

Digital consumer behaviour and attitudes

Broad characteristics of the literature

Demographics

The academic literature about the behaviours of, and attitudes towards, unauthorised online downloading is often limited in terms of the demographics of the populations studied. Research is dominated by samples of university or school students¹⁴ (see e.g. Calluzzo and Cante, 2004; Wood et al. 1999; Lysonski and Durvasula, 2008), with variations within this group (e.g. undergraduates, post-graduates, high school students etc.). Some of these studies (e.g. Taylor et al, 2009) include faculty in the population studied, although the results are often discussed in broader terms. There is one significant survey of 'the general public' (Suter et al, 2006) and one of executives/senior managers, though this is dated (Taylor and Shim, 1993).

A typical approach in the work we have considered can be seen in this abstract to 'Digital Piracy, a Latent Class Analysis' (2009) by Higgins et al. (2009).

"Using data from undergraduate students (n=353), the present study explores actual digital piracy and the intention to perform piracy..."

Industry research often also highlights the 'youth' element of this issue. Indeed many of the pieces of research we have seen are specific to the 12-24 year old demographic. A good example of this can be seen in the release from the Business Software Alliance:

"Understanding copyright law is not enough to stop children and teenagers from downloading copyrighted software, games, music and other digital media through illegal online file-sharing networks, according to a Harris Interactive poll..."

We highlight that mainstream consumer research, such as the Olswang 'Digital Convergence' (2008) study that considers a far broader demographic sample-base, is required urgently to understand the full scope of this issue.

Research methods used

Questionnaire surveys

The questionnaire surveys posed questions on one or more of the following topics:

- Computer usage patterns such as average daily hours using computers, commonly used pirated software products, and channels used to obtain pirated software products (e.g. Hsu, 2008).
- 'Ethical idealism', where agreement with a number of statements is measured on seven point Likert scales (strongly agree to strongly disagree) (Lysonski and Durvasula, 2008)
- Frequency of certain behaviours (e.g. on a 7-point scale: 'very rarely', to 'very frequently') (Shoham et al. 2008)
- Likelihood to commit an act of piracy attached to a hypothetical scenario (Higgins et al, 2008).
- Attitudes to piracy, including questions on:
 - Social cost of piracy.

¹⁴ "Much research has used students as subjects. These subjects have been assumed to be suitable surrogates for business managers and decision makers and results should be generally applicable to actual business managers and most of digital pirates in today's world are young people. This is especially the case when researchers are interested in the ethical decision making process." Cronon & Al Rafee (2008, p539).

- Anti-big business attitude, and the desire to “get back” at the recording companies for charging high prices.
- Social benefit of dissemination
- The ethics of downloading music without paying for it.
- Consequences / punishment.
- Willingness to pay for original material (Hsu, 2008)

Scenarios dealing with the stealing of music, usually with regard to ethics and piracy, are often used in questionnaire surveys. Two examples serve to outline the method. In a study on people’s ethical behaviours, Lysonski and Durvasula (2008) formulated scenarios that presented different situational factors, and respondents indicated their likelihood of committing piracy under those circumstances. The scenarios were:

- stealing a CD from a music store with 100 percent certainty of not getting caught;
- stealing a CD from a music store with some risk that an invisible security camera might observe them;
- not paying for downloading music from a new CD from a major successful artist who they believed is very rich
- not paying for downloading a new CD from an independent artist who is very talented, but has not made much money on his/her previous CD.

The other example is that of Nunes’ et al. (2004). In this study, the scenarios were more detailed. The researchers wished to “explore how different cost structures lead consumers to make vastly different inferences about their ability to harm sellers by depriving them of their due...(and) the relationship between the perceived harm to the seller and the consumer’s intention to pay” (ibid: p46).

An example of their scenarios and questions is:

Scenario A: The software vendor paid the original programmers of RussianStar an initial royalty of \$600,000. That was a onetime lump-sum payment that would not change no matter how many copies of the program are downloaded. In addition, for every copy of the program downloaded, the software vendor has to pay the original Russian Star programmers an additional royalty of \$1.

Question: Suppose you have downloaded the program without paying the \$75 in Scenario A. Which of the following is the more accurate description of the effect of your behavior on the vendor?

- My behavior would cause the vendor to forgo the opportunity to gain \$75.
- My behavior would cause the vendor to lose \$75.

Studies have used a questionnaire inviting open responses. Lau (2006: p409) posed two open-ended questions designed to elicit perceptions from Chinese respondents on the subject of software piracy. “Respondents were asked to share their experiences in using pirated software, such as what kinds of software they have pirated, and the reasons for them to use pirated software. They were then if they knew anyone who worked in the software industry, and if this affected their attitudes”. Lau (ibid) also conducted a content analysis on a population of 209 Chinese messages concerning software piracy that were posted to the USENET newsgroup comp.hacker, “and screened for references to software piracy”.

Logs of online activity

Only one study was found in which behaviour was actually measured. Bhattacharjee et al., (2006) used P2P network data gathering and analysis to examine the effect of file-sharing on performance of music albums. Computer logs of music file downloads and commercially available music sales charts were compared. Logs were analysed of the number of files for songs on a specific album that were available for sharing. The congestion (queue lengths) at individual sites were also noted and used in the analysis.

Experimentation

Jih-Hsin Tang and Cheng-Kiang Farn (Tang and Fam, 2005), used an experimental design for their study the effect of interpersonal influence on softlifting intention and behaviour. Fifty four subjects participated in what they thought was a 'software quality evaluation' exercise. However, as the authors explain, 'a ploy was carried out to measure the subjects intention in software piracy under different levels of group pressure and financial gains' (ibid: p149). The ploy was to plant four people (described as 'cohorts' in the paper) in each session, who were to vote on whether to copy software. As the authors explain: 'Four levels of group pressure conditions were designed: (a) 4 cohorts unanimously chose to copy; (b) 3 cohorts chose to copy and one chose to purchase; (c) one intended to copy and 3 chose to purchase; (d) 4 cohorts unanimously chose to purchase' (ibid: p152).

Content analysis

Eric Kin-wai Lau (Lau, 2006) supplemented an online survey with a content analysis of 209 Chinese messages concerning software piracy that were posted to the USENET. "All Chinese messages posted to comp.hacker were unobtrusively downloaded from a news server and screened for references to software piracy. ...Messages were considered relevant to software piracy if they were indexed in the news group as 'software piracy'; and if they contained at least one statement either for or against pirated software (ibid: p409).

Altschuller and Benbunan-Fich (2009) undertook a content analysis of the recommendations written to answer an ethical vignette. The vignette presented the case of a subject who faces the dilemma of whether or not to download music illegally.

Key findings from the academic literature

The landscape of the academic research into downloading culture is shaped largely by debates in ethics, law and psychology. There are also many papers that consider legal and economic factors, including the concepts of pricing for legal e-commerce products, and those of digital consumers' relationship to online 'trust' when making purchasing decisions. However, while we cite some of these in this part of the report, they are of secondary consideration: copycat culture finds its value in goods being 'free', and 'trust' levels concern the level of likelihood that downloading a digital file will bring with it a computer virus, or spyware.

As we have demonstrated in the introductory sections, the Internet has evolved into numerous sub-cultures and eco-spheres; technologies and created new social norms. The following sections describe some of the behavioural and attitudinal shifts that the Internet in its entirety has brought about (the web, file-sharing networks, e-mail, online telephony, Usenet etc.) and some of the behavioural and attitudinal shifts that particular web-based social networks - and the sharing they permit - may influence.

Downloading is an ethically confused activity

CIBER confidence rating: ★★★★★

Much of the academic literature on consumer attitudes and behaviours towards unauthorised downloading of copyright protected materials ('piracy') concerns the ethical dimension. As the downloading and copying (and indeed, much simple 'file shifting') of any unauthorised digital material is a contravention of intellectual property laws, such activity affects "consumers ethical decision processes" (Chiou et al. 2005: p161). The question is: are these decision processes different in the online world?

As Glass and Wood (1996: p1189) point out, 'a person who fails to recognise [that piracy is] a moral issue will fail to employ moral decision making schemata.' However, the nature of this failure in 'recognition' is very confused: is it conscious, unconscious, somewhere in between these positions, or a changing amalgam of all three which is influenced by the specific location in which the activity takes place, the type of peer-pressure experienced, or the age of the downloader - to take three seemingly important behavioural and attitudinal modifiers? At the most basic level Calluzzo and Cante (2004) state

in the introduction to their research into ethics, IT and software that: "Qualitatively and anecdotally it appeared that many, if not most, students [in the sample] had misconceptions about what represented ethical and unethical behavior in these realms [the use of IT and software]". They are not alone.

Altschuller (2009), citing Kallman and Grillo (1996), posits four ethical/legal positions that lead to some types of social confusions about IP. These positions are: ethical/legal, ethical not legal, not ethical-legal, and not ethical-not legal. And with file-sharing culture it is both in the muddled area of 'ethical not legal' (such as file-shifting for a friend, giving a copied playlist on a burned CD as a present, sharing expensive software to accomplish a task, or downloading content that is not available commercially, e.g an old recording on vinyl, or film, or in print, that has been digitised and uploaded *for the public good*, or *domain* by another person, known or not) and in the area of 'legal but not ethical' (such as responses to the creating and distribution of content that can only be consumed on one proprietary player; or to the charging of higher prices for digital content than physical content) that causes confusions. As Altschuller states, downloading culture "has forced society into a muddle of uncertainty with how to incorporate it into existing social and legal structures."

