OPINION

Digital Rights Management
the music industry versus the consumer

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If you listen to music on your computer or on a portable music player you are, sooner or later, going to be affected by digital rights management (DRM).

The music industry has always moved rapidly to accept technological advances: the speed with which CDs replaced vinyl is testament to that.

More recently, music distributors have been moving away from CDs to concentrate their efforts on controlling the "soft" copy formats that exist within the downloadable world.

The rise in popularity of MP3 players and other devices, such as the iPod, have meant that digital copies of music are rapidly becoming the preferred format of younger generations, and it is easy to see why.

Digital copies of music are easy to transfer, transport and store, the only drawback being an occasional small loss in sound quality.

But while it may seem that the modern music consumer is being offered a more user-friendly product, appearances can be deceiving.

The rise of the digital era has also meant that the broader multimedia industries (including music, film and software in general) have had to develop new methods by which to protect their investments and intellectual property rights. No longer does the music industry have to rely solely on the enforcement of the *Copyright Act* 1968 (Cth) (the Act) to deter piracy.

By converting music into a digital format, it becomes possible to include a "physical" barrier to piracy in the actual music/data file that the consumer buys.

Copy protection and other types of DRM allow the music distributor a greater range of options for managing their IP rights, without having to rely on the courts to enforce their interests.

What is DRM?

DRM covers a number of different methods by which the holders of IP rights can control the distribution and use of their product.

Essentially, a DRM product is released in an encrypted form, so to protect the content from unauthorised use.

A user can only access or use the DRM product once they have demonstrated that they are "authorised" to do so; this is generally done through the user providing a password or registration key.

This method of combining encryption and authorisation to protect information is not new. But in the wake of the popularity of MP3s, downloadable music, and file sharing over the Internet, the music industry has welcomed DRM with open arms, in an attempt to regain control over the distribution of music.

The application for DRM systems is broad.

Authorisation for use of a DRM product is not limited to typing in a registration key. Some portable music players have their registration keys "hard wired" so that they will only work in conjunction with particular software.

One of the benefits to the music distributor that arises from a direct linking of music player to software is that the user becomes subject to a licensing agreement. Any number of rights can then be reserved by the music distributor, which they can then alter or remove from the licensee at a later date.

Other methods of DRM used by the music industry to control music distribution have included forms of copy protection that prevent the copying or uploading of a CD onto a computer.

Copy protection used to limit the ability of a user to "format shift" (changing the form which data takes from one form, such as the coding on a CD, into another form, such as an MP3) operates through either the use of specific encryption techniques or by including software programs on the CD that override other computer programs that would normally be used to recognise and upload the CD.

Recent amendments to the Act

Understanding IP and digital rights is increasingly complicated because creators of the technology, as well as the legal profession, have begun to use different terms to describe the same thing.

Under the *Copyright Amendment Act* 2006 (Cth) (the Amendment Act), a DRM is referred to as a technological protection measure (TPM), bringing Australian legislation into line with the US. But the IT industry and the media of both countries still prefer the old term.

Thus lawyers have to become fluent in both sets of terminology in order to communicate with clients and conduct cases.

The Amendment Act has few changes that will favour the music consumer, but notably there has finally been the introduction of an exception for individuals making a copy of their personal music collection.

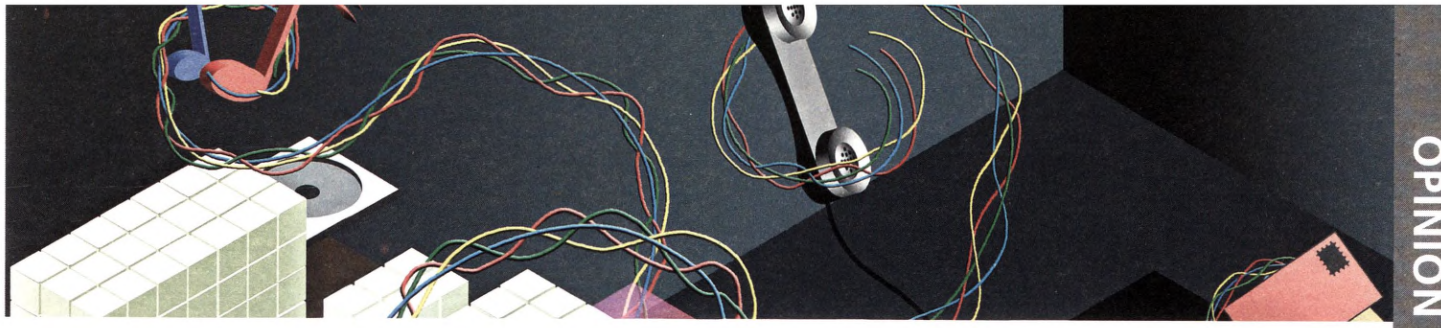
This exception only applies to music that has been format shifted and still does not allow you to make "mix tapes" for your friends or sell the copies on to other people. But shifting your old CDs onto your MP3 player is finally legal, rather than just the songs that you bought from an online store.

