

File-Sharers: Criminals, Civil Wrongdoers or the Saviours of the Entertainment Industry? A Research Study into Behaviour, Motivational Rationale & Legal Perception Relating to Cyber Piracy

Michael Filby¹

Abstract

The ongoing battle between file sharers and the entertainment industries is one which has been largely approached from the point of view of the latter parties with the reasoning that the law should be invoked to clamp down on the distribution of unauthorised copies of works through peer to peer networks. This paper argues that the industries, with the assistance of the legislature in certain circumstances, should be focussing their attentions not on limiting the natural evolution being brought about in the digital age, but by recognising that many of the parties labelled as scurrilous pirates are actually a rich market which can be tapped into through alternative means.

An analysis of various theories relating to the routes, impacts and effects of file sharing is applied to a digital distribution model. The model is then expanded to encompass the Efficient Distribution Theory which argues that, through the application of measures which can be cheaply and easily implemented by the entertainment industries, a number of factors can mitigate any negative effects file sharing may cause to the extent that widely distributing digital copies can be directly beneficial to the industries.

The analysis and theory is supported by the results of a research study carried out by the author in February 2007, which are presented in this paper. The findings of the research indicate that those who engage in cyber piracy not only financially spend more on authorised products proliferated by the entertainment industries compared to those who do not engage in piracy, but are also willing to move away from committing tortious acts of copyright infringement if the industries can provide a viable alternative means of digital delivery, inter alia.

1.0: Introduction

“...because of the fact that the VCR is stripping...those markets clean of our profit potential, you are going to have devastation in this marketplace.

Now, is this all? Is it going to get any bigger? Well, I assure you it is...We are going to bleed and bleed and hemorrhage, unless this Congress at least protects one industry...whose total future depends on its protection from the savagery and the ravages of this machine.

Now, the question comes, well, all right, what is wrong with the VCR. One of the Japanese lobbyists...has said that the VCR is the greatest friend that the American film producer ever had.

¹ LLB, LLM, MPhil; Lecturer in Law, University of Hertfordshire. Comments regarding this paper are welcomed, and can be addressed to: M.Filby@herts.ac.uk

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

I say to you that the VCR is to the American film producer and the American public as the Boston strangler is to the woman home alone.”²

This summation of the film industry’s momentary view in 1982 of the video cassette recorder by Jack Valenti of the Motion Picture Association of America has crossed from the realms of legal obscurity to the common knowledge of anyone who has so much as a passing interest in the ongoing conflict between the entertainment industries and technological innovation. Although these words were forcefully uttered some 15 years ago, it is apparent that the very same industries that have shown reluctance in the past to accept new technologies which have the temerity to challenge their static models of operation would still today prefer to travel the route of attempting to defeat evolution through shouting³ or litigation⁴.

As far as the UK is concerned, there has yet to be an instance of remonstrance which can accurately match the hysterical protestations of the MPAA in 1982 shortly before the movie industry reformed its business model to take advantage of the VCR, paving the way for the contemporary equivalent, the sale of pre-recorded DVDs, to be booming to the point that many films earn more profit through the home viewing market than via cinema ticket sales upon theatrical release⁵. Nevertheless, industry lobby groups such as ELSPA⁶ are unafraid to perpetuate the myth that file-sharing on a non-commercial basis is a criminal offence through the proliferation of misleading advertising⁷, nor to neglect their self-given duty to disseminate occasional successes in prosecuting business-pirates with headlines such as “Branston Pirate in Pickle,”⁸ “Worcestershire Source of Pirate Activity,”⁹ and “Court Grabs Woman’s Assets”¹⁰ further satisfying a remit of serving the cause of the double entendre, should one exist.

The strength of the words has contributed in some part to the prevalence of the question that was posed then being applied in the era of digital distribution: are means of time-shifting, format shifting and indeed file sharing in general really strangling the industry as a serial killer would a vulnerable woman? This paper seeks to address the concerns behind this question by examining to some extent the effects of file sharing on not only the movie industry but several of the entertainment industries which produce works which can be digitally distributed (namely films, television, music, and software inter alia), and to determine how, or indeed if, this group of apparently murderous stranglers can be tamed.

² Jack Valenti, Hearings Before the Subcommittee on Courts, Civil Liberties, and the Administration of Justice, 12/4/82, at <http://cryptome.org/hrcw-hear.htm>

³ <http://www.piracyisacrime.com/>

⁴ See, for example, “Latest Round Of Music Industry Lawsuits Targets Internet Theft At 17 College Campuses”, RIAA, 29/09/2005, at <http://www.riaa.com/News/newsletter/092905.asp>

⁵ “Pop goes the corny blockbuster”, The Times, 3/11/05, at http://entertainment.timesonline.co.uk/tol/arts_and_entertainment/film/article585718.ece

⁶ The Entertainment and Leisure Software Publishers Association, at <http://www.elspa.co.uk/>

⁷ As discussed in Michael Filby, “Confusing the Captain with the Cabin Boy: The Dangers Posed To Reform Of Cyber Piracy Regulation By The Misrepresented Interface Between Society, Policy Makers & The Entertainment Industries”, (2007), presented at the British & Irish Law, Education and Technology Association Conference 2007, available at <http://www.bileta.ac.uk/pages/Conference%20Papers.aspx>

⁸ <http://www.bhpress.co.uk/release.asp?i=833>

⁹ <http://www.bhpress.co.uk/release.asp?i=791>

¹⁰ <http://www.bhpress.co.uk/release.asp?i=694>

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

When approaching existing research into the effects of piracy¹¹, caution must be taken. It has already been pointed out by this author that the movie industry in particular, although not alone, has made a determined effort to fund lobbying based on research which is publicly unverifiable, and thus invalid, in order to communicate a bleaker and more damaging picture of file sharing and piracy than has been academically proven¹². Professor Michael Geist has also pointed out the undesirable consequences of presenting unverifiable figures as undisputed fact:

“In the best Hollywood tradition, the Motion Picture Association of America (MPAA) and its foreign counterparts have put on a show that is much ado about nothing, featuring unsubstantiated and inconsistent claims about camcording, exaggerations about its economic harm, and misleading critiques of the law...Not surprisingly, none of these figures have been subject to independent audit or review.”¹³

Similar caution must also be taken when approaching existing academic work into the area. Much of the existing academic studies are based on various economic theories, and can trip up the unwary through their application to differing areas of the piracy spectrum, although the effect of file sharing on the music industry is particularly common. The speed at which the area of digital distribution is evolving also renders some earlier research obsolete.

The research study which is presented in this paper was designed to avoid the jumbled ball of wool which makes up intellectual property regulation by focusing upon the user-end of the scale as opposed to purely economic figures pertinent to the entertainment industries. Interests of industries are far easier to predict than the interests of consumers due to the former being single legal entities with the maximisation of profits as their sole motivation. The hypothesis behind the research study is that consumers cannot be pigeonholed quite so easily, and that the determination of what drives them to behave in the way they do in relation to piracy will allow for a more pragmatic approach to be taken in establishing how to utilise existing distribution models and IP regulation to allow for an optimal efficiency of digital distribution which is beneficial to both creators and consumers, and how the industries can adapt to maximise their profits while not alienating the precise audience which is driving their marketability. It is submitted that the latter danger will be realised if the full weight of the law is indiscriminately wielded without justification.

The layout of the remainder of this study will be split into four primary sections and three appendices. In section 2, the principal indications of the research study will be explored alongside the current state of digital distribution, and the reconciliation of the findings with this model will be used to determine the de facto existing

¹¹ For the purposes of this paper, any use of an unauthorised copy contrary to the civil or criminal provisions of the Copyright, Designs and Patents Act 1988 (as amended) will be described as “piracy” and those who carry out such acts described as “pirates”, although the term is not intended to be necessarily pejorative in this context

¹² See Michael Filby, “Confusing the Captain with the Cabin Boy: The Dangers Posed To Reform Of Cyber Piracy Regulation By The Misrepresented Interface Between Society, Policy Makers & The Entertainment Industries”, *ibid*

¹³ Michael Geist, “The Fact and Fiction of Camcorder Piracy”, 6/2/07, at <http://news.bbc.co.uk/1/hi/technology/6334913.stm>

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

framework, and outline proposals for how this can be utilised to maximise the profits of the industries by complying with the needs of the consumers. Section 2.1 introduces the methodology of the research study and establishes the sample. The following section then visually establishes the current framework of digital distribution as a model, and introduces the common theories which dictate behaviour and effect within the model. The results of the research study which focus on rationale and spending behaviour are then explicitly applied in section 2.3, and current dilemmas and their proposed resolutions discussed. Section 2.4 finally considers the Efficient Distribution Theory in relation to the results of the study, and proposes framework changes which could mitigate losses to the industries caused by file sharing, or even increase profitability through taking advantage of the positive effects of file sharing which are identified.

Section 3.0 then discusses the methodology and results of the research study in greater detail, and explores the concepts raised by the responses including the range of the sample group¹⁴, the behaviour, rationales and motivation of pirates¹⁵, possible solutions to the issue of file sharers choosing to use unauthorised copies¹⁶, the perception of the law relating to various acts of copyright infringement by the sample group¹⁷, a focussed examination of the behaviour and spending habits of users of BitTorrent¹⁸, the rationale and motivations of those who do not engage in piracy¹⁹, a comparative analysis of the spending habits of pirates and non-pirates on authorised copies²⁰, and proposals for further research²¹. Finally, section 4.0 concludes that the Efficient Distribution Theory supported by the results of the research has potential to maximise the profits of the entertainment industries by utilising file sharers via indirect means made possible through digital distribution, provided the industries are prepared to adapt to the evolution they are currently attempting to use the law to block.

Appendix A contains the open text box responses given to question 4.3, followed by a brief historical summation of piracy for each of the main entertainment industries in Appendix B for use as a reference guide. Appendix C contains an evaluation of the practicalities of piracy for each of the main entertainment industries considered in this paper.

2.0: The Research Study: Indications

2.1: Methodology

The research study is based around the responses of an anonymous questionnaire available for respondents to complete online. The study was preceded by a pilot study which took place in December 2006. The objectives of the pilot study were two-fold:

¹⁴ Section 3.1

¹⁵ Section 3.2

¹⁶ Section 3.3

¹⁷ Section 3.4

¹⁸ Section 3.5

¹⁹ Section 3.6

²⁰ Section 3.7

²¹ Section 3.8

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

to test the range of responses which participants in the study would supply, and to act as an exploratory study to the hypothesis presented in the author's earlier paper²². The pilot study again took the form of a questionnaire which could be completed online, and was advertised around the University of Hertfordshire and on a small number of online forums. The pilot study was completed by 157 respondents.

The primary research study was available for respondents to complete throughout February 2007. There were 1,072 respondents. The study was advertised more widely than the pilot study, with advertisements placed at the University of Hertfordshire and on a greater number of predominantly UK-based online forums (although the globalisation of the internet means that it is likely a small proportion of the respondents are not British citizens, this should not affect the validity of the answers given). Due to the nature of the study being an online questionnaire about cyber piracy, it is highly likely that a sample bias is inherent. This in itself is not overly problematic, as the intended sample group initially consisted of persons who were aware of cyber piracy and had the knowledge and means to engage in it. It is likely that such persons would predominantly respond to a request to fill in a questionnaire of this nature.

The online advertisements were specifically targeted towards internet users who had an interest in the entertainment industries, thus they were placed in forums and on websites used by those interested in gaming software (a principal type of forum and website on the internet due to the intrinsic link between gaming and the internet), in addition to technology and movies inter alia. The details of the author were made clear, the survey included a privacy policy assuring respondents that their IP addresses would never be made publicly available, and links to software was provided which would mask the IP addresses of respondents if desired, in order to attract truthful responses. Of the forums used, only two objected to the research links being placed²³. Overall, feedback given where the advertisements were placed indicated a significantly high level of respondent satisfaction and that the survey was balanced and in no way leading.

The questionnaire was designed so that respondents who indicated that they had obtained, purchased, downloaded, viewed or otherwise used unauthorised copies²⁴ answered a set of questions which specifically enquired about their personal experiences, behaviour and motivational rationale with regard to piracy and file-sharing²⁵. Those who indicated that they had not used unauthorised copies were provided with an alternate set of questions which sought their views on piracy and

²² Michael Filby, "Confusing the Captain with the Cabin Boy: The Dangers Posed To Reform Of Cyber Piracy Regulation By The Misrepresented Interface Between Society, Policy Makers & The Entertainment Industries", *ibid*

²³ The forums of UK movie magazine Empire (at <http://www.empireonline.com/forum/>) and UK PC magazine PC Advisor (at <http://www.pcadvisor.co.uk/forums/>)

²⁴ "Unauthorised copies" was defined in the survey as "unauthorised copies of copyrighted music, games, software applications or video footage such as films or television programmes"

²⁵ As the focus of the research study was on the behaviour, rationales and motivations indicated by pirates and non-pirates with regards to cyber piracy and the entertainment industries, and, as the results to question 3.1 indicate, the type of works being used by pirates are converging, the unauthorised copies produced by the entertainment industries were dealt with as a single class of work, although this paper will identify and consider the differences between them where appropriate

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

file-sharing, including why they did not engage in such activities, and a question designed to gain a comparative gauge with pirates. Both sets of respondents were asked to complete questions regarding their age and gender.

Those who indicated they were pirates were given the opportunity at the end of the questionnaire to answer further questions regarding BitTorrent²⁶. This is due to the forecast by the author that it would be indicated that BitTorrent would be the most prevalent means of file sharing unauthorised copies, and little substantive research has been undertaken into this system which is distinct from more traditional peer-to-peer networks such as Napster²⁷ and Kazaa²⁸.

2.2: Interpretation & Analysis

Several particular theories related to the impact of file sharing have been formulated and applied by researchers in recent years. The way in which these theories broadly operate and interact are illustrated in the chart contained in Figure 1. Although these theories are most often applied to research into the file sharing of music, the chart is applicable for all types of file sharing related to the entertainment industries identified in this paper, namely film, television, music and software.

²⁶ <http://www.bittorrent.com/>

²⁷ <http://www.napster.com/>

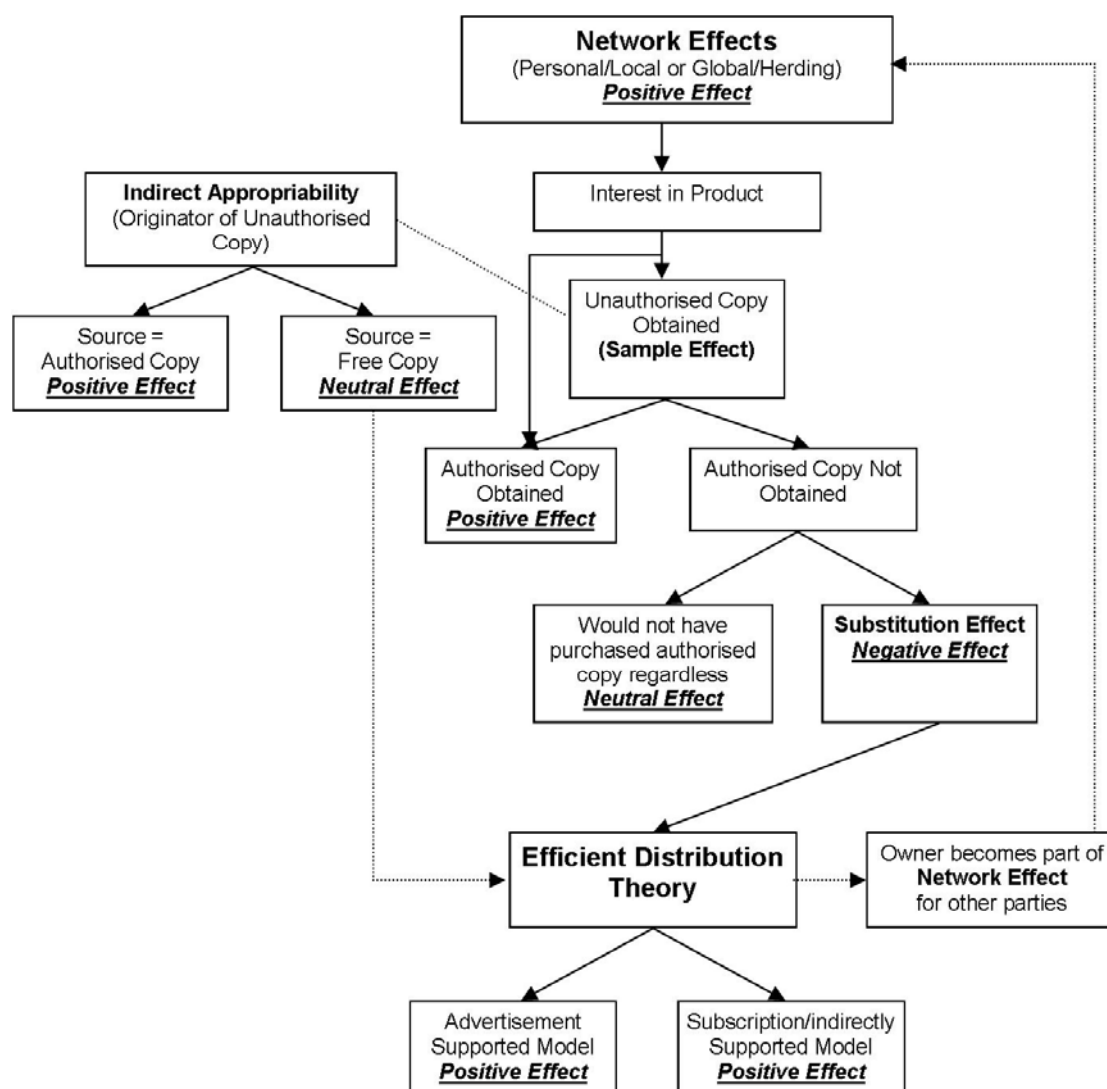
²⁸ <http://www.kazaa.com/>

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

Figure 1: Digital Distribution Model



There are primarily two ways in which a consumer can enter the model: the consumer can be subject to the “network effect”, or might become interested in a product through an alternate means. The network effect is generally referred to in two senses, namely the personal or local network effect and the global or herding network effect²⁹. The global network effect can be applied to the example of a piece of software such as an operating system. If an operating system is acquired by a large proportion of computer users, then the consumer will feel compelled to obtain the same system for the practical reason of ensuring software they run will be compatible

²⁹ See Stan J. Liebowitz, “Pitfalls in Measuring the Impact of File-sharing in the Sound Recording Market”, (2005), CESifo Economic Studies, Vol.51, pp.439-477 and Fabrice Rochelandet & Fabrice La Guel, “P2P Music Sharing Networks: Why The Legal Fight Against Copiers May Be Inefficient”, (2005), Review of Economic Research on Copyright Issues, Vol.2(2), pp.69-82

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

with what they see is a popular and widely adopted operating system, and for the social reason of inclusion. The local network effect is a similar principle, but applied on a smaller scale. For example, if the social group the consumer mixes with have all seen a particular film, the consumer will hear more about it than if the group had not all seen it, thus piquing the interest of the consumer. It is generally accepted that network effects have a positive impact on the relevant industries, expressly so as applied to music³⁰ and software³¹ inter alia³². The network effect is recognised as having a positive effect for the industries in the same respect as, for example, traditional means of advertising, as it promotes awareness and interest in products.

Once the consumer has entered the model through a network effect or by gaining an interest in the product through some other means, there are two routes which can be taken to obtain the product. If the user purchases an authorised copy, then this is beneficial to the relevant industry (hence the positive effect of the network effect if that was the originator of the interest in the product). The alternative means is to obtain an unauthorised copy. At this point, the “sample effect” is deemed to be applicable. The sample effect relates to the notion that when a consumer obtains an unauthorised copy of a digital file, they are essentially using it as an evaluative copy in order to decide whether or not to purchase an authorised copy.

The sample effect is related to the concept of “indirect appropriability”³³. This theory relies on the contention that a demand for unauthorised copies will have a knock-on effect on the demand for authorised copies from which the unauthorised copies are derived. The determining factors in how beneficial this effect can be on the industries lie in the efficiency of distribution of unauthorised copies and whether the unauthorised copies de facto originated from a paid-for authorised copy. With regard to the efficiency of distribution, this is clearly a factor which has increased to a high degree alongside the rise of peer-to-peer networks and digital file sharing. Where analogue copies were made prior to the boom of the internet, more original authorised copies were required per copy. The ease at which digital files can be copied and distributed without any or negligible loss of quality necessarily means there are fewer original authorised copies required.

The results of question 8.1 reveal that 16.2% of BitTorrent users distribute the equivalent of more than one copy of the file they are sharing, whereas 71.7% distribute the equivalent of one copy or less. Although this prima facie indicates that

³⁰ See Stan J. Liebowitz, *ibid*, and Norbert J. Michel, “Digital File Sharing and Royalty Contracts in the Music Industry: A Theoretical Analysis”, (2006), *Review of Economic Research on Copyright Issues*, Vol.3(1), pp.29-42

³¹ See O. Shy and J-F. Thisse, “A Strategic Approach to Software Protection”, (1999), *Journal of Economics and Management Strategy*, Vol.8, pp.163-190; LN. Takeyama, “The Welfare Implications of Unauthorised Reproduction of Intellectual Property in the Presence of Demand Network Externalities”, (1994), *Journal of Industrial Economics*, Vol.42, pp.155-166; & K.R. Conner and R.P. Rumelt, “Software Piracy – An Analysis of Protection Strategies”, (1991), *Management Science*, Vol.37(2), pp.125-139

³² See Ivan P.L. Png, “Copyright: A Plea for Empirical Research”, (2006), *Review of Economic Research on Copyright Issues*, Vol.3(2), pp.3-13 for books, music, films, games and software

³³ See Stan J. Liebowitz, “Copying and Indirect Appropriability: Photocopying of Journals”, (1985), *Journal of Political Economy*, Vol.93, pp.945-957; & M. Boldrin and D. Levine, “The Case Against Intellectual Property”, (2002), *American Economic Review*, pp.209-212

distributors are in the minority, there is no way of determining whether the copies being shared are derived from authorised copies or unauthorised copies. Further, although question 8.2 reveals that only a minority of 11.1% of BitTorrent users actively create new torrents to upload, it again cannot be determined whether these users derive the copy from an authorised or unauthorised copy. What these figures do reveal is that the majority of BitTorrent users are primarily concerned with like for like sharing or “leeching”³⁴ as opposed to acting as distributors.

Even if the unauthorised copy was made from an authorised copy, the source may not necessarily have been paid for. If the movie industry is taken as an example, the original source of a digitally copied DVD may have been an authorised copy of a DVD paid for by the file sharer who wishes to be one of the first to associate his online name with a torrent of the copy to satisfy the demands of other users of BitTorrent. In the respect that that source is an authorised paid-for copy, the industry derives some comparable benefit from this and other file sharers making purchases in order to distribute. However, if the source of the unauthorised copy is an authorised copy which has not been paid for, for example a review copy supplied to film critics, then the only benefit the industry might hope to derive is from the sample or network effects or Efficient Distribution Theory³⁵. It is generally considered that indirect appropriability is beneficial for the industries, as the only scenario in which the benefit to the industries would be neutral is if all demand for unauthorised copies only amounted to originators using freely obtained authorised copies and never purchasing authorised copies, which is highly unlikely. Thus indirect appropriability can never be considered as harmful to the industries.

Once an unauthorised copy has been obtained for evaluative purposes as per the sample effect, two outcomes can result. If the consumer goes on to purchase an authorised copy, the relevant industry will directly and positively benefit from the sale and, in the case of music files, according to Bockstedt, Kauffman & Riggins³⁶, it can further “sell more music and increase concert attendance.”

If the consumer chooses not to go on to purchase an authorised copy, it must be considered whether or not the consumer would have purchased an authorised copy regardless of whether or not they had obtained the unauthorised copy. If the answer is no, then no harm is done to the industry as no sale has been lost. If the consumer however would have purchased an authorised copy but decides to keep the unauthorised copy instead, the “substitution effect” is deemed to be operating (i.e. the unauthorised copy is acting as a substitute for an authorised copy which would have been purchased were it not for the consumer obtaining the unauthorised copy).

The prevalence of the sample effect is supported by the results of the research study. The most common response to question 3.3, which asked respondents to select which of the listed rationales for obtaining unauthorised copies applied to them, was “To try

³⁴ The practice of downloading more file segments from a peer-to-peer network than is uploaded

³⁵ Discussed below, section 2.4

³⁶ Jesse C. Bockstedt, Robert J. Kauffman and Frederick J. Riggins, “The Move to Artist-Led Online Music Distribution: Explaining Structural Changes in the Digital Music Market”, (2005), IEEE Computer Society, 38th Annual Hawaii International Conference on System Sciences, Track 7, Vol.07, p.14

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

before I buy (may or may not purchase later)” at 66.7%, suggesting that file sharers intend to obtain unauthorised copies for the purposes of sampling.

In determining the proportion of file sharers who go on to purchase an authorised copy, question 3.3 indicates that 9.4% of respondents who obtain unauthorised copies “always purchase an authorised copy later”, which is beneficial to the industries. With regards purely to BitTorrent users, question 8.4 demonstrates that 5.1% always buy authorised copies of the unauthorised copies they download. In the same question, 27.5% and 71% indicated that they would obtain an authorised copy provided it is better or if they like the product after sampling respectively, indicating a sizeable leaning away from the substitution effect provided a motivating factor is present.

This is further supported by the fact that only 13% of respondents claimed to never purchase authorised copies of what they had downloaded. Although this may prima facie suggest that this proportion of “samplers” fall into the substitution category, it must not be forgotten that those among this group who had no intention of obtaining an authorised copy regardless would fall outside of the substitution category, thus causing no negative effect to the industries. Supporting this notion, in question 3.3 it was indicated by 40.2% of pirates that they obtain unauthorised copies that they have no intention of purchasing. It is also worth noting that question 8.5 indicates that 89.8% of respondents who admit to piracy bypass the sampling effect completely by purchasing some authorised copies without first downloading unauthorised copies.

2.3: Analysis of Rationale & Spending: Applying the Results to the Digital Distribution Model

Several elements of the research study can be applied to the model in order to provide assistance in determining what drives pirates and non-pirates to make the various decisions required when it comes to choosing whether or not to purchase an authorised copy. The results pertaining to rationale will now be examined and reconciled with the model.

The fact that pirates spend an average of £77.56 per person per month³⁷ on authorised copies compared to an average of £54.32 per person per month³⁸, which is £23.24 less spent by non-pirates, lends credence to the concept that pirates are keen enthusiasts of the output produced by creators to the extent that they will willingly spend more than non-pirates per month despite the option of downloading unauthorised copies for free being available. As question 8.3 reveals that BitTorrent users alone are willing to spend nearly half of the value of what they download on authorised copies is further support that the entertainment industries must recognise pirates as a market to be tapped into, as opposed to a scourge which should be bludgeoned with the full force of the law until they give up. By considering the rationales given by pirates for choosing to obtain unauthorised copies as opposed to purely relying on authorised copies, possible solutions to deriving benefit from this group can be yielded.