This muddle has not yet found business, legal or academic solutions. As we have demonstrated in the empirical sections of this research the breadth of technological possibility to file-shift, copy, down- and up-load on and off-line is such that it would be a surprise to find research that covers *all* these types of activities from either a technological or an ethical perspective. And we did not. Of course, in the eyes of the law, *all* types of unauthorised downloading acts are illegal, and thus there is always an ethical dimension. But very often, the academic literature we looked at considers file sharing or illegal downloadin" as a singular *un-ethical* or 'problematic' act, with an economic and/or creative cost: this singularity *is* true legally; but it is not in practical terms. We emphasise this point as technological innovation to allow sharing, dissemination, copying and storage is happening at breakneck speed, and just as much digital consumer self-regulation of their behaviour is, as Altschuller states, 'deficient', and so we add that much downloading research appears 'out of date' when considering a world of mass broadband to the home.

Nevertheless, McMahon and Cohen (2008) emphasise that unlike the physical world where 'theft' is a tangible activity, with clear punishments when 'caught', well-communicated ethical appeals are sometimes the only deterrence mechanism remaining to content providers. "In the online environment, where rules are not clearly established and methods of enforcement are weak, the recognition of the ethical implications of behaviour is particularly important." Given that the amounts of unauthorised content available, and the numbers of citizens who consume it, we found the following description of Altschuller et al. (2009) - describing the result of the 'disconnect' between the law and (some) of its citizens over issues of copyright - to be helpful when he states that "a fierce struggle ensues between society and its conscience."

For where is the Internet's conscience? Is it in the minds of its online (or offline) consumers, the creators of its networks, the producers of the content that populates those networks, or the manufacturers of the machines that enable us to access, create and share the Internet? And, if the conscience is not found in any of these places, then can it be modulated in enforceable laws, or persuasive social arguments?

The dissemination of ethical perspectives to consumers lays primarily within the scope of education: either at home, in schools, or through communication campaigns created by industry, regulatory bodies, and government. In interviews with industry we were told about various initiatives, including the 'Knock off Nigel' campaign¹⁵ undertaken by the UK IP Trust on behalf of the UK film industry.

These types of campaigns emphasise both the sleazy nature of, in particular, buying cheap counterfeit copies of DVDs and CDs, and the impact of the lost revenues on creativity. This latter point is illustrated by showing how lost revenues may impact on future investments in young talent, or cause established artists to be unable to continue with their work. We were told that such campaigns are highly successful, although we note that much of the message concerned the recording of films in cinemas using hand-held

¹⁵ <http://www.knockoffornot.com/>

cameras, and buying counterfeit disks: both areas in the physical world, where being 'caught' is far more likely than in the Online world (the current perception; and, largely, the current truth).

Another good example of this type of educational initiative is found in the RIAA document: 'Young People, Music and the Internet' – which is available for download from the RIAA website¹⁶. Here parents are given a description of some of the technologies available to 'kids'.

"Music files are also found on file-sharing or peer-to-peer (P2P) networks where huge amounts of songs are swapped. This raises copyright issues for music fans... There are legal ways to use P2P networks, and they are a revolutionary way of distributing your own personal files like photos or songs. But copying or distributing copyrighted material such as music, movies, games and software without permission or payment is illegal."

There are many excellent educational initiatives in existence.

Another fertile observation in the context of ethics is found in McMahon and Cohen's (2009: p15) conclusion: "As many behaviours are based on brand-new technologies, there may be little agreement as to what behaviours constitute unethical use of the technology.... An important related issue is whether development and distribution of such [file sharing] software, which has both legal and illegal uses, *imposes some ethical responsibility on the developer* [our italics] – even without knowing the specific nature of the use of the software by individuals." Here we would point to the same issue for all aspects of the matrix that creates the unauthorised downloading eco-sphere: these include not just deficient self-regulating consumers and P2P software developers, but the consumer electronics industry, the ISPs, and online data warehousing services.

We believe that for the purposes of this report the ethical issue of unauthorised downloading can be grouped into three main consumer positions: those who do not know about, or fully understand IP; those who do know about, and fully understand, IP but choose to ignore its implications; and those who do not believe that downloading unauthorised materials constitutes a 'crime'. Historically, these three positions have been addressed by the deterrence triangle of 'education, enforcement, and legislation.' But in the online eco-sphere, the opportunity to download, the absence of cues suggesting a moral imperative, and fast-evolving peer norms about the idea of sharing, appear to validate all three consumer positions. To consider this another way: technology makes many types of digital sharing and copying so easy, and it is evolving so fast, there is almost no time for ethics.

We note here, for instance, that the RIAA document cited above fails to note that *all* content on a P2P network is covered by IP laws: creators of user-generated content, described by RIAA as 'personal files', have just the same rights as the music or movie business. We also note that the web-based technologies of 'data warehousing' are completely ignored, as are those of sharing music videos on social networking sites, such as YouTube, and illegal streaming websites. The ease with which files can be emailed, posted to Usenet groups, or included on blogs is not covered. Finally there is no consideration of the 'darknet' sharing of content offline, using hard-drives, or Bluetooth enabled devices. Then again, many of these phenomena are relatively new, and any explanation of the downloading eco-sphere must be constantly updated, and explained in simple ways to those whose task is to educate the digital consumer. A good example of this type of technology development is the fast evolution of unauthorised websites that stream live sport directly from a feed that is based on a pay-TV service. Web addresses are posted in chat rooms just minutes before the sports event begin, to prevent legal intervention and the service being switched off.

So where do we start? Where do the moral imperatives and ethical boundaries lie? Jones (1991) suggests that the idea of 'moral imperative' is related to the seriousness of the ethical consequences that flow from a situation. In particular the moral 'intensity' of a situation is dependent, Jones states, on a variety of components that include: the magnitude of the consequences (the aggregated harm to the victims of the moral act); social consensus; the probability of effect – a joint function of the likelihood of an occurrence

¹⁶ <http://www.riaa.com/>

of an act and the expected consequences of the act; temporal immediacy, the length of time between the act and its ethical consequences; proximity that the 'moral agent' has to the 'victim'; and the concentration of effect, that is the degree to which costs or benefits of the act apply to only a few people.

Each of Jones' elements appears to be highly relevant to downloading culture in 2009. The current lack of 'intensity' of these elements conspires to promote further unauthorised behaviours: consequences are minimal, social consensus favours sharing, it's easy and rewarding to do (free stuff in two clicks), and the victims are 'virtual'.

In simple terms we were looking to find evidence to measure just how 'wrong' consumers judge these downloading activities to be against the backdrop of vast numbers of copyright infringements. Or, indeed, if consumers consider 'wrongness' at all when pursuing downloading activities. As Suter et al. (2006): p194) states: "while the moral philosophy-ethical judgment relationship is understood in many domains, little is known about whether these relationships hold in computer-mediated environments."

Suter's research, with non-student adults, which makes it unusual and potentially significant – makes the case that "as the Internet continues to be a key resource for developing and enhancing exchange relationships, marketers and public policy makers should recognise that users' general ethical behaviour *translates directly to their behaviour in the digital domain* [our italics]." (ibid: p199) Suter argues (p199) that despite the 'unethical freedoms' that digital consumers might be allowed by the Internet, it is likely to be their central moral philosophy, and not what is possible online, that determines whether they download unauthorised materials. Thus that there can be a relationship between 'general' moral actions, and those that are 'specific' to the Internet.

From our research, we believe that as Internet and other digital technology becomes more widely available, and at faster speeds with higher data storage, there will be, without some significant shift in consumer attitudes towards legislation, regulation, and content 'online', a greater ethical variance between the general and the specific, and not, as Suter might suggest, a greater harmonisation. We see much empirical evidence, and some academic research findings that, in issues of digital consumption, the ethics are very different. As Altschuller (2009: in press) states: "music downloading has become *part and parcel of the social fabric of our society despite its illegal status.*"

However, Selwyn (2008: p461) also refutes the two-culture idea by suggesting that whilst much of his research data illustrates "the notion of the Internet as a fertile environment for misbehavior, malpractice, and mild deviance" this notion must be balanced by the fact that "the levels of online misbehavior were broadly commensurate with the levels of non-Internet-based misbehavior self-reported by [his] respondents."

"Comparison of these two sets of data," Selwyn (2008: p462) adds, "revealed a striking congruence between online and offline misbehavior. Indeed, aside from purchasing pornographic material (which was more likely to take place in "real-life" contexts) and misrepresenting personal details on a form (more likely to take place on the Internet), respondents' self-reported levels of the misbehaviors covered in the survey followed notably similar patterns. This suggests that online misbehavior closely replicates and reinforces existing misbehavior rather than necessarily constituting a transformed or new set of actions. Thus, the Internet may certainly be providing our respondents with more opportunities for misbehavior and deviance, but it appears to be primarily giving individuals the opportunity to misbehave in ways in which they already do offline—as Grabosky (2001) puts it, "A case of old wine in new bottles.""