Industries that rely on DRM (or rather TPM) have also been afforded greater protection of their IP rights through the prohibitions that have been placed on the circumventing of these protection methods.

Now it is not only the music that is protected by copyright law, but also the protection method used to prevent piracy of the music falls under the shield of copyright.

People who never make an infringing copy of a song but break the encryption system used to protect the song can now be targeted by the music industry solely on the basis that they devised a way to breach or circumvent the DRM that was being used.

Potentially this is a huge win for DRM-reliant industries, because the person committing the breach does not have to make a commercial profit or sell infringing copies of music, but merely has to have allowed others to make infringing copies by putting the "crack" into the public domain.



The effect of DRM on the consumer

For music executives, DRM is not merely another method of protecting their IP rights and investments, but it is also a method by which the consumer can be manipulated in their listening and purchasing habits.

Over the past few decades there has been a trend where individual record labels have been taken over by large multinational electronics companies.

DRM has allowed these mega corporations to link music distribution with particular brands of product, thereby enabling the corporation to control greater market shares in both the music industry and the electronic appliance industry.

Apple's DRM system, "FairPlay", is an example of just how much control can be exerted on the consumer's purchasing habits.

I love my iPod, but the song codec (the format in which data is saved to your computer) that it uses requires that I run iTunes and is not compatible with Microsoft's song codec, which the rest of my family uses, making it difficult to listen to their music collections (which, under the Amendment Act, I am allowed to do).

A lack of compatibility is essentially the biggest problem facing the consumer with DRM controlled music.

No more borrowing the latest album from a friend for a week (or a few years). Now you are going to have to borrow their computer and portable music player too. Compounding the compatibility problem are the online music stores. Having purchased an iPod I am now locked into buying music through the iTunes store. Even brand neutral DRM sites, like Napstar, are not available to me.

The same problem exists for all consumers who are using other brands of DRM-based portable music players and online music stores.

Of course, it is possible to buy music through a non-DRM MP3 codec online store and then import the songs into iTunes, but there are limits as to the songs and sites that are available for this.

Consumers are also at the mercy of the music distributors, due to the licensing agreement that they have to agree to when they first turn on their portable music player or create an online account with a store.

More importantly, the licensor can adversely alter the rights of the licensee at any future time. Licences of on-line music stores are generally structured to limit the number of computers and portable music players that a song can be copied to (after the initial purchase has been made).

Burning playlists to CD is permissible with some DRM systems, but again, the number of times this is allowed is limited. There are also restrictions against the reselling of songs and the use of songs in computer edited home movies.

This issue of the restriction of consumers' rights does not exist with music that is not DRM controlled.

Of course, any person that is prepared to risk falling foul of the Amendment Act and has the ability to circumvent protection measures will not consider DRM systems to be anything more than a slight annoyance.

The future for DRM

Although the Amendment Act has increased the ability for the music industry to tackle piracy, the future of DRM music is shaky.

Concerns that non-commercial piracy cannot be stopped and that consumers of online music are becoming disgruntled have led to calls for an end to the music industry's use of DRM.

> In February, Steve Jobs, head of Apple, agreed with those claiming that DRM was no longer working to defeat online music piracy.[1]

One proposal that Apple has put forward is for DRM-free songs to be released by online music stores at a slightly higher fee than DRM-protected songs.

The immediate short-term gain in revenue from higher fees may balance out the concerns of music executives that there would be a long-term loss of revenue from the introduction of DRM-free music.

> How the consumer will respond to paying higher fees to regain the benefits of DRM-free music remains to be seen, and will depend heavily on whether the record labels accept Apple's proposal.[2]

But while some in the music industry are claiming the end is nigh for DRM, the issues surrounding the consumer will not vanish overnight.

First, the major players in the music industry have to agree that music released online will not be subject to DRM and copy protection. Also, there need to be some assurances that the cost to the consumer for DRM-free music will not be exorbitant.

Second, the issue of music player and codec incompatibility needs to be addressed.

Ideally, the companies producing portable music players need access to all types of song codec to make their players universally compatible.

However, the software giants are concerned that allowing their codec to be widely known would make it easier for piracy groups to "crack" their system.

Until the codec issue is resolved the consumer is essentially "stuck" with DRM-based restrictions, even with the changes that are expected to be introduced shortly to online music stores. ■

Postscript: While the music industry is moving away from DRM systems the visual media industries are not. DVD piracy is a big industry and a secure DRM system is seen as vital to stopping it.

The current "format wars" that are taking place between Blue Ray and HDDVD are reminiscent of the video wars of the 1980s. The race is on between the manufacturers of these formats to establish a large enough market share to ensure that they are not the next BETA video.

Endnotes

1. Steve Jobs, "Thoughts on music", 6 February 2007, see **www.apple.com/hotnews/thoughtsonmusic.**
2. At the date of writing this article only EMI had agreed to allow its catalogue to be released through iTunes DRM-free.