³⁷ Question 4.1

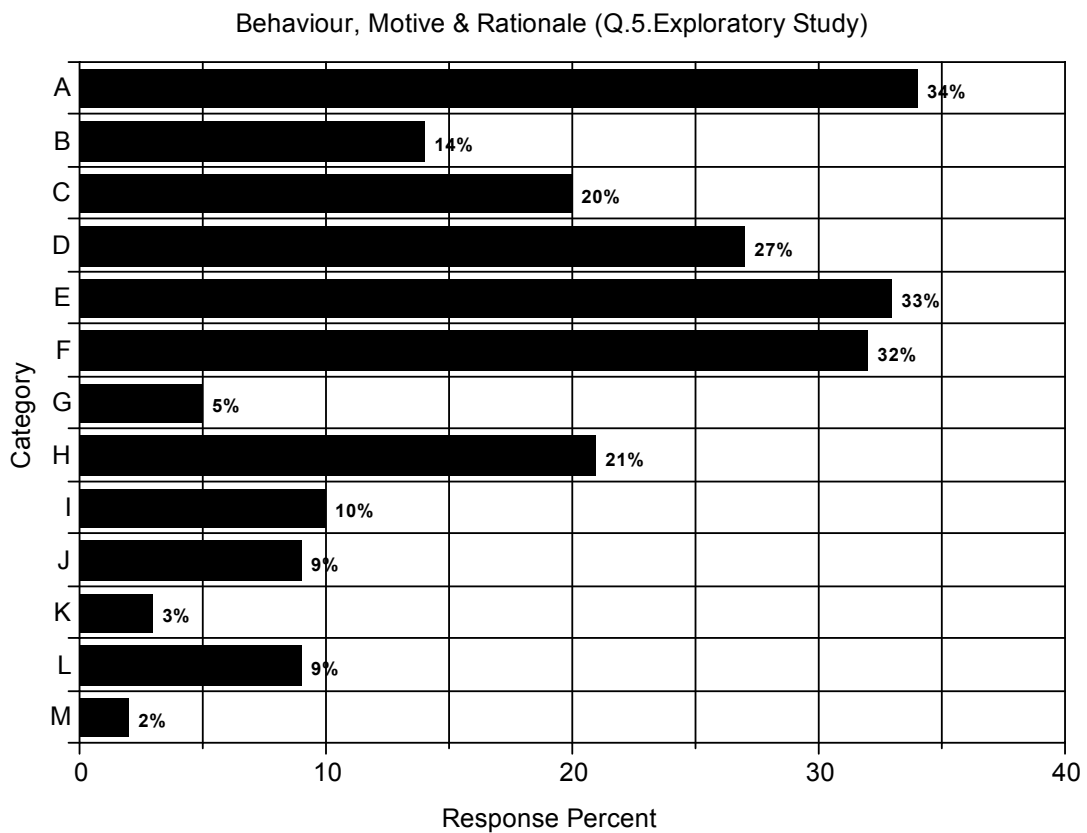
³⁸ Question 6.2

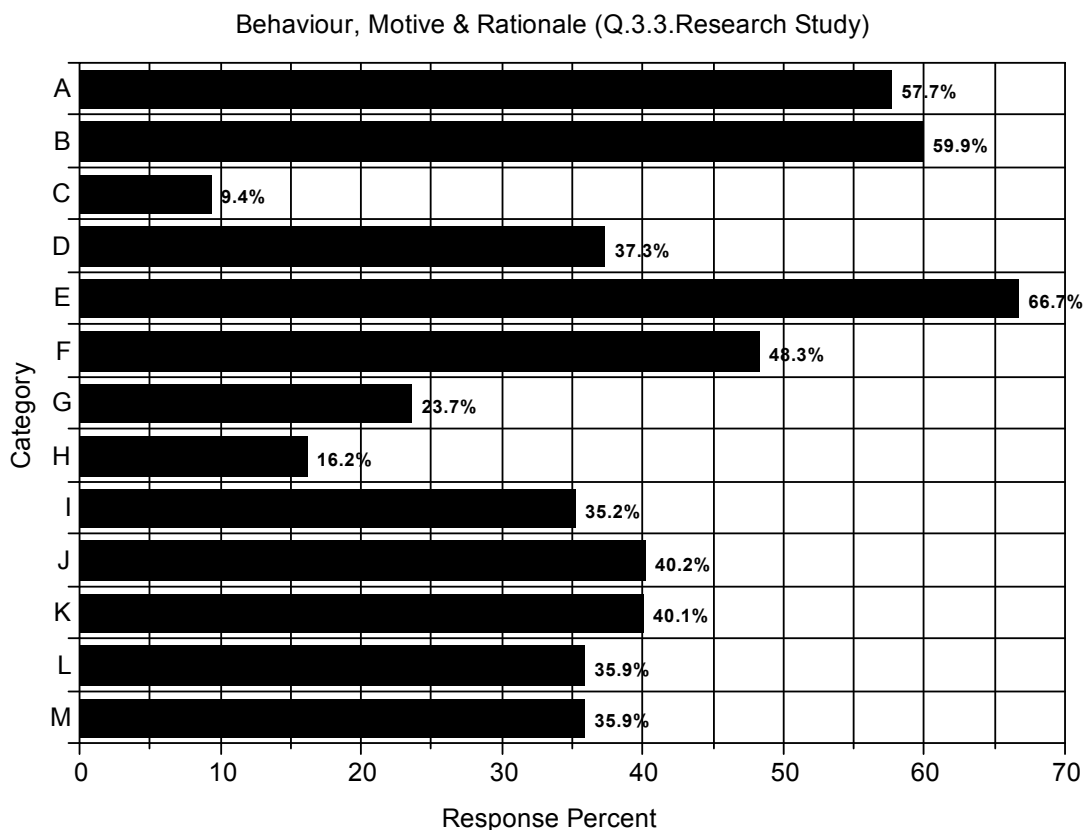
© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

The results of question 3.3 provide the most direct indicator. The two charts which follow represent the proportions of pirates who cited each rationale in the pilot study and the research study respectively:





The thirteen rationales derived from the pilot study and offered to pirates in question 3.3 were as follows:

- A.** The prices of authorised copies are too high
- B.** US/foreign TV and films are available earlier
- C.** I always purchase an authorised copy later
- D.** Authorised copies are hard or impossible to obtain in the UK/domestically
- E.** To try before I buy (may or may not purchase later)
- F.** Unauthorised copies are free and easy to obtain
- G.** The industries have not taken advantage of internet delivery
- H.** I have a negative view of the industries, and/or think obtaining unauthorised copies is victimless
- I.** I believe I have already paid to view or use the copy (maybe at another time or on another format)

- J. I obtain unauthorised copies of products I have no intention of purchasing
- K. Time shifting (e.g. as an alternative to recording a programme or film using a VCR)
- L. Unauthorised copies are superior to authorised copies (e.g. no DRM, advertisements, etc.)
- M. I obtain abandonware / orphaned works (works with no traceable rights holder)

The most common reason cited in the research study was category 3.3.E, where the user uses unauthorised copies as a means of evaluation or “try before you buy”, insinuating that the user will purchase an authorised copy if the product meets their expectations. As discussed above, this is directly indicative of the sampling effect.

The second most common reason cited was 3.3.B, where the user is attracted by the availability of unauthorised copies of US or other foreign television programmes and films at an earlier point in time than when authorised copies become available domestically, as many popular US programmes are shown often months before a UK broadcaster transmits them, and the UK also often trails behind in terms of the release date of cinematic releases. A suggested solution to this problem is evident courtesy of the respondents of question 4.3 who suggested reducing or eliminating the gap between foreign and domestic availability of authorised copies would motivate them to stop obtaining unauthorised copies, and was the fourth most commonly cited category³⁹.

Although films and television programmes in particular are commonly shown often months in advance in the US, it is becoming more common for larger releases⁴⁰ and high profile television programmes⁴¹ to have their release windows vastly reduced. The benefits to this practice are that if, for example, episodes of a US show a UK consumer wishes to view are easily available at the same time that they are available in the US, those who merely wish to view the episodes will have less reason to go to the trouble of downloading the show when they can simply watch the television broadcast, which would boost the viewing figures of the broadcaster (assuming the erstwhile pirate happened to be part of the UK viewing figure sample group⁴²) and thus allow the broadcaster to maintain their advertising fees. However, it is questionable whether file sharers are having a de facto economic impact upon such broadcasters, as the most recent OfCom figures reveal that television advertising revenues are rising⁴³.

³⁹ Category 4.4.B

⁴⁰ For example, Spider-Man 3 is due for a worldwide release on 4/5/07

⁴¹ For example, episodes from the third season of Lost and sixth season of 24 are, at the time of writing (April 2007), being broadcast in the UK only a few days after their US premiere, compared to a period of several months for earlier seasons

⁴² The primary body responsible for collating UK viewing figures is Nielsen Media Research, at <http://www.nielsenmedia.com/nc/portal/site/Public/>

⁴³ See “The Communications Market 2006”, 10/08/2006, Office of Communications, at http://www.ofcom.org.uk/research/cm/cm06/cm06_print/main.pdf

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

The third most common reason for piracy was 3.3.A, where the file sharer believes authorised copies are too expensive or that they are being subjected to the “rip-off Britain” phenomenon⁴⁴, to the extent that they would not purchase them even if the option to obtain an unauthorised copy was not available due to the price. This too is supported by 4.3.A, in which the lowering of prices of authorised copies is the most commonly cited category. This would pose a problem if the industries were to attempt to solve the release window problem by releasing films and television programmes over legitimate download services such as iTunes, most notably as that particular service is currently the subject of an EU investigation into pricing structures being 18% higher than other European territories⁴⁵.

The fourth most common reason, 3.3.F (that the respondent prefers using unauthorised copies as obtaining them is easy and/or free of charge) is related to 3.3.G (where the respondent is of the opinion that the industries have not taken advantage of the efficient means by which copies can be distributed digitally, thus relies on those who have, namely, unauthorised peer-to-peer networks and BitTorrent). A solution to this rationale can be found in 4.3.C, the second most commonly cited suggestion for implementing a measure which would stop the respondent from obtaining unauthorised copies, which is to increase the efficiency of delivery processes and widen the availability of authorised copies. The widening of the availability of authorised copies would also provide a solution to 3.3.D, where file sharers feel that it is extremely difficult or impossible to obtain certain authorised copies in the UK, particularly old or obscure television programmes and/or films and Japanese Manga products.

Essentially, it is being suggested that offering an online service which provides the efficiency and choice of currently existing peer-to-peer networks at a price lower than is currently being asked for products would help to dissuade consumers from turning to piracy. To be of optimal benefit, this model would need to offer products which are not encumbered with digital restrictions management⁴⁶ (DRM). This is indicated through 35.9% of respondents indicating that they concur with category 3.3.L (where the respondent believes unauthorised copies are superior to authorised copies, for reasons such as authorised copies of downloaded music containing DRM, DVDs containing unskippable advertisements and PC games requiring the disc to be inserted in the drive in order to run despite being already installed on the hard disc drive of the user), and the third most cited suggestion of question 4.3, namely 4.3.D (where it was suggested that the desirability of authorised copies is increased through the removal of DRM and advertisements and the addition of incentives such as physical items being included with boxed copies, or an improved sound and picture quality for digital copies). The recent announcement that EMI is to commence the online selling of its

⁴⁴ A term used to describe many instances of British prices being higher than those charged for the same product in the US or other countries

⁴⁵ See “Apple Challenged over UK iTunes Charges”, 3/04/07, at http://ec.europa.eu/unitedkingdom/press/frontpage/03042007_en.htm & “European Commission confirms sending a Statement of Objections against alleged territorial restrictions in on-line music sales to major record companies and Apple”, 3/04/07, at <http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/07/126&format=HTML&aged=0&language=EN&guiLanguage=en>

⁴⁶ Also known as digital rights management or technical protection measures

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

music tracks without any DRM⁴⁷ is a significant step in the right direction, although the slightly more dubious decision to charge more for the privilege is likely to harm some of the benefit this will have.

Finally, the Gowers Review of Intellectual Property⁴⁸ proposes changes which will bring the law into line with the rationales indicated in 3.3.I (where the user has already paid to use an authorised copy, thus believes they should not have to pay again, such as a user who has purchased an authorised copy of a film on DVD, but does not believe they should have to pay for an authorised copy of the same film to watch on a portable playback device) and 3.3.M (where the user believes the unauthorised copies to be “abandonware”⁴⁹ or orphaned works).

With regard to the former, the Gowers Review recommends the introduction of an exception in copyright law which would allow consumers to copy for the private purpose of format shifting. This is a sensible proposition, as it acknowledges (albeit somewhat impliedly) that there is little distinguishable difference between transforming an analogue or digital broadcast into an analogue video cassette recording and transforming a digital recording into a file capable of being played on a portable device. For the latter, it is further proposed in the Review that the EU Copyright Directive⁵⁰ be amended to allow orphaned works to be copied and used after reasonable steps to find the rights holder are taken but they still cannot be found. This suggestion too is certainly sound in concept, but it remains to be seen if and how the exceptions are specifically defined and drafted, particularly as the amendment regarding orphaned works requires the agreement of the European Commission. It would be unrealistic to expect quick results for that reason alone.

2.4: Digital Distribution Model: Efficient Distribution Theory

As can be seen with reference to the Digital Distribution Model diagram⁵¹, file sharers who fall under the substitution effect (which is commonly viewed as having a negative effect on the industries) and the consequences of indirect appropriation leading to free copies of original copies being used (which can otherwise be regarded as having a neutral effect on the industries) both lead into the umbrella category of “Efficient Distribution Theory”. The crux of this theory is that measures can be put in place which lead to the efficient proliferation of copies to consumers having a beneficial effect to the industries, as opposed to a negative or neutral effect. It is proposed that this can be achieved in three primary ways:

- i) The feeding of the network effect;

⁴⁷ See “EMI Music launches DRM-free superior sound quality downloads across its entire digital repertoire”, 2/04/07, at <http://www.emigroup.com/Press/2007/press18.htm>

⁴⁸ Available at http://www.hm-treasury.gov.uk/media/583/91/pbr06_gowers_report_755.pdf

⁴⁹ Works which are considered to be old and devoid of commercial value, i.e. taken as “abandoned” by the rights holder

⁵⁰ Directive 2001/29/EC on the harmonisation of certain aspects of copyright and related rights in the information society

⁵¹ Figure 1, above

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

- ii) The implementation of an advertisement supported model;
- iii) The implementation of a subscription or otherwise indirectly supported model.

i) Feeding The Network Effect

The feeding of the network effect can be explained quite simply with reference to the network effect itself. As more consumers obtain copies of a work, they will increase the network of owners which will encourage local or global herding.

ii)(a) Advertisement Supported Distribution: Video

The implementation of an advertisement supported model is more limited in scope, and could only be applied to certain situations, but has the potential to benefit particular areas of the entertainment industries. Pesce⁵² has applied a theoretical model relating to on-screen advertising in the context of television. The theory is based around replacing or supplementing the commercial breaks of programmes with advertising which appears on-screen. The rationale for this is based upon the fact that before file sharers upload episodes of television programmes to file sharing networks, they edit the commercials out of the programmes. If advertising was to appear on-screen, consumers who have obtained unauthorised copies would still view the advertisements and thus it would conversely come about that it would be in the interest of advertisers for the programmes they take out on-screen advertising with to be viewed by as many people as possible.

Although it could be argued that such advertising would be intrusive⁵³, most television programmes are already subject to pop-up information. For example, many UK digital channels and almost all US channels contain a watermark in a corner of the screen containing the ident of the broadcaster. This practice has been in place for many years, and viewers have subsequently got used to this partial obscuring of the picture. However, it seems somewhat pointless and fruitless to waste a premium area of the picture with a station ident which will have the purpose of reminding the viewer of what channel they are watching when they can simply use the digital function to remind themselves if need be, or to inform a downloader where the programme originated, neither of which benefits the broadcaster.

Further, almost all UK channels now feature a pop-up banner which informs the viewer of the name of the programme which is on next. If this banner and the station ident were to be replaced by advertising, then it would follow that the broadcasters would benefit by securing a revenue related to how widely the programme is watched.

⁵² Mark Pesce, "Piracy is Good? New Models for the Distribution of Television Programming", (1995), available at <http://www.afrs.edu.au/download.cfm?DownloadFile=B0A6D409-2A54-23A3-69F5E21BEA2270EA>

⁵³ If it was to be argued that advertisements appearing on-screen were obtrusive, the author of this paper would most likely be inclined to agree

This would allow for global viewers to download television broadcasts and still be subject to advertising.

Some programmes are particularly amenable to on-screen advertising. For example, an average episode of *American Idol*⁵⁴ will typically see the sponsor of the telephone lines flashed up throughout every performance and repeated by the presenter, the contestants will sing while draped around a Ford motor vehicle, and they will be interviewed in front of a monitor containing the Coca-Cola logo, which is also emblazoned on the cups of the judges. However, while this kind of advertising suits reality formats, and product placement can serve any programme or indeed film set in the present day, it is less suited to more dramatic works or any programme or film set in the future, past or a fictional world.

ii)(b) Advertisement Supported Distribution: Games/Software

Games and software are as equally amenable to in-game advertising. Despite such advertising appearing in games for many years, the UK games industry is still reluctant to use it as a means of reducing or eliminating the imposition of a fee to purchase. In games industry trade publication MCV, Frank Sagnier of the in-game advertising firm Double Fusion stated with regard to in-game advertising leading to a reduction in software costs:

“If you’re talking about software prices coming down, that’s unlikely. However, if you look at the model of gaming in China and Korea, most of the games are online and they’re free. The money is made by things like...advertising. In game advertising offers new possibilities for games companies to change their business models”.⁵⁵

Considering the above quote is mostly dedicated to pointing out that in-game advertising is demonstrably capable of purely financing games in other territories without cost to the end user, it seems unjustifiable and somewhat baffling that the areas of the games industry responsible for considering such a route in order to gain financial benefits through efficient distribution are unwilling to entertain the notion of moving towards a similar model.

ii)(c) Advertisement Supported Distribution: Music

The only area of the entertainment industries considered in this paper where the advertising model is potentially unworkable is with the music industry, as there is no viable way of including advertising in an audio file without it simply being edited out by file sharers. However, recent proposals for an advertising supported model of distributing music demonstrate that advertising can bring revenue to music publishers through file sharing without including the advertising in the music file itself⁵⁶.

⁵⁴ <http://www.americanidol.com/>

⁵⁵ See “Sagnier Outlines the Future of In-Game Advertising”, 13/04/07, MCV

⁵⁶ See “New Model For Sharing: Free Music With Ads”, 23/04/07, New York Times, available at: http://www.nytimes.com/2007/04/23/technology/23qtrax.html?_r=1&oref=slogin

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

Companies such as SpiralFrog⁵⁷ are proposing a model of selling advertising which is displayed to users as they search for and download music. Qtrax⁵⁸ is offering a similar model, although a far greater reliance is being placed on the sample effect as music is offered for free streaming only, with full downloads requiring payment.

iii)(a) Subscription Supported Distribution

The final model, that of subscription based or indirect support, can be applied to all of the entertainment industries. Subscription based support currently operates in the form of services such as DVD rental firms who charge consumers a monthly fee to receive a set number of DVDs per month. Research by economists has indicated that subscription-based models such as this are not harmed by piracy⁵⁹, and such models could easily be extended to the music and games industries, particularly if coupled with an efficient internet-based delivery system⁶⁰.

iii)(b) Indirectly Supported Distribution

The model of indirect support is something of an umbrella which encompasses any other means which can be employed by the industry to ensure that they derive benefit from files being distributed. To take the example of the film and DVD industry, the sampling effect and the respondents who cited 4.3.D (increasing the desirability of authorised copies through the addition of incentives) suggest that if, with the incentive of extras such as a high quality DTS soundtrack, director and crew commentaries or tangible benefits such as packaging and in-box goods designed to attract enthusiasts of the subject matter, the proliferation of films and television programmes could persuade those who would otherwise settle for the unauthorised copy as substitution to purchase the authorised tangible copy.

Another solution lies in the subject matter of question 4.2, which asked respondents if they would be willing to pay a fee as part of their ISP, blank media or media player prices to enjoy legal access to digitally distributed copies. A similar proportion of respondents indicated they would be willing to pay more for their ISP service and blank media (30.8% and 30.4% respectively), and 22.6% indicated they would be happy to pay more for media players⁶¹.

⁵⁷ See <http://www.spiralfrog.com/>

⁵⁸ See <http://www.qtrax.com/>

⁵⁹ See David Bounie, Marc Bourreau and Patrick Waelbroeck, "Piracy and the Demand for Films: Analysis of Piracy Behaviour in French Universities", (2006), Review of Economic Research on Copyright Issues, vol.3(2), pp.15-27; and Brett Keintz, "The Recording Industry's Digital Dilemma: Challenges and Opportunities in High-Piracy Markets", (2005), Review of Economic Research on Copyright Issues, vol.2(2), pp.83-94

⁶⁰ See <http://www.steampowered.com/> for an example of a successful direct distribution platform in the games industry

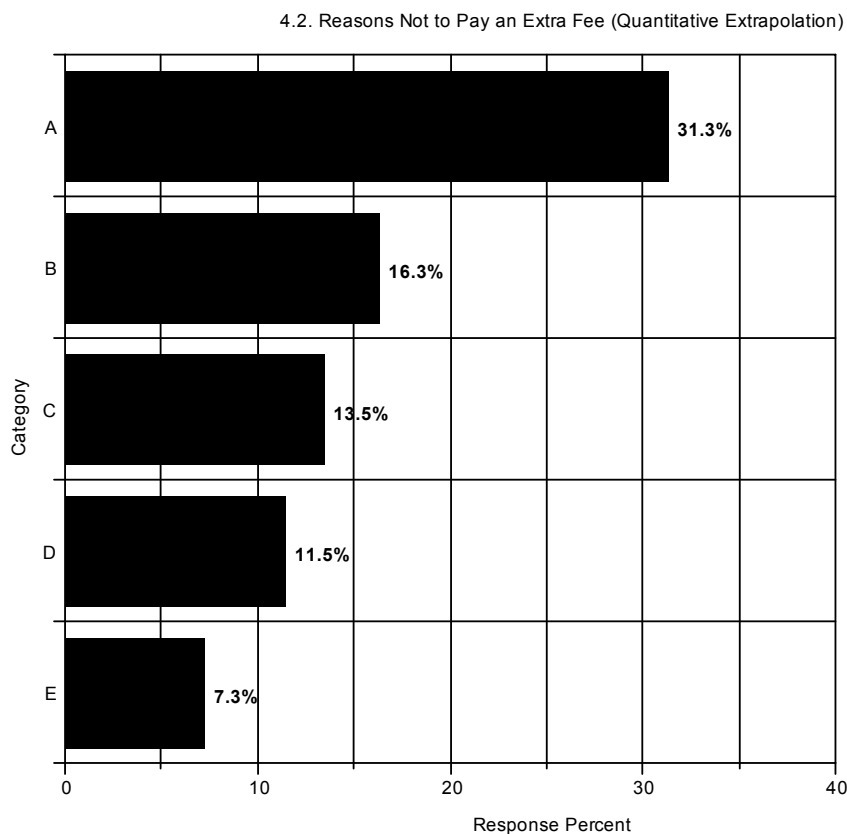
⁶¹ For example, for every Microsoft Zune media player sold, \$1 is given to Universal, although bizarrely there is no added incentive of extra legal rights

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

Of the 40.9% of respondents who indicated that they would not be willing to pay extra for any of these services in exchange for more legal rights, the categorisation of responses is indicated on the chart below⁶²:



The categories, with illustrative examples from the respondents for each, are as follows:

- A. The respondent does not believe the industries should be the recipients of more profit (including the holding of negative views of the industries in general): *“The price of piracy is already factored into the retail prices of most media.”*⁶³
- B. The respondent believes a blanket imposition of extra fees would be unfair to purchasers of a product or users of a service who do not obtain digital copies: *“Using any of the above [services or media] does not necessarily mean using pirated intellectual property. Such levies punish the innocent. It didn’t work with blank audio tapes and it won’t work now.”*⁶⁴
- C. The respondent does not want the price of the product or service to rise (i.e. extra legal rights are not sufficiently compelling, or media and/or services are

⁶² 20.1% of respondents were unclassifiable, e.g. by specifying no reason

⁶³ Respondent 135

⁶⁴ Respondent 13

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

already viewed as too expensive): “ISPs already charge enough, media isn’t really that cheap and...my ipod already cost me £300.”⁶⁵

- D. The respondent believes that such a system would be mishandled, and/or that the extra fees would go to intermediaries rather than creators: “Simply, I can’t be sure the money will go to the right places. EG: Universal are getting a kickback from [the US Microsoft] Zune sales, which isn’t much use if all your music comes from every other label.”⁶⁶
- E. The respondent has an indifferent or negative attitude with regards to complying with the law: “I like it the way it is. I have the ability to get what I want when I want from the internet without paying now... I can’t see why I should [pay more for media and/or services] just to have it legally.”⁶⁷

Although imposing a tax or levy such as this has been frequently discussed by commentators both positively and negatively⁶⁸, it is difficult to discount as a viable means of indirectly supported distribution despite the range of negative reasons given by respondents to the research. While the range of responses varies from moral reasons (i.e. fearing unfairness) to personal reasons (i.e. not wishing to pay into the industries further), the model is still workable. The most common view, that the industries should not receive more money, is unrealistic in terms of any commercial model. This can be linked to the least common response, that the respondent has an indifferent attitude to complying with the law, in that no serious consideration can be afforded to a general apathy towards complying with models which would ultimately benefit the consumer in addition to the industries.

The view that the imposition of a tax or levy on services or media would be unfair to users who do not use unauthorised copies could be addressed through the imposition of a scheme whereby with, for example, ISP use, the option to pay a premium in exchange for the right to deal with what would be unauthorised copies on a private non-commercial basis would allow users disinterested in the use of such copies to opt for a cheaper ISP package which does not impose the levy.

The above view is also somewhat altruistic, and can be linked to the general desire for prices not to rise. The OfCom 2006 report⁶⁹ reveals that internet users with broadband access now outnumber those with dial-up connections, and that broadband access is getting continually faster and cheaper. If further research was to be carried out, it would be interesting to ascertain the type of broadband package used by pirates and non-pirates. It would not be unreasonable to assume that those who obtain unauthorised copies through downloading generally pay a higher price for a broadband package with a high or unlimited download cap. If this assumption is valid,

⁶⁵ Respondent 38

⁶⁶ Respondent 197

⁶⁷ Respondent 37

⁶⁸ See, for example, Bob Rietjens, “Copyright and the Three-Step Test: Are Broadband Levies too Good to be True?”, (2006), International Review of Law, Computers & Technology, Vol.20(3), pp.323-336

⁶⁹ See “The Communications Market 2006”, 10/08/2006, Office of Communications, at http://www.ofcom.org.uk/research/cm/cm06/cm06_print/main.pdf

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

it would be interesting to note whether this group of downloaders would be willing to pay the higher price they pay for broadband if they could no longer download unauthorised copies which, if they would not, would mean the internet service providers would lose money. If this theory was proven, it could be said that piracy directly benefits the ISPs. It is therefore likely that downloaders are actually currently paying more in order to obtain unauthorised copies.

If this is applied to users of AOL, then the extra fees being willingly paid by downloaders and file sharers to AOL will be benefiting its parent company Time Warner. Ironically, Time Warner also produce films and television programmes inter alia, which means that it is likely that they are already being subject to the model of indirect support. If certain ISP packages offered a premium priced service whereby downloaders could obtain copies without restrictions in exchange for a proportion of that premium going to the entertainment industries, a more widespread model of indirect support could mitigate against negative effects of piracy such as substitution.

This leaves the issue of the industries mishandling the levy so that an insufficient proportion of the profits, in the eyes of the consumer, do not go to the creators of the copyrighted works. One of the consequences of the digital revolution is that the creators are seeing the balance of power tipped in their favour away from the intermediary services such as, for music, the record labels⁷⁰. This fact alone should be motivation for the intermediary companies to proactively establish models of indirect support if they are not to find themselves cut out of loop completely by their potentially more enterprising representees.

3.0: The Research Study: Questions & Responses

This section will present the findings of the study⁷¹ in more detail⁷², appropriately adjusted where necessary.

