The term intellectual property, in a very general way, describes the creations, ideas, and knowledge related to the human mind; laws about intellectual property rights help protect the interests of the creators of such works. Copyright law, for example, is meant to give a particular work’s creator control over its copying and distribution for an extended period of time. It makes it illegal to copy, reproduce, or otherwise use someone else’s expression of ideas without that person’s explicit consent. Intellectual property can include, regardless of format,

- literary works, such as books, magazines, newspapers, memos, trade journals, training materials, and emails;
- sound recordings, such as CDs, records, and podcasts;
- dramatic productions and accompanying music, such as plays, screenplays, and scripts;
- audio and visual works, such as motion pictures and presentations;
- computer software;
- graphics, pictures, and images;
- musical works, including compositions of both words and music (lyrics without music would fall into the literary works category);
- artistic works, such as paintings, drawings, photographs, sculptures, maps, and architectural works and designs; and
- performances, such as those by actors, musicians, dancers, mime artists, and singers.

Generally, laws protect intellectual property for two specific reasons: to give a work’s creator the opportunity to publicly express his or her creation and to encourage that creation’s fair trade. However, because of the technological advances we’ve all enjoyed in recent years, especially those related to the Internet, enforcement of laws related to intellectual property rights has become increasingly difficult. This article examines the problem of copyright infringement and the balance between creator and public interests.

Today’s Problem
Technology has reached the point where Internet users can copy almost anything with the click of a button, at no cost whatsoever. Obviously, this hurts the work’s creator: unauthorized copying prevents that person from collecting any profit as potential consumers are no longer compelled to buy the work when it’s available elsewhere for free.

From the countless articles available on the subject, statistics indicate that most copyright infringement today is committed by young adults and teenagers, with many of them seemingly unaware that they’re violating author rights. They justify their illegal activities as being a simple way to enjoy something without having to compensate the major entertainment industry groups—such as the Motion Picture Association of American (MPAA) and the Recording Industry Association of America (RIAA)—that have profited in the past. Although these groups have spent millions of dollars in their fight against the illegal downloading and copying of copyrighted materials, many people believe that they’ve focused on the wrong end of the problem. So far, they’ve concentrated on shutting down illegal Web sites or pursuing legal action against individuals, but a better approach...
might be to create a successful awareness campaign aimed at the elementary school level or perhaps even earlier.

It’s easy for those who illegally download and copy works to dismiss the claims of groups such as the RIAA and the MPAA: their countermeasures to date have fostered a belief that copying and distributing music, movies, and other works is actually good because it gives the author’s work exposure and only hurts a faceless company. In fact, some view taking digital media owned by major corporations and sharing it with others as an act of revolution or a form of anarchy that promotes the free exchange of information. Or alternatively, “If I can get it for free, why pay for it?”

However, such attitudes don’t take into consideration the rights of the original copyright holders, which is where education and awareness come in: copyright infringement doesn’t just hurt corporate groups such as the RIAA and MPAA; it also hurts the original authors and robs them of justified earnings from their work. Educating children in ethical Internet use and right from wrong before they become proficient with technologies and tools could go a long way in reducing this problem in the future. Similarly, if they’re made aware of the fact that they hurt individuals much more than they do corporate entities by engaging in such activity, they might also reconsider their actions.

The Ins and Outs of Copyrights

The legal protection that a copyright provides takes effect immediately upon a work’s creation. The author who created the work doesn’t need to apply for copyright—it exists automatically. As part of this protection, the author has the right to authorize or prevent certain acts in relation to the work, including

- reproduction in various forms,
- distribution of copies,
- public performance,
- broadcasting or communication to the public,
- translation into other languages, and
- adaption into novel or screenplay.

In spite of such basic provisions, copyright laws don’t have complete power to prevent all uses of an original work from being copied or distributed. In the US, a doctrine in the US Copyright Act called fair use allows for some copying and distribution without the copyright owner’s express consent (www.copyright.gov/fls/fl102.html). However, this doctrine isn’t very clear and simply provides the following factors to consider when analyzing whether fair use of an original work exists:

- the nature of the copyrighted work,
- the amount of the portion used in relation to the entire copyrighted work as a whole,
- the purpose and character of the use, and
- the effect of the use on the copyrighted work’s potential market value.

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Many other countries such as Australia, Canada, New Zealand, the UK, South Africa, and Singapore have similar fair use doctrines referred to as fair dealing, which is a set of possible defenses against copyright infringement (see the Canadian copyright law example at www.cipo.ic.gc.ca). Essentially, fair dealing defines the use of copyrighted materials in such a way that a work’s use doesn’t infringe on its copyright—for example, for the purposes of private studies or research, criticism, review, or news reporting. The main difference between fair use and fair dealing is that the former is generally an open-ended legal doctrine, and the latter is generally more constrained (it provides a list of exemptions that leaves little room for judicial interpretation).