In this context Selwyn argues strongly that as offline is where the problems begin: "...governments and other stakeholders should not feel compelled (or indeed justified) to implement further restriction of individuals' Internet use in an attempt to curb what is seen as peculiarly technology-driven forms of misbehavior. As we have seen, such behaviors are most likely to be grounded in offline issues, circumstances, and structures. As such, any attempt at 'cyber-policing' individuals' online behavior may primarily serve to restrict the continued development of the Internet as a free space rather than affect individuals' propensity to misbehave," (ibid: p463).

This position is in striking contrast to what Selwyn (2008: p449) describes as “the argument [that] has been forcibly made by some cyber-theorists that the emerging norms and values of the Internet are quantitatively and qualitatively different from those of the ‘real world.’” This is the position we feel more accurately describes the current file-sharing environment.

Commenting on this position Selwyn (2008: p449) states that: “From this perspective, online behavior is inherently disinhibited, self-absorbed, and, on occasions, transgressive”, with Internet users therefore feeling “entitled and more willing to challenge offline norms of acceptable behavior” (Denegri-Knott, 2006, p. 82). As Freestone and Mitchell (2004: p. 126) concluded, “The idea is that cyberspace exists as a separate realm to the physical world, and may have developed an ethical culture of its own, or ‘Netiquette’ and has a set of beliefs or standards, shared by a group of people, which help the individual decide what is, what can be, how to feel, what to do and how to go about doing unethical things on the net.

We highlight this wide variance as a key area, requiring far broader research. If unauthorised downloading is being undertaken by a far wider section of society than simply ‘young people’ – which we do not yet know – does the online behaviour of the 40 or 60 year old digital consumer also take its moral bearings from a predilection, or not, for offline ‘misbehaviour and deviance’?

Academic evidence does suggest, and perhaps significantly, a sense of moral obligation – or its absence – does have a large effect on the intention to pirate digital material. Cronan and Al-Rafi (2008) found in their study of factors which could determine an individual’s intention to pirate digital material, that subjects who felt more guilt about, or moral obligation not to commit, digital piracy do have a lower intention to pirate. A review of the subject responses indicates that on average 50.7% of the subjects felt more guilt or moral obligation that pirating was not right, while 23.6% felt pirating was acceptable behaviour. When comparing genders, both men and women felt that pirating was not right (54% and 46.5%, respectively). Again, we ask, is the greater penetration of Internet Access changing ethical beliefs – for the digital world, but not the physical world? Secondly, is there a relationship between this ‘sense of moral obligation’ and age? This latter question can only be answered when broad consumer data about copycat culture has been captured in longitudinal research. Is it the case that those who now download will change their behaviours through an increased sense of moral obligation, created through changing offline behaviours and attitudes? Or, merely, as they get older?

Shoham (2008: p204) suggests two approaches to explaining ethical behaviour: that of the ‘slippery slope’ and that of ‘balancing the books.’ The former posits the idea that ethical deviations lead to “ever-increasing transgressions.” The latter accepts the ‘slippery slope’ argument, but that in addition, and following the committing of an unethical act, some people will “tend to become more aware of their moral balance, which leads to avoidance of future transgressions in order to ‘balance the book.’” This framework allows the author to suggest that educational initiatives are required to explain to the public the damage done when downloading and copying – and hence to reinforce the idea of ‘balancing the books’. We have seen much evidence of those initiatives, but no significant ethical shifts in consumer behaviours. Online appears, instead, to be a slippery diving board. As Shang et al. (2008: p360) writes: “unethical behaviour...like other behaviours, is learned in social interaction.” And online social interaction is largely free of ‘education’ about copyright status: from the sharing of a newspaper article, the embedding of a video in a personal blog, and the downloading of an entire television series from a P2P network.

Cronan and Al-Rafi (2008: p539) in the study mentioned above, found that many respondents (23.6%) “didn’t feel a great deal of guilt about pirating digital media; that it was acceptable behaviour. There was a low level of guilt (moral obligation) about digital piracy. Significant others encouraged the pirating act, and didn’t believe it was wrong to do so. However, 50% of the subjects did feel a greater sense of guilt or moral obligation about ‘pirating’ and these subjects did have a lower intention to pirate.”

A further dimension is explored by Cho et al. (2008: p22) who considers the ethics of legal e-commerce providers; in particular the ideas of “behaviour consistency” and “ethical reciprocity”. Whilst claiming that “scholars agree that ethical principles in e-commerce and bricks-and-mortar business are

fundamentally the same,” Cho adds that there are differences – which include: “problems of digital privacy”; “copyright”; and “unethical marketing practices in e-commerce.”

The issues here can be described as major questions. They are:

- i) *What personal privacy am I ceding when accepting free things, (e.g. Google’s services, a Facebook account, a ‘free’ Radiohead music release).*
- ii) *What is the copyright status of the content I consume online, and how do I find this out?*
- iii) *How do I know what data and access I am providing to third parties online?* Each of these ethical considerations has a dual focus: towards the consumer and towards the provider, and thus shapes the idea of ‘ethical reciprocity’ – the balanced response of one or a consensus of people towards the actions of others in social exchanges. Put another way, the question online is: *does the ethical behaviour of the supplier of content warrant comparable consumption behaviour?*

We see little evidence. As Shoham (2008: p205) states: “...consumers appear to employ a double ethical standard. Specifically, they expect high morals and spotless ethics from businesses and managers, but not from themselves. *Such a double standard should be made explicit and its behavioural consequences emphasised*”. [our italics].

There is also substantial evidence that many individuals do not perceive software piracy to be an ethical problem at all. Several papers support this view. Specifically, Cohen and Cornwell (1989a) found (in a survey of 309 students) that software piracy is viewed as acceptable and normative behavior. Solomon and O'Brien (1990) found that seventy-one percent of a sample of 266 students consider illegal copying of software ‘as a socially and ethically acceptable behavior’ (quoted in Glass and Wood (1996: p1190) and Shim and Taylor (1989) found that ‘ninety percent of a sample of 218 faculty members believe that their colleagues illegally copy software’ (ibid: p1190).

A Harris Interactive Poll in 2004 (Leitman, 2004), found that 75% of respondents agreed that “downloading music for personal use is an innocent act and should not be punished”. (Another 70% in the same poll felt that cheaper CDs would reduce downloading; an opinion which does not appear to be the case, five years on from this research the price of CDs and legal online downloads has fallen significantly, but unauthorised downloading is still on the increase).

Freestone’s analysis of Generation Y attitudes and ethics found that: “Gen Y consumers seem more permissive of software piracy”. They add that within this group there “...is a strong suggestion that crime within IT is looked upon in a less serious manner. Both from an ethical and legal perspective, than other crimes,” (ibid: p126).

In an earlier study, Longsdon et al. (1994) surveyed 363 students at a large US university. These included undergraduates (60%) and graduate-level students (37.5%), with the rest being non-degree students. Results support the idea that piracy is not perceived to be an ethical concern. The paper concludes that “the social consensus about whether an act is good or evil does seem to regard software piracy as not necessarily good, but certainly not evil.” (ibid: p855). The authors also found that “the length of time between the act of copying and the onset of [possible] consequences, ... is quite long”, and this temporal aspect “made downloaders/copiers less aware of the harm their activity might do to content creators.”

Lysonski and Durvasula (2008: p167) examined the present state of downloading and how ethical orientation and attitudes towards MP3 piracy impact on such activities. The researchers were interested in the issue of whether fear of punishment has a negative impact on the intention to commit downloading. Findings showed that the intention of downloading was not highly associated with [the statement] ‘not paying recording artists their rightful profits is unethical’. This result shows the gap between declared ethics and likely actions, and is further evidence that downloading is not, therefore, seen as an activity with an ethical component. Results also suggested that even those who consider themselves to have a strong ethical ideal and would not steal a music CD from a shop, are not similarly reticent about downloading music. In addition, as Shang et al. (2008: p351) write: “consumers...may justify this behaviour as sampling and may still be willing to buy...”

Put another way, Lysonski and Durvursula, (2009), suggest that – as ‘ethical idealists’ believe that there is a social cost to downloading activities, it is not ethical and has negative consequences – if ethical idealism can be increased there is likely to be heightened consciousness about downloading.

Another useful ethical perspective was offered by Brey (2007: p21) who argues that ‘information ethics’ are ‘culture relative’. Given the global nature of both the Internet and the phenomenon of downloading, Brey’s conclusion that differing traditions of ‘rights-centered’ moralities and ‘virtue-centered’ moralities require an “intercultural information ethics that engages in interpretive, comparative and normative studies of moral problems and issues in information ethics” is helpful if mind-boggling.

Many people believe that illegal downloading is a ‘victimless’ crime

CIBER confidence rating: ★★★★★

So, if the ethical position of many who download is either confused or non-existent, caused by offline propensity to ‘misbehaviour’ or ‘virtue centred moralities’ what other reasons found online can be explored to explain this behaviour?

Higgins et al. (2009) set the scene, citing Wall (2005), who, “noted four characteristics of the Internet that have enabled individuals to easily commit criminal activity: it allows anonymous communication, it is transnational, it has created a shift in thinking from the ownership of physical property to the ownership of ideas, and it is relatively easy. In addition, Wall contended that the Internet facilitates piracy because it allows the offense to take place detached from the copyright holder, which provides the offender with the perception that the *act is victimless*. [our italics]”

There is much research which shows digital consumers find ‘softlifting’ to be harmless (Shang, 2008: p351) because “the victims [largely the content distributors, rather than the original creators] are seen as far removed and impersonal.” The conclusion being that unauthorised copying is seen as “socially acceptable and not at all unethical.”