3.1: The Sample Group

Respondents were given the option of indicating their gender and age-group in questions 7.1 and 7.2 respectively. Respondents were not required to give this information, and were not asked to give details any more specific than this, due to the risk of reducing the sample size through potential fear by respondents of giving away too much about their identities. This risk would have been disproportionate as the focus of the study was on the behaviour, rationales and motivations of pirates and non-pirates as respective entities rather than the relationship between particular

⁷⁰ Norbert J. Michel, "Digital File Sharing and Royalty Contracts in the Music Industry: A Theoretical Analysis", (2006), Review of Economic Research on Copyright Issues, Vol.3(1), pp.29-42

⁷¹ The author gratefully acknowledges all participants of the research study for contributing, and to the following people and bodies for allowing the study to be advertised and discussed on their websites: Future Publishing, Imagine Publishing, Simon Byron, Ste Curran, David McCarthy, Colin Barnwell, Jolt Online Gaming, Stuart Campbell, Phil Wand, Kieron Gillen, GamesPress, Eurogamer, Llamasoft, Dave Perry, University of Hertfordshire, Digital Spy, Pro-G, NTSC-UK, WeebIs-Stuff and The Student Room

⁷² The raw data from the research can be found at <http://www.surveymonkey.com/Report.asp?U=309947854807>

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

activities and the specifics of the circumstances of respondents which, in any case, can be derived to some extent through the specific responses given to the open text questions. The gender and age of the respondents were as follows:

7.1. Gender	Response Percent	Response Total
Male	91%	715
Female	9%	71
Total Respondents		786
(skipped this question)		286

7.2. Age	Response Percent	Response Total
17 or under	8.2%	64
18-25	40.7%	318
26-34	35%	273
35-44	11.5%	90
45-59	3.8%	30
60 or over	0.8%	6
Total Respondents		781
(skipped this question)		291

Although the proportion of male respondents is high, a wider sample has been reached than was achieved in the exploratory study where 98.5% of respondents were male. The predominance of respondents lying within the 18-34 age demographic is also indicative that a wider representative sample has been reached than the previous study (where 86.7% lie within this group, compared with 75.7% here). It is desirable that the study attracted a high proportion of young adults within the 18-25 age group, as recent statistics demonstrate that this group is highly active when it comes to the use of entertainment devices and services which can be potentially related to digital piracy, such as DVD players, the internet, mp3 players, games consoles and PCs⁷³.

Similar research which has been carried out using online questionnaires include the effect of piracy on films by Bounie, Bourreau and Waelbroeck⁷⁴, which uses a smaller sample group than that of the research study being discussed here, and points out that although the sample is “very specific”, as only university students and staff were included, the results are still consistent with other studies in the same area. Further research into peer to peer music sharing networks by Rochelandet and Le Guel⁷⁵ used

⁷³ See “The Communications Market 2006”, 10/08/2006, Office of Communications, at http://www.ofcom.org.uk/research/cm/cm06/cm06_print/main.pdf

⁷⁴ David Bounie, Marc Bourreau and Patrick Waelbroeck, “Piracy and the Demand for Films: Analysis of Piracy Behaviour in French Universities”, (2006), Review of Economic Research on Copyright Issues, vol.3(2), pp.15-27 at p.26

⁷⁵ Fabrice Rochelandet & Fabrice La Guel, “P2P Music Sharing Networks: Why The Legal Fight Against Copiers May Be Inefficient”, (2005), Review of Economic Research on Copyright Issues, Vol.2(2), pp.69-82

a combination of paper-based and web-based questionnaires, although the sample data is consistent with the figures here in that 64.8% of respondents were below the age of 40.

Question 2.1 sought to separate pirates from non-pirates at the beginning of the survey so as specific questions could then be posed to them. In response to the question “Have you ever obtained, purchased, downloaded, viewed or otherwise used unauthorised copies?”⁷⁶, 91.2% of respondents indicated that they had engaged in the specified activities. This group was then asked the questions designed for “pirates”.

3.2: Pirates

It should be re-emphasised at this point that the sample group is not indicative of all of society, thus it cannot be inferred that the overwhelming majority of the public engage in file sharing. However, this result does indicate that a high proportion of the sample group, namely young adults comfortable enough with the use of PCs and the internet to respond to an online questionnaire, do fall into the category of pirates.

Question 3.1 sought to establish what types of digital files have been used, and thus which particular industries might potentially be affected by the file sharers:

3.1. Which of the following types of unauthorised copies have you come into contact with?		
	Response Percent (Adjusted)	Response Total (Adjusted)
Music	95.7%	816
Films	83.7%	714
Television	78.1%	666
Games	78.7%	671
Software Applications	83.7%	714
Other (please specify)	8.6%	73
Total Respondents		853
(skipped this question)		219

Respondents were invited to specify in an open text box if they had come into contact with types of unauthorised copies which were not already listed. The respondents who ticked “Other” and then specified a file type that was already listed were added to the totals given resulting in the adjusted statistics above. The overwhelming majority of pirates indicated that they had come into contact with music. Films and software applications are the second most pirated item, followed by games and television programmes, although these statistics were all close in proximity.

The other file types specified were e-books and scans of other publications such as comics or sheet music, which 6.21% of respondents had come into contact with. This was followed by 1.1% of respondents coming into contact with pornography,

⁷⁶ Where “unauthorised copies” were defined as “unauthorised copies of copyrighted music, games, software applications or video footage such as films or television programmes”

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

although this category could encompass any of the main categories specified. Less than 1% of respondents specified audiobooks / other recordings and images respectively.

These results support the association between piracy and the primary entertainment industries specified.

Question 3.2 sought to establish how pirates obtain unauthorised copies:

3.2. How do you obtain unauthorised copies?		
	Response Percent (Adjusted)	Response Total (Adjusted)
Purchase on a media (eg. DVD-R)	17.1%	146
Download from peer-to-peer network (e.g. Kazaa)	60.8%	519
Download using BitTorrent client	76.3%	651
Given on a media for free	47.1%	402
Other (please specify)	15.1%	129
	Total Respondents	853
	(skipped this question)	219

These results have again been adjusted to take into account where respondents have indicated in the “Other” open text box that they use one of the specified means of obtaining unauthorised copies. The results indicate that a notable majority use BitTorrent, while a significant proportion still use traditional peer-to-peer networks such as Kazaa despite recent action taken by industry bodies to diminish the use of the latter⁷⁷. Other means of obtaining unauthorised copies not specified included 5.7% of respondents using newsgroups and USENET, 3.9% using direct download from internet websites, 1.6% using FTP, and 0.9% making their own copy from an authorised copy.

These results demonstrate that although traditional peer-to-peer networks are still popular, BitTorrent has taken over as the source of choice for pirates to obtain their unauthorised copies.

Question 3.3 follows on from a similar question asked in the exploratory study, and seeks to ascertain the rationale for obtaining unauthorised copies. The exploratory study invited respondents to complete an open text box in response to the question “If you download, view, purchase or sell unauthorised copies of copyrighted music, games, software or video footage, please explain why”.⁷⁸ From the answers given, thirteen categories could be derived which encompassed all of the rationales. Question 3.3 presented these thirteen rationales in a random order, and asked respondents to

⁷⁷ See *MGM Studios Inc v Grokster Ltd*, No.04-480, 545 US [2005]

⁷⁸ See Michael Filby, “Confusing the Captain with the Cabin Boy: The Dangers Posed To Reform Of Cyber Piracy Regulation By The Misrepresented Interface Between Society, Policy Makers & The Entertainment Industries”, *ibid*; and <http://www.surveymonkey.com/Report.asp?U=291499026511> for full details of the answers given in the exploratory study

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

indicate all of those which applied to them. The results of the exploratory study have been included for reference purposes:

3.3. Consider why you obtain unauthorised copies, and select the following rationales which apply to you:			
	<i>Response Percent (Exploratory)</i>	<i>Response Percent (Adjusted)</i>	<i>Response Total (Adjusted)</i>
The prices of authorised copies are too high	(34%)	57.7%	492
US/foreign TV and films are available earlier	(14%)	59.9%	511
I always purchase an authorised copy later	(20%)	9.4%	80
Authorised copies are hard or impossible to obtain in the UK	(27%)	37.3%	318
To try before I buy (may or may not purchase later)	(33%)	66.7%	569
Unauthorised copies are free and easy to obtain	(32%)	48.3%	412
The industries have not taken advantage of internet delivery	(5%)	23.7%	202
I have a negative view of the industries, and/or think obtaining unauthorised copies is victimless	(21%)	16.2%	138
I believe I have already paid to view or use the copy (maybe at another time or on another format)	(10%)	35.2%	300
I obtain unauthorised copies of products I have no intention of purchasing	(9%)	40.2%	343
Time shifting (e.g. as an alternative to recording a programme or film using a VCR)	(3%)	40.1%	342
Unauthorised copies are superior to authorised copies (e.g. no DRM, advertisements, etc.)	(9%)	35.9%	306
I obtain abandonware / orphaned works (works with no traceable rights holder)	(2%)	35.9%	306
Other (please specify)	-	6.4%	55
Total Respondents			853
(skipped this question)			219

The large difference between the percentages of respondents for each study is attributable to the exploratory study being an open text box which necessarily did not explicitly present all of the above options to the respondents. What is interesting is the notable difference in popularity of the option regarding the respondent having a negative view of the industries, i.e. far fewer respondents appear to be willing to expressly admit to having a negative view of the industries yet, as the results of the exploratory study reveal⁷⁹, a higher proportion reveal negative views in an open text box.

3.3: Possible Solutions

Question 4.2 invited respondents to indicate whether they support a solution to piracy which has been previously suggested⁸⁰ and, indeed, used by some service and product providers⁸¹, namely paying an extra fee for related media, goods or services in order to enjoy more legal freedom to engage in file sharing:

⁷⁹ Available at <http://www.surveymonkey.com/Report.asp?U=291499026511>

⁸⁰ See Section 2.4, above

⁸¹ For example, the proportion of the cost of each Microsoft Zune sold which is contributed to Universal, albeit without the addition of extra legal rights, as discussed above

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

4.2. Would you be happy to pay an extra fee for any of the following goods/services, which would go to the appropriate industries, in exchange for more legal rights to use digital copies?			
		Response Percent	Response Total
	Yes - ISP fees	30.8%	217
	Yes - Blank media prices (e.g. CD-R / DVD-R discs)	30.4%	214
	Yes - Media player prices (e.g. mp3 players such as the iPod)	22.6%	159
	No (please specify why not)	40.9%	288
Total Respondents			704
(skipped this question)			368

Although the majority of respondents⁸² indicated a willingness to pay more for extra legal rights, a large proportion indicated the contrary. The latter respondents were asked to specify in an open text box why they would not be happy to pay extra. From these responses, five general categories were established in which the majority of these responses could be assigned, although 20.1% of the responses were unclassifiable⁸³:

- A. A belief that the industries should not receive more money, which implies a negative view of the industries is held, was cited by 31.3% of the “Other” respondents
- B. The next most popular view was that it would be unfair to impose a higher price which would discriminate against those who do not file share merely to subsidise those who do (16.3%)
- C. A general desire for prices to not be increased for any reason was suggested by 13.5% of respondents
- D. 11.5% of respondents indicated that they did not believe the extra fee would go to the creators as opposed to the intermediary companies such as publishers
- E. 7.3% implied an indifference as to whether or not their actions were in breach of the law, thus did not support paying extra to render their actions lawful.

⁸² 59.1%

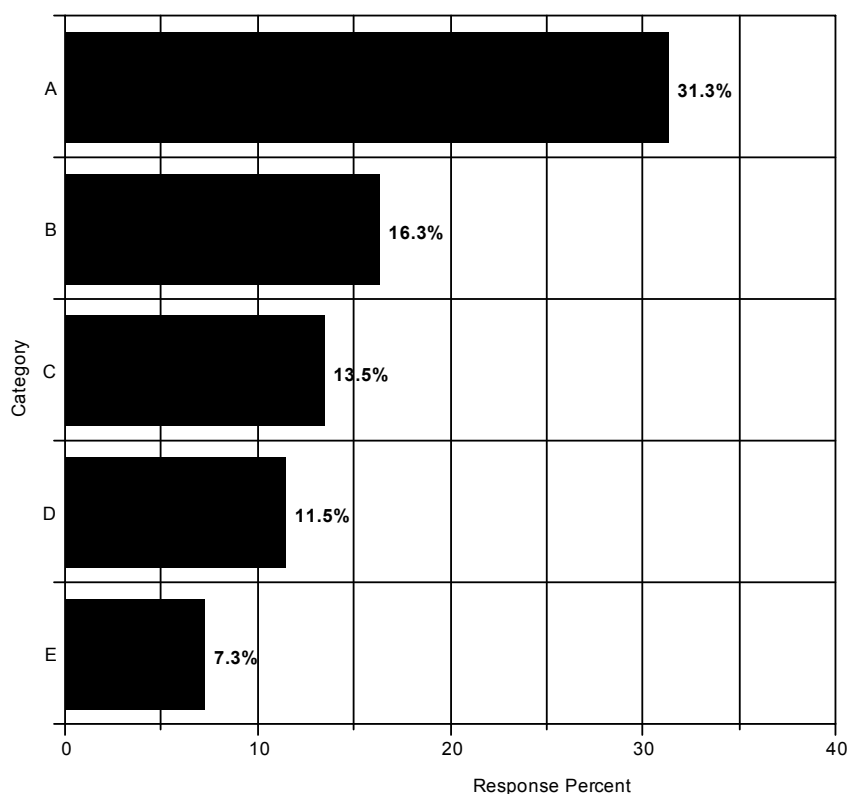
⁸³ See Appendix A for the full responses given

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

4.2. Reasons Not to Pay an Extra Fee (Quantitative Extrapolation)



Question 4.3 was designed to take a pragmatic approach to the legal conundrum of how to deal with piracy. An interview by the BBC which featured Dan Glickman speaking on behalf of the Motion Picture Association of America and John Perry Barlow speaking on behalf of the Electronic Frontier Foundation submitting the views from each side of the piracy argument, Perry Barlow suggested that the MPAA would be unlikely to emerge triumphant from the battle to control the behaviour of file sharers:

“The bad news is that you’re up against a dedicated foe that is younger and smarter than you are...and is using its technological acumen very adeptly to ward off all of your efforts at control, and you’re gonna lose that one. I mean...they’re just smarter than you are.”⁸⁴

It is difficult to dispute the claim that any of the entertainment industries have yet to successfully impose control over file sharers, thus question 4.3 sought to gain the views of this precise section of society Perry Barlow was referring to with regards to what would effectively stop them from obtaining unauthorised copies. This question attracted 619 responses⁸⁵ which, through a process of qualitative analysis, could be categorised into nine classifications:

A. The prices of legitimate copies being lowered

⁸⁴ The full video can viewed at <http://news.bbc.co.uk/1/hi/help/3681938.stm> & a partial transcript can be found at <http://news.bbc.co.uk/1/hi/programmes/newsnight/5064170.stm>

⁸⁵ The responses are listed in full in Appendix A

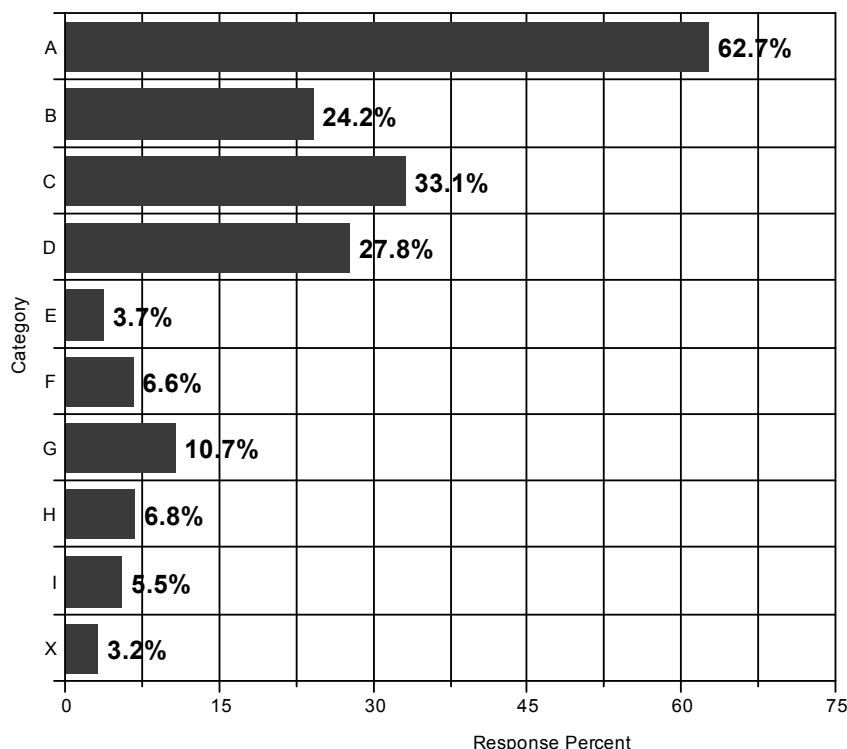
© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

- B.** A reduction or elimination of the gap between domestic and foreign availability of authorised copies, such as films and television programmes being released and broadcast respectively in the US earlier than in the UK
- C.** An increase in the efficiency of delivery processes to allow a wider selection of authorised copies to be made available more easily and conveniently
- D.** An increase in the desirability of authorised copies achieved through the removal of DRM and advertisements and/or the addition of incentives which are unavailable in unauthorised copies
- E.** A reform of the economic retail model to divert money away from intermediaries and towards creators
- F.** An increase in the seriousness of applicable penalties for unauthorised file sharing
- G.** An increase in the efficiency of enforcement of penalties for unauthorised file sharing
- H.** Nothing
- I.** Removal of availability of unauthorised copies through the closure of all means of file sharing such as peer-to-peer networks and/or the application of technological bars
- X.** (Invalid response)

4.3. What would reduce or stop you from obtaining unauthorised copies? You may include passive measures (e.g. prices) and/or aggressive measures (e.g. penalties) in your answer (quantitative extrapolation)



The quantitative extrapolation reveals a significant majority of defendants suggesting that lowering the prices of authorised copies would stop them from obtaining unauthorised copies. The next three most cited responses were an increase in the efficiency of delivery processes and a widening of choice of authorised copies, the increase of desirability of authorised copies and reducing or eliminating the gap between foreign and domestic availability of authorised copies. All aggressive measures, including raising the severity of sanctions and improving enforcement of such sanctions, were notably less popular reasons, thus supporting the contention that the carrot rather than the stick approach to regulation would prove more fruitful.

3.4: Perception of the Law

Question 5.1 was initially asked in the pilot study, and was included again here to verify the results which supported the hypothesis submitted with the report of that earlier study⁸⁶. Question 4.4 asked respondents if they had participated in the earlier study so that those who had would not be presented with question 5.1, and thus not asked the question a second time, allowing the results to be merged with those of the pilot study:

⁸⁶ See Michael Filby, “Confusing the Captain with the Cabin Boy: The Dangers Posed To Reform Of Cyber Piracy Regulation By The Misrepresented Interface Between Society, Policy Makers & The Entertainment Industries”, *ibid*
 © Michael Filby
 The moral rights of the author have been asserted.
 Database rights The Centre for International Law (maker).

4.4. Did you complete the earlier survey accessible from www.cyberpiracy.co.uk?			
		Response Percent	Response Total
Yes		6.2%	45
No		93.8%	680
Total Respondents			725
(skipped this question)			347

5.1. Which of the following do you believe is a criminal offence under English law?			
	Criminal	Not Criminal	Response Total
Downloading unauthorised copies	76.1% (634)	23.9% (200)	833
Viewing unauthorised copies	43.7% (364)	56.3% (470)	833
Purchasing unauthorised copies	80.8% (673)	19.2% (161)	833
Selling unauthorised copies	98% (816)	2% (18)	833
Giving unauthorised copies	70.7% (589)	29.3% (245)	833
Total Respondents			833
(skipped this question)			395

These results are entirely consistent with those yielded in the exploratory study, and thus confirm the hypothesis of the author that the perception of the law by this sample of society regarding which of these acts are criminal in nature is erroneous in all but the act of selling unauthorised copies, which is capable of being a criminal offence⁸⁷.

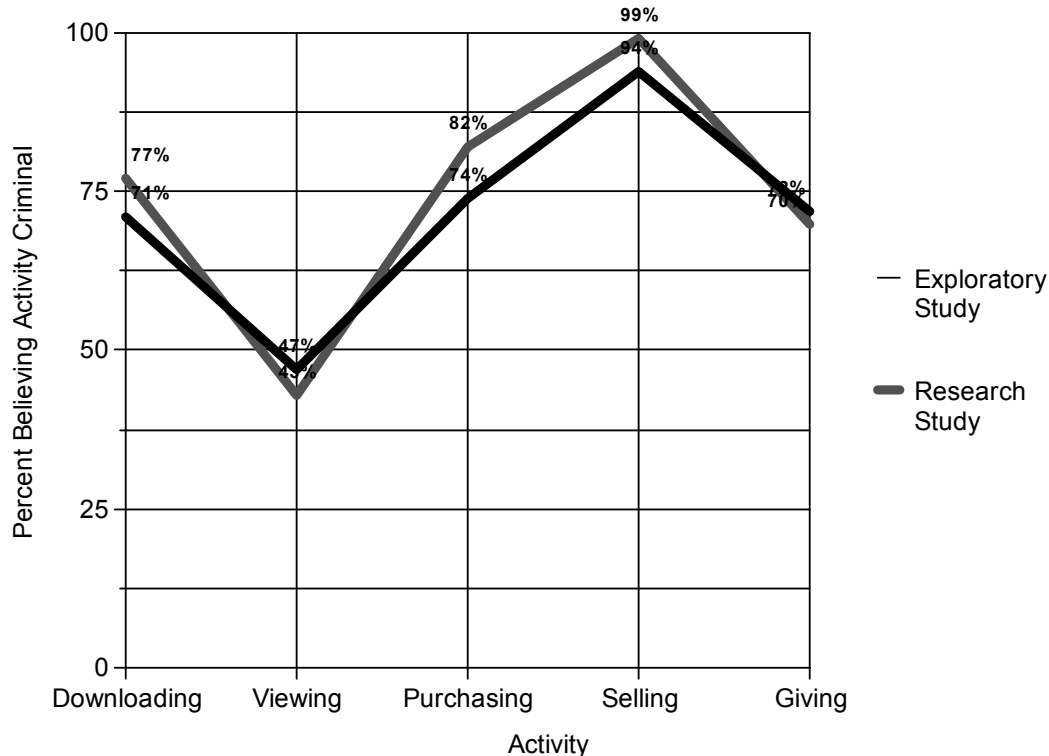
⁸⁷ See Michael Filby, *ibid*

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

5.1. Comparison of Perception of Law Between Exploratory Study & Research Study



3.5: BitTorrent

At the end of the main body of the survey, question 7.3 invited respondents who had used BitTorrent to answer some further questions specifically aimed at the use of that network. Question 8.1 asked those who chose to answer the extra questions to indicate what their average BitTorrent ratio is for unauthorised copies. This question was designed to ascertain the extent to which users of the BitTorrent network were acting as distributors⁸⁸, leechers or sharing like for like:

8.1. What is your average BitTorrent ratio for the unauthorised copies you download?			
		Response Percent	Response Total
Less than 1:1 (predominant leecher)		33.3%	156
Around 1:1 (predominant sharer)		38.4%	180
More than 1:1 (predominant seeder)		16.2%	76
Not sure		12.2%	57
Total Respondents			469
(skipped this question)			603

⁸⁸ Known as “seeders” in internet parlance
 © Michael Filby
 The moral rights of the author have been asserted.
 Database rights The Centre for International Law (maker).

The results indicate that the majority of BitTorrent users (71.7%) fall into the like for like or leeching categories, whereas only 16.2% could be accurately described as distributors.

Question 8.2 was designed to further investigate the proportion of BitTorrent users who actively engage in distribution as opposed to like for like sharing and leeching:

8.2. Do you create and upload new torrents for listing on torrent sites?			
		Response Percent	Response Total
Yes		11.1%	52
No		88.5%	415
Don't know		0.4%	2
Total Respondents			469
(skipped this question)			603

The result indicating that a significant majority of BitTorrent users do not create torrent files from unauthorised copies supports the notion that most users of the network are interested in only leeching or like for like sharing. The almost negligible number of respondents who indicated that they did not understand the question is demonstrative that the sample group for this section of the survey were experienced internet users familiar with the terms commonly used in, but peculiar to, the file sharing community.

Question 8.3 was designed to firstly reveal whether or not BitTorrent users spend money on authorised copies and, secondly, to determine an approximate figure to aid in establishing an approximation of how prevalent the “sample” and “substitution” effects⁸⁹ are among these file sharers. The reason December 2006 was used was two-fold. Firstly, as the study took place in February 2007, the month of December 2006 was recent enough to reasonably remember an approximation of what was downloaded and what was purchased. Secondly, December is traditionally a month associated with a large prevalence of entertainment products available both commercially and on BitTorrent due to Christmas. This prevalence is likely to mean that both figures would be higher than for other months of the year, but there is no reason to assume the ratio of unauthorised copies to authorised copies obtained would otherwise be any different. Some results had to be removed before an average was taken of each set of figures in order to preserve the integrity of the results, for example, results where respondents had only entered an amount for one of the questions:

⁸⁹ Both of which are discussed above in Section 2.2
© Michael Filby
The moral rights of the author have been asserted.
Database rights The Centre for International Law (maker).

8.3. Estimate the approximate economic value (how much you would have paid in shops or online) in pounds sterling for unauthorised copies of films, games and music you downloaded in December 2006, and how much you spent on authorised copies in the same period:			
		Response Average Value	Response Total
Value of unauthorised copies downloaded (£)		£306.23	426
Amount spent on authorised copies (£)		£150.16	426
Total Respondents			426
(skipped this question)			626

The results indicate that BitTorrent users spend an average of 49% of the value of unauthorised copies they have obtained on obtaining authorised copies.

Question 8.4 was designed to help further determine the prevalence of the sampling effect against substitution, and in what circumstances the sampling effect would be exercised:

8.4. Do you buy authorised copies of games, films and/or music you have already downloaded?			
		Response Percent	Response Total
Yes, always		5.1%	24
Yes, provided I like the product		71%	333
Yes, provided the authorised copy is better (e.g. contains extras on a DVD)		27.5%	129
No		13%	61
Total Respondents			469
(skipped this question)			603

The results suggest that the positive effects of the sampling effect will predominantly prevail if a downloader likes the unauthorised copy, but the substitution effect will predominantly prevail among 13% of the respondents.

Question 8.5 again sought to derive further details regarding the purchasing habits of BitTorrent users, specifically with regard to whether they spend money on authorised copies of files which they have not downloaded:

8.5. Do you buy authorised copies of games, films and/or music which you have not downloaded?			
		Response Percent	Response Total
Yes		89.8%	421
No		10.2%	48
Total Respondents			469
(skipped this question)			603

The results demonstrate a minority of respondents rely on unauthorised copies exclusively.

3.6: Non-pirates

The respondents who indicated in question 2.1 that they do not obtain unauthorised copies were given two questions to answer in place of the questions given to pirates. The first, question 6.1, sought a rationale for not engaging in file sharing in order to derive an understanding of what it is that prevents non-file sharers from being tempted into piracy:

1. Why do you not obtain unauthorised copies? (tick all that apply)			
		Response Percent (Adjusted)	Response Total (Adjusted)
	I don't know how	14.7%	11
	I think it's morally wrong	61.3%	46
	I'm afraid I would get caught and punished / fined	26.7%	20
	I'm not interested in the unauthorised copies available	37.3%	28
	Other (please specify)	16%	12
Total Respondents			75
(skipped this question)			997

Of the respondents who specified “Other”, the majority could be classified in the existing categories. A small proportion of respondents (5.3%) indicated in the open text box provided that they believed authorised copies were superior due to the benefits of receiving a legitimate box and packaging, a belief that picture and/or sound quality was better, and/or that authorised copies do not carry with them a risk of infecting the computer of the respondent with a virus.

