths of their brand names and trademarks is to make the names part of the domain names for their websites. When websites were first established, there was no procedure for validating the legitimacy of requests for website names, which were given out on a first-come, first-served basis. And in the early days of the web, many cybersquatters registered domain names for famous trademarks or company names to which they had no connection, with the hope that the trademark's owner would eventually buy the domain name for a large sum of money.

The main tactic organizations use to circumvent cybersquatting is to protect a trademark by registering numerous domain names and variations as soon as the organization knows it wants to develop a web presence (e.g., UVXYZ.com, UVXYZ.org, and UVXYZ.info). In addition, trademark owners who rely on non-English-speaking customers often register their names in multilingual form. Registering additional domain names is far less expensive than attempting to force cybersquatters to change or abandon their domain names.

Other tactics can also help curb cybersquatting. For example, the Internet Corporation for Assigned Names and Numbers (ICANN) is a nonprofit corporation responsible for managing the Internet's domain name system. Prior to 2000, eight generic top-level domain names were in existence: .com, .edu, .gov, .int, .mil, .net, .org, and .arpa. In 2000, ICANN introduced seven more: .aero, .biz, .coop, .info, .museum, .name, and .pro. In 2004, ICANN introduced .asia, .cat, .mobi, .tel, and .travel. The generic top-level domain .xxx was approved in 2011. With each new round of generic top-level domains, current trademark holders are given time to assert rights to their trademarks in the new top-level domains before registrations are opened up to the general public. As of March 2016, there were 882 top-level domain names, which can be found at http://blog.europeandomaincentre .com/list-of-domain-extensions/#.

ICANN also has a Uniform Domain-Name Dispute-Resolution Policy, under which most types of trademark-based domain name disputes must be resolved by agreement, court action, or arbitration before a registrar will cancel, suspend, or transfer a domain name. The ICANN policy is designed to provide for the fast, relatively inexpensive arbitration of a trademark owner's complaint that a domain name was registered or used in bad faith.

The Anticybersquatting Consumer Protection Act (ACPA) in US, enacted in 1999, allows trademark owners to challenge foreign cybersquatters who might otherwise be beyond the jurisdiction of U.S. courts. Also under this act, trademark holders can seek civil damages of up to $100,000 from cybersquatters that register their trade names or similar-sounding names as domain names. The act also helps trademark

owners challenge the registration of their trademark as a domain name even if the trademark owner has not created an actual website.

In 1994, a reporter bought the mcdonalds.com domain for a story he was writing for Wired magazine about the value of domain names. At this very early stage of the Internet, nobody at McDonald's saw any value to being online. Eventually McDonald's realized their mistake and wanted to use the domain name. So the author persuaded the company to make a charitable contribution of $3,500 to a public school to provide computers and Internet access in exchange for returning the domain name to McDonalds.

What does the term intellectual property encompass, and what measures can organizations take to protect their intellectual property?

- Intellectual property is a term used to describe works of the mind—such as art, books, films, formulas, inventions, music, and processes—that are distinct and owned or created by a single person or group.
- Copyrights, patents, trademarks, and trade secrets form a complex body of law relating to the ownership of intellectual property, which represents a large and valuable asset to most companies. If these assets are not protected, other companies can copy or steal them, resulting in significant loss of revenue and competitive advantage.
- A copyright is the exclusive right to distribute, display, perform, or reproduce an original work in copies; to prepare derivative works based on the work; to and grant these exclusive rights to others.
- Copyright infringement is a violation of the rights secured by the owner of a copyright. Infringement occurs when someone copies a substantial and material part of another's copyrighted work without permission.
- Copyright law has proven to be extremely flexible in covering new technologies, including software, video games, multimedia works, and web pages. However, evaluating the originality of a work can be difficult and disagreements over whether or not a work is original sometimes lead to litigation.
- Copyrights provide less protection for software than patents; software that produces the same result in a slightly different way may not infringe a copyright if no copying occurred.
- The fair use doctrine established four factors for courts to consider when deciding whether a particular use of copyrighted property is fair and can be allowed without penalty:
  (1) the purpose and character of the use,
  (2) the nature of the copyrighted work,
  (3) the portion of the copyrighted work used, and
  (4) the effect of the use on the value of the copyrighted work.
- The use of copyright to protect computer software raises many complicated issues of interpretation of what constitutes infringement.
- The original General Agreement on Tariffs and Trade (GATT), signed in 1993, created the World Trade Organization (WTO) in Geneva, Switzerland, to enforce compliance with the agreement. GATT includes a section covering copyrights called the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS).
- The WTO is a global organization that deals with rules of international trade based on WTO agreements that are negotiated and signed by representatives of the world's trading nations The

goal of the WTO is to help producers of goods and services, exporters, and importers conduct their business.