The denial that there is a ‘victim’ also forms a part of ‘neutralisation theory’ – one of many explanations for rationalising the behaviour of unauthorised downloading. Neutralisation theory suggests four means by which people justify and rationalise their actions.

These are: *Denial of responsibility*: where factors apparently beyond an individual’s control come into play – such as an urgent need for a piece of software, for example. *Denial of injury or victim*: where no one suffers as a result of one’s actions. *Condemning the condemners*: assuming that those who criticise engage in their own unauthorised activities or somehow deserve any injury – such as loss of earnings. *Appeal to higher loyalties*: such as obtaining unauthorised material in order to help a family member.

There are also ‘de-indivuation theories’ which inform the issue of unauthorised downloading. These suggest that individuals avoid responsibility for their actions because they are longer aware of their own identity or ‘self’, or that of others. These kinds of behaviour include the idea of being anonymous online and that of being totally immersed in a social network. We will consider these ideas in their entirety later in the document. For now we consider: *Condemning the Condemners*.

As Shoham writes (in 2006) “The belief is growing that since corporate ethics are suspect (Enron, WorldCom), consumers can also engage in such practices.”. He suggests that such behaviour is “a reminder that many who illegally copy software...consider their acts as taking from the rich (software and music companies) and giving to the poor (themselves).”

Shang (2008: p351) appears in agreement, when writing about music counterfeiting. “Some consumers even claim that the entertainers (in this case musicians) are not hurt by the counterfeits as they still enjoy a high income and live a lavish lifestyle.”

One of Logsdon’s (1994) main findings was that the ‘victims’ of the act of software piracy, i.e., individual software developers or companies, are perceived to be far removed from and impersonal to the copier.

Respondents felt that ‘if there are negative consequences to the victims, ... the suffering will not be widespread, as only a few individuals or companies will suffer at all’ and copiers believed that ‘the probability that the act of copying software will cause harm is low...’ (ibid: p855).

Ingram and Hinduja, (2008: p346) also examined this aspect of piracy. The researchers surveyed 2,032 undergraduates from a large U.S. midwestern university. Respondents were asked (amongst other things) “whether they would be more likely to download MP3s if: (1) it were known that the recording industry ‘could afford it’ and would never miss the tiny amount of proceeds lost; (2) it were known that law enforcement agencies, universities, and authorities could not care less about MP3 file exchanges; and (3) it were held that no one is really getting hurt from Internet distribution”. Findings indicated that denial of injury and denial of victim, significantly predicted moderate levels of piracy participation.

Complementary to these findings was a study by Chiou (2005) The authors surveyed 361 Taiwanese High School students to test various hypotheses regarding digital piracy, including whether ‘perceived magnitude of consequences’ had a (negative) impact on their attitude toward music piracy. Survey questions tested respondents’ responses to questions such as:

- Unauthorised downloading/duplication or purchasing pirated music products will have a big and negative impact on the singer(s)/band(s).
- Unauthorised downloading/duplication or purchasing pirated music products will have a big and negative impact on the record companies
- Unauthorised downloading/duplication or purchasing pirated music products will have a big and negative impact on the whole Taiwanese society

Those whose responses suggested a higher magnitude of consequences (in other words, were aware of possible negative consequences and therefore that there may be ‘victims’) tended towards a negative attitude towards music piracy.

Finally, Freestone and Mitchell (2004: p126) found, in their study of Generation Y attitudes towards e-ethics and internet-related misbehaviours that “Generation Y consumers [those aged between 8 and 24, in 2004, although only ‘undergraduate students’ were surveyed] seem more permissive of software piracy and many commented they feel that they are doing no direct harm to sellers as they cannot see the direct economic consequences of their actions, and said that they are the victim of inflated software, music or movie prices, blaming the industry for keeping prices artificially high”. This result was echoed by Levin et al, (2007: p121) who found that attribution of harm had no impact on students’ intentions to download in the future. It is quite possible that college students, who are typically not yet financially independent, have a hard time believing that music artists and/or companies truly need the money that is lost due to downloading music.

And if not ‘no victim’ there is certainly the sense that with peer-to-peer networks there is, as Chiou (2005: p171) describes, ‘ethical ambiguity’ which means that, at the very least, consumers have ‘no idea’ they are infringing, and who they are ‘hurting’.

Personal and situational factors affect propensities to commit illegal content activity

CIBER confidence rating: ★★★★★

Considering the question of why those consumers who believe the ethical issues related to illegal downloading to be important nevertheless fail to act in ethical ways in certain cases Eckhardt (2006) suggests that situational and personal factors are important. This section considers the social norms that exist in the physical world, and online, and how they may influence ethical decision making processes.

Situational factors

Goles et al., (2008), in a questionnaire survey to 455 university business school students, found that the more an individual is aware of laws regarding software copying, the less favorable his or her attitude will be toward softlifting. However, this correlation applied *only in a school setting* where, it seems, “there is the perception of real consequences to violated software laws. It is very unlikely that softlifting in one’s home will be discovered and prosecuted” (ibid: p493).

We feel this is significant. Taylor's (2009: p255) conclusions revolve around educative initiatives. As it may be "difficult to protect the integrity of [new] distribution practices associated with digital service products like music and movies," Taylor suggests that "it appears judicious to begin trying to identify successful means of persuading stakeholders to not engage in DP [digital piracy]." He adds that part of this process should take place well before places of further education. "...it is important to recognise the need to [simultaneously with utilitarian appeals to college students] target elementary and middle school students as part of the overall communication strategy." Taylor makes the valid point that the first encounters that digital consumers can have with easy digital piracy opportunities take place by "middle school" [in the US from eleven years onwards]. Thus, by college, an active downloader may in the future have seven years of experience (and stored content) – or as Taylor states, college aged students have "established strong attitudes supporting participation in DO." And even if school sanctions on online behaviour are strict and ethically-based, and *do* emphasise the consequences of unauthorised downloading amongst a range of online misdemeanors, there still remains home access, access via mobile devices, and public wi-fi points which do not necessarily do so.

Where peers and other influential members of a social group (family, school staff etc.) are perceived to be anti-piracy, inhibitions are created within the group. Higgins et al, (2008) use the expression 'social-bonding' and claimed, from the results of their study into delinquent behaviour, that the threat of losing close 'attachments and commitments' by performing piracy acts was significant. Hsu and, Shiue, (2008: p715) "analysed consumers' willingness to pay (WTP) for non-pirated computer software and examined how attitudes toward intellectual property rights and perceived risk affect WTPs". Microsoft Windows and Microsoft Office were used, as two commonly used commercial software products. The study "surveyed high school students, college students, graduate students, and general consumers who were not currently enrolled as full-time students in order to include respondents of various age and educational levels" to examine consumers' usage patterns of unauthorised software in addition to evaluating the dollar amount of willingness-to-pay for these two software products. Social norms had strong positive influences on WTP for software (ibid: p729). As the writers say, "individuals' behavior seemed to be affected by thoughts and deeds of other people in the environment". Specifically, "when friends and family members believed using pirated software was not appropriate, respondents tended to have relatively high WTPs."

Glass and Wood's (1996) study concerned the propensity of people who legally buy software, in order to copy it for others. Evidence was found for all of the authors' propositions, suggesting that illegal copying is strongly related to situational factors and not ethical considerations. Copying was found to be negatively related to the price of the software – the more the software costs, the less likely it is that the purchaser will distribute it to others; the perceived negative outcomes directly related to the exchange (ibid: p1192). However, they were positively related to: favorable social outcomes; "the debt perceived to be owed to the second person from a prior exchange" (ibid: p1192); the promise of repayment – in the form of a reciprocal benefit - by the receiver; and the perceived financial difficulty of the receiver.

In terms of two of these positive relations, Altschuller and Benbunan-Fich (2009: in press) write: "Along with [this] increased connectivity, there is a sharing environment where people are willing to offer music files to unknown others (supply side) and to download music from others (demand side)." That is: 'sharing' brings favourable social outcomes (more content), and 'reciprocal benefit' (other people's content). A third 'positive', the "debt owed from a prior exchange" can be seen in the description of those who download but do not upload – they are known as 'free riders.'

Rahim et al. (1999) also found that situational (and demographic) factors dictated people's propensity to use pirated software. In an admittedly small sample (91 students) they found that male respondents, computer ownership, and more computer experience were positively correlated on the use of pirated software.

Other research looks at peer pressure and social norms. The strength of fitting in with social norms is a theme running through the literature – and whilst there is little that is robust we could find about sharing and the social norms of the social media, it is evident that social networks create their own norms –

which is often based on the principle of sharing both user-created content and content sourced in other places.

Indeed LaRose and Kim (2007: p268) suggest that one of the reasons why industry efforts to curtail piracy is failing is that “downloading appears to be as much a social phenomenon as an economic one.” The authors claim that the downloaders of “so-called pirate music seem to be more motivated by the social aspect of trading and sharing music with other enthusiasts rather than the proposition of saving money on music purchases.” They add that downloading “appears to have a habitual, almost addictive, quality for many users.”