3.7: Comparative Spending on Authorised Products

Question 6.2 asked non-pirates to estimate approximately how much they spend per month on authorised copies. Question 4.1 posed the same question to pirates so as the results could be averaged out and compared to establish whether file sharers or non-file sharers spend more per month on authorised copies. Some responses had to be removed to maintain the integrity of the results, for example, where a non-numeric response or an obviously arbitrary and random lengthy number⁹⁰ was submitted:

⁹⁰ Such as “£67533673567356767.03p”

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

4.1. & 6.2. Approximately how much in pounds sterling (£) do you spend per month on authorised copies? (Please include the cost of games, software, DVDs, cinema ticket prices and subscription television costs)			
		Pirates	Non-Pirates
Average Amount Spent Per Person Per Month		£77.56	£54.32
Total Respondents		714	70

These results indicate that pirates spend an average of £23.24 per person per month (approximately 30%) more on authorised copies than non-pirates.

3.8: Further Research

The results of this study provide an illuminating glimpse into the motivations, behavioural patterns and rationales in relation to piracy. Further research could benefit from concentrating on the solutions to piracy proposed above, and to evaluate how willing respondents would be to embrace specific elements of the Efficient Distribution Theory, namely attitudes to alternative routes of advertising such as on-screen advertising, and reactions to more detailed proposals to offer multi-tiered broadband access aimed at file-sharers.

4.0: Conclusion

That it can be established that the Efficient Distribution Theory already mitigates the purported negative effects of file sharing necessarily points to the conclusion that correctly implemented models of advertising and indirect support coupled with the inherent network effect would, with little effort from the industries, result in there being no discernible negative effects of this type of piracy, and that file sharing would in fact provide an alternative source of revenue over that which the industries claim has been purloined from the move many consumers have made away from traditional retail models.

The results of the research has pointed overwhelmingly to suggestions that not only are the entertainment industries not suffering negative effects to the scale that they are suggesting, but also that respondents are willing to work with the industries if alternatives to unauthorised file sharing are offered which are seen as being reasonable in price and of a comparable or better quality than current unauthorised material available. It is also clear that as a group who spend more money than non-pirates on authorised copies and who will spend on average approximately 50% of the value of what they download on purchasing authorised copies, file sharing pirates are a market which can, through sensible measures, be tapped into.

To be fully taken advantage of, the industries must ensure that digital copies of the information they produce are capable of distribution for private purposes without the actions of private distributors and recipients of the copies becoming infringing distributors according to the Copyright, Designs and Patents Act 1988⁹¹. Removing

⁹¹ As often and precariously amended

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

DRM restrictions is an important first step which has so far only been taken with regards to certain music files, but removing DRM restrictions universally would not only allow for the positive effects of the Efficient Distribution Theory to operate lawfully, but would also encourage consumers to use established digital stores such as iTunes⁹² to purchase authorised copies. The industries could also communicate an express permission for private copying to take place by utilising a Creative Commons Non-Commercial Distribution license⁹³. For the law to intervene to encourage the industries to take this brand of positive action would be more problematic however, as restrictions contained in the CDPA, such as s.296ZA, prohibiting the circumvention of DRM and other copy-protection measures originate from the European Copyright Directive⁹⁴. That recent research has shown that the length and breadth of intellectual property protection does not specifically increase the value of intangible assets⁹⁵ indicates that utilising the law in a restrictive way will not necessarily be the most advantageous option.

It is also perfectly clear that those who currently engage in file sharing are vehemently opposed to being the subjects of legal sanctions, and will actively avoid any further or ongoing attempts at control levied by the industries through the law. Indeed, as question 6.1 indicates, even non-pirates are dissuaded from file sharing more through a form of subjective altruism and a lack of interest in unauthorised copies than through a fear of legal sanction. What is less clear is why in the face of so much evidence to the contrary, the industries are not carrying out more of their own research into how they can work with consumers to evolve alongside them in the digital age, as opposed to wielding the sledgehammer of legal sanctions in what will be an ultimately futile attempt to bludgeon a free market into compliance. Not only is there solid empirical research such as that carried out by Oberholzer-Gee and Strumpf⁹⁶ in which it was determined through the studying of file sharing figures in relation to corresponding music sales that music file sharing has an effect on the music industry statistically indistinguishable from zero, but when the plain truth that despite the fact that piracy has been carrying on in some form or another for decades is also considered, the somewhat overblown predictions of the industries which have practically amounted to a collective promise that the world will cease to spin should file sharing not be stopped has failed to materialise. Furthermore, despite the industries being in a state of transition⁹⁷, many of the industries are on the contrary more profitable now than they have ever been, to the point that the current chairman and CEO of the Motion Picture Association of America, Dan Glickman, has described

⁹² Although the current localisation of the various stores restricting certain materials such as television programmes and films to particular countries is an unwise and undesirable contradiction to natural digital globalisation which should be addressed if a wider audience is to be won over

⁹³ See <http://www.creativecommons.org/>

⁹⁴ See Art. 6 Directive 2001/29/EC on the harmonisation of certain aspects of copyright and related rights in the information society (which arguably leaves a little room for manoeuvre), and regs.3 & 24(1) Copyright and Related Rights Regulations 2003 SI 2003/2498

⁹⁵ William Davies and Kay Withers, "Public Innovation: Intellectual Property in a Digital Age", (Institute for Public Policy Research, 2006)

⁹⁶ Felix Oberholzer-Gee and Koleman Strumpf, "The Effect of File Sharing on Record Sales: An Empirical Analysis", (2005), available at http://www.unc.edu/~cigar/papers/FileSharing_June2005_final.pdf

⁹⁷ Particularly the music industry with regard to the ongoing shift in consumer uptake of authorised digital downloads as opposed to physical album sales

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

the upsurge in cinema attendance and profits for 2006 as being indicative of a “bullish year”⁹⁸, and games developers⁹⁹ and games software retailers¹⁰⁰ are announcing notable increases in operating and sales profits.

The real mysteries behind piracy lie not in how to stop file sharing, but in how to embrace the technologies that these apparently industry-strangling pirates have created and uncovered, and to recognise that while means of distributing unauthorised copies have become more efficient, so have the means of authorised distribution. The academics have done the work for the industries – now all that is left for the industries to do is to adapt to the market with which they are currently engaged in a conflict which is not only needlessly costing them money, but adversely affecting the evolution of the digital age.

While there are certainly some pirates, specifically those who seek to profit from the work of others by operating in the course of a business, who are undoubtedly criminals, it is the private file sharers who, through developing and supporting efficient means of distribution and contributing to this research study, have uncovered the road which the entertainment industries would be well advised to take if they wish to maximise their profits even further. They may well have committed some civil infringements in the process, but the pirates are, after all, the customers, and the customers are so very rarely wrong.

“You say you’re nasty pirates, thieving, scheming, bad bushwackers;
From what I’ve seen, I tell you, you’re not pirates, you’re just slackers.”¹⁰¹

⁹⁸ See http://www.hollywoodreporter.com/hr/content_display/news/e3i7234a986fe9b96d96f4487e029cb7e99

⁹⁹ For example, Ubisoft has recently announced a 37.4% increase in fourth quarter sales: http://www.ubisoftgroup.com/index.php?p=59&art_id=60&vars=Y29tX2lkPTQ2OSZzZW5kZXI9SE9NRSZzZW5kZXJfdXJsPWluZGV4LnBocCUzRnNpdF9pZCUzRDIIImjZQSFbTRVNTSUQIM0Q1ZmMIYzlkYjA1NmQ5MWM3NjVhZDg5ZGMzMzY5NTA3OCZmaWx0ZXJfdHlwZT0mZmlsdGVyX21vbnRoPSZmaWx0ZXJfeWVhcj0%3D

¹⁰⁰ See, for example, Game Group plc, the largest specialist retailer of games software in the UK through shops and online selling, which has recently reported a tripling of international operating profits and a sales growth of 24%: <http://www.gamegroup.plc.uk/gg/investors/regnews/rnsitem?id=1177480933nRNSY4657V>

¹⁰¹ Michael Land, “A Pirate I Was Meant To Be”, (1997), LucasArts

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

Appendix A:

Question 4.3 Responses

The answers given by the respondents to question 4.3 are reproduced in full below. Please note that the answers given by the respondents are unedited and some contain language which some readers might find offensive.

4.3. What would reduce or stop you from obtaining unauthorised copies? You may include passive measures (e.g. prices) and/or aggressive measures (e.g. penalties) in your answer.	
1.	redesign the legal system so abandon ware actually has a rightful owner. lower the prices of downloadable shows (or actually bother to allow people who preorder the DVDs download access)
2.	ethically its wrong.
3.	Innability to get them .All so easily available at the moment.
4.	I think if the prices of games and music here in the UK was at a lower price (ie. games for only say £15 not £30) that would tempt me more into buying them more.
5.	more aggressive legal penalties. maybe.
6.	If they shut down internet, maybe. Or "authorised" ALL copies.
7.	I don't think that any sort of price reduction would stop me from downloading unauthorised copies, but certainly tougher penalties would make me reconsider.
8.	Higher bandwidth charges.
9.	prices
10.	Vast majority of downloads are either for time-shifting purposes, or of foreign material that has no prospective UK release date (relies on fan-made subtitles to make them viewable). Therefore measures which would stop this: legitimate time-shifting downloads (perhaps with small fees and a wide database of past programmes) and greater availability of obscure foreign films with English subtitles.
11.	Nothing.
12.	Sinking prices. No agressive measures ever will. Unless they build prisons for the tens of millions of offenders in any country.
13.	Some sort of quality assurance - usually impossible if it is dependant on personal taste. Lower prices, earlier release dates, shortage of supply (of unauthorised copies), no internet connection or computer.
14.	Lower cost software would get me buying more legitimately.
15.	Better availability of legal copies in China.
16.	unavailability
17.	Cheaper prices on actual medium
18.	lower fairer prices on physical media (CDs/DVDs) Tv shows packaged with more episodes per pack, priced at the price of a movie DVD. online music and video must be sold on open codecs with no DRM of any kind online musci sales must be in a lossless format or the same or better quality that CD Games, more effort with pricing and content in bite size chunks like XBLA
19.	only whatever the industry puts there to stop me. I only download odd things here and there and use it as a "try before I buy"
20.	Prices cheaper, more easily available. More vigilence.
21.	For TV shows / films etc, a better way of distributing them apart from much delayed and over priced boxed sets, or expensive TV packages which also bombard you with advertising, I would happily pay for.
22.	Reduction in price of Cd's
23.	affordable access to legitamate software and content that was more convinient than using a copy
24.	Stricter enforcing of piracy. At the moment I feel that casual piracy is un-enforced.
25.	hell freezing over
26.	Lower UK pricing structure inline with other Countries in and outside of the EU
27.	A real attempt by the industries in question to understand why people use pirated copies, and a corrsponding change in attitude from those industries. I'm thinking MPAA/RIAA here.
28.	reasonable prices (ex : 1\$ for a tv programme) try before you buy
29.	I would not be affected by penalties, but i would probably buy more products if there was a decrease in price.
30.	Nothing.
31.	Aggressive measures will make me pirate more. Rather than pirate I'd like a good, 'grown-up' alternative to the noisy, filthy McCinemas we are obliged to watch films in nowadays, I'd like not to be told I mmustn;t copy DVDs when I plress play on a DVD I've just bought, and I'd like the music industry to crumble into dust and be started again, by people who actually like music.

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

32.	Stronger laws or better enforcement of laws. Youtube and mspace are prime examples of people posting other peoples work, which the hosts then do very little about (from my own experience of having my trademark and copyrighnten work posted by other unauthorised users) I was told what info to send them, which I did, both responded by saying 'Thanks for the info, but we can't/won't do anything unless you take us to court' - which would be too much hassle for me (especially just to have a couple of videos removed from a website)
33.	What stopped me was that my attitude to the industry changed, I thought that people lost jobs from it and I general though it is the same as stealing
34.	If it wasn't so easy
35.	Mainly prices!!!
36.	A lack of sellers of pirate goods. Lower priced genuine items
37.	pricing, greater availability.
38.	Not having any sensory organs
39.	-Cheaper prices -Easier ways to obtain software/media from the internet, rather than having to wait for it to be shipped or broadcast in the UK
40.	Much more reasonable pricing on media
41.	well i wouldnt get lost/scrubs off bittorrent if they were released here at the same time as america. i wouldnt get psp-ps1 games if sony let me download them, but they need you to own a ps3 (wtf is up with that?) i despise microsoft so my heart rarely bleeds for them. music is simply too expensive.
42.	Availability of US films in the UK sooner
43.	Price reduction, increased retailers for PC games.
44.	Being arrested, I guess. Been copying stuff since I was a kid & I have more interesting things to spend my money on. I buy the more esoteric stuff (gitaroo man, indie music, ikaruga etc etc) to support the less mainstream artists - the biggies get enough money from everyone else. If the police took more of an interest then I'd just stop consuming paid-for media. Another reason for all this is that I'm breaking the law in one way or another (ripping your CD to your ipod, sir? Playing imported games? Playing spectrum games on your DS? You're nicked!) so the 'in for a penny, in for a pound' mentality kicks in.
45.	Price, ease of obtaining. I WOULD be interested in a flat fee unlimited access deal - even as high as A£100 a month for complete, unrestricted, play on anything access to Films for example. No DRM, no restrictions on what or how I watch/listen to it.
46.	Price cuts, higher availability of specialised content
47.	Lower pricing. (downloadable) try before you buy on more products.
48.	Mainly availability. It's easier to torrent something than using services like 4-on-demand. Also, downloadable PPV TV programmes are way too expensive - after watching a downloaded series at £0.99 a go it ends up being more expensive than the DVD boxed set.
49.	Products available at low prices with no DRM.
50.	Fair pricing. Removal of region coding.
51.	Films released worldwide at same time CDs cheaper Software cheaper earlier after initial release
52.	Something that is available from fast servers, DRM-less, legal digital copies which are significantly cheaper than their physical counterparts and cheaper as a whole than what the industry prices are currently.
53.	Dropping the unskippable ads. Dropping region locking. I'd pay for abandonware, if the money went to a charity or into a fund that developers could apply to. A try before I buy would be a must. I'm not sure what would make me buy music. I buy non-DRM music online, and I buy quite a bit of vinyl. Films I don't own, I usually don't download, since it's easier to pop down to the videostore. I have copied films from friends, and that's usually lost revenue. However I bought Spiderman 2, and will be buying Children of Men and Pan's Labyrinth. That's a pretty high proportion (3 out of 5). I have pirated music software, which I'll pay for if I ever start publishing my music (doubtful), too expensive to pay for as a toy. I have never pirated games which were not abandonware.
54.	Nothing. I was brought up with a certain level of expectation.
55.	Lower prices, more rental services.
56.	I download TV episodes to my PC to watch them when I have the full season. Sky are starting a service (sky anytime) now which may make me stop. There are some DRM issues that may make me continue.
57.	Cheaper prices through online distribution. Steam is getting there, but is charging high street prices for unboxed copies. Steam purchases should be at least HALF of the price of high street boxed goods. iTunes and similar music providers need to revise their pricing tool and DRM in music files is really annoying; a hard copy is so much more flexible than a DRM protected file. Also, as mentioned above, all movies, TV shows and music should be covered by a license fee rather than trying to charge on an individual basis. And lastly, if I'm paying for something, I refuse to tolerate advertorial content in my goods. If you're going to advertise stuff in your product, then I'm either not going to buy it or will pirate it. You're already getting your money from the advertiser to try and brainwash me, so why the hell should I give you money for the privilege?
58.	Price drops. Fewer 'anti-piracy' sermons at the beginning of authorised DVDs. Unskippable DVD segments removed. Simultaneous cinema / DVD release (even if lower quality than cinema pressing, no extra features etc) Releases of 'orphaned'/cult TV shows made more available
59.	I have now stopped as it is immoral and illegal
60.	Nothing
61.	reduce price, increase availability, respect, using of decent codex
62.	If I suddenly had a bank balance which was measured in positive numbers it would help.
63.	Content owners should provide better access online to material. Eg: ABC currently provide episodes of their show online. However, the quality is still inferior to that available the next day from BitTorrent. Shows that are available on iTunes are also made available much later than the illegitimate copies. Existing content provision mechanisms are often overpriced with respect to the hard-copy alternatives - the album price on iTunes is too expensive when compared to buying a CD.
64.	Availability of US TV shows for download at a nominal low fee, including a 'discount certificate' redeemable at a UK store when purchasing the physical media when released - i.e. having paid a small price for the download version already, the physical copy costs somewhat less on presentation of the certificate. The distributor then gets some small revenue on the download (as opposed to zero if unauthorised) plus a good chance of revenue

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

	on the physical media later.
65.	Lower prices and DRM-free products would go a long way to stop me obtaining unauthorised copies. I also use unauthorised copies as a try-before-you buy method and UK TV programmes to watch later. Unless something is really good, I usually delete whatever it is after watching/listening/using unless its really good and then I buy a legit copy - assuming its free enough from DRM that I can use said media on the player of my choice.
66.	Lower prices and doing away with regional restrictions such as later release dates.
67.	Penalties/Fines Abolish fees for digital copies/change copyright laws
68.	Prices. Lower the price and I'd be more likely to buy authorised copies.
69.	I normally buy dvd films as these arnt to expensive, if games came down to the same sort of price then i would probably buy them :)
70.	Have recently been "buying" movies and TV episodes via set-top box, but as delivery is instant and payment is made monthly it doesn't really "feel" like you're inconvenienced in any way. If software was managed in a similar manner, I /might/ be persuaded to purchase it. However, as I do not charge for the software I write, Satan would probably be skating to work that day.
71.	I want active measures: TV and Film being available to download, from the content providers when its released. The BBC is about to get this right - I would willingly PAY for this content.
72.	Legal alternatives for downloading TV.
73.	better delivery systemms for tv series eg tv shows are shown irregularly or not at all and much much later than elsewhere in the world.
74.	Lower prices, more transparent management, less whining from the big companies and more emphasis on delivering cheaper content than try and use half-arsed solutions such as DRM and DMCA-alikes.
75.	Less DRM and lower cost for digital media
76.	If the US series I download were on at the same time in the Uk.
77.	In practice, 'casual' piracy via Youtube etc and the occasional track - usually rare-to-impossible to get hold of by any legitimate means - from mp3 blogs is all I indulge in. Making it easier, or possible, to obtain these items legitimately would be enough to make me want to. I'm a working musician and don't feel right about ripping off my peers.
78.	Reduce the middle men. Creators should sale their work, on the net, direct to the consumer. Let us reward the media we love by paying for it directly. Most people dont want to steal. We just want too obtain things in the fastest, more direct manour.
79.	Having a DVR, removal of harmful or intrusive DRM and having more obscure music available on legal download sites.
80.	Lower Prices on CDs/DVDs. Harsher Penalties on downloading.
81.	Reduce prices, and ensure a higher percentage goes to the artists. As it is, they get hardly anything - even on digital copies, which cost nothing to reproduce. An artist deserves the complete profit for what they have created, and record companies make me want to vomit. Also, Sony are rootkit-using, user-raping wankers. Feel free to omit that section.
82.	Lower prices
83.	Fair pricing, with profit going straight to the creator(s).
84.	I'm a real tight ass when it comes to money and if there is a way to get something for free... That's the wya i will take
85.	making all copies authorised.
86.	Lower prices!
87.	Cheaper cinema expenses (inc. travel, food/drink and tickets) Games should be far cheaper, £45 per game is way too steep Software is definitely overpriced, there is no use in me paying *£200 for photoshop so i can occasionally retouch or resize an image (and using a mac there aren't many alternatives which are any good.. i've tried using GIMP (freeware) but it lags my computer CDs are fairly priced, but musicians seem to make more than enough from merchandise, touring and publications... it is in my opinion that just because someone has musical talent they shouldn't automatically become a multi millionaire Also, by downloading movies and games, I don't have to actually go to a store, because it currently isnt possible to download them legally (unlike for example music from itunes) And yes obviously, fines or penalties would definitely be an incentive for me to buy authorized copies, but until some of the above things improve, i will stick downloading most of my media but still pumping my regular £50-£80 a month into the industry (which, for a teenager is like myself is quite a lot of money, maybe not for an industry fat cat though..? or possibly (some) greedy musicians who have a drug addiction to feed?
88.	lowering prices of games and music, having it available in multiple formats, sheduling tv so we arent behind the US in terms of tv shows
89.	If whole albums were available to stream only for a limited amount from websites. If cinema prices were MUCH lower.
90.	Shut down bittorent & others.
91.	more reasonable prices, when a dvd costs 50p to produce and the costs have been made up already. i dont see y i should be charged over £15. international releases are hard to come by, easier to access and prices/tax of imports would reduce downloading of foreign content.
92.	Cheaper media (it costs maybe a hundreth of the price to buy a dvd than it does to produce it). If the authorities could efficiently track and punish you.
93.	reduced prices
94.	Penalties, Copywrite law is not well enforces in the area I live.
95.	lower prices
96.	Lower prices
97.	More value for money/less "scamming" by industries. "Try before you buy" DRM tracks, but DRM free tracks when purchased.
98.	Well I've basically stopped already, but if they'd make CD's work on everything instead of being stupid and making it only work on certain types of MP3 player or not on MP3 players at all. Also reducing prices.
99.	Reasonable prices - if the convenience of getting an authorised copy was proportional to the cost.

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

100.	Reduced price of authorised products Adequate provision for trial use of products Removal of copy protection from purchased copies
101.	Tbh, I think the prices they charge for CD's in the shops are the real criminal acts. Though I admit I know little of the current situation, I have it on good authority that for every say £10 paid by the public for a CD, maybe £3-4 goes to the original artist. I find it disgusting that the original skill or talent is abused as a cash cow for (already massively rich) companies to line their pockets. I'd like to see more bands giving away free MP3's on their sites as well, even though it would probably cost them money. As a fan, it makes me feel like they care rather than just taking your cash. Long live the free media.
102.	Lower software prices (e.g. photoshop)
103.	Not much, except perhaps cheaper and easier to obtain CDs.
104.	All unauthorised copies being somehow stopped and made unavailable for download. Other than that, nothing really.
105.	Lower prices for media as it is too expensive in most cases.
106.	Pricing, definitely. Also less of a "corporate" sort of attitude. Squeeze every last penny out of something and not offer real value to me, the end user. For example making an artist churn out album after album with probably only 2 or 3 decent tracks on it for £14!?! I don't think so. DVD pricing is way off too, if they can be legally sold in other countries cheaper than in Europe for example (take note Sony) then there is clearly a good bit of profiteering going on. SO I redress the balance with some healthy thievery. Want it stopped? Stop ripping us off.
107.	Wider availability and much lower pricing
108.	Cheaper pricing, better use of the 'net to distribute copies, no DRM
109.	getting in trouble for it
110.	If the industry was to make available online everything that was available in the shops, for less than they ask for the boxed copies, WITHOUT DRM, I'd be more inclined to pay for it.
111.	Worldwide releases of TV/Movie/Music content, lower prices, more money going directly to the artist/creator of the good, fewer mediocre releases and more time and money put towards making good products than funding bad ones.
112.	genuine prices cut massively.
113.	Stricter penalties
114.	Penalties - at the moment, you hear stories of people being taken to court, but you don't think it would happen to you. If there were more of a guarantee that I (emphasis on the "I") could be charged, then I'd definitely stop. Prices on the other hand would probably not deter me from obtaining unauthorised copies of anything. I have a try before buy mentality, so naturally I would not want to try for 20p, 10p or even 1p..but for free.
115.	Lower prices. More good open source alternatives.
116.	1) Authorised copies to fall in price - they cost so little to produce (DVDs/CDs) it's outrageous the prices they expect us to pay, especially in rip-off Britain 2) Authorised copies (particularly DVDs) to not have the ridiculous anti-piracy adverts at the beginning - I've already bought the fucking thing, you don't have to tell me not to get it as a pirate version 3) Removal of DRM on legally-obtained songs. One of the reasons I have, in the past, downloaded songs is because of the restrictions placed on legal downloads (iTunes Music Store for example ONLY working with the iTunes player and the iPod). It's absolutely ridiculous that, once I've bought it, I am restricted to playing it only on certain devices or a certain number of computers. 4) The industry not to lie, bamboozle and threaten its way to getting what it wants. It blamed Napster for a fall in single sales that occurred 2 years before Napster even existed, it claims that by downloading movies I'm helping fund organised crime and that by importing copies from abroad I'm risking bringing down death and damnation on all my loved ones, bringing about the Apocalypse! (OK maybe not, but you get the point)
117.	A reduction in prices
118.	Stop punishing buyers with anti-copy crap
119.	Death
120.	If I had money, I'd buy stuff. So yeah, give me money.
121.	If the copies weren't good/full quality. My position is more one of convenience than a political "free information" standpoint, so piracy as a punishable crime actually being enforced would stop me.
122.	Better legit products that aren't riddled with DRM
123.	DRM free download systems with flat fares
124.	lower costs of official media.
125.	Remove time lag between American and UK release dates of TV and cinema
126.	dunno
127.	1. availability of legal alternatives, i.e. the same content available in high quality, in standardized, vendor-independent formats/codecs, without DRM, without forced advertising, with no censorship or cropping of picture, etc. 2. too dangerous to obtain unauthorized files
128.	Reduced prices for authorised media
129.	cost I use it as a guideline for what I buy, and spend more on authorized copies because of the availability of the unauthorized. Penalty of law and enforcement of the law would also put an end to it for me as well
130.	Stricter laws and punishment i guess. (Atm it seems only people who resell get charged)
131.	prices
132.	Nothing.
133.	nothing if dvd rentals were free i'd still bittorrent convenience is why i do it.
134.	If prices were lowered then I would probably buy more, at the moment I buy music CD's which because of their genre were initially cheap. Now that they have become chique the price goes up and I have to search for cheaper outlets Take Zamfir A£35 for a CD bit much to ask
135.	prices, availability