- The World Intellectual Property Organization (WIPO) is an agency of the United Nations dedicated to "the use of intellectual property as a means to stimulate innovation and creativity."
- A patent is a grant of property right issued by the U.S. Patent and Trademark Office (USPTO) to an inventor that permits its owner to exclude the public from making, using, or selling a protected invention, and it allows for legal action against violators. A patent prevents copying as well as independent creation (which is allowable under copyright law).
- For an invention to be eligible for a patent, it must fall into one of three statutory classes of items that can be patented: (1) it must be useful, (2) it must be novel, and (3) it must not be obvious to a person having ordinary skill in the same field.
- A utility patent is "issued for the invention of a new and useful process, machine, manufacture, or composition of matter, or a new and useful improvement thereof." A design patent, which is "issued for a new, original, and ornamental design embodied in or applied to an article of manufacture," permits its owner to exclude others from making, using, or selling the design in question.
- Unlike copyright infringement, for which monetary penalties are limited to certain specified dollar amounts, if the court determines that a patent has been intentionally infringed, it can award up to triple the amount of the damages claimed by the patent holder.
- The Leahy-Smith America Invents Act changed the U.S. patent system from a "first-to-invent" to a "first-inventor-to file" system and expanded the definition of prior art, which is used to determine the novelty of an invention and whether it can be patented. The act made it more difficult to obtain a patent in the United States.
- The courts and the U.S. Patent and Trademark Office (USPTO) have changed their attitudes and opinions of the patenting of software over the years.
- To qualify as a trade secret, information must have economic value and must not be readily ascertainable. In addition, the trade secret's owner must have taken steps to maintain its secrecy. Trade secret laws do not prevent someone from using the same idea if it was developed independently or from analyzing an end product to figure out the trade secret behind it.
- Trade secrets are protected by the Uniform Trade Secrets Act, the Economic Espionage Act, and the Defend Trade Secrets Act, which amended the Economic Espionage Act to create a federal civil remedy for trade secret misappropriation.
- Trade secret law has three key advantages over the use of patents and copyrights in protecting companies from losing control of their intellectual property:
  (1) There are no time limitations on the protection of trade secrets, unlike patents and copyrights;
  (2) there is no need to file any application or otherwise disclose a trade secret to outsiders to gain protection; and
  (3) there is no risk that a trade secret might be found invalid in court.
- Because organizations can risk losing trade secrets when key employees leave, they often try to prohibit employees from revealing secrets by adding nondisclosure clauses to employment contracts. Employers can also use noncompete agreements to protect intellectual property from being used by competitors when key employees leave. A noncompete agreement prohibits an employee from working for any competitors for a period of time, often one to two years.

What are some of the current issues associated with the protection of intellectual property?

- Plagiarism is the act of stealing someone's ideas or words and passing them off as one's own. Plagiarism detection systems enable people to check the originality of documents and manuscripts.
- Reverse engineering is the process of breaking something down in order to understand it, build a copy of it, or improve it. It was originally applied to computer hardware but is now commonly applied to software.
- In some situations, reverse engineering might be considered unethical because it enables access to information that another organization may have copyrighted or classified as a trade secret.
- Recent court rulings and software license agreements that forbid reverse engineering, as well as restrictions in the DMCA, have made reverse engineering a riskier proposition in the United States.
- Open source code is any program whose source code is made available for use or modification, as users or other developers see fit. The basic premise behind open source code is that when many programmers can read, redistribute, and modify it, the software improves. Open source code can be adapted to meet new needs, and bugs can be rapidly identified and fixed.
- Competitive intelligence is legally obtained information that is gathered to help a company gain an advantage over its rivals. It is not the same as industrial espionage, which is the use of illegal means to obtain business information that is not readily available to the general public. In the United States, industrial espionage is a serious crime that carries heavy penalties.
- Competitive intelligence analysts must take care to avoid unethical or illegal behavior, including lying, misrepresentation, theft, bribery, or eavesdropping with illegal devices.
- A trademark is a logo, package design, phrase, sound, or word that enables a consumer to differentiate one company's products from another's. Website owners who sell trademarked goods or services must take care to ensure they are not sued for trademark infringement.
- Cybersquatters register domain names for famous trademarks or company names to which they have no connection, with the hope that the trademark's owner will eventually buy the domain name for a large sum of money.
- The main tactic organizations use to circumvent cybersquatting is to protect a trademark by registering numerous domain names and variations as soon as they know they want to develop a web presence.