Because there’s no such thing as an international copyright law, the rules governing intellectual property vary from country to country. Naturally, when it comes to copyright duration, the rules are extremely contentious at best. Copyright treaties do exist, such as the Berne Convention (www.wipo.int/treaties/en/ip/berne/), which requires 154 member countries to amend their copyright laws to at least meet the minimum standards for copyright duration (the author’s life plus 50 years). However, because countries are free to protect works for longer periods of time—the US and EU countries, for example, provide copyright protection for the author’s life plus 70 years—someone wanting to use copyrighted intellectual property in a country such as Canada, which
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provides protection for the life of the author plus 50 years, could freely use the work 20 years earlier. Thus, a work can be out of copyright protection in one country yet still protected in others.

Even though agreements exist between countries, it’s not easy to determine when a copyright will expire. In the US, the simplest rule to remember is that copyrights have expired on all works registered or published before 1923—all such works have entered the public domain, meaning anyone can use them. From 1924 forward, however, copyright duration in the US depends on three timeframes:

- Created on or after 1 January 1978—author’s life plus 70 years, unless the work is made for hire or anonymously produced, in which case the protection is for 95 years from publication or 120 years from creation, whichever is shorter.
- Created before 1978 but not published (created but not published or registered for copyright protection)—same as above, life plus 70 or 95/120 years.
- Created and published or registered before 1978—rules vary depending on the specific dates involved. For example, if a work was published from 1964 to 1977, protection exists for a 28-year initial term plus a 67-year automatic renewal term. For works published from 1923 to 1963, protection exists for 28 years plus a 67-year renewal if the renewal registration is filed during the 28th year of the initial term.

Sounds complicated, right? The best advice for interested readers is to consult the US copyright law at www.copyright.gov to determine the specific duration of copyright protection for a particular work.

Protecting Copyrights

Preventing copyright infringement or violation isn’t easy: even large-scale industry and government efforts to discourage illegal copying and distribution of material on the Internet have been both unconvincing and ineffective. The problem requires a different approach—one that encompasses several related solutions working together.

New Copyright Laws

Many people agree that current copyright laws are complicated, poorly written, and, consequently, poorly understood. Moreover, they’re outdated, often written for and applicable to an analog world instead of the digital one in which we live today. Even some of the most recent enhancements to US copyright law (such as the Digital Millennium Copyright Act) have proven to be ineffective. If they’re clearly written and intuitive, new laws can go a long way toward improving awareness and general education.

Increased Education and Awareness

School programs that begin at an early age could improve awareness among young people—widely regarded as the biggest copyright infringers—about the need to protect intellectual property and creative works. Ensuring that children understand how copyright provides incentives to those who create original works, thereby encouraging others to do the same, might also make them far more likely to respect and comply with copyright laws.

Improved Digital Watermarking and DRM Technologies

Digital watermarking is the process of embedding information into a signal, the idea being that it carries saved information—audio, picture, or video—from copy to copy. Deploying information in the signal that limits or restricts its usage is part of digital rights management (DRM) technology, which to date, has been extremely difficult to implement, especially on the Internet. However, if DRM technologies and solutions improve, they could effectively protect many different types of intellectual property, including film, audio, gaming systems, e-books, and even electronic documents.

But instead of preventing someone from copying the digital signal, perhaps we should focus on technology that notifies copyright owners of their original work’s usage. This could even lead to an immediate, appropriate payment upon its duplication or use.

Appropriate Pricing

Most people would be willing to pay a small fee if it’s understood by all to be the fair market value of the item being copied or downloaded. The emphasis here is “fair”—it must encourage people to pay the fee for use, yet discourage or deter them from copying or download-
right owners appropriately for their original works. He admits that issues remain to be sorted out—for example, how to track downloads for proper compensation distribution—and he also acknowledges that those not in favor of this universal copyright surcharge might claim that they don’t illegally download, so they’d end up subsidizing those who do. But he believes that those same people already pay a subsidy by way of the increased prices that industry groups impose on legal downloading and store-bought purchases in an effort to recover their losses from illegal activity.

**“Perfect” Distribution**

Notoriously, copyright owners and industry groups such as the RIAA and MPAA have been slow to embrace Internet technologies, but they should realize this opportunity to generate explosive growth for their major marketing and distribution channels. Peer-to-peer networks and distribution sites make it very easy and convenient for Internet users to access original works at an affordable price. We live in an age where almost anything is available at the click of a mouse—consumers are now used to this model and have come to expect it. Anything that requires more effort or money than what people consider to be fair just won’t work.

The proliferation of Internet technologies doesn’t change the fundamental principles behind copyright and our obligation to respect copyright entitlements. Clearly, though, existing copyright laws and policing methods aren’t effective. By combining several options, we could see reduced instances of copyright infringement among Internet users.

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