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

136.	Less media shift - i.e paying for the same rights several times over just because it is a CD not vinyl, or DVD not CD, or Bluray etc etc.
137.	losing my internet access
138.	Nothing.I don't really have a lot of pirated stuff.
139.	Penalties coupled with a DRASTIC reduction in price.
140.	Difital Media are overpriced in my country. (South Africa)
141.	Price drop on authorized copies
142.	if i no longer had access to the internet
143.	Stricter Enforcement
144.	Lower prices, and the option, for example with music, to buy "direct from the artist" i.e. the whole cost of the album going directly to them.
145.	Reasonable prices for their products. Lack of DRM. The price of a movie, music or game has either remained the same or risen over time. Simple economics shows us that the price of older technology falls not remains steady or rises. Also the way the **AA handles their "Sue Em All" campaign of harassing their own customers drives more people toward P2P daily. They are hurting their own industry with their exorbitant prices, and gestapo methods of enforcement.
146.	You could triple the amount the artists/programmers receive for their work, and cut out all the middle men with direct sales over the internet without the "industry" and prices would drop by well over 50%. Then I would buy media and software (if it was in my language in the case of anime)after an appropriate trial period.
147.	More reasonable prices, availability of high quality DRM-free downloads, and more reasonable corporate practices. If I am going to spend \$20 on a CD, I expect the lion's share of this to go to the artist, particularly given the incredibly low costs of CD production.
148.	If there was an omniscient and omnipotent international body that found any and everybody that bought, downloaded or even used an unauthorised copy of something and throw them in jail.
149.	Better consumer protection legislation against these corporate pirates. The right to try before you buy enshrined in law. Lower prices.
150.	Being arrested
151.	Cheaper autharised material
152.	Prison
153.	Nothing
154.	Providing authorised copies on a try-before-you-buy basis... that's the only reason I dl TV shows anyway, I'm always at work when they're on, and I like watching them without commercials better anyway, soi I dl a season, if I like it, I buy the Season on DVD... much happier experience all around.
155.	To be legally given the right to try before we buy. A reduction in prices. Solid consumer legislation giving suitable rights to a refund. Reasonable protection for consumers against big corporate businesses like Microsoft etc... Who use their size and money as leverage to circumvent the rights of consumers.
156.	I obtain unauthorised copies to preview and choose which program best suites my needs, which I then purchase. This is the most efficient method to do that.
157.	Prison, followed by a ban from computers/internet
158.	More reasonable prices for software (20 bucks should not be the average)... a JOB would be nice... and if iTunes and music stores distributed in real MP3 format, I would buy all my music instead of downloading, simple as that.
159.	penalties from ISP or legal measures
160.	"Original" copies of films are overpriced, if I can buy blank dvd's for *10p, then why are the original copies from shops more expensive than than VCR cassettes? Because we're being ripped off, that's why, a fair price for a film on dvd, e.g. A£5 would encourage me to but them rather than copy/download them.
161.	authorised downloads for a small fee, especially music
162.	1 - Lower prices, like, say, in line with THE REST OF THE WORLD. 2 - Nothing. If I want to buy something (e.g. film, game) I'll buy it. If I don't want to buy it then I won't. Piracy just means I have a bunch of stuff I wouldn't have bought in the first place on my PC.
163.	Lower prices
164.	Sensible pricing (of operating systems), games that are worth buying (only a few are at present), smaller fees for one-play downloads of tv programs (as an alternative to my vcr).
165.	software at reasonable prices
166.	Lower prices Better distribution eg. rereleases of old games etc.
167.	Making it more difficult to do I suppose. At the moment it's easy to just browse the internet whilst listening to downloaded music and you'll have a new episode to watch for tea time
168.	Prices and being able to obtain products easier and quicker
169.	I hardly do anything like this nowadays, anyway
170.	if they were cheaper & easier to obtain
171.	* Earlier distribution of US TV content (UK schedules typically 6 months to a year behind) * Reduced prices reflecting the negligible cost of producing a digital copy (offset by increased distribution of the digital product) * Stop the copies being "unauthorised" - enshrine fair-use and time/place-shifting in law to decriminalize the activity
172.	death
173.	Less ridiculous prices Trialware on Software

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

174.	Legal method of watching foreign television
175.	nothing!
176.	penalties, lack of availability, only inferior copies being available.
177.	More open and easily available downloadable content. I personally think current pricing is fair. A fairer deal for the artist (in the case of music) with more transparent accountability on the part of the big download providers.
178.	realistic pricing structures
179.	The threat of getting caught is not really a worry - technology moves faster than the media "owners" can keep up with and so there always seems to be a way of covering your tracks. I download a lot of music and I am led to believe that when you're caught you receive a fine. OK - but I'm tech savvy and know all about hiding your IP address and all that. But, in my defense, I spend an absolute fortune on music, too. I more or less always buy CD I have downloaded if I like it. If I don't like it I delete it.
180.	Making film/music cheaper
181.	Lower prices for 'official' releases. An incentive to buy official releases (some kind of advantage in buying official).
182.	Try-before-you-buy for more products, digital delivery
183.	First of all, to apply the logic that downloading music and films is theft, surely that logic would need to be extended to listening to, or watching, music and films - legally - that you have not paid for. For example, at a friend's house. Of course, I understand the consequences of EVERYONE downloading music and films, I feel more at odds with the way that I am commanded to abide these rules, when the rules don't actually make an awful lot of sense. To answer the question, I don't really care if something is authorised. I don't take pleasure knowing that I am contributing to any multi-million selling companies. I take pleasure in enjoying the art that they are exploiting.
184.	Price reduction for CD's DVD's (UK is expensive in comparison to many other countries) Simultaneous Global Release Dates Removal of DRM Knowledge that the vast Profits made by the movie/music industry were not lining the pockets of a select few but were used to support new independent artists & freedom of speech. The death penalty
185.	Prices
186.	*Lower prices *A wider range of products in mainstream media stores. For example, HMV, Virgin, etc will rarely have CDs by artists outside the mainstreams genres of music, in some cases meaning that the only possible means of obtaining the music your after is an unauthorised copy.
187.	Lower prices, less treating the consumer as a potential criminal
188.	Lower prices. Threat of fines, imprisonment etc Easier to obtain eg downloads
189.	Having them available on legal sites for a reasonable fee at the same time or within two days of US airing (in the case of TV shows).
190.	Lower prices for CDs and DVDs. Everyone likes shiny things. I would buy (and indeed try on a whim) a lot more stuff if I didn't think I was wasting a lot of money per purchase.
191.	Being shot in the head
192.	Should unauthorised copies become unobtainable then it would probably deter me from obtaining them, seeing as they're so easy to come by at the present it seems silly to pay for them.
193.	Sensible pricing, allowable fair use, incredibly harsh penalties
194.	If everything I wanted to play/view/listen to was accessible to me as and when I wanted it as it is via the Internet.
195.	genuine reduction in quality
196.	Once the media and software industries start charging sensible prices for their products.
197.	The potential penalties are not an issue, the chances of being caught would be more of an issue.
198.	Prices
199.	more accesibility on the internet
200.	price only factor
201.	- Prices lowering - Release dates being the same worldwide - Ease of obtaining unauthorised copies reduced - Items being released in a worldwide format, ie japanese updates for games released worldwide being unobtainable otherwise
202.	Easier distribution (ie online) Better quality Ease of use (no protection)
203.	A reasonably priced service where I could download stuff that isn't riddled with DRM.
204.	Lower prices on goods, more effective catching of pirates, more sever penalties
205.	A decrease in the unfair price gap between copies obtainable in the UK and for example in North America. Also abolishment of the 'staged releases' of titles eg released in North America several weeks/months before in the UK.
206.	I don't intentionally buy unauthorised copies, but would welcome the right to own old second user software for which I could buy updates for the usual fee.
207.	Unless "they" made it impossible to do, I would always obtain unauthorised copies.
208.	In most cases, simultaneous releases worldwide would remove much temptation. Lower prices are obviously also going to affect my attitude towards buy v download. Although DRM doesn't really affect me as I buy most of my music and films on CDs/DVDs, if DRM wasn't an issue I would probably be more inclined to attempt to download something legally rather than illegally. I don't think that penalties are the correct way of going about preventing piracy, as it ends up turning people against the industry, thus ultimately making the situation worse rather than better.
209.	Better demo release for games, somtimes games are released in other countries before a demo is released here.
210.	Better trial versions. The opportunity to listen to streamed versions of CDs online in decent quality.
211.	lower prices on music and games

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

212.	No computer and no contact with friends.
213.	If it was made harder to do so, or if the prices of authorised copies was lower.
214.	Cheaper downloadable (legal) software and movies
215.	prevention
216.	cheaper DVDs. Earlier or equal release dates for films and games, and not fucking last here in the UK after every other country gets them. But mostly CHEAPER, we all know we pay waaaaay over the odds, again, especially here in the UK. I will not pay for an executives or companies or industrys GREED.
217.	prices
218.	Cheap and easily obtainable versions of the works.
219.	I think providing the content at a low price or free over the internet with fairly inobtrusive advertising or a state-sponsored service similar to the Libraries. (I borrow far more books from the library than I buy).
220.	better pricing or better quality in terms of gameplay for example/
221.	Lower prices and greater availability/shelf life for games. Simultaneous worldwide releases for films/tv. But mainly a better paid job so I have more disposable income.
222.	If there was no delay in programs being broadcast in the US to being shown in the UK.
223.	Lower prices and better digital distribution. Official demonstration versions
224.	Some things should be cheaper (eg. software), money should go primarily to creators/artists not corporations, the kinds of obtuse media I am into should be easier to obtain through legal means, better value should be added into authorised material somehow (typically I do not consider, for example, that DVD bonus features make owning a film more desirable, I would rather have access to the film score on the DVD somehow and definitely higher resolution sound and image). Aggressive measures just piss me off.
225.	I very rarely do now because of the risk of viruses.As I have paid a fee for my ad-free peer to peer service, I feel I have paid for the goods I have down loaded. Pure & simple, if Microsoft stopped it's astronomical charges for it's products (eg Office etc) then there would be no need for piracy.
226.	Well, prices could do down.
227.	if there a real risk of getting caught
228.	Online music stores offering high quality DRM free mp3's instead of crippled proprietary formats. More freely available demo's of console games. The 360 marketplace does away with the need to "try" very expensive games. Home user licenses for advanced software at a reasonable price, eg Photoshop.
229.	prices and quicker available to dvd cinemas too expensive, you can buy the dvd for cheaper
230.	Neither
231.	Prices
232.	Only if they started chasing ordinary downloaders.
233.	A delivery method similar to the torrent system
234.	Lower prices would definately help, if I could buy 4 games for the price of the one I might buy in a month I would be less reluctant to splash out. Ability to download Tv Shows that I've missed from the relevant channels website inclusive in my subscription (although I guess a sky plus box or something similar does the same job)
235.	More aggressive law enforcement.
236.	Official sites offering more online downloading. When buying overseas reality tv streaming (Big Brother), allowing the purchase of the tv highlights shows for viewing on the internet too for subscribers.
237.	I'll buy it at a reasonable price given the chance
238.	nothing.
239.	nothing atall.
240.	A drop in prices of certain prodcuts-mainly TV products. Plus more ways to access these things products via the internet, one large site for example that has it all stored rather than having to go between several sites, a itunes of film and TV in other words. Companies need to catch up with the internet.
241.	Cheaper Prices
242.	The death penalty. Apart from that, nothing.
243.	if prices were lower
244.	Worldwide same day publishing would prevent me from bothering to download media which is only published in one country such as the US long before anywhere else. This is madness which is "costing" publishers money which they could otherwise easily recoup.
245.	- Lower Prices - Abolishment of DRM (or at least a severe reduction) - Better, legal ways to try before you buy.
246.	Cheaper to obtain authorized copies, a percentage of the money from profits goes too charity.
247.	The european market taken seriously, and police action.
248.	Better online distribution. The abolishment of DRM - if I buy something online, then I want the choice of what media I view/listen to the product. For games, I want the right to back up to disc so that I do not have to go through the whole downloading process again. The really silly thing in the case of music is that I would download more if DRM were abolished, and I was allowed to listen to my purchase on the media of my choice. Until then, if I want to find out if I want to purchase an album, I will borrow from mates and rip it to hard drive. Proper, intelligent, distribution will result in me buy 3 or 4 tracks from an artist as an overview instead.
249.	Extremely reduced prices, to the point where distributors are making a fair profit, not an unfair one. DVD videos would be approximately £5 RRP.

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

	Music albums would be approximately £3 RRP. Games would be approximately £10 RRP.
250.	nothing
251.	Prices
252.	Lower prices. Better quality (e.g. album with more than 2 tracks worth listening to).
253.	Cheaper prices for productivity software (Photoshop etc.) for home use. No restrictions on release dates for movies in different territories (i.e. US versions of movies or TV series coming out before the UK versions).
254.	Unavailability
255.	dont have to wait 6 months before the tv episodes are on the television.
256.	I have stopped
257.	Mainly prices. The sheer volume of media I want to be able to access makes buying it all unreasonably expensive.
258.	Lower prices on CD's
259.	I'll be honest in this actually. Nothing, truth be told would stop me. If the price is high, I simply won't pay for it. I only earn so much a month, why pay permium prices for something I wont use often? I don't do movie pre-releases anymore due to the hassle of having to download it all again when the film is released, and I like everything in 5.1 sound, rather than naff mono/stereo sound. I buy virtually every film I own now. Likewise with games, I like to play online and there's just something satisfying about owning the legit dvd and having a nice collection. On another note - I do not distribute anything I have aquired legally/illegally. If somebody wants a copy of my stuff, they can bugger off, I went to the hassle of aquiring it. I refuse to pay more than about A£6 for a DVD, and get annoyed at companies such as Disney or Dreamworks and people like Mr Lucas for trying to rape us for every penny we have. (I popped into my local ASDA to buy SW:EP1 only to find it was A£19 - so I downloaded it, I only wanted to watch it once, not sell or burn to disc due to the space it would waste on my shelf. I deleted it later actually.) Very little music I will pay for now though, if any. I'm almost spotless when it comes to movie/game piracy but I've not bought a song in years. Virtually all the stuff released in the last 5 years is crap, I don't want rubbish like itunes on my pc, I hate DRM more than I hate my ex (that's saying something) as mine (though very nice and expensive) does not support it. Plus I hate WMA. Very few bitorrent users get caught, hence why I use it, the more sites that get shut down, the more will spring up. I'd stop it if they were able to track down every soul who pirated media and bang on their door, but at the moment they can't. It's too easy and CDs take up too much space.
260.	More titles on digital distribution with a closer price to high street retail - currently they are always RRP. TV shows on iTunes is nice, shame they don't allow access outside of america. Demos and trials are also often useful as these are easier to get hold of and trial than a pirated full version.
261.	end capitalism
262.	Easier legitimate ways of doing things. For example, I have 'on demand' replay on cable telly, but with very restricted choice, so I still have to resort to the Internet for several programmes. Application software is trickier. Usually I only want to use something once, then I'll discard it. I'm buggered if I'm paying A£400 for the privilege (I'm looking at you, Adobe). In this case, I don't know, better, full-featured demos. I'll happily pay for things I'm going to use a lot. Games are exclusively old stuff that it's almost impossible to get elsewhere and I've purchased (in some cases multiple copies) in the past. There's no point downloading new games, I just buy them for a few quid a few months after release. Perhaps they could be released as collections. I've certainly bought many commercial collections of games I've got perfectly good free emulated copies of already (eg. Namco Museum series, C64 games in a Joystick). Music I don't download any more, but then again I don't listen to it much either.
263.	Reduced prices, and benefits for actually going out and buying the copy. Digital distribution that works. I believe that trying to punish pirates won't work, but what would work is Digital Distribution with benefits available to those who actually purchase it (such as free updates/packs).
264.	More of a Try Before You Buy element (eg better/more demos), TV shows should be legally downloadable from the TV Station's website, Cinema too expensive + the seats are hard and uncomfortable. You have to share a cinema with idiots.
265.	Lower prices. Better availability. If finding unauthorised copies was too difficult.
266.	Fair prices, i.e. the money I pay will benefit the artist/creator, instead of just the publisher/music company. Reasonable restrictions in use, no DRM etc, able to play it on multiple devices.
267.	In truth I don't use that much unauthorised content and see it more as a way of road testing content (I don't keep it for extended periods, for instance). The current laws for theft are quite enough for me not to want to make a full-time living doing it. However, more generally I do think that there is little that can be done to curb digital piracy, apart from a wholesale change of game plan by the content industry. Stop trying to foist restrictive DRM laden content on us that prevents us from using it in a reasonable manner. That is their best bet at turning the. Less stick more carrot, if you will.
268.	Price drop Winning the lottery
269.	Prices. When you can get a CD for a pound or so more than downloading it from itunes or wherever, which if you rip it yourself, can be better in quality and you are unrestricted on which player you can move it to, it's stupid to buy a digital copy at the current prices. Also I resent having to pay more than the US for what basically is the same thing.
270.	For computer games it is availability and price. If I could download all games and get them at a reduced price due to not having any packaging etc I would definately purchase them. I have already done this with certain games. For music, the price has to be significantly reduced and DRM has to be completely removed. I will never pay for crippled products.
271.	penalties
272.	If authorised copies were available, for free, worldwide, as soon as they were released.
273.	Severe price cuts, time-trials to know if it's worth my time and money, and legal downloading for as many times I want in case I always have my HDD full.
274.	Lower prices really, I'm a poor student after all!! Genuinely though a lot of what I donwload I'll buy later on if I really like it and it's available.
275.	Nothing. The simple fact is, it's easier and cheaper than buying stuff. Although, I do spend a lot of money on things too, I just download what I can't afford or stuff I wouldn't have bought in the first place. Generally, if I want it and can afford it, I buy it.
276.	Lower prices for music/DVDs. Availability of older game titles (re-releases, retro collections etc). Coming into a large sum of money.
277.	1)More downloadable games/media i.e "Steam" system used by Valve. I hate shopping. 2). Add-on downloadable content on secure system, i.e: Im not going to bother "chipping up" an Xbox 360 when i buy one because all the downloadable content for games (like Oblivion) will be unobtainable. 3). Original games LOL.

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

278.	Lower prices
279.	If they were made available without DRM for a fair price.
280.	A gun to my head.
281.	Prices, quality of product film/game
282.	Reducing prices. Downloads should be cheaper than CD's but you can often find a CD cheaper than the downloadable equivalent. The music industries treat their customers with contempt. They want us to buy the same music over and over again.
283.	Well as everything is literally right in front of you through p2p services and so on its sometimes hard not to. Be it shows not always available in the uk or music you might have heard and liked. I suppose if there were much stricter penalties or it was more likely you'd get caught opu then I'd stop but to be honest for the amount I would download its negligible weather I'm really doing a lot wrong. Maybe a song here and there, a program I have urgent need of for a piece of coursework at uni...not much else really. I understand its actually steeling what goes on but who in these cases are the victims? Any music I download, I generally buy the album at a later date, I don't download films as I'd rather own the dvd in my collection. I might download the odd old game but I feel I have more than contributed to the games industry, spending upwards of £50 a month on gaming kit.
284.	Greater availability software available to purchase over the internet e.g Steam, Direct2Drive
285.	If music was cheaper I would purchase it. I know of cheaper online purchase possibilities but do not know which ones to trust, and I cannot use iTunes with my Phone's MP3 player. I purchase legitimate copies of most things I buy bar music. I'll buy the odd album if I see a deal but singles are far too expensive.
286.	Close down Torrent sites.
287.	Bettters and more timely demo's Lower price on some titles Faster release dates on films and TV's
288.	Prices.
289.	Major movies or games i would generally buy, unless it is a blockbuster out in the states and not due in the uk for a good few months later. Games i will buy on release.
290.	Prices The companies trating theircustomers with a little more respect Removing DRM Allow people to use their music etc on other devices woned by that person Allowing people to convert musics etc to different formats
291.	Increases in prices of blank media (DVD-R etc). Decreases in prices of certain authorised media (music albums through iTunes are much cheaper). Increases in the cost of broadband service. Serious and public enforcement of the law.
292.	A real threat of prosecution Being rich
293.	Leaving off anti-pracy software (eg. Galactic Civilisations 2). The product being of a high enough standard. The product being an Indie title.
294.	Not much, most of what I obtain I don't want or need, it's not a case of doing it to save money or anything, it's just because it's there.
295.	If the cost of the media was brought in line with various countries(America etc) Also there should not be any delays in movies/games from one region to the next..unless translation is a factor
296.	Prices being available in the UK being availabel to download at the same time as is aired on TV (in the US aswell)
297.	Better quality products.
298.	Making the technology unavailable
299.	I do not believe that unauthorised copies are nessianarily something that needs to be stopped.
300.	Sharp sticks work better than carrots - aggressive targetting by companies/authorities would work better. Imagine if your windows install wiped itself if an illegal copy was played on it.
301.	well if the products we're cheaper but harder too download the products i would buy it in the shops or online
302.	More reasonable pricing, greater availability, simultaimous international releases, fairer treatment of artists/developers, a more honest and open industry.
303.	Removal of DRM on music and reduced price on software that has sold 'x' amount. Eg platinum series software for Playstation.
304.	Making t.v shows available legally for a fair price, £1 per view as used on some sites is a total rip-off. Making a demo of a game available before it is released.
305.	NOTHING
306.	In the UK - even taking a copy of a music CD I have legally purchased is considered illegal (even if it's unenforced). That needs to change. Downloading movies on P2P is more hassle than it's worth imho. I do download music from time-to-time (I'm a binge-downloader) but still spend a sizeable portion of my salary on original music CDs, also boxset DVDs, rental movies and I go to the cinema at least four times a month. A blanket license fee would suit me fine for music to allow me to share to my hearts content. For games software, I like to have the originals, but I'll sometimes download to try first. More PC games software demos should be freely available on P2P networks such as BT to stop pirating here. For most applications, I always download a demo copy from the developers website if available, and purchase/receive (from work) original and legal license keys. However, sometimes there are applications which I can't afford, or at least, will not purchase until I'm 100% sure they do everything I need - usually after 12 months or so. Open licensing for non-commercial use would be great for these, or at least cut-down "free" versions.
307.	Lower prices for authorised goods.
308.	I imagine prices would affect my habits. After all, legal software is better supported and not likely to be riddled with viruses. Aggressive measures would, admitably, be more of a deterrent. After all, if I had enough money to pay off fines and court cases I doubt I'd pirate, assuming of course I could easily just download the software. Perhaps the biggest measure would be making it bloody hard to pirate. Microsoft XP with service pack 2 and the new Vista for example. The "Your system may be at risk" message is the most annoying thing ever. I'm buying my next copy. So, Microsoft have one this battle.
309.	If the police started to hunt down a considerable number of people downloading illegal copies, I might reduce it. As it stands, I spend a big amount of money on games and the industry is getting that money anyway. If I would not be allowed to download the games/movies I wanted, I would not buy them either because I would run the risk of buying a game/movies I wouldn't like - downloading them is the best way for me to make sure it's worth a purchase.
310.	simultaneous release of media between europe and usa. computer software to be more sensibly priced

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

311.	Cheaper Cds and no friends to make me copies.
312.	A reduction in cost for DVD's, PC Games and Music.
313.	Penalties
314.	Being able to get hold of something which I can use however I want. i.e. no DRM issues. Certain things being available. i.e. certain music is very difficult to get hold of on the internet legally.
315.	Cheaper pricing, easier and quicker availability (i.e. Internet delivery for TV series just after they have been aired, for those unable to view them and quicker release of movies at cinema onto DVD).
316.	The main factor is the availability of the media - old games which are no longer published, rare and difficult to find albums, TV shows that are not broadcast in this country, so if those things were easily available legitimately, I would have less of a reason to obtain unauthorised copies. I also object strongly to DRM being applied to content I have legitimately purchased and refuse to buy such content on principle, so this is a strong factor as well.
317.	Stricter penalties, better prices and the 'carrot' as opposed to the 'stick' - that is, offer features and items in the authorised copy that are unavailable in unauthorised copies. Also, removing DRM and similar security measures in music and films would further persuade me to use more authorised copies.
318.	a cost and a social vilification of pirates
319.	Here in the UK we get ripped off and its very frustrating to see the same products on sale in the US/Asia for much less. Bring prices into line with other countries.
320.	cheaper prices maybe. i generally only get stuff that i had no intention of getting in the first place. in many instances this has led to me making purchases.
321.	nothing....prices...
322.	Global launches - I dislike staggered release dates Abolition of regional locking Cheaper media I strongly dislike record companies - I have read that less than 10% of the cost of a typical CD goes to the artist - I do not see pirating music as seriously disadvantaging the artist when I support artists through merchandise and concert tickets. I would buy more music if I could pay direct with the artists or their management.
323.	Good quality games, which dont require software updates every week because the game was rushed. Try before you buy ensures i spend my money on a quality product, as the warranties and exchange policies can sting if the game doesnt work, or is unplayable (due to cd key's)
324.	I use unauthorised copies as a way of trying before I buy. If I like the product after trying it, I will purchase an official copy.
325.	Cheaper prices, we already pay to much in the UK
326.	Cheaper CD's and software in the shops. Less money going to the producers/publishers and more going to the artists/developers.
327.	Getting into trouble. Incredibly expensive software becoming cheaper. *Lost*/forgotten software made accessible officially.
328.	Price Penalties Guilt
329.	Allow listening to an entire album twice online before giving you the option to buy. In terms of software, trial periods and option to a refund if the product isn't as expected.
330.	Prices
331.	Reduction in price, removal of all DRM
332.	Maybe create more applications like 4OD to allow easier downloading/catching up on passed tv shows.
333.	Lower prices in shops.
334.	Penalties are difficult to enforce and will cause only the most prevalent offenders to be punished. This would not cause a significant reduction in piracy. One thing that would reduce piracy would be to release films at the same time across different countries. There is no decent reason for this not to happen.
335.	I guess if you got the death sentence for doing it, I'd have to think again.
336.	DRM Easier use of media (eg no disc in drive while playing a game) Copy protection messing my pc up
337.	None short of breaking my arms and cutting my fingers off. I've obtained music in the past, liked the one album I've downloaded and then gone on to buy their entire back catalogues, then sought out similar artists and done the exact same thing all from one downloaded song. Same goes for films like Ong Bak and The Machinist which I torrented months before they were out and ended up pre-ordering.
338.	99% of the time, it's availability. I'll go unauthorised with something that isn't available in the UK yet. If I like it and it comes out later, I'll buy it too. 1% of the time, it's a piece of software that costs Â£1000 without a downloadable free trial. And come on, there has *got* to be something crazy in brand marketing so strong they can just say it's new and expect me to pay the full price. A 30 day trial would be reasonable and then I would know if that Â£1000 cost would make my life that much easier or if I don't really need it. After all, I wouldn't buy a car without a test drive, and my first car cost a heck of a lot less than Â£1000. Back in the day and all.
339.	No measures would stop me entirely. As I do it so infrequently.
340.	Unavailability of data; getting arrested.
341.	Remove DRM More ethical behaviour from the RIAA (no more of this suing random people crap) Less obscene prices (applies mostly to CDs and some books) More representative demos
342.	Lower prices. Greater availability of free samples from entire albums. Harmonisation of release between EU and US for film. The end of all recordable media.
343.	Cheaper DVD / TV series prices. Abolishment of DRM.
344.	Earlier release dates. Better distribution. Cheaper merchandise.
345.	Removal of DRM from media. Availability worldwide simultaneously. Old obscure stuff released. Low price.
346.	proven investment in the product without syphoning of funds to unnecessary intermediaries in the industry. lower prices of product and availability

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

	online for immediate purchase/access.
347.	Lower cost - more availability
348.	Lower prices, less restrictions on use, not being treated like a stupid kid.
349.	Make authorised copies FREE
350.	If the price of authorised copies were cheaper. Or if copies of films were available on dvd sooner and cinema costs were cheaper.
351.	prices
352.	if they where cheaper.
353.	Higher penalties. to publicise the penalties and also to make the pirated materials not so easy to get hands on.
354.	prices are lower
355.	prices
356.	Nothing
357.	Price is the main issue. But harsher penalties that were actually enforced would be, obviously, a greater deterrent. However, I don't agree with prison sentences of fines. Just stop us from being able to do it. Track and trace us all like cattle. That's what you think we all are anyway. Go fuck yourselves.
358.	If a majority of japanese or us games were released in the uk and at the same time as the rest of the world.
359.	A more flexible business model that does not abuse my consumer rights by, for example, forbidding me from playing legally bought CDs on certain types of audio equipment (such as car stereos). Online digital copies that are cheaper than offline hard copies would also work; thus far, very little of the cost saving is being passed onto me. Also, make sampling of products easier - online single downloads is one step, but what about timely demos of software products?
360.	Bring down prices of software for PC (Antivirus etc)
361.	Jail terms for anyone found guilty of downloading or buying illegal material knowingly
362.	feasible internet business models that take into account pricing and reduce any gaps in timing/cost with the US and other international markets.
363.	If rights holder of older 'abandonware' software could make the programs freely available, perhaps for a small 'all you can eat' fee, that would be satisfactory.
364.	getting caught
365.	Lower Prices and easy DRM free download services.
366.	If copies of media could be obtained digitally for an absolutely minimal cost, with hard copies or special, personalised copies available for a much higher price for wealthy, big fans.
367.	mp3s: if I could try *whole track* before buying, and tracks cost say 20p/£2 an album. It's not as if there's any significant cost to the record company to transmit this data to me, after all, so why're legit mp3s as expensive as CDs? Also, if I thought the pricing structure went in any significant way to the artist - given that it's record companies who make all the profits, I've no emotional interest in giving them my money. Telly: I wouldn't watch the OC on YouTube if (a) my telly worked, and (b) if the UK season wasn't months behind the US. Software: If Office/Adobe stuff didn't cost £200. But Vista is evil and wants to stop me accessing even legitimately-copied digital media, so that'll stop me using Windows altogether instead - and Unix is freeee! Everyone downloads, so there's no realistic potential of throwing us all in jail, or even 1 in 100. I mean, if downloading meant significant risk of being imprisoned/fined lots I wouldn't do it, but that's never going to be possible.
368.	Price is always going to be a factor and lower prices means more purchases - I do prefer to own legitimate copies. I would pirate less if the pirated copies were not superior to the legitimately purchased copies. For example - downloaded movies do not auto-play unskippable ads before I watch them. Ironically, I am punished for buying a genuine dvd by being forced to sit through unskippable anti-piracy adverts. Realistically, fear would motivate me to stop pirating if I believed there was any likelihood that I would be prosecuted. I don't believe that that would lead to me purchasing more authorised materials though.
369.	prices dropping significantly - aspects such as xbox live which prevent MP gaming on hacked machines
370.	Better availability of media Cheaper Prices Threat of prosecution
371.	Better releases of foreign media in the uk.
372.	Better/easier to obtain trials, having more money myself, lower prices, more advantages (e.g. decent bonus features)
373.	Nowadays i only download music to evaluate it, and delete it afterwards regardless of wether i buy a hard copy or not. Therefore i would only stop downloading if it i run the risk of receiving a fine or something like that, because i have no moral quarrels with downloading this way because it have made me discover several great bands, and if i find the music worth having i support the band by buying their albums, if not i delete the file.
374.	Lower prices of authorised copies
375.	A change in personal circumstances - if i could afford to buy I would more often - I am not 'lost sales', as I have little excess income to commit to purchases.
376.	penalties and legislation would probably fail tp curb piracy in any noticeable amount so i'd recommend improving the alternatives
377.	once you have had something for free for so long it is very difficult to go back to paying for it. lower prices would help enormously as would sending me to prison, perhaps.
378.	Cheaper prices for the authorised software
379.	I'd be happy to pay a monthly fee to download unrestricted content with no DRM so I could put it on my ipod, portable video player, stream it to my tv as and when I wanted to
380.	If companies were more lenient.
381.	prices and freedom - i stopped downloading mp3's when emusic launched in the uk for example.