Levin et al., (2007: p120) surveyed 388 undergraduate business studies students at a medium sized south-eastern University in the USA to examine the effectiveness of various strategies used to dissuade consumers from downloading music illegally. Results suggested that those who believe their peers to be supportive of [this practice] undertake higher levels of “... downloading behavior compared with those who believe that their peers are *not* supportive of [it]”.

Ingram, and Hinduja (2008) in a study mentioned earlier in this report, found similar results. In their study, the effect of appeals to higher loyalty on issues of piracy was found to be conditioned by the respondent’s approval of the behaviour. Overall, results suggested that university settings may unwittingly facilitate a climate for online piracy whereby students place a higher value on group norms rather than legal norms and do not consider the harms associated with the behaviour. Lau’s (2006) analysis of USENET messages also showed that peer attitudes had an effect on ‘leniency’ towards pirated software. Indeed, the few people who admitted legal buying original software were admonished by others. Once again the absence of a longitudinal study, taking those students into a different environment – or climate – such as post-college life, is marked. If universities create a climate for online piracy, does the post college world create the climate for ethical responsibility?

A particularly salient and interesting study in this area was carried out by Tang and Fam (2005), who examined the effect of interpersonal influence on ‘softlifting’ intention and behaviour. The authors used the unusual method of a laboratory experiment, which they claimed was superior to survey techniques in being able to address causality rather than simple association. The 54 subjects who participated were students of an introductory database course at a Taiwan university. There are 43 male and 11 females, with an average age of 20. Group pressure and the desire to conform to norms came out strongly in the experiment, but was moderated by the level of financial gains available. It should be noted that in this case the ‘financial gain’ was the saving of the price of the software, rather than an actual monetary gain.

“However, ‘the price of software is a less dominant factor for software piracy compared with group pressure when the price is lower; the importance of price is higher when the software is more expensive. But group pressure and price of software consistently influence people’s intention of copying.” (ibid: p154)

A further survey by the same authors (Tang and Fam, 2005) with 216 college students from two public universities in Taiwan investigated the relationship between consumer susceptibility to interpersonal influence and softlifting intention/behaviour. Again, “normative influence was related to the intention to softlift” (p149) more than ‘informational influence’. In other words, information about a product from associates was less influential than perceived norms of a social group, confirming the importance of peer pressure in this matter.

Freestone and Mitchell (2004) gathered attitudinal information from the Yahoo ‘Hackers’ Chat’ online ‘chatroom’. The authors report that there was “sometimes a strong sense of peer group support with hacker’s chat rooms having an almost ‘gang-like’ atmosphere with their own language and codes of communication. This creates a deviant social influence without immediate fear of the embarrassment of being caught or reprimanded and being subjected to social exclusion”. (Freestone and Mitchell, 2004) p123)

However, the effect of social norms cuts both ways. Thus, where peers and other influential members of a social group (family, school staff etc.) are perceived to be anti-piracy, inhibitions are created. Higgins et

al. (2008) use the expression 'social-bonding' and claimed, from the results of their study into delinquent behaviour, that the threat of losing close 'attachments and commitments' by performing piracy acts was strong. Hsu and Shiue, (2008: p715) "analysed consumers' willingness to pay (WTP) for non-pirated computer software and examined how attitudes toward intellectual property rights and perceived risk affect WTPs". Microsoft Windows and Microsoft Office were used, as two commonly used commercial software products. The study "surveyed high school students, college students, graduate students, and general consumers who were not currently enrolled as full-time students in order to include respondents of various age and educational levels" to examine consumers' usage patterns of unauthorised software in addition to evaluating the dollar amount of willingness-to-pay for these two software products. Social norms had strong positive influences on WTP for software (ibid: p729). As the writers say, "individuals' behavior seemed to be affected by thoughts and deeds of other people in the environment". Specifically, "when friends and family members believed using pirated software was not appropriate, respondents tended to have relatively high WTPs."

Another personal and situational factor is found specifically in the activity of file sharing – as distinct from simply downloading materials, a crucial distinction. In a file sharing network, as we have explored in our empirical observations, there is more than one "role" which the consumer can play, more than one personal and situational influence. Specifically, the digital consumer can be the uploader/provider of an original file: a CD, DVD, software package, e-book etc. They can also be a file provider, in that the data they make available to the network, via their computer, includes content they have already obtained from others in the network. Finally, they can be simply a downloader - who does not make their content available but does access others (a 'free-rider').

In legal file sharing networks the success of the network is determined by the numbers willing to share, and not to merely 'free ride.' Shang (2008: p353) thus argues that "people with a stronger belief in the norm of reciprocity may further recognise the value of P2P systems."

This triangulation leads to a series of behavioural and attitudinal norms: As some users may be 'concerned' about the legal issues around providing content to others they may simply download. But those who are under the 'norm of reciprocity' may act differently and "perceive it as their duty to provide files to others." (Shang, 2008). The large numbers – millions – using the networks may also "create a deindividuation effect and reduce the impact of the anti-piracy norm".

A second consideration comes when digital consumers *pay* for premium services in a file sharing network (or, indeed, a data warehouse). Here there is a sense that such digital consumers "may convince themselves that since they have paid for the benefits they get, piracy should be the problem of the P2P system provider. Besides, people may believe they are doing a good thing for both musicians and consumers by distributing good music, instead of hurt copyright holders." (ibid: p360).

Lyonski and Durvasula (2008: p175) suggest that "those who believe they are ethical are unlikely to steal CDs from a store, but this ethical self-concept has no relationship with downloading activities. So, people may not identify ethics as an issue when it comes to non-physical/tangible goods like digital files, as research on copying software seems to suggest."

However, if the definition of digital piracy is shifted (Taylor et al., 2009) to be "the consumption of illegal copies of digital *services* [our italics]" a new form of issue – a combination of issues about victims and personal and situational influences – emerges. Henning-Thurau etc, for example, show evidence that consumers' intention to pirate "cause them to forego theatre visits and legal DVD rentals and/or purchases."

Personal factors

In addition to situational factors that act as determinants regarding digital piracy behaviour, personal factors are also important. For example, Gottfredson and Hirschi's (1990) self-control theory has been used to understand digital piracy. Gottfredson and Hirschi argued that individuals who are subjected to poor or ineffective parenting practices (i.e., no emotional attachment, lack of monitoring, no recognition

of deviant behavior, and the use of corporal punishment) are likely to have low self-control (i.e., the inability to foresee the long-term consequences of a behavior). Those with low self-control are likely to perform criminal behavior when an opportunity presents itself. Higgins et al. (2008) looked at self-control with respect to digital piracy. They used a questionnaire which they administered to 358 university majors. Results suggested that "an individual is likely to perform digital piracy because they are impulsive and unable to wait to purchase a copy of the digital media. These individuals are not likely to be empathetic to the potential copyright holder and perform the behavior. Further, these individuals are likely to be attracted to ease and simplicity of performing digital piracy" (Higgins et al., 2008: p456).

We looked, in vain, for robust research into the emergent social networks, in particular for work that demonstrated the peer-norms and subsequent pressures that are evolving within social media. Our search was predicated on previous research, such as that of Hinduja and Ingram who found that those who placed a strong emphasis on 'immediate group norms' which they describe as "peer/family or work/school norms" were likely to participate "in higher levels of piracy." Their implication was that "it may become necessary to shift prevention efforts from the individual to the group setting in order to modify this climate." As this work, like so many others, was focused on a university population the authors' recommendation was similarly directed: "...formally engendering a greater respect for intellectual creations and property among students...should increasingly become a function of higher learning."

Another, less hopeful analysis came from business. "For this generation," stated Human Capital in its "Youth and Music Survey" of 1,000+ 15-24 year olds (Human Capital, 2009), "free music is prevalent, easily reached and largely guilt-free. As a result, the economic value of recorded music is being eroded and the struggle against downloads lost."

In terms of demographics there is little data, due to limited nature of surveys (most of which are either confined to students or do not mention demographic differences in their results). Results are conflicting. There appears to be some evidence that younger males commit more software piracy (Peace, 1997; Gopal and Sanders 1997; Hinduja 2001, 2003). However, Sims et al. (1996: p844) in an older study, found that there was "overwhelming support in the *other* direction (i.e., older students tend to pirate more than younger students) on the 'number of time in the past year students copied software without purchasing it'. There was also a significant difference ... between younger and older students when measured by the extent of piracy across software types".

With regard to music, there is an equally mixed picture. One of the few studies to explicitly examine differences between generations with regard to music piracy found that there was a generational difference in the direction one might expect – that younger people ('Generation Y' (born 1976 to 1991) tended to download unauthorised music more than 'Baby Boomers' (born 1946 to 1960).

Lee and Low (2004) investigated attitudinal differences towards intellectual property concepts. As the authors admit, however, there were many limitations in their methodology, to the extent that they advised against generalising their results to a wider population. Their study used an 'interviewer-administered survey instrument' (ibid: p3). Two hundred respondents, equally split between the two generations noted above, were interviewed face to face in a shopping mall. Significant differences were reported between the two groups. Only 10% of Baby Boomers indicating they visited music sites to download music, in contrast to 54% of Generation Y respondents. Baby Boomers reported a preference for owning the original CD compared to Generation Y at 88% and 62% respectively.