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

382.	Being caught; simultaneous UK/US release.
383.	If it was more difficult.
384.	For Music: It's pretty simple. If iTunes and similar provided completely un-DRM'd content, at a lossless encoding level (e.g. FLAC) as well as at the level I require, and I owned the rights (in a maintainable way) to re-acquire content I'd purchased, I'd pay for every single thing I use. In other areas, such as Application Software - I need Photoshop for a hobby, it's priced for the commercial/corporate market, therefore I can't and won't pay.
385.	lower pricing
386.	Availability. The only unauthorised downloads I have made have been of media not readily available in my country.
387.	Making authorised copies more freely available, at reasonable prices. By freely, I mean easily accessed and free from DRM and similar restrictions.
388.	lower prices
389.	Internet delivery which does not depend on credit card.
390.	100% chance of being caught, prosecuted and a heavy fine or imprisonment
391.	Reevaluation of ethics has significantly reduced my unauthorized copies, but I do still download television programmes that I have previously paid for in order to time-shift them to a more desirable option. Audio files are downloaded only if I can't find a paid-for option.
392.	Cheaper prices for software (MicroSoft Vista etc) Harsher penalties would probably put me off as well
393.	Disband the copyright cartels (RIAA/MPAA et al.) as illegal rackets. Make authorised copies available worldwide at the same time and at a sensible price. Remove all DRM and other means that treats a purchaser as a thief. Agressive methods will never work.
394.	The only way to do it is drop the amount it costs. They could reduce the packaging, sack some of the management people or reduce their wages. Or realistically they'll have to completely stop peer-to-peer software.
395.	Rock bottom prices, at perhaps £2-3 for a film, with correspondingly dependable and fast downloads would make me willing to pay for films. I'd pay for computer games/software under the same conditions, although I would have less interest. Anyone who makes their music 'unauthorised' is either a charlatan or a tool of The Man. They probably make terrible music, too. I download songs and sometimes entire albums. However, if I like them, without fail I buy the record, even if I could have burnt the whole thing myself onto CD, as a matter of principle. Of course, if the Internet CyberPolice burst into my house and beat me up, I'd probably stop my so-called criminal activities.
396.	Reduction of the price of CDs, DVDs and computer software. I would rather have an authorised copy but can often not afford to pay the prices charged in the UK.
397.	Improved internet distribution - particularly for television programmes. The release of a wider variety of television programmes. The removal of piracy trailers on official DVDs (although I continue to purchase DVDs as and when they are released).
398.	i have stopped obtaining unauthorized music and software since the advent of iTunes and e-music and having a job to pay for things. I recommend everyone get a job.
399.	Increased availability of purchasable downloadable media. Fair Prices (For example, I can buy DVD box sets for the same price as downloadable content that doesn't include packaging, special features and is encoded at a lower bitrate). Removal of DRM/time restrictions on use.
400.	Either lower prices or more money to spend. Online distribution of games and films becoming more common, with the option to download the product for free or for a small fee after ordering a copy. Airstrikes on the homes of suspected pirates.
401.	Lower prices, less restrictive trial versions of software.
402.	These days I only download American TV shows. If I waited for them to air over here then then I wouldn't actually be paying any more than I already am, since I frankly wouldn't be buying them on DVD, not at those prices.
403.	lower prices, ease of obtaining demos
404.	Ability to purchase legal digital copies, preferably without DRM for books and games; cheaper prices for many software applications.
405.	Lowered prices on productivity software, more consumer-friendly protection in games as opposed to DRM, lack of DRM in music/video.
406.	Prices being lowered, legitimate chance of being caught
407.	I currently do not pirate, I now have plenty of disposable income and on principal will buy anything I want to watch/listen to. Personally lower pricing and more convenient availability would have been attractive to me when I did and I probably would not have done it. Penalties are fine as a way to punish those that are caught but there is too much of a feeling of being anonymous on the internet and most people think they will never be caught.
408.	Sensible pricing.
409.	Prices, availability.
410.	Stopped already. Only did it when I was younger
411.	Threat of actual legal action. Or if it were conclusively proven that it was damaging the entertainment industry.
412.	Now I'm paid more, I'm more likely to buy software than when I was a student (I genuinely believe in paying for real copies of software; I was awfully cash-strapped at the time). Globalised release dates, especially for TV/film. Better releasing for niche titles (eg: anime). Legal ways to obtain at reasonable price, even if the item in question is not on network broadcast - the most downloaded show amongst my friends is "Heroes", simply because it's a) great and b) not on TV in the UK. Similarly Battlestar Galactica. Better "watch again" facilities. DRM-less music (cf, from Bleep.com vs iTunes).
413.	Greater/cheaper/sooner legitimate availability of foreign released content in my home country.
414.	Prices are too high on business related software, home versions should be available. Worldwide releases or downloadable releases that are region free. Penalties wouldn't come to much to be honest its too widespread and been going on since the first tape recorders where released.
415.	A wider, more comprehensive penalty procedure that targeted users, free downloads or very cheap download services.
416.	None of this region nonsense. It's the only reason I download items. Digital distribution and global distribution rights mean that everything should

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

	be available to all countries at the same time or with very limited time difference (a couple of weeks as opposed to months/years).
417.	Cheap subscription streaming content on web sites
418.	TV shows being aired at the same time as in the US.
419.	easier to obtain a legit copy than an unauthorized one. think "one-click-purchase" the industry's default position changing towards the consumer : we are not by default, thieves , hence, no more DRM.
420.	The wider availability of DRM-free authorised copies, at a price which recognised that the cost of reproducing digital copies is negligible, and that 'bare-bones' digital items [a film without extras, an album without liner notes/artwork etc] should be far cheaper than tangible items.
421.	Pricing
422.	Music: nothing. Downloading is the best way to try before I buy. Games/Films/TV: simultaneous release dates, and (specifically for games) lower prices.
423.	Availability is a major factor, especially with regards to foreign media that might not get a 'proper' local release- this is particularly important with regards to music where different countries might have wildly different tastes in genre. Pricing is quite important, too. DRM and re-downloading is an issue- I want to be able to play my music (or video, etc) on any device I choose, and if I somehow lose every copy of the file I have, I would like to be able to re-download it from the source any time I like, for free (or very cheap)
424.	- Dropping DRM from legal music downloads - Simultaneous global access to legal tv show downloads when first released in country of origin - Cheaper per-track prices on music files - Abandoning of convoluted anti-piracy measures on games
425.	Change the pricing.
426.	A cheaper form of hard distribution (i.e: not paying Â£50+ for a boxed set). Failing that, more risk of being caught, with a harsher penalty.
427.	I've almost replaced all my products with legitimate copies, apart from MS Office (too expensive) and "adult" stuff (too expensive + dodgy!)
428.	Cheaper prices - I'm not often willing to pay more than Â£5 for a CD. Though I almost always purchase a copy of a CD I'd like eventually, illegal downloads tend to tide me over until I can secure a legal copy at a more realistic price.
429.	Better legal digital distribution services.
430.	I find simple morality stopping me now more than ever.
431.	Releasing TV at the same time over here, buying a sky plus box, making it more difficult to download music eg. shutting down torrent websites, limewire etc.
432.	price drops on expensive games that are not worth the £40 they are priced at.
433.	Increased availability of niche/foreign products in this country.
434.	nothing short of ISPs preventing it
435.	More availability/easier to find Better quality of goods
436.	Getting caught
437.	reduced cost of products
438.	If they removed regional coding, launched worldwide with every product and didn't penalise the UK with pricing that is clearly designed to recouperate loses in the home market.
439.	Lower prices. Â£40 for a game that I'll only play for 3 hours is a joke. Â£40 for Shadow of The Colussus is fine.
440.	Making older software/films/tv etc. available to buy - either digitally or otherwise. And at a reasonable price.
441.	if i could by authorised copies of the content i am interested in, i would do so. the only thing stopping me in general is content company's dislike of selling goods across borders. if i could, i would, but i am not allowed to.
442.	Prices would, seeing as I don't get money to even buy myself a drink from the shop, its the only way I can get anything.
443.	nothing
444.	prices release dates
445.	Reduce prices of software. Next-generation games (PS3 and 360) have increased in price and most of the time, not much work has been put in to justify the extra £10 spent.
446.	Pricing Fines/prosecution
447.	Cheaper prices, more accessibility, less copy protection inhibiting enjoyment of product.
448.	Greater availability of old software (i.e. re-releasing classic titles in Xbox Live Arcade) Lower prices for original titles Aggressive laws may cut down on downloads, but encourage greater efforts to mask identities and I.P addresses
449.	Lower prices, easier accessibility to authorised copies.
450.	Easier ways to preview media in full. Lower costs for software.
451.	Lower prices, Better demos, less time between TV shows in the USA and UK. Better Release dates on software (why should i wait a few months?)
452.	Lowering of Prices and the availability of certain products.
453.	price drops and widespread availability of foreign tv shows
454.	Tv shows is the main unauthorised product I get now, and would be happy to pay a reasonable amount for content if companies provided the speed, quality and access the unauthorised ones do. High quality videos the day after airing which can be kept and transferred to other media for personal use. I even download shows available in my home country as the picture quality (standard def) is more stable than what my tv provider gives. The underground community have strict checks and quality control which would put dvd manufactures to shame.
455.	Same release date worldwide. It won't stop me completely because I like to keep the original purchased disc clean and use a copy instead.

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

456.	Lower prices. Shorter gaps between US and UK releases for games, films and TV shows.
457.	The music / TV industry stopping their lies and gross distortion of the facts when it comes to piracy. The music / TV industry coming up with more new original material rather than dire remakes, special editions, and rubbish spin offs. More new ideas, less repeats of old ones.
458.	Music - if the artist saw more than the label Film - cheaper. They're overly expensive right now TV - Available online in an authorised way Software - should be freeware
459.	Better Quality downloads (inc. NO DRM) available from authorised sources (why would I pay for overpriced garbage when I can get a better version for free?) More realistic prices for authorised downloads - A music album that costs nothing to manufacture, requires no shipping, no storage, no employees to handle, should be cheaper than \$9.99 (iTunes price). I honestly think penalties won't solve anything. The online community will adapt to anything that is thrown at it.
460.	Lawsuits, which threatens the methods of data transfer I use, or local lawsuits.
461.	Removing DRM.
462.	Content being Globally available. Lower costs.
463.	Having retro videogames and ROMS available through authorised channels has pretty much removed the need for illegal downloads i.e. Nintendo's virtual console and Xbox Live Marketplace are very reasonably priced and more convenient than trawling the web.
464.	Lower prices and less restrictions to use softwares (like DRMs or rootkits on some of them, not all), better and faster distribution for certain items with more extras, if applicable.
465.	Companies sniffing out downloaders and smacking them with huge fines would be a definite deterrent. then again, if it was a world market (like it should be) with easily obtainable paid downloads i'd have no problem in buying them.
466.	anime/dorama being available to buy over the internet, without cuts/long waits, with subtitles of the quality many fansubers create.
467.	Prices of import CDs - one CD I downloaded recently is \$30+\$14 postage from Japan to buy a CD of; that works out at about £22 for a CD, which is just ludicrous really. I'd happily have paid a premium price - as in, £13-14 (compared to the average new release price of £9-11) for it, but £22 is just horrendously prohibitive. Harsher penalties and more consistent ones would make me stop downloading, but the RIAA's approach to the matter so far has been an utter farce.
468.	More options to obtain a show/film after its been shown, less time between trans atlantic tv shows being shown here and in USA
469.	no drm, don't punish legitimate punters. earlier availability, films/tv do not need to be staggered so greatly in this day and age. a decent price.
470.	Blank media prices would have to be more than double what i pay now before i would reconsider whether to make a copy of a rental DVD. I don't think tougher penalties would make any difference to people making small quantities of copies for domestic use.
471.	More products available (many games don't get released here), lower prices. Also I would love to obtain game soundtracks without going out of my way to import them from Japan for a ludicrous amount of money.
472.	if the music or other media was available freely. for exaple i only download music or films that are hard to find. i would be much keener to buy the album or film. wearas with software i feel the prices are way too high for example ms office
473.	more choice, things released at the same time worldwide, reduction in price, aggressive persecution of bittorrent users, ease of access to back catalogue (especially with regards to games)
474.	Government action
475.	Better access to demo and trial content (e.g download an album which expires after 24 hours to see if you like it)
476.	games: better user policies, products released in usable state, better content, no DRM/copyprot/online activation/restrictions (if you want to play retro you *have to* rely on warez and unauthorised patches), prolonged lifespan (free exclusive stuff/support). Price of pc games is ok. movies: instant online availability outside of US - meaning *before* tv/dvd premiere. Price. music: I don't p2p anymore, only songs not available online. There is nothing to reduce here books: only edu and tech-books, to preview if it contains what I'm looking for all: Entertainment biz reminds of communism. They expect common people to pay someone who's making threats to them. They've got distribution services free of charge at their disposal (spreading their goods to milions of people - for no cost), yet instead of using it, they call it piracy.
477.	Availability in the UK of Japanese or US only games. Prompt UK airing of US TV series. Legally downloadable content to be less restricted by geographical region.
478.	I would stop if all the media was DRM free, this is my main reason if I purchase something I should be able to use it on anything I want not what the companies say I can use it on. DRM management is not about stopping piracy it never was, its about restricting users rights for the usage of media they've legitimately purchased. DRM doesn't work you can see that on any p2p or torrent site. All it succeeds in doing is increasing piracy, it's interesting that when napster first started record sales were increasing when it shut down sales of cd's started declining, is that a coincidence?
479.	1) Better trials for software 2) Less harrassment - if I'm already treated as a criminal, why not become one? 3) More availability of rare items 4) Cheaper games/films
480.	Some magical way to give me infinite, instant access to everything I want in my front room for minimal prices. Occasionally you just pirate to get it, as soon as possible, as you need it then. Download purchasing at reasonable rates is the way to reduce it. I do buy download purchases, after all, especially on the more obscure material that's rarely in the filesharing.
481.	Prices, easy internet distribution.
482.	Reducing prices. Same release dates as other countries.
483.	nothing
484.	Written Threat of a fine/jail term.
485.	Having 90% of the stuff I download actually available to purchase.
486.	I often use pirated copies because of poorly implemented online purchase mechanisms - e.g. I purchased a digital download of version 2 of something, and then change my credit card details / suffer a system crash, and find it hard or impossible to prove my right to a cheaper upgrade to version 3 of said software. If this sort of problem did not arise I would not download software in this manner. TV / Music - until they offer easier access to the things I am interested in (only available in the US most of the time) I would not be inclined to stop.
487.	Giving me a job that pays megabucks. Lowering the average prices by 50%. Releasing TV and films at the same time in all countries.

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

<u>488.</u>	If the content owners made it as easy (or easier) to obtain authorised copies as (/than) unauthorised ones and acted more openly in general. If I had any form of income after paying rent and food to spend on authorised copies. Also, if there was a greater guarantee that the money was going to the actual artists/content creators rather than a host of middle men.
<u>489.</u>	Wider availability of content from international sources, lack of DRM allowing free use of purchased files (time limited files would be fine).
<u>490.</u>	a better system for getting the stuff legally without restrictive drm that makes every purchase an expensive lease.
<u>491.</u>	Remove spyware from media and applications Remove crippling DRM Remove offensive, unskippable "Anti-Piracy" adverts on DVDs Provide a proper usage licence or even better alternate-format availability on media - EG, buying a DVD should also let me rip-and-format for portable playback devices, or archive storage. Provide internationally accessible content - Battlestar Galactica, for example, is available on iTunes as video the day after broadcast *in the US only!* It's a paid download, therefore nobody loses if I can buy it this way. I would if I could.
<u>492.</u>	Lowering of prices. Ability to get hold of things available in other countries. No DRM.
<u>493.</u>	nothing as i only download albums that i m not sure i will enjoy. if i do enjoy i will spend the money to purchase the sd
<u>494.</u>	Prices, availability.
<u>495.</u>	Prices, availability, no DRM
<u>496.</u>	Treat people like adults and they'll respond. The majority of my piracy was as a teenager (20 years ago) and I rarely indulge now apart from for 'behind the curve' games (MAME, 8/16 bit) and the occasional try-before-buy
<u>497.</u>	lower prices no drm or other restrictions better quality (if I'm paying the same price as a cd I want the same quality) major crackdown (high likelihood of getting caught)
<u>498.</u>	No DRM on authorised downloads. I will not pay for anything I can't watch on all my devices (archos etc.)
<u>499.</u>	Cheaper pricing on software, some software is updated frequently and put in the market at the same price as it's predecessor. The readiness of some software publishers to drop support for versions of their software so quickly after a new release only adds to the need to have the latest version of their software, and I'd imagine that most users find that the easiest/quickest way to do so is by obtaining a pirated copy. More portability in legally purchased material, for example the ability to easily make a back of a DVD (or other video/audio disk format) on a home PC without having to negate DRM. The fact most publishers seem to forget is that once a single copy of a film has been extracted from a dvd/hd-dvd, and made available for piracy, the encryption on all other copies of the disk in existence becomes worthless and only serves to hinder normal usage, so why not leave the content on the disk unprotected to begin with?
<u>500.</u>	I mainly pirate software. Increased detection and fines would deter me. I'm sure Microsoft would sell more copies of their stuff if they were cheaper for individual purchase. Some of the best products for the likes of video editing are too expensive for home use e.g. £2000. If they made the same available much cheaper but with a limited number of uses, I might buy.
<u>501.</u>	Reduction of the price of authorized copies Further incentives when buying authorized copies Heightened risk of prosecution for unauthorized downloading
<u>502.</u>	Better prices on authorised copies, better/quicker availability. More readily available, more ease of gaining them - less debit/credit card sites, more Paypal (using echeques) sites. Penalties, especially custodial, for getting unauthorised copies.
<u>503.</u>	Micropayment authorised copies, eg episodes of programmes for one of price (in pennies not pounds), or maybe a flat montly fee. TBH aggressive measures of clamping down on people around me (ie friends of friends of friends) would no doubt scare me into doing it -less- but not in any drastic way. Would still make unauthorised copies among friends.
<u>504.</u>	prices. The main reason is the way the music industry treats the consumer. They force us to have DRM in our music, they tell us the bit-rate we MUST have. i pay for it, I should dictate whether it has or does not have DRM and I should have 192kbps with LAME encoding.
<u>505.</u>	Wider Availability, Cheaper Prices
<u>506.</u>	Better price policies during the release period, if it is profitable selling a DVD at 7,5 why are they sold in the release period for obscene prices?!
<u>507.</u>	I can't afford anything :)
<u>508.</u>	Cheaper prices in general, more demonstration things available.
<u>509.</u>	Ridiculous prices on some software (applications in particular) seems to force me down the piracy route. Eg. MS Office, which I may only use for small amounts of time is massively overpriced for home use. Generally speaking I usually buy all games and DVDs. Also I sometimes download films if I haven't had time to see them at the cinema before they are released on DVD. If they were released at the same time on DVD as the cinema I would not download the films, I would purchase the DVD.
<u>510.</u>	At the moment, nothing. Rip-off Britain is expensive enough as it is, especially with the increasing inflation. I am a student, and I can't afford to pay for authorised copies, when I have my student loans to pay, TV License, Gas bill, electricity bill, water bill, internet fee, accomodation rent, food etc. Its neverending!
<u>511.</u>	being able to have access to US shows at the same time as the US or any other country for that matter
<u>512.</u>	Global releases, decreasing prices, ...
<u>513.</u>	I only obtain unauthorised copies of things I can't obtain legally. If they were released to buy as official copies then I would do so.
<u>514.</u>	a price drop in singles
<u>515.</u>	Cheaper software, less restrictive DRM's
<u>516.</u>	getting a fine or criminal prosecution
<u>517.</u>	Cheaper games, films, albums, etc. No adverts in cinemas, games or films. More respect to customers and less all-or-nothing funding for films and games that means that there are a hundred terrible ones for every decent one.
<u>518.</u>	Cheaper prices - it costs somewhere in the region of 25-60p to produce a DVD with case, and yet we get charged upwards of £15.
<u>519.</u>	Better quality legal downloads, for fairer prices.
<u>520.</u>	Bring TV series to the UK at the same time TV series that are available on terrestrial TV Lower prices

521.	nothing? the real deal will always be expensive, games cost way too much to buy.
522.	Cheaper software, no intrusive copy protection, earlier availability.
523.	I have already stopped.
524.	Lower prices, maybe releasing things in the UK instead of making us wait for it to be translated into french, spanish e.t.c
525.	Drop the prices simple as that ,they charge a massive amount
526.	Cheaper prices. Easier online availability. No or little DRM - e.g. no time limits, no copying restrictions, etc.
527.	Near simultaneous worldwide releases of film and tv shows. Removal of territorial price fixing. My bank not charging me for overseas transactions. Removal of DRM from authorised copies
528.	Prices is the obvious one. Why should people pay through the earth the the cost is never properly justified. I wouldnt spend £5 on an egg id buy a chicken instead.
529.	Cheaper prices, better quality of product, removal of restrictive DRM (for example on CDs) or irritating unskippable copyright notices (eg. on DVDs).
530.	Lower prices of authorised copies. Bringing prices of said authorised copies into line with global prices, especially regarding software, music and dvds.
531.	More aggressive forms of tracking
532.	Increased risk of prosecution / fine
533.	If a free copy is available I will always take that over a copy I need to pay for. Penalties would be the most likely thing to stop me.
534.	availability of legal copies, availability through legal internet means, death penalty
535.	Fair use - When I purchase something, it becomes MINE. Copy Protection - Pirated software has no restrictions (Doesn't stop other programs working, doesn't crash my machine, dosen't require the sodding media to play it) Copy DVDs don't make me sit through a stupid "advertisement" telling not to copy stuff.
536.	Proper digital distribution, and steaming on demand services for television and films.
537.	Removal of DRM Removal of region coding Release of games/films/music in different regions at same time
538.	if there was a cheap and legal alternative. EG the TV industry let me download and view (and keep) shows like Lost - and not have to wait. Happily pay 99p for this, and i'd still buy the DVDs when they turned up. Penalties don't scare me, too many people pirate stuff and they can't even catch one percent of them.
539.	Making more things available to purchase i.e. old TV series, music tracks etc
540.	You could close the Internet, I suppose.
541.	Greater availability
542.	Lower prices for authorised goods, easier methods of delivery which are fast.
543.	Legal available downloads for reasonable prices (e.g. lower quality downloads that are very cheap that are really for watching rather than keeping). Removal of DRM and messages on the purchased products. If I bought the product then I don't want an unskippable lecture on piracy that I wouldn't get if I actually pirated it! The ability to trade in existing copies of a product to get a discounted new version. E.g if I own a film on DVD, I don't want to pay the full price to get it AGAIN on HDDVD. Same with Vinyl and CD's etc Global release dates. If something's available in the US, but we have to wait x number of months for it then that's just going to increase the chances of it being pirated. I like to see stuff as soon as I can... (blame the too effective advertising campaigns maybe!)
544.	Much lower prices, a complete lack of DRM, easier access to digital distribution for all media, not just mainstream.
545.	tv series that i want to watch being broadcast at the same time in the u.k. as the u.s. not weeks/months/years later if at all. films being available on dvd at the same time as cinema releases. i have a projector and surround sound too, i also have leg room and a distinct lack of people talking and chomping on popcorn. accurate tracking and severe penalties to users like myself
546.	Price reduction More added value i.e. thicker CD booklets containing more info.
547.	Reduced prices, no DRM protection.
548.	Lower prices on software packages (e.g. Office, Photoshop).
549.	prices availability - especially in digital form over the internet
550.	stronger penalties
551.	Less DRMs, higher availability (i.e. internet downloading), effective neutralization of internet piracy (unlikely)
552.	Pricing, the cost of music is escallating and will never stop!
553.	- if real copies were cheaper - if pirated stuff as harder to get
554.	-Access -Reduced price -No region code (DVD, games) -Reduced tax on import
555.	Most of the things I download are anime fansubs that will never see the light of day in the UK (although I do buy them if/when they do become available) or japanese music with have a high native price. Therefore companies need to work better at localising anime ,and games to a lesser extent, in all territories, not just the US. Also, a European release should include the UK, this is not always the case.
556.	price
557.	Freely available digital copies of everything I want, paired with low prices.
558.	Unavailability. Prison.
559.	nothing

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

560.	DEATH. It's a disorder, probably.
561.	cheaper prices
562.	prices, penalties, availability, all these things have a bearing on my decision whether or not to obtain unauthorised copies. Thing is if i didn't obtain unauthorised copies of the stuff that i do it's unlikely i'd buy the media.
563.	Increased functionality (I.e. for games I intend to play extensively, easier patching makes purchase worthwhile) More extensive enforcement through ISP:s etc.
564.	Lower prices and wider availability of rare media
565.	Lack of region locks, reduction in price disparity between regions, removal of delays between launches between regions.
566.	simply an official easy and reasonably priced distribution set up.
567.	TV: Releasing legitimate copies sooner Music: Having it available at the iTunes Store Games: Releasing it in Europe So generally, providing a way to get it without all the hassle of downloading.
568.	Correct prices on the stuff, like music, games and so. Far too expensive. I would prefer to buy through internet, like iTunes, which saves lot's of money like distribution, cd's, dvd's, paper, cases, ink, employees, etc.
569.	Have stopped using p2p for music as you can't guarantee you can get the track(s) you want or the quality of them. iTunes is only 79p a track after all. Will always buy a full album though.
570.	Hot branding irons.
571.	Local availability Lower prices More choice ...
572.	More competitive pricing of games, movies and music. Better online delivery methods.
573.	Decent subscription services not just aimed at the USA
574.	Prices, or if the software done alot more then a freeware version I can find elsewhere. Software seems a stupid amount of money nower days, take Office 2007 for example; you pay an extra Â£200 odd for the full package, when the only difference (from a version down) is one program like Outlook... is Outlook REALLY worth an extra Â£200? Music is also too expensive, I won't pay that amount of money for an album when I'll only be listening to one or two of its songs.
575.	Agressive enforcement of the law, or reduced price of the authorised copies making unauthorised uneconomic.
576.	Prices, and digital distribution techniques. My house isn't big enough to hold all the media I might watch once, and never again.
577.	Nothing
578.	Lower prices to make product purchases less of a risk, less delays for European releases and ensuring that European releases meet the quality standards of those available in other regions.
579.	Cheaper pricing. Quicker release & distribution for media. Less aggressive DRM and patronisation from the industries involved.
580.	Only losing the ability to download them in the first place. Take away the ability to download TV shows, and I would stop watching them, and subsequently stop buying the DVDs. No point in stopping abandonware downloads when there is no other legal (authorised) way to obtain the software. Is there was an authorised way, I'd buy it anyway.
581.	Quality - make it worth my while to have the legal copy. That includes value for money...
582.	Easier access to the various media in as legal form, and/or a tighter policing of the availability of illegal software online. Its often just as easy to get things illegally, and its free.
583.	Lower prices Better Quality More value for money
584.	Better availability of unpopular media.
585.	cheaper authorised copies.
586.	Prices! If they were cheaper, I would purchase copies. I am against piracy but I cannot afford software/games/music etc especially when so much choice is available
587.	Lower prices, better availability (regional limitations)
588.	Greater emphasis on opportunity to pay what you think it's worth. A greater feeling that the creators benefit from their work rather than businesses that will spend the profits reducing customers rights (i.e. Lobbying) No DRM Greater rights over the content Reduced pricing No more region controls
589.	Reduced prices, European releases!
590.	Making it more difficult to obtain these copies
591.	Price. Accessibility. Freedom to do with ones own property as one wills.
592.	Prices to be dropped
593.	Cheaper prices, DRM
594.	reduced pricing and more availability of material online
595.	Being as there would be no way to stop it, nothing would stop it. If all access to the copies could be removed then I'd obviously stop. Or if it became too expensive to obtain them.
596.	lower prices
597.	Lower prices of authorised copies, i.e CDs and DVDs would reduce my piracy. Serious penalties would also deter me.
598.	Nothing would stop me but I would definitely reduce if there were official alternatives as efficient as the pirate services. Ie put up an official episode of 24 on bittorrent that keeps some advertisements and let people see it. Those who like a program might like to choose the official version to help pay for the product. Videogames should be WAAYYYYYY cheaper if they are digital format (ie. not a physical disc) as the companies are saving

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

	SHITLOADs on logistics and packaging. We need to see those savings too as we are giving up the physicality and the ability to sell second hand. Im talking 5 euro or less for a major videogame title available on the net. A large percentage of people who pirate would probably buy these once in a while (ala xbox live or nintendo virtual console). Think Tesco or Walmart - make it super cheap and the sales will rocket - it doesnt cost nintendo any more to sell the same product 1000 times or a million times online but they certainly make more money. The answer is cheap, high quality and they d make a fortune. Idiots deserve to be pirated otherwise.
<u>599.</u>	Any aggressive measure will be counter-productive. It will only encourage me to do it more. If the industry wants me to buy it, they will have to start to listen. When CD's where introduced, the industry said that prices would go down because of reduced costs. The costs now are a fraction of the costs of what they where back then but prices have sky-rocketed. Yet most artists can hardly make a living, where does all the money go? I want to support an artist with my money, not those mobsters from the industry.
<u>600.</u>	Prices, Media coming out in Europe earlier.
<u>601.</u>	The ability to get a file download against an already purchased product i.e. you buy product and receive a download code permitting you to download the same product to file format for back up should the disc become damaged or allowing use of the file for mp3 players etc while keeping the disc copy safely stored
<u>602.</u>	i have stopped, as mostly i downloaded games for the pc. Now i am more inclined to support the format properly.
<u>603.</u>	For me it is mainly convenience - I want to download films, tv shows etc. Without DRM (so I can watch them on any device I chose), and for a reasonable price (for example, I will not download films if they cost as much as a DVD with all the extras that a DVD brings, and knowing how much cheaper the distribution is for the companies involved)
<u>604.</u>	lower prices (possibly subsidised by advertising), easier availability over the internet, online authentication (eg Steam).
<u>605.</u>	Lower Pricing. Easier to obtain Music and TV shows
<u>606.</u>	If the entire thieving process was incredibly difficult, and laborious. I'm lazy, so make me work for ill-gotten material, and I'll likely cease.
<u>607.</u>	Perhaps if things were released simultaneously worldwide with no regional encoding, this would remove the impetus.
<u>608.</u>	Better quality, cheaper downloads. An low-quality DRM'd MP3 copy of an album on iTunes shouldn't cost as much as the CD copy. Authorised DVDs shouldn't be prefaced with adverts claiming that you're a criminal - it's even worse when those notices are unskippable. Things like the new 4-OD service are a step in the right direction but the quality and selection are appalling.
<u>609.</u>	Price. Availability - PS1 games on the PSP for example. I'd also pay a small fee if I were able to download TV programmes - provided they were released in good time (but understand that will never happen as these things need to go through 20 different groups/viewed/rated etc before they reach us) Demos help with the games, and tend to lead to a purchase, or not. If the various media wasn't so easy to obtain/ Although whos to say I would stop even if it was difficult...
<u>610.</u>	On demand downloads. internet TV. Lowing prices!!!! EG Å£60 for an xbox 360 game!! Why so much.
<u>611.</u>	Lower prices for Windows :-) Or finding a way to get rid of Torrents.
<u>612.</u>	Ridiculous, unavoidable piracy warnings/software on legally obtained media. Synchronous international releases. Less inflated prices for music and DVDs. A prison sentence would probably make me think twice also.
<u>613.</u>	Financial circumstance (i.e. higher wages). Plus respect for the creators.
<u>614.</u>	Prices, penalties, social acceptance
<u>615.</u>	Reduced prices, and no DRM. I think getting sued would probably stop me too.
<u>616.</u>	Pricing is an obvious factor, but also portability and convenience; having a series of a TV programme or a Playstation game installed to a hard disk is considerably more convenient than hunting around a spindle, traipsing to a shop to buy it or waiting for the postal service to get items from mail order delivered.
<u>617.</u>	I'd think twice if policed and enforced correctly.
<u>618.</u>	Nothing. Downloading is usually for a trial.
<u>619.</u>	If the authorised copy was not as compressed.

Appendix B:

A Brief History Of Piracy

This section is intended to provide a working definition of piracy for the purposes of this paper, and to discuss its development with regards to the entertainment industries. For evaluations and explanations of specific file formats, please refer to Appendix C.

Definition

Piracy is a term which has traditionally applied to a type of crime committed on the seas, namely the taking by force of property or ships or the kidnapping of persons from ships¹⁰². Although this tends to conjure images of large-sailed wooden vessels flying a skull and crossbones flag firing cannons upon other vessels in centuries past, popularised by Errol Flynn and, more recently, the Pirates of the Caribbean franchise, modern day piracy has seen sizeable frigates replaced by speedboats, swords replaced by machine guns, and blackbeards and eye-patches replaced by balaclavas.

Although piracy in that sense still takes place today, albeit to a far lesser extent than in the days of the British Empire, the term is now far more commonly used to describe an altogether different type of activity. The literal term of piracy is defined as “the unauthorized use or reproduction of another’s work”¹⁰³, while cyber is attributed as “relating to or characteristic of the culture of computers, information technology, and virtual reality”¹⁰⁴. Thus cyber piracy in the context of the entertainment industries can encompass any person who utilises IP in a digital form without the authorisation of the rights holder.

A History of Piracy and the Entertainment Industries

Although the term “piracy” has, as we’ve seen, been somewhat ironically hijacked from its traditional roots, the etymological definition reveals that “pirate” was first used to describe “one who takes another’s work without permission”¹⁰⁵ in 1701, undoubtedly in the context of books. If one was to have taken the content of another’s book and printed copies themselves to sell without authorisation, they would have been technically pirating the IP.

The same source reveals that the term has been applicable to an “unlicensed radio broadcaster” since 1913. However, before we can truly find ourselves in the realm of

¹⁰² As piracy usually takes place on the high seas, it is defined in international law (Geneva Convention on the High Seas 1958 & Convention on the Law of the Sea 1982) as “any illegal act of violence or depredation which is committed for private ends on the high seas or outwith the territorial control of any state”

¹⁰³ Oxford Dictionary of English, 2nd ed. (revised), (Oxford University Press, 2005)

¹⁰⁴ Ibid.

¹⁰⁵ <http://www.etymonline.com>

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

cyber piracy, we have to jump forward another 70 or so years, when the digital era became established and began to boom.

Computers & Computer Software

Although the first rudimentary computers and games consoles were available in the 1970s, it wasn't until the 1980s that the issue of cyber piracy became pertinent. The Sinclair ZX81 and the far more popular ZX Spectrum¹⁰⁶ series marked a boom in home computing. This and its main rival, the Commodore 64¹⁰⁷, initially used two primary methods of loading software. One method was by manually typing in pages of code by hand. The other, far more common, method was by loading programs recorded onto cassette tapes. To make an unauthorised copy of a computer program was as easy as connecting two tape recorders together, or using a twin-deck tape recorder¹⁰⁸.

As the Acorn BBC and Commodore 64 formats moved onto utilising 5.25" floppy discs, copying the programs stored on the discs could easily be achieved with a blank disc and the computer and drive itself.

Towards the end of the 1980s and the beginning of the 1990s, market dominance was transferred to the Commodore¹⁰⁹ Amiga range of home computers and, to a lesser extent, the Atari¹¹⁰ ST. At this time, IBM¹¹¹ PCs (the ancestor of the modern-day PC seen in most homes and offices today) were also gaining in popularity. All of these formats relied upon a 3.5" floppy disc system for their data input. These were again easy to copy, as any home user could simply connect a second floppy drive and implement a direct transfer of data to a blank floppy, or the computer could hold the data of the floppy disc in its memory before writing the data back onto a blank disc.

Far more concerted efforts were made throughout this generation of computing to imbue copy-protection systems to prevent the unauthorised copying of programs from one floppy disc to another as the value of the software market was increasing. Many attempts at copy protection were most usually very quickly bypassed by coders who would set out to crack the protection either as a personal challenge or motivated by the feeling that software should be freely copied regardless of the rights holder's views.

For example, many Commodore Amiga users could use one of the "X-Copy" series of backup tools to copy the contents of their discs and automatically bypass any inherent copy protection. Ironically, although the X-Copy software was released as paid-for software via a publisher, it could easily be copied onto a blank floppy disc using the

¹⁰⁶ <http://www.worldofspectrum.org/>

¹⁰⁷ Although other formats existed enjoying varying levels of success, most notably the Acorn BBC series, Sinclair and Commodore enjoyed the largest market share between them

¹⁰⁸ The Amstrad model of which was at the centre of the music industry's attempt to have the device declared as unlawful, which culminated in the House of Lords case of CBS Songs Ltd. V. Amstrad Consumer Electronics plc (1988) AC 1013

¹⁰⁹ <http://www.commodorecorp.com/corporate/default.aspx>

¹¹⁰ <http://www.atari.com/>

¹¹¹ <http://www.ibm.com/uk/>

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

program itself. Despite its obvious potential application of making unlawful copies of software, it also had the legitimate use of copying public domain software¹¹².

In addition to copy-protection measures programmed into the software, developers also tried programming software to only work if a requested word from the software's accompanying manual was entered. This was often circumvented by either home programmers removing the system completely, or using something no more technically advanced than a photocopier to supply a copy of the requested words along with the unauthorised copy of the code.

As the 1990s saw the dominance of the Commodore Amiga series give way to the rise of the PC, copy protection techniques became ever more complex. However, authors of copy-protection circumvention software were never less than a step behind. Even the use of a hardware "dongle" – a device which would have to be plugged into a port of the computer before the software would work – could easily be circumvented by reprogramming the software to ignore the requirement.

With the advent of the CD-ROM¹¹³ – a compact disc containing data – the software developers enjoyed a brief period where, short of breaking the data of the CD down onto floppy disks (which, considering CDs could contain up to 700MB compared to a floppy disk's 1.44MB, could potentially require well over 450 floppy disks), could not easily be copied. However, in combination with the success of the CD format for storing music, demand quickly led to the advent of the CD writer becoming available, allowing anyone with such a device along with a PC to copy CD-ROMs. Copy protection measures put in place by authors of the CD-ROMs can easily be bypassed by home coders who release patches for the game which removes measures such as disc-checking, i.e. the software checks for the presence of an original copy of the CD-ROM before it will run.

The upsurge in the use of DVD-ROMs as developers required more space for their programs to be stored and distributed in saw a repetition in the pattern established by the introduction of the CD-ROM, as DVD-writers became commonplace in home PCs and patches removing copy protection measures continued to be distributed for free on certain websites¹¹⁴.

Consoles have enjoyed a greater level of protection from piracy in the past due to the storage media they use. From the generation where the Nintendo¹¹⁵ Entertainment System and the Sega¹¹⁶ Master System were dominant through to when the Sega MegaDrive¹¹⁷ and the Super Nintendo Entertainment System were in many homes, little illegal copying took place as the games for all of these formats were distributed via a proprietary design of cartridge unique to each system containing the code on non-volatile flash memory. To copy these cartridges, specialist equipment was

¹¹² Software that the rights owner had allowed to be freely distributed without individually requiring permission

¹¹³ Compact Disc Read Only Memory

¹¹⁴ See, for example, <http://www.gamecopyworld.com/>

¹¹⁵ <http://www.nintendo.com/home>

¹¹⁶ <http://www.sega-europe.com/en/Homepage.htm>

¹¹⁷ Known in the US as the Genesis

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

required. Nevertheless, this didn't prevent more determined pirates from investing in such equipment and mass producing unauthorised copies of software to distribute as an infringing course of business.

Time and the progression of technology has allowed the software for these consoles¹¹⁸ to become far more easily pirated now via the medium of emulators which are widely available on the internet as free downloads. These emulators when run are designed to emulate relatively elderly consoles (due to the processing power required, modern PCs can only provide enough computational power to emulate consoles around two generations behind the current generation of consoles) when pared up with a ROM file – a file containing a copy (which has often been made without authorisation) of all of the data from a particular cartridge.

Many console manufacturers from the mid-nineties onwards have eschewed the more expensive but less piratable cartridge format in favour of the cheaper and higher capacity, but more piratable, CD-ROM and DVD-ROM formats. However, in order to combat the ease at which PC users had been able to make unauthorised copies, Sony¹¹⁹ and Microsoft¹²⁰ built hardware measures into their consoles which would prevent non-original discs from running. In order to bypass the console copy protection systems, modchips became commercially available for users to purchase and fit into the console itself. Controversially, Sony took action against a distributor of the “Messiah” modchip¹²¹ – one of the most popular modchips available for the Sony PlayStation 2 console – and it was found that, despite having other uses such as removing the regionalisation coding which prevented the use of legally imported software, the distribution of the chip was contrary to, inter alia, s.296ZA CDPA 1988¹²². Nevertheless, modchips are still available on the underground market.

The decrease in the cost of technology has also allowed electronic tools allowing the unauthorised copying of non-volatile memory used in cartridges for handheld systems such as the Nintendo GameBoy and DS to be within the financial reach of home users. Sony's current handheld format, the PlayStation Portable (PSP), uses a proprietary “Universal Media Disc” format, but pirates have made use of the Memory Stick Duo slot to run unauthorised copies of games directly from a standardised non-volatile flash memory.

With the rise of the internet has come the biggest evolution in the practice of piracy. Initially, consumers wishing to run unauthorised copies of computer programs would have had to either purchase them from an unauthorised distributor or make the copies themselves from either a legitimate or illegitimate original. Now that many homes have high-speed access to the internet via broadband connections, entire programs can be downloaded by just one person and be subsequently downloaded by thousands.

¹¹⁸ Along with the most recent console to rely on a cartridge-based system, the Nintendo 64

¹¹⁹ <http://www.sony.co.uk/>

¹²⁰ <http://www.microsoft.com/worldwide/>

¹²¹ See Brian Esler, “Judas or Messiah? The Implications of the Mod Chip Cases for Copyright in an Electronic Age”, (2003), Hertfordshire Law Journal, Vol.1(1), pp.1-13

¹²² *Kabushiki Kaisha Sony Computer Entertainment Inc v. Ball* [2004] EWHC 1738

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

It is rare to find websites brazenly offering such programs for direct download, which is why alternative distribution methods have become dominant. Among these are newsgroups, peer-to-peer networks¹²³ and BitTorrent. Despite many software programs ballooning in size from being able to fit onto a 1.44MB floppy disk 15 years ago to being in excess of 1GB¹²⁴, a program that would normally fit onto two CD-ROMs or a DVD-ROM can now be downloaded directly to a user's desktop PC in an afternoon.

US distributors have attempted to combat peer-to-peer networks and sites offering the torrent codes of BitTorrent distributed files by primarily relying on the Digital Millennium Copyright Act¹²⁵ to close down websites and networks allegedly offering infringing material. On a worldwide level, distributors have attempted to combat P2P networks and BitTorrent websites by uploading "dummy files", which are files that are tagged with the description of a piece of software users might wish to download and are of the approximate size the file would be expected to be but contain nothing but garbled data¹²⁶. However, users of P2P networks and BitTorrent limit the effectiveness of this through a combination of self-regulation and software. The former takes place mainly when users post a comment once they have downloaded a particular file pointing out whether or not it is genuine, and warns downloaders away from dummy files. There is also software such as PeerGuardian 2¹²⁷ which is freely downloadable, and acts like a firewall focussed towards blocking recognised IP addresses of known dummy file uploaders (and thus disallowing the downloading of dummy files while alerting the user in the process that this is occurring) through a list which is updated and distributed for free on a daily basis.

The future of computer and console piracy is set to offer new challenges to the unauthorised copier, but is unlikely to pose an obstacle for particularly long. New formats such as HD-DVD and Blu-Ray¹²⁸ contain more data than standard DVDs, but it is unlikely to be long before the determined coder finds a way to strip down programs to fit onto a standard DVD¹²⁹. It is also likely that as HD-DVD and Blu-Ray writers which are appearing on the market for home PC users become more common, the reduction in their price will see home users more readily utilising them to make unauthorised copies.

The main obstacle to software pirates is likely to come in the form of programs which are designed for use over the internet. For example, many massively-multiplayer online games¹³⁰ come with a unique code which can be entered before the user is allowed to access the central server which is crucial to the gamesplaying experience. Although coders have been known to establish their own servers on which unauthorised copies of the game can be played, many consumers have preferred to

¹²³ Such as Napster, Grokster and Kazaa

¹²⁴ 1024MB

¹²⁵ Pub. L. No. 105-304, 112 Stat. 2860 (Oct. 28, 1998)

¹²⁶ See Nicklas Lundblad, "Noise Tactics in the Copyright Wars", (2006), *International Review of Law, Computers & Technology*, Vol.20(3), pp.311-321

¹²⁷ <http://www.phoenixlabs.org/pg2/>

¹²⁸ Used in the Sony PlayStation 3 console

¹²⁹ As used to occur when PlayStation 2 titles begun being distributed on DVD – the pirates would strip out any unnecessary elements of the program in order to fit it onto a single CD

¹³⁰ MMOGs

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

purchase legitimate copies in order to play on official servers. Although this is currently the strongest weapon in the rights holders' defences against pirates, it is far from adequate as unofficial servers for standard online games, which usually support 16-32 players, are more populated by unauthorised copiers because of the lower numbers¹³¹. Programs which merely have to use the internet to activate, such as Windows XP, and have no reason to authorise after being activated can simply have the activation procedure removed by a patch distributed by a coder. Thus, unless all programs become necessarily tied to or rely upon the internet in order to function to the consumer's satisfaction, it is likely that piracy of such programs will continue to flourish in the future.

Music

The first problem the music industry has faced as far as piracy is concerned is the unlawful transmission of sound recordings (which includes the musical composition and the lyrics of a track) from so-called pirate radio stations. Some pirate radio stations transmitted from within England's borders, and thus could be held accountable for infringement of copyright when located via their signal transmitter. Other pirate radio stations¹³² famously broadcast from ships sailing just outside of UK waters, thus avoiding the jurisdiction of English law which generally requires radio stations to seek rights clearances to broadcast commercial music tracks from collecting agencies Phonographic Performance Ltd¹³³ and the Performing Rights Society¹³⁴.

With the invention of sound recording devices came the option for listeners to record music tracks played by radio stations. However, the quality of recording onto a cassette tape from a radio (particularly prior to the rollout of the FM standard) was lower than the quality of a legitimate recording purchased from a shop on tape or vinyl record, so private home taping for personal use has traditionally been tolerated by the music industry.

The first catalyst for the music industry to attack the recording of music was the invention of Amstrad's twin cassette recorder – a device which could hold two cassette tapes, and enabled the owner to copy the contents of one tape to another with little appreciable loss in quality. The case which ensued¹³⁵ was found in favour of Amstrad, thus opening the floodgates for other manufacturers to produce and distribute such devices.

When the compact disc was introduced as a means of distributing music in the early 1980s, up to 80 minutes of music could be digitally stored and played back on a standard CD player. Again, although tape decks were available which would allow the recording of a track from the CD to a cassette tape, the degradation in quality coupled

¹³¹ By comparison, MMOGs can have thousands of players on a single server at any one time

¹³² Two such examples being Radio Caroline (the first offshore pirate radio station, which transmitted from 1964) and Radio Luxembourg, both now defunct

¹³³ <http://www.ppluk.com/>

¹³⁴ <http://www.mcps-prs-alliance.co.uk/Pages/default.aspx>

¹³⁵ CBS Songs Ltd v Amstrad Consumer Electronics plc [1988] AC 1013

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

with decision in Amstrad¹³⁶ played a role in the music industry's decision not to use litigation to prevent such copying.

After the invention of the CD, the two main threats in the form of piracy came from the later invention of the CD-writer and the rise of the internet. As far as the former is concerned, owners of a CD-writer could easily copy music CDs much like they could with tapes as feared by the industry in the Amstrad case. As for the latter, PC users could easily transfer music from a CD (whether purchased legitimately or otherwise) and convert the file to mp3 format. In basic terms, this essentially renders music tracks to a size of around 3MB with a sound quality almost comparable to that of the CD original. Even before broadband became commonplace within UK homes, the small file size of these music tracks led to an upsurge in peer-to-peer services such as Napster where users could share their music collections with other users of the network.

In an attempt to combat this, some music distributors added security measures to their CDs. For example, adding a corrupt layer of code to the initial ring of the CD¹³⁷ prevented PC users from accessing the CD, but still worked with many (but, crucially, not all) conventional standalone CD audio players. This attempt at combating piracy led to a consumer backlash for several reasons, namely that purchasers of legitimate copies of a particular CD with this type of protection were unable to listen to the music they had purchased on their PC systems. It was also widely publicised on the internet that the protection could be bypassed by simply drawing over the outer ring of the CD with a marker pen.

Sony BMG Music made a significantly bolder attempt to prevent users from transferring tracks from their CDs to their computers by including "Extended Copy Protection" (XCP), a piece of software which would covertly install itself onto a user's PC if they were using Microsoft's Windows XP operating system. XCP would then monitor the user's activity and, should they attempt to transfer files onto their hard-drive, would replace the music with white noise. As XCP is by definition indistinguishable from a virus or malware, the United States Computer Emergency Readiness Team¹³⁸ advised users not to use CDs which included XCP. There was also criticism¹³⁹ as to the legality of the program as it covertly installed itself prior to the user viewing an end user licence agreement¹⁴⁰, and a class action was initiated against Sony BMG Music which resulted in a settlement being offered by Sony¹⁴¹. Sony BMG Music have since recalled all discs featuring XCP, and have ceased distributing further copies of the program on their music CDs.

The prevalence of music tracks which have been converted to mp3 format due to the excellent levels of compression and quality with no copy degradation means that distribution via peer-to-peer networks and BitTorrent is a common activity. The music industry has responded by uploading dummy files (which can be manoeuvred around

¹³⁶ Ibid.

¹³⁷ The Cactus Data Shield method

¹³⁸ Which is a part of the National Cyber Security Division of the Department of Homeland Security

¹³⁹ <http://news.zdnet.co.uk/software/0,39020381,39235149,00.htm>

¹⁴⁰ EULA

¹⁴¹ <http://news.zdnet.co.uk/itmanagement/0,1000000308,39244664,00.htm>

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

by downloaders by using the software and methods described above) and, in the US, taking legal action against file sharers.

Now that the music industry is belatedly beginning to embrace the concept of legitimate digital distribution of music, whereby a user selects and pays for a music track online before downloading it with authorisation, many are utilising digital restrictions management¹⁴² (DRM) in an effort to prevent purchasers from distributing lawfully purchased digital music files. However, this has led to criticism in that many types of DRM prevents users from transferring the file they have purchased to their own digital music player. Apple and EMI have recently announced¹⁴³ that digital files by EMI are to be offered without DRM if a higher fee is paid.

Movies/Film

Movie piracy originates from the time of the home video boom of the early 1980s. Video tapes containing unlawfully obtained copies of movies could be copied by connecting two VCRs together, although this would result in some degradation of the movie leading to poor quality results. Although some sectors of the US movie industry initially attempted to litigate¹⁴⁴ against Sony for manufacturing and distributing the Betamax VCR for copyright infringement by their customers¹⁴⁵, the judgment in favour of the legality of VCRs led to the movie industry distributing legitimate copies of their movies for sale to VCR owners. Legitimate copies contained Macrovision¹⁴⁶ copy protection which would interfere with the capability of the secondary VCR to reproduce the picture of the original recording, but this could be overcome by making or purchasing a cable designed to remove Macrovision protection.

The introduction of the DVD format in the late 1990s saw consumers switching to this format so quickly that by the early 2000s, the format was outselling pre-recorded video cassettes. The most crucial aspect which made DVDs desirable was that the movies distributed on them were rendered in a digital format which resulted in a sharper picture on playback that would never degrade with repeated playback or, indeed, copying.

Although regionalisation and copy protection measures were included on legitimate DVDs, software to circumvent these were quickly developed and distributed for free over the internet¹⁴⁷. The advent of the DivX¹⁴⁸ codec allowed home users to, once they had overcome the copy-protection measures included on the disc¹⁴⁹, convert the ageing DVD MPEG-2 format movies contained on the disc into a DivX file using

¹⁴² Also known as digital rights management and technological protection measures

¹⁴³ <http://www.emigroup.com/Press/2007/press18.htm>

¹⁴⁴ Sony Corporation of America v Universal City Studios Inc [1984] 464 US 417

¹⁴⁵ But note that this case was primarily concerned with making recordings of films that were broadcast on television

¹⁴⁶ <http://www.macrovision.com/>

¹⁴⁷ See, for example, CSS descramblers at <http://www.cs.cmu.edu/~dst/DeCSS/Gallery/>

¹⁴⁸ <http://www.divx.com/>

¹⁴⁹ Which could easily be achieved with another litany of freely-available programs distributed over the internet

MPEG-4 Level 2 compression. The advanced compression techniques inherent in the DivX codec means that movies that would take up a considerable portion of the 4.38GB of storage space available on a DVD could be reduced down to a file size of between 700MB and 1.3GB with only a minor loss of quality.