Thirty eight percent of respondents admitted having *illegally* downloaded music; a difference was reported between Baby Boomers and Generation Y at 12% and 63% respectively. Finally, "while both generational samples were aware that most of the music files shared online are in fact illegitimate copies", Baby Boomer's identified more closely with the concept that "downloading these files is like stealing" when compared to Generation Y respondents. (ibid: p5)

If Lee and Low's (2004) study tends to support a traditional view that young people are the major culprits with regard to unauthorised music downloading, other studies, by contrast, have failed to find evidence to suggest young people are more likely to engage in digital piracy. Indeed, some of the evidence is

contrary to this. d'Astous et al. (2005: p307), for example, found that "the effect of age on the intention to swap music over the Internet was negative and marginally significant... as people get older they are less concerned with morally inappropriate behaviours" (Bhattacharjee et al., 2003: p108) surveyed over 200 respondents during 2000–2001 as part of an ongoing study of consumer attitudes toward online music sharing and piracy. Respondents were primarily enrolled as full-time (15%) or part-time (54%) students in colleges; ages ranged from 19 to 54 years, with 61% males. The researchers found no significant age-related difference in behaviour, again strongly suggesting that younger people are no more likely to pirate than older people.

Many people feel anonymous online and act as though no one is watching them when they misbehave

CIBER confidence rating: ★★★★★

One of the most compelling pieces of research we considered is Barnes (2006: unpaginated), who states: "In America, we live in a paradoxical world of privacy. On one hand, teenagers reveal their intimate thoughts and behaviors online and, on the other hand, government agencies and marketers are collecting personal data about us. For instance, the government uses driver license databases to find 'dead-beat dads' or fathers who are behind on their child support payments. Many government records have been turned into digital archives that can be searched through the Internet. Every time we use a shopping card, a retail store collects data about our consumer spending habits. Credit card companies can create even larger profiles of our shopping behaviors. Locked away on hundreds of servers is every minute detail of our daily lives from our individual buying preferences to personal thoughts."

This is a central and under-researched part of the online universe, though the apparent anonymity of the digital consumer when online is an aspect of digital piracy that is well covered in the literature. As Sameer Hinduja (Hinduja, 2008: p392) explains, "anonymity or pseudonymity on the Internet releases participants from traditional constraints on their behavior by deindividuating them—by reducing self-awareness and self-regulation". Thus it may be speculated that the anonymity afforded by the Internet might facilitate individual digital piracy behaviour. Similarly, according to Shang et al. (2008: p360) "the large number of people sharing copyrighted music files on a P2P (Peer-to-peer) network and the anonymity of a computer-mediated may also create ethical ambiguity and lead to deindividuation". This, in turn is said to be a predictor of 'deviant' behaviour.

'Deindividuation' appears frequently in the literature. Hinduja hypothesised that deindividuation, as generated by the anonymity inherent with online communications, was positively related to pirating activities. He surveyed 433 undergraduates at an unidentified US Midwestern University, who were asked to state their agreement with the statements, "The anonymous nature of the Internet is something I value"; "Individuals should be able to assume different identities, personas, and roles while using the Internet if they so choose," answers to which were correlated with respondents' self-report illegal download activity. Findings suggested that there was only a weak agreement with the hypothesis – in other words "no significant increase in software piracy participation could be explained by knowledge of whether the respondent values anonymity or favors the use of different identities online" (ibid: p396). The paper concludes that "it may be that simply being anonymous online or favoring the use of different personas in an attempt to conceal one's true identity does not facilitate or encourage deviance and that other aspects of cyberspace are more salient predictors" (ibid: p396). One other aspect mentioned is that of isolation, which "lends itself to feelings of liberation from formal and informal norms that typically would constrain any tendencies or inclination to deviate."

Finally, the concept of self-disclosure informs the debate on anonymity. As its name implies, self-disclosure is the propensity of people to disclose information about themselves to others. Much research has been undertaken with regard to self-disclosure online. As Adam Joinson and colleagues (Joinson et al., 2007), points out, "when data collection is conducted via computer-aided self-interviews (where participants type their answers on to a laptop) people report more health related problems... more drug use ..." fewer (men) or more (women) sexual partners, and generally higher levels of reporting of sensitive information of various kinds. The anonymity afforded online has also been shown to reduce

incidence of socially desirable responding in questionnaire surveys (Frick, Bachtiger and Reips, 2001 – quoted in Joinson, 2007).

Consumers' perceptions of being 'anonymous' online are at odds with this most monitored of technologies, yet there is a broad academic literature which considers online behaviour as an action that is undertaken as if nobody is watching. But they are.

There is, in fact, a paradox of online privacy. The economic reality is that digital consumers receive free things in exchange for giving up some or all of their online privacy - even if they don't know it. Personalised advertising, e.g. web pages that combine content with advertising optimised for the individual consumer through the continuous monitoring of their online consumption patterns is central to the business models of Google, Facebook, and many other websites.

This ability to monitor consumer behaviour online – in search of unauthorised and illegal activity – appears central to the demands of industry that those with access to this information, that is the ISPs, should be required, as the Interim Digital Britain report (BERR, 2009a: p11) states:

“...to collect anonymised information on serious repeat infringers (derived from their notification activities) to be made available to rights-holders together with personal details on receipt of a court order.”

In their response (2009) to the Interim Digital Britain report Talk Talk (2009) states:

“...on the basis of what we have understood we have a number of concerns:

- *the approach relies on unreliable evidence...and there remains a risk of false allegations we think that rights-holders can get reasonably accurate views of serious infringers without this evidence*
- *it raises a number of data protection and privacy concerns particularly in respect of collecting and storing information in relation to individual accounts*
- *it places the ISP in the invidious position of monitoring its customers' behaviour”*

Later Talk Talk adds: “...all ISPs must adopt these measures else a) ISPs who do not adopt them will be at a competitive disadvantage and b) the measures will be less effective/ineffective since individuals could move ISPs to avoid being identified.

Peer pressure and the 'sharing culture' are major determinants of illicit online activity

CIBER confidence rating: ★★★★★

Ninety-three percent of American teens use the Internet, and 64 percent have taken part in social media activities. Boyd and Jenkins (2006) explain this to be because they are, “looking for ways to leave their mark on the world and they are seeking places where they can socially interact with minimal adult interference”.

Much of this interaction revolves around the sharing of thoughts and expressions, and thus the creation of an online identity. But whilst it is empirically clear that young people value the freedom of self-expression, it is far from clear as to whether or not they weigh the consequences of self-revelation online.

A further area of this interaction – and identity creation – is the sharing of content through web links, by embedding content into a blog (i.e. a YouTube video, a song from LastFM, a block of text from a newspaper, or an image taken from another site). Again, there appear to be no consequences to this kind of behaviour; and the prevalence of numerous music blogs, written by fans, which embed music, or have links to data warehouses full of unauthorised content, only heightens the sense that online identity can be constructed around the content of others. We have seen, for example, when a new song is released, that a simple Google or Hype Machine search will discover the whereabouts (on a personal blog or some other social media site) of an MP3 copy of the song, or a YouTube video of the artist singing the song – and often a series of re-mixes or mashes of the song. On P2P networks the same is true, but there is less

context to the content, though sometimes an uploader has described the file in some way.

As Barnes (2006: unpaginated) argues: “Commercial social networking sites thrive on a sense of immediacy and community. The spirit is independent, even rebellious. Teenagers are learning how to use social networks by *interacting with their friends, rather than learning these behaviors from their parents or teachers* [our italics]....Often parents have no clue about the information teens are publicly revealing. Currently, a new type of communication behavior is emerging amongst teenagers as they explore their identities, experiment with behavioral norms, date, and build friendships.”

Tufekci (2008) is in broad agreement: For many people, the Internet is increasingly “a social ecology involving other people, values, norms and social contexts” (quoting Petric, 2006). Through networked computers, people communicate with their social contacts through multiple mechanisms, some synchronous (instant messaging and chat) and some asynchronous (e-mail). Furthermore, people often create self-presentations, such as personal home pages and profile pages in social network sites. Questions of privacy arising from social representations and interactions, which I refer to as technologically mediated sociality, should be analysed in a framework that takes into account the dynamic boundary between the public and the private in social interactions, with careful cognisance of the disparities and dissimilarities between the social Internet, on one hand, and the commercial and the informational, on the other hand. I refer to the latter as the instrumental Internet and the former as the expressive Internet.”

Within in the context of Tufekci’s ‘expressive internet’ there are many very new consumer behaviours: we would argue that the sharing of (other people’s) content is one of them. And this is put into an interesting light by a piece of unusual research that nevertheless had resonance for us. Giles et al. (2008: p431) considers the psychological meanings of record collections and the impact of changing technologies. Like other kinds of material goods, Giles et al. argue, record collections (in the physical world: i.e. CDs and vinyl recordings) “serve as a kind of cultural autobiography for their owners by attaching to specific moments, events and relationships across the lifespan.”

In contrast, the digital music collection appears to play a very different role. Giles et al. (2008: p440) continue: “The disposability of MP3s means that there is less investment in their ownership. Several iPod users talked of their digital collections as being compiled haphazardly, frequently housing material liked by friends and partners but not themselves.”

In the study Giles interviewed a small group of music lovers about their relationship to the music and the format by which it is consumed. Those that downloaded free music provided some interesting ideas:

“...there's no real ownership with a digital file, which is why I like to own them [CDs] too. iPod has just made getting hold of music more immediate really.” (ibid: p435)

Which suggests the material idea of ‘cultural autobiography’ suggested above. However Giles continues that in the digital realm:

“...consumer identities are less bound up with the music in the collection. This means that owners are able to be more adventurous, to sample a wide variety of different music without restricting their consumption to a relatively small set of artists or genres.” (ibid: p440)

And they do this because evidently there is an adventurous wide variety of music out there to sample. We might add here that the same is true for film, television and – increasingly – electronic and audio books (see our first Empirical Case Study).

This leads Giles (Giles et al., 2008: p441) to speculate: “digital ownership of music is more about the listening experience itself than about the painstaking compilation of material collections. The physical nature of digital music players, where the emphasis is on portability and private consumption, with the individual listener plugged into his or her player, would seem to emphasise the sensual nature of listening to music.

“Ironically, however, this aspect of music collecting has a *social element* [our italics] to it not found in the other two aspects, which are more about the relationship between the individual and his or her

collection (and, by association, the artists). File sharing and the storage of friends' and partners' favourite music was a frequently mentioned feature of digital players, and it seems that *one of the great attractions of downloading music is that favourite tracks can be easily passed around among iPod owners in a much easier way than the traditional lending and borrowing of CDs or vinyl.* [our italics]

"In this respect, *digital music ownership makes music consumption a highly social act* (the younger age of the digital collectors could also be a factor here). As one participant pointed out, the storage capacity of her iPod allows her to maintain musical relations with several friends, whereas in earlier times she may have felt compelled to side with one specific genre:

"some of [my friends] are really into cheesy pop and some are into heavy metal, and now I can download the lot (F, 18)"

Finally, and to re-iterate our view that there are two cultures with different behaviours evolving, that is the physical/material and the digital, Giles states: "Traditional record collections of CDs and vinyl seem to be associated with the relationship between *the consumer and the artist*, and carry powerful meanings for the presentation of the self and the construction of identity: digital music collections *make music consumption a more social activity* and encourage a pluralistic musical outlook, particularly in younger owners."

This is an unusual piece of research, however if its findings prove sound with more research, it does have tremendous implications firstly for the ideas about 'no victim, no crime' which we describe above. If the new relationship being developed online and through sharing is about that with the content, not the creator (or distributor), then education and marketing to re-emphasise that relationship are essential. Secondly, if as Giles et al. (2008:p440) state: "The disposability of MP3s means that there is less investment in their ownership..." it leads on the idea that the investment is in the social network – where the file will be held *somewhere*. Or that in an ecosphere in which one data warehouse can hold 160 million files it will *always be possible to find a file that has been lost or deleted*.

The norm of reciprocity and the ideology of freeware also appear to be a motivator for piracy. In one recent study, Rong-An Shang, Yu-Chen Chen and Pin-Cheng Chen (Shang et al., 2008) used a scenario-based questionnaire to test various hypotheses related to norms of anti-piracy behaviour, the ideology of free software, the norm of reciprocity, and the ideology of consumer rights. The surveys were conducted in classes with a sample of high school and college students. Four hundred and fifty one questionnaires were returned, comprising of 162 from junior high school students, 100 from senior high school students, and 189 from university students. Results suggested that the ideology of consumer rights played a significant part in decisions to share music and software. In fact, "the impact of the belief in the ideology of consumer rights was greater than most of the beliefs in other norms. The innovation of digital technology has increased consumers' expectations" (ibid: p359).

In addition to claiming what they feel are their rights, there is evidence that people may believe they are doing a good thing for both musicians and consumers by distributing good music (Shang et al., 2008: p360). Similarly, people feel that pirated software is acceptable because it is for the benefit of society as a whole (Lau 2006: p414).

Economic factors

We did not research online pricing mechanisms and business models, although there is an abundant literature that considers price elasticity and demand in the digital world. This document has considered instead "free things", for which there is always demand – and currently in the online ecosphere, always a fruitful supply.

In particular we highlight the paper by Page and Garland (2008: p1) which considers the experiment by the rock band, Radiohead, in which its latest recording 'In Rainbows' was made available electronically and consumers were left to decide what to pay. Page and Garland suggests that beyond the media attention considering the average price paid was a more structural point. "InRainbows.com set out to redirect the inevitable torrent traffic that would (have) taken place with any high profile album release (back) towards the bands official website...this could be paraphrased as *if you're not going to pay for the*

record at least give us your email address – as this provides a ‘currency’ of its own when planning tours, and other promotional activities.”

In fact, from the figures Page and Garland quote: 2.3 million torrent files were downloaded on the recording in less than a month, a figure they believe far exceeds the estimated download from the Radiohead website. It leads the authors to posit a ‘venue hypothesis’ which suggests that “many core music fans are making regular habitual use of file sharing technologies...We call these ‘venues’ because *they are destinations, and like any retail outlet (iTunes, HMV), they are popular because of their brand reputation, convenient location, superior value proposition, and ease of use.* [our italics]....They are considerably more widely used than iTunes, HMV, and all other retailers...combined.” (ibid: p3).

On a more basic level, Hsu and Shiue’s (2008: p729) study of consumers’ willingness to pay (WTP) for non-pirated computer software mentioned earlier showed that “average WTPs for software products were much lower than suggested retail prices, indicating that users did not value authorised software products as high as market price”. Unsurprisingly, other studies (e.g. Lau 2006) also suggest that perceived excessive pricing is a factor in the decision to act illegally. Lau (ibid: p410) found that “market demand (economic factors) was found to be a dominant factor driving people to use pirated software. ... since people can choose either originals or copies, they probably choose the cheaper option of pirated software. Some attitudinal associations were identified as important reasons for people choosing pirated software – e.g. a feeling of being exploited by software companies”.

Shang et al. (2008: p360) examined peer-to-peer (P2P) files sharing, and suggested that “people who have paid the P2P provider may feel less guilty and not concern about piracy while downloading files from the network. They may convince themselves that since they have paid for the benefits they get, piracy should be the problem of the P2P system provider”.

Factors inhibiting piracy

This is, of course, an extremely important area. Several factors have been discussed in the literature, including fear of punishment, Social pressures/norms, and performance (e.g. of software).

Fear of punishment

The literature is very contradictory with regard to the effect of the fear of punishment. Lysonski and Durvasula (2008) surveyed 364 university students (a “cross section of undergrad class levels, majors, and grade point averages”) using a scenario-based questionnaire. Results suggested that fear of punishment did have an impact on the propensity to download illegally. “Results clearly show that there is a significant negative correlation between downloading intentions and consequences of being caught downloading” (ibid: p175). As the writers point out, Kwong and Lee (2002) also found that laws can be a strong deterrent, with regard to at least the pirating of CDs. This study was based in Hong Kong, and so the results might not apply totally to a UK setting. Levin et al.’s (2007) study of undergraduate business studies students also suggested that the use of severe threats [emphasis added] seems to be an effective way to diminish downloading” (ibid: p121). Lower levels of (scenario-based) threats did not result in a lower reported likelihood of illegally downloading music.

Research suggesting there is no link between penalties incurred and illegal downloading include that by Hsu and Shiue (2008: p730) whose work found that the risk of prosecution “did not significantly increase willingness to pay for software products [as] individuals who used pirated software were not at a high risk of being prosecuted”. In research not based on scenarios, but on download statistics, Lysonski and Durvasula, (2008p175) echo this finding, pointing out that “lawsuits have not succeeded in stopping or even slowing illegal file sharing”. The authors cite Knopper, (2007) who, by reference to BigChampagne.com (the research group that follows downloading activity) “maintains that P2P sharing has gone up significantly from 5.5 million users a month in 2003 to over 9.3 million in 2006, despite the 20,000 lawsuits by the RIAA.”

Somewhat ambiguously, Goles et al., (2008), in a questionnaire survey to 455 university business school students, found that the more an individual is aware of laws regarding software copying, the less

favorable his or her attitude will be toward softlifting. However, this correlation applied only in a school setting where, it seems, “there is the perception of real consequences to violated software laws. It is very unlikely that softlifting in one’s home will be discovered and prosecuted” (ibid: p493).

Performance (of software)

As Jyh-Shen Chiou and colleagues point out, (Chiou et al., 2005: p164), “the performance of a pirated CD or files on the Internet normally can have quality as good as the original one. Therefore, the performance risk is not very strong”. In other words, there is a very low risk that a pirated copy of a digital object (music, software etc.) will perform poorly. Performance risk has been examined in the literature. It was positively correlated to willingness to pay for software products (Hsu and, Shiue, 2008: p730).

REFERENCES AND BIBLIOGRAPHY

- ACTA (Anti-Counterfeiting Trade Agreement) (2008) Anti-Counterfeiting: EU, US. And Others Meet in Washington to Advance ACTA. *ACTA Press Release* Available online at: http://ec.europa.eu/trade/issues/sectoral/intell_property/pr310708_en.htm (accessed 09.04.09)
- Adam, A (2005) Delegating and distributing morality: Can we inscribe privacy protection in a machine? *Ethics and Information Technology* 7. pp.233-242
- IP Rights (2004) UK Tackles counterfeiting and piracy – launch of national IP Crime Strategy *Alert* 156 Available online at: http://www.iprights.com/publications/Alert_156.pdf (accessed 20.02.09)
- Al Rafee, S, Cronan, T (2006) Digital Piracy: Factors that Influence Attitude Toward Behavior. *Journal of Business Ethics* 63 pp.237-259
- Altschuller, S, Benbunan-Fich, R (2009) Is music downloading the new prohibition? What students reveal through an ethical dilemma. *Ethics and Information Technology* (in press)
- Amichai-Hamburger, Y, McKenna, K,Y, Samuel-Azran, T. (2008) E-empowerment: Empowerment by the Internet. *Computers in Human Behavior*. 24 pp.1776-1789
- Arakji, R, Lang, K (2007) Digital Consumer Networks and Producer-Consumer Collaboration: Innovation and Product Development in the Video Game Industry. *Journal of Management Information Systems*, 24 (2) pp.195-219
- Astous, A d', Colbert, F, Montpetit, D. (2005) Music Piracy on the Web – How Effective Are Anti-Piracy Arguments? Evidence From the Theory of Planned Behaviour. *Journal of Consumer Policy* 28 pp.289-310
- Bandura, A. (1995). *Self-Efficacy in Changing Societies*. Cambridge: Cambridge University Press.
- Banerjee, D, S, Chou, T (2007) *Copyright protection and innovation in the presence of commercial piracy. (working paper)* Available online at: <http://arrow.monash.edu.au/hdl/1959.1/42113> (accessed 12.03.09)
- Banks, J, Humphreys, S. (2008) The Labor of User Co-Creators: Emergent Social Network Markets. *Convergence*. 14 (4) pp.401-418.
- Barker, D (2007) Copyright and the Google Generation. *Journal of Intellectual Property Law and Practice* 2(9) pp.576-577
- Barnes, S (2006) A Privacy Paradox, *First Monday* 11(9) 4 September Available online at: <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/1394> (accessed 21.04.09)
- Barresi, V (2008) IP Rights and *locus standi*: a matter of (individual) concern. *Journal of Intellectual Property Law and Practice* 3 (12) pp.761-764
- Baumol, W,J, (2005) *Intellectual Property: How the right to keep it to yourself promotes dissemination*. Available online at: <http://www.serci.org/2005/Baumol.pdf> (accessed 24.03.09)
- BBC News Online (2009) Piracy Laws Cut Internet Traffic *BBC News Online* Available online at: <http://news.bbc.co.uk/go/pr/fr/-/1/hi/technology/7978853.stm> (accessed 22.04.09)
- Beaudreau, B,C, (2006) Identity, entropy and culture. *Journal of Economic Psychology* 27 pp.205-223
- Bell E (2009) Digital media cannot be contained by the analogue rulebook *Guardian (Online)* Available online at: <http://www.guardian.co.uk/media/2009/mar/23/regulating-digital-media> (accessed 22.04.09)
- BERR (Department for Business, Enterprise & Regulatory Reform) (2009a) *Digital Britain: Interim Report* Available online at: http://www.culture.gov.uk/what_we_do/broadcasting/5944.aspx (accessed 21.04.09)
- BERR (Department for Business, Enterprise & Regulatory Reform) (2009b) *Copyright in a digital world. What role for a Digital Rights Agency?* Available online at: www.ipr.gov.uk/digitalbritain.pdf (accessed 13.04.09)
- Bhattacharjee, S., Gopal, R., & Sanders, G. (2003). Digital music and online sharing: software piracy 2.0? *Communications of the ACM*, 46(7) pp.107-111
- Bhattacharjee, S., Gopal, R., Lertwachara, K., & Marsden, J. (2006a). Whatever happened to payola? An empirical analysis of online music sharing. *Decision Support Systems*, 42(1) pp.104-120
- Bhattacharjee, S., Gopal, R., Lertwachara, K., & Marsden, J. (2006b). Consumer Search and Retailer Strategies in the Presence of Online Music Sharing. *Journal of Management Information Systems* 23 (1) pp.129-159
- Blechar, J, Constantiou, I,D, Damsgaard, J. (2006) Exploring the influence of reference situations and reference pricing on mobile service user behaviour. *European Journal of Information Systems* 15 pp.285-329
- Bounie, D, Bourreau, M, Waelbroeck, P. (2005) *Pirates or Explorers? Analysis of Music Consumption in French Graduate Schools* Brussels, Belgium, ENST, Université Libre de Bruxelles.
- Boyd, D (2008) Facebook's Privacy Trainwreck: Exposure, Invasion, and Social Convergence. *Convergence*. 14 (1) pp.13-20.
- Boyd, D, Heer, J. (2006) Profiles as Conversation: Networked Identity Performance on Friendster. In *Proceedings of the Hawaii International Conference on System Sciences* Available online at: <http://www.danah.org/papers/HICSS2006.pdf> (accessed 19.02.09)
- Boyle, J (2008) *The Public Domain: Enclosing the Commons of the Mind* London: Yale University Press
- BPI/Motion Picture Association of America. (2008) *Joint Memorandum of Understanding on an approach to reduce unlawful filesharing*. Available online at: <http://www.bpi.co.uk/our-work/protecting-uk-music/article/joint-memorandum-of-understanding-on-an-approach-to-reduce-unlawful-file-sharing.aspx> (accessed 17.03.09)
- Brey, P (2005) Privacy and Surveillance. *Ethics and Information Technology*. 7 pp.184-4
- Brey, P (2007) Is Information Ethics Cultural Relative? *International Journal of Technology and Human Interaction*. 3 (3) pp.12-24
- Bridges, E, Florsheim, R (2008) Hedonic and utilitarian shopping goals: the Online Experience. *Journal of Business Research*. 61 pp.309-314
- Broussard, S. (2007). The Copyleft Movement: Creative Commons Licensing. *Communication Research Trends*, 26(3) pp.3-14
- Brown A (2009) The Pirate Bay Trial is the Collision of 'can I?' and 'should I?' culture *The Guardian (Online)* Available online at: <http://www.guardian.co.uk/technology/2009/feb/26/read-me-first-pirate-bay> (accessed 20.04.09)
- Brown, J, Broderick A, Lee, N (2007) Word of Mouth Communication Within Online Communities: Conceptualizing the Online Social Network. *Journal of Interactive Marketing*. 21 (3) pp.2-20
- BSA (Business Software Alliance) (2007) BSA and IDC 5th annual Global Software Piracy study, 2007. Available online at: http://global.bsa.org/idcglobalstudy2007/studies/2007_global_piracy_study.pdf (accessed 21.04.09)

- Buzzell, T, Foss, D, Middleton, Z. (2006) Explaining Use of Online Pornography: A Test of Self-Control Theory and Opportunities for Deviance *Journal of Criminal Justice and Popular Culture*, 13 (2) pp96-116
- Cabinet Office (2009) *Power of Information Taskforce Report*. Available online at: <http://poit.cabinetoffice.gov.uk/poit/> (accessed 21.04.09)
- Calluzzo, V, Cante, C (2004) Ethics in Information Technology and Software Use. *Journal of Business Ethics*; 51(3) pp301-312
- Campbell, C. (1999) Perceptions of Price Unfairness: Antecedents and Consequences *Journal of Marketing Research*, 36, pp.187-99.
- Caplan, S, Turner, J. (2007) Bringing theory to research on computer mediated comforting communication. *Computers in Human Behavior*. 23 pp.985-998
- Capurro, R (2005) Privacy. An Intercultural Perspective. *Ethics and Information Technology* 7 pp.37-47
- Carroll, J.M. Rosson, M.B. (2003). A trajectory for community networks. *The Information Society*, 19(5) pp.381-393
- Carter, H, Synder, C, Imre, A. (2007) Library Faculty Publishing and Intellectual Property Issues: A Survey of Attitudes and Awareness. *Libraries and the Academy* 7 (1) pp. 65-79
- CashMusic (2009) *Press Release*. Available online at: <http://cashmusic.org> (accessed 15.04.09)
- Cassell, J, Huffaker, D, Tversky, D, Ferriman, K (2006) the Language of Online Leadership: Gender and Youth Engagment on the Internet. *Developmental Psychology*, 42 (3) pp.436-449
- CBI/Google (2006) *Survey of Internet Trends for Business and Consumers Conducted by gfk/NOP* November 2006 Available online at: www.cbi.org.uk/pdf/cbigoogleurvey1106.pdf (accessed 23.03.09)
- Cellan-Jones R (2009) Digital Britain - who foots the bill? *BBC Online* Available online at: http://www.bbc.co.uk/blogs/technology/2009/04/digital_britain_who_foots_the.html (accessed 03.03.09)
- Ceyhan, A, Ceyhan, E (2007) Loneliness, Depression and Computer Self-Efficacy as Predictors of Problematic Internet Use. *CyberPsychology & Behavior*, 11 (6) pp.699-701
- Chatzidakis, A, Hibbert, S, Mittusis, D, Smith, A (2004) Virtue in Consumption? *Journal of Marketing Management*, 20 pp.527-544
- Chellappa, R, Kumar, K, (2005) Examining the Role of "Free" Product-Augmenting Online services in Pricing and Customer Retention Strategies. *Journal of Management Information Systems*, 22 (1) pp.355-377.
- Chellappa, R, Shivendu, S (2007) An Economic Model of Privacy: A Property Rights Approach to Regulatory Choices for Online Personalization. *Journal of Management Information Systems* 24 (3) pp.193-225
- Chen, Y-F (2008) Herd