With the movies compressed and stripped of their copy protection, they are then distributed via the peer-to-peer networks and BitTorrent much like music and computer programs (with the same protection against the industry's attempts to place dummy files into such networks). The commonality of these files has seen the release of home DVD player units compatible with DivX and Xvid¹⁵⁰ files (inter alia) burned onto DVD-writables in addition to traditional MPEG-2 DVDs.

The advent of the new Blu-Ray and HD-DVD formats has already seen coders claiming to have discovered ways to bypass the copy-protection methods employed on these types of disc.

Television Programmes

Television has changed immeasurably with the advent of the digital era. The issue of piracy first became apparent with the launch of the VCR, which allowed any broadcasted transmission to be recorded onto a video cassette for later viewing. The movie industry saw the recording of their films which were broadcast as an infringement of copyright and, in the US, fought a case against Sony Corporation who invented, manufactured and sold the now defunct Betamax video cassette recorder¹⁵¹. The Supreme Court found in favour of Sony and held that "time shifting" was an acceptable form of fair use.

At the end of the 1990s, digital television broadcasting was launched commercially. This made the process of receiving, encoding and storing a television programme on a home PC without any degradation of quality viable, and saw the launch of hard-disk based recorders which are capable of recording multiple television channels at once, and allowing for the delayed viewing of a particular programme while it is still being broadcast. UK law has followed the concept of the Sony case by making specific provision for time-shifting in the CDPA 1988¹⁵².

The most common form of piracy linked with television programmes lies in the digital recording and distribution of programmes over the internet via peer-to-peer networks and BitTorrent. Once captured, a programme of around 45 minutes in length can be compressed using the DivX codec to around 350MB which, for broadband users, can be downloaded within a few hours. High profile series such as US shows 24, Desperate Housewives and Lost are favoured by British downloaders, while US

¹⁵⁰ <http://www.xvid.org/>

¹⁵¹ Sony Corporation of America v Universal City Studios Inc [1984] 464 US 417

¹⁵² S.70

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

downloaders gravitate towards series that premiere on UK television such as Doctor Who¹⁵³ and several soap operas.

Programme makers object to this unauthorised distribution as the advertising is often removed from the programme by the persons recording and sharing them. It is also argued that less consumers will be willing to pay for subscription services to gain access to these television programmes through, for example, British Sky Broadcasting¹⁵⁴, when they can download a high-definition copy which contains no advertising and can be viewed sooner.

Books & Publications

Books can be transferred to a digital format a number of ways.

- 1) The book can be scanned page by page into a computer, and distributed as a series of images of the pages which can be read using software such as Adobe Acrobat Reader¹⁵⁵;
- 2) The book can be scanned into a computer using text recognition software which would allow the text to be distributed and read with any text software;
- 3) The text of a book can be manually typed into a computer and distributed as above.

Due to the nature of books and the fact that the reading of text from, for example, a palmtop computer, is not as comfortable as reading from ink on paper, this is one of the rarest forms of piracy¹⁵⁶.

¹⁵³ Of which the pilot episode of the 2005 series was leaked onto the internet a week before its scheduled worldwide-premiere transmission; see http://news.bbc.co.uk/1/hi/entertainment/tv_and_radio/4326005.stm

¹⁵⁴ <http://www.sky.com/portal/site/skycom/home>

¹⁵⁵ <http://www.adobe.com/uk/products/reader/>

¹⁵⁶ See question 3.1

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

Appendix C:

The Practicalities of Piracy: A Glossary

This section is intended to be used as a reference guide to the practicalities of piracy, and a summation of each of the formats and methodologies used by all types of pirate which has evolved with the digital age.

The rise of new technology has fed the rise of cyber piracy in that many older technologies, which are frequently classed as “analogue” devices, have been replaced by digital technology. Digital technology can be manipulated and replicated far more easily by technical experts and, increasingly, home computer users, than analogue systems¹⁵⁷. Although the systems and formats used in each industry differ, digital technology allows them all to be distributed in the same way. The following sections will review the technicalities of piracy which have evolved in each of the main entertainment industries, and consider how pirates use technology to distribute infringing copies.

The Music Industry

Dominant distribution media:

Vinyl Records	<i>(peaked late 19th century – 1980s)</i>
Compact Cassette Tapes	<i>(peaked early 1980s – 1990s)</i>
Compact Discs	<i>(peaked 1980s – present day)</i>
Digital Storage	<i>(peaked late 1990s – present day)</i>

Vinyl Records

Function: Sound is stored on polyvinyl-chloride records in analogue format for playback on a gramophone player. The needle of the player drags along a long, continuous groove responding to the bumps pressed into the record. Vibrations caused by this process are amplified and passed through speakers as music / other recorded sound.

Evaluation: As playback requires the needle to make contact with the vinyl record and drag along the track, degradation with repeated playback is a consequence. Sound quality / fidelity is also affected by dust and scratches on the record, and often results in playback hiss and pops. Vinyl records are easily damaged.

Recording: Specialist recording and cutting equipment is required to stamp bumps into a vinyl record. There is no general availability of blank vinyl record media to home users.

¹⁵⁷ Notwithstanding DRM measures, which have been considered above

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

Same Media Copying: Due to prohibitive costs, complications of recording onto vinyl records and degradation with every instance of playback, the occurrence of record-to-record copying has been low.

Inter-media Copying: Later models of gramophone players can be easily connected to any electronic recording unit. No anti-piracy methods have been (or arguably can be) introduced to prevent copying from records.

Compact Cassette Tapes

Function: Sound is stored in an analogue format magnetically on a plastic tape coated in a ferromagnetic substance. The tape is spooled inside a plastic casing. When the compact cassette tape is inserted into a player, the tape runs between a pinch roller and an electromagnetic head. The head reads the patterns in the ferromagnetic substance and converts the patterns into sound which can then be amplified and output through speakers.

Evaluation: The tape inside a compact cassette is protected by a plastic casing, thus is far more durable than vinyl records. Sound quality is comparable to a clean vinyl record, but can vary depending upon the materials used in the ferromagnetic compound. As the tape rubs against a metal head when played back, degradation occurs. This can result in hissing and “bleed through”, where a previous recording can faintly be heard when playing back a newer recording.

Recording: Many models of home tape player feature a recording function, whereby the electromagnetic head which normally reads the tape can re-magnetise the ferromagnetic compound to make a new recording. Blank compact cassette tapes and recorders are widely available.

Same Media Copying: Any two compact cassette recorders with input/output sockets can be connected with an inexpensive wire to copy an original onto a new or pre-recorded cassette. Blank cassettes are widely and cheaply available. Twin-deck cassette recorders can copy the recording on a cassette in its primary tray directly to a secondary cassette. The legality of the sale of twin-deck cassette recorders with regards to their potential to infringe copyright was addressed by the courts in *CBS Songs v. Amstrad*¹⁵⁸ whereby the House of Lords found their sale to be lawful. Some degradation occurs when a copy of a sound recording is made onto another tape. No anti-piracy methods have been introduced to prevent infringing copying.

Inter-media Copying: Any compact cassette player with an output socket can be connected to any electronic recording unit. No anti-piracy methods have been introduced.

Compact Discs

¹⁵⁸ *CBS Songs Ltd v Amstrad Consumer Electronics plc* [1988] AC 1013

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

Function: Sound is stored digitally on an optical disc. A round piece of polycarbonate plastic with a very fine spiral contains a number of pits (indentations) and lands (spaces between the indentations) over which a layer of aluminium is added for reflectivity, and a label printed on for visual information and protection of the pits. A CD player spins the disc and a laser is shone into the spiral. The pits (which are bumps on the read side of the disc) and lands cause the laser to register two states of reflection which are recorded and ran through an electronic digital-to-analogue conversion process. The newly converted analogue sound is then amplified and output to speakers.

Evaluation: As a laser is used to read the data, no physical contact is made to the data area and thus no degradation occurs during playback. The data area is also highly protected by the layer of plastic which, married with built in error-correction techniques, makes compact discs resilient to debris and all but the deepest of scratches. Although a digital-to-analogue conversion takes place, the sampling rate is very high ensuring an excellent standard of fidelity. Discs also contain subcode data which allow all players to jump straight to specific tracks when requested.

Recording: Pre-recorded CDs are manufactured with expensive specialist equipment which stamps pits and lands into the polycarbonate plastic moulds during manufacture. However, CD-writeable (CD-R) discs contain a layer of light-sensitive dye instead of aluminium. The laser in a computer's CD-R disc drive can change the surface area of the dye so as to replicate the reflective state that pits and lands provide, thus allowing for playback in most normal CD players. CD-rewriteable (CD-RW) discs contain a layer of light-sensitive metal alloy which responds to the heat produced by the laser in a computer's CD-R disc drive. This process again replicates the reflectivity of the pits and lands, but the reflectiveness is of a lower standard to CDs and CD-Rs, thus can only be played in particular types of player. However, CD-RWs can be recorded on multiple times.

Same Media Copying: Any home computer fitted with an inexpensive CD-writer drive is capable of storing the data from any type of CD¹⁵⁹ and writing a perfect copy with no degradation onto a CD-R or CD-RW. Both types of writeable CD are widely available to home users for little cost. Copy-protection methods are rarely employed on pre-recorded CDs as their use has excluded the discs they are used on from being categorised as a "compact disc" due to the Red Book standard¹⁶⁰. The most notable attempt to prevent CD to CD copying is the easily circumvented Macrovision¹⁶¹ Cactus Data Shield method¹⁶².

Inter-media Copying: Any CD player can be connected to a compact cassette recorder, but the sound will be reproduced with a lower fidelity than the original. When placed in a computer's CD drive, software can be used to transfer music tracks from a CD for storage as a digital file on the hard disc drive. Recent attempts at

¹⁵⁹ Which can copied, or "ripped", from the CD in a lossless digital form to maintain the original quality

¹⁶⁰

See

<http://www.ip.philips.com/services/?module=IpsLicenseProgram&command=View&id=15&part=2>

¹⁶¹ <http://www.macrovision.com/>

¹⁶² See the "Music Industry" section of Appendix B, above

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

incorporating copy protection methods have focussed on restricting the ability for a CD to be read by a computer's CD drive, and attaching digital rights management to a track on the CD (both of which were attempted with "Copy Control", a system used by Sony BMG and EMI¹⁶³). Ease of circumvention contributed to the withdrawal of its use. Extended Copy Protection, whereby a virus-like program is installed onto the user's Computer, has also been discontinued¹⁶⁴.

Digital Music Files

Function: "Digital music files" is an umbrella term which encompasses any piece of music in a digital format. The tracks on a CD are in a digital format (PCM), but advances in compression technology means that many computer users prefer to store their music files in a format such as mp3 and WMA¹⁶⁵. The mp3 (MPEG-1 Audio Layer 3¹⁶⁶) format is currently the most popular, and works by applying a "lossy"¹⁶⁷ compression routine to sound files. The files can be played through any computer with the appropriate media player software installed, and through most dedicated digital music file players such as the Apple iPod which uses a digital to analogue conversion process to output the music to speakers. The files are most commonly stored on hard disk drives and non-volatile memory.

Evaluation: Digital music files are reliable and, when set to a high enough bit-rate (which raises its file size), offers a fidelity comparable to standard CD tracks. There is no degradation when played. Many purchasers of pre-recorded CDs opt to use the mp3 file format to convert and store their music files on hard disc drive for playback for later transferral to an mp3 playback device¹⁶⁸. The size of a typical mp3 file is around 1MB per minute, so a compact disc which can hold 80 minutes of Red Book standard music could hold in the region of 8000 minutes of mp3 encoded music.

Recording: Any computer with a sound card and sound input socket can be used to convert vinyl records and compact cassette tape recordings into mp3 format. Radio or internet broadcasts can also be easily and freely (although not necessarily lawfully) converted. Any computer with a CD drive can quickly convert the tracks into a compressed digital music file with negligible degradation.

Same Media Copying: Digital music files can be copied with a computer, unless DRM measures have been attached to them¹⁶⁹, with no degradation.

¹⁶³ See http://www.emimusic.info/us_EN/sect4.html

¹⁶⁴ See the "Music Industry" section of Appendix B, above

¹⁶⁵ Windows Media Audio

¹⁶⁶ See the Moving Picture Experts Group at <http://www.chiariglione.org/mpeg/standards/mpeg-1/mpeg-1.htm>

¹⁶⁷ This term is used to describe forms of digitising music by removing elements which are commonly undetectable to the human ear, thus lowering the resulting file size

¹⁶⁸ Although this is technically a form of copyright infringement at the time of writing (April 2007), the Gowers Review of Intellectual Property has proposed that the CDPA should be amended to legalise this form of copying for private uses, such as in the home by individual users

¹⁶⁹ Although DRM measures can be easily, if not lawfully, bypassed through the use of software commonly available at no cost through the internet

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

Inter-media Copying: Digital music files can be quickly and easily uploaded to and downloaded from the internet without degradation.

The Film Industry

Dominant distribution media:

Film:	<i>(peaked early 20th century – present day)</i>
Video Cassette Tapes:	<i>(peaked early 1980s – late 1990s)</i>
Digital Versatile Discs:	<i>(peaked mid 1990s – present day)</i>
Digital Video Files:	<i>(peaked early 2000s – present day)</i>

Function: Commercially released films are distributed to cinemas in canisters of film stock which consist of reels of tape with many still frames which, when passed in front of a projector light, are represented on the screen as moving images.

Evaluation: Although this method of film distribution to cinemas has remained practically unchanged for nearly a century, the quality of film stock is generally good. As the film is repeatedly spooled through the projector mechanism, dust and scratches can be introduced which appear on the screen as dark blotches.

Recording: The process, not dissimilar to the developing of photographs onto a negative, requires expensive specialist equipment and is thus practically restricted to authorised distributors.

Same Media Copying: Due to the complexity of the recording process, the practice of copyright infringing transferral to another reel of film is negligible to nil.

Inter-media Copying: The two primary processes used by pirates to obtain a copyright infringing copy of a film are the “telecine” process and the camcorder method. The telecine process involves the use of an expensive telecine machine which allows the film to be transferred digitally into a device such as a video cassette recorder. As well as the prohibitively high cost of telecine machines the pirate would also need access to the original film stock, usually obtained through cinema employees. The copy usually suffers from noticeable degradation in the telecine process. The more common camcorder method involves little more than recording a film playing out on a cinema screen with a video camera, either surreptitiously or in a lone screening. The copy often suffers from significant degradation, problems with the picture aspect due to the angle of filming and a poor recording of the soundtrack. Despite the inherent issues with poor quality when it comes to inter-media copying, the main anti-copying measure put in place is the Coded Anti-Piracy¹⁷⁰ method. This involves placing a code into the film itself which can theoretically be identified by the film distributor when viewing a telecine or camcorder copy of the film. If successfully identified, the code acts as a fingerprint which reveals the cinema from which the copy was made.

¹⁷⁰ Used by Eastman Kodak and Deluxe Laboratories
© Michael Filby

The moral rights of the author have been asserted.
Database rights The Centre for International Law (maker).

Video Cassette Tapes

Format: Soundtrack and picture information is stored in an analogue format magnetically on a plastic length of tape coated in oxide. When inserted into a video cassette recorder (VCR), the tape is dragged past a metal cylinder which reads the picture information and a second head which reads the soundtrack information. The information is then converted into sound and moving pictures which are output through the speakers and screen of a television set.

Evaluation: Video cassette tapes reproduce pre-recorded films or television broadcasts at a quality slightly below that of a good broadcast standard. As the tape is dragged past two readers when played, degradation in quality occurs in the form of a blurry or snowy picture and static-like interference in the soundtrack.

Recording: All VCRs have the capability to record a picture onto a video cassette tape in a manner similar to audio compact cassette tapes. Blank tapes are widely and cheaply available, and all video tapes can be re-recorded on with minor degradation. The legality of recording television broadcasts was discussed in the US case of *Sony Corporation of America v. Universal City Studios Inc*¹⁷¹.

Same Media Copying: Two VCRs can be connected so as the original tape outputs to the VCR holding the tape on which a copy can be made. Degradation in quality occurs during the copying process, which is why the many pirated videos available at the height of the VCR's popularity were of a poor standard. Many pre-recorded video cassettes include Macrovision¹⁷² copy protection, which included pulsing information in the information track of the video cassette which causes the VCR to record a picture which is perpetually brightening and darkening onto the copied tape. Some VCRs include a function which can bypass this measure, or a cheap to purchase/manufacture video stabiliser device can be used.

Inter-Media Copying: A VCR can be connected to output the contents of a video cassette to any piece of recording equipment such as a DVD recorder or a computer. Degradation in the copying process occurs. Macrovision copy protection can be easily bypassed when using a computer to record a copy.

Digital Versatile Discs

Function: Soundtrack and video information is digitally stored on an optical disc in a form similar to compact discs (see above), but with a much higher capacity. As with compact discs, a laser in a DVD player or the DVD drive of a computer reads the pits and lands stamped into the polycarbonate plastic layers. The pits and lands in DVDs are smaller than in CDs. DVDs can also be dual layer, in which case a layer of silver is sprayed over the first layer rendering it semi reflective before the second layer is positioned and backed with a gold backing. This allows the laser to focus on either layer to read the information and perform a digital to analogue conversion which

¹⁷¹ [1984] 464 US 417

¹⁷² See above

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

outputs a soundtrack and video to speakers and a television screen. Double-sided dual layer DVDs are also available.

Evaluation: The DVD format shares many of the benefits of the compact disc (see above). The higher storage capacity allows for many extras to be included with a pre-recorded film such as language soundtracks and subtitles, and the video and sound quality are both of a far higher quality and fidelity than can be produced by a video cassette tape.

Recording: Pre-recorded DVDs are manufactured similarly to pre-recorded compact discs (see above), but using MPEG-2 compression¹⁷³. There are also a number of DVD-writeable and DVD-rewriteable formats all of which can be played by most players. These discs are easily and cheaply available, and home users can purchase inexpensive DVD recorders or DVD drives for their computers.

Same Media Copying: Like CDs, the fact that the discs hold digital information and the discs do not make physical contact with the player to be read means perfect reproduction can take place. Most pre-recorded DVDs are protected by the DVD Copy Control Association Content Scramble System (CSS)¹⁷⁴ anti-copying method. This scrambles the code using a cipher algorithm which is designed to only be descrambled by the descramblers built into DVD players. However, this is easily circumvented with the use of DeCSS (or one of a number of computer programs which include it) which descrambles the code so copying can take place with the use of a computer's DVD-writer drive. Although the US developers of DeCSS have been subject to litigation for infringing the terms of the Digital Millennium Copyright Act 1998, programs incorporating DeCSS are still widely available on the internet. As dual layer writeable DVDs are more expensive than single layer writeable DVDs, pirates often use programs such as DVD-Shrink¹⁷⁵ to strip away unwanted features (such as foreign language soundtracks and subtitles or trailers) and compress the remaining film with a more efficient codec¹⁷⁶ so it will fit on a single layer 4.7GB DVD. Regionalisation measures are also added to pre-recorded DVDs to prevent the playing of DVDs outside of the region they are sold in, but the software described above removes the regionalisation code from copies. Many DVD players sold also contain the unofficial option to play pre-recorded DVDs from other regions.

Inter-Media Copying: Using DeCSS software, computer owners can transfer the digital video file from the disc to hard disk drive, portable digital video players or non-volatile memory (such as that contained on memory cards).

Digital Video Files

Function: "Digital video files" is an umbrella term which encompasses any piece of music in a digital format. Copiers frequently use more modern and efficient encoders

¹⁷³ See the Moving Picture Experts Group at <http://www.chiariglione.org/mpeg/standards/mpeg-2/mpeg-2.htm>

¹⁷⁴ See <http://www.dvdcca.org/css/>

¹⁷⁵ See <http://www.dvdshrink.org/>

¹⁷⁶ Coder-decoder

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

than the ageing MPEG-2 to reduce the file size of the copied film. The most common codec is currently DivX¹⁷⁷. Using this method, copiers can upload and download files in the region of 700MB to/from the internet and play them back on their computer or, if written to a writeable DVD or CD, played on a more recent DVD player which have a variety of modern codecs such as DivX pre-installed. The files can be further manipulated to optimise them to be transferred to a portable digital video player such as the Apple iPod Video¹⁷⁸ (which uses a micro-hard disk drive) or the Sony PlayStation Portable¹⁷⁹ (which can access the non-volatile memory on a Sony Memory Stick Pro Duo card¹⁸⁰).

Evaluation, Recording, Same Media Copying & Inter-Media Copying: As digital music files (above).

The Computer Program & Video Games Industry

Compact Cassette Tapes:	<i>(peaked 1980s)</i>
Floppy Diskettes:	<i>(peaked mid 1980s – early 2000s)</i>
Proprietary Memory-Based Formats:	<i>(peaked late 1980s – present day)</i>
Compact Discs:	<i>(peaked early 1990s – early 2000s)</i>
Digital Versatile Discs:	<i>(peaked late 1990s – present day)</i>
Proprietary Optical Discs:	<i>(peaked early 2000s – present day)</i>
Digital Software Files:	<i>(peaked early 2000s – present day)</i>

Compact Cassette Tape

Function: Same as for music industry (above), but sounds stored on the tape are interpreted by the computer as code which cumulatively builds in the memory of the computer until it can run.

Evaluation: The degradation and low quality inherent with the compact cassette tape format means it was a comparatively unreliable format for storing data.

Recording, Same Media Copying & Inter-Media Copying: As music industry (above).

Floppy Diskette

Function: Data is stored magnetically on a round plastic disk covered with ferromagnetic particles (similarly to the technique used for compact cassette tapes). The data can be read by any computer equipped with a floppy disc drive, which

¹⁷⁷ See <http://www.divx.com/>

¹⁷⁸ See <http://www.apple.com/ipod/ipod.html>

¹⁷⁹ See <http://www.sony.co.uk/psp>

¹⁸⁰

See http://www.sony.co.uk/view/ShowProduct.action?product=MSXM8GSX&site=odw_en_GB&pageType=Overview&category=MS+PRO+Duo

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

contain at least one head capable of reading the magnetised patterns in the disk's coating.

Evaluation: Although there have been a number of different designs of floppy diskette, the 5.25 inch disk in a bendable jacket gave way to the more reliable 3.5 inch disk which is protected by a plastic jacket and metal cover. Although the disk-surface can drag against component parts during reading and writing, the floppy diskette is a far more reliable means of data storage than a compact cassette tape.

Recording: All floppy disk drives are capable of erasing and re-magnetising floppy disks to record new data.

Same Media Copying: Disks can easily be copied onto readily available blank disks. Copy-prevention methods employed on pre-recorded floppy disks included techniques such as writing corrupt data onto certain tracks of the disk to confuse standard disk-copying software and writing onto tracks outside of the scope of most copying programs. However, specialist copying software could fairly easily and cheaply be obtained to overcome this. Coders would often reprogram software which contained copy protection and redistribute them with the protection removed.

Inter-media Copying: As the contents of a floppy disk can be quickly and easily transferred to the hard disk drive of a computer user as a digital software file, these files can be transferred to any modern media or distributed on the internet.

Proprietary Memory-Based Formats

Function: Data is stored on a circuit board containing a form of ROM¹⁸¹. When the circuit board (which is usually encased in a protective plastic cartridge casing) is inserted into a reader, the device (often a computer or games console) can read the data held in the ROM and run the program.

Evaluation: As the ROM chips are held inside a protective casing and contain no moving parts, they are a highly reliable means of storing data. As technology has progressed, the ROM boards have become increasingly smaller to the point that a complete piece of software can be held on a board the size of a postage stamp. Memory-based formats also offer very high access speeds.

Recording: Depending upon the type of ROM used, pre-recorded proprietary memory formats (which are usually manufactured specifically for the purpose of interacting with a particular reader) have data recorded onto them using expensive specialist equipment.

Same-media Copying: Due to the nature of proprietary ROM, the difficulty in obtaining the expensive equipment required to manufacture and record onto cartridge-based formats is rare.

¹⁸¹ Read-Only Memory

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

Inter-media Copying: Most computers and games consoles which have relied upon proprietary ROM cartridges are either outdated or handheld formats. Equipment can be purchased to read particular types of ROM. The data can then be used in an emulator on a computer, or copied onto a flash memory-based card and ran with the hardware. Copy protection measures are rarely employed in original proprietary ROM. However, recently Sony has attempted to curb the proliferation of running extracted images of PlayStation Portable software files by introducing firmware for the handheld console itself which prevents software from running from flash-memory media.

Compact Discs

Function, Evaluation & Recording: As music CDs (see above).

Same Format Copying: As music CDs (see above). However, anti-copying measures used are necessarily different but more common. The most usual forms of copy protection introduced involve writing codes onto tracks of the CD-ROM that cannot be reproduced on CD-R or CD-RW discs. This protection can be bypassed by coders who release patches for most common software for free over the internet which removes the code instructing the program to check for the copy-protection code before running.

Inter-media Copying: With the aid of the patches described above, software can be simply extracted from CD-ROMs and stored on writeable DVD media or hard disc drive, or distributed via the internet.

Proprietary Optical Discs

Function: Optical discs based on the same principles as CD-ROMs and DVDs (see above), but with a characteristic designed to defeat copying to writeable CDs or DVDs. For example, Sega¹⁸² have used a higher capacity variant of the CD-ROM dubbed the “GD-ROM”¹⁸³ which shared the same dimensions as that disc.

Evaluation: As CDs & DVDs (see above).

Recording: Blank proprietary optical discs are only available to distributors licensed to distribute software for the relevant console. Data is recorded onto the discs during the manufacturing process.

Same Media Copying: No writeable/rewriteable media or drives are available, thus same media copying for these formats are virtually nil.

Inter-media Copying: Success is dependant upon each type of proprietary disc. As the GD-ROM shared the same dimensions as a CD-ROM, and the console they were

¹⁸² See <http://www.sega-europe.com/en/Homepage.htm>

¹⁸³ GigaDisk-Read Only Memory, see <http://mc.pp.se/dc/gdrom.html>

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).

designed to operate with could read CD-ROMs, copiers could copy the data from the GD-ROM and adapt it for writing onto a CD-ROM. The adaptation process could include the removal of certain non-essential files to lower the sum total file size to fit onto a lower capacity CD-ROM. Sony's UMD¹⁸⁴ format can also be copied, but onto flash memory which the console the programs are designed to run on are compatible with (see above). Nintendo's GameCube¹⁸⁵ high capacity optical disk format is physically smaller than a standard CD or DVD so, although the data can be extracted from the proprietary discs using specialist equipment, it can only currently be run on emulator software on computers which, at the time of writing¹⁸⁶, cannot accurately emulate the GameCube format to a feasible extent.

Digital Software Files

Function: The program data stored on any of the above formats can be extracted to, stored on and, to some extent, ran from a computer hard disk drive. Digital software files are often packaged with any patches or specific instructions required to be applied in order to circumvent any copy-protection measures and run the program, and are distributed on writeable CDs and DVDs or via the internet.

Evaluation, Recording, Same Media Copying and Inter-media Recording: As digital music and video files (see above).

¹⁸⁴ Universal Media Disc

¹⁸⁵ See <http://www.nintendo.com/systemsgcn>

¹⁸⁶ April 2007

© Michael Filby

The moral rights of the author have been asserted.

Database rights The Centre for International Law (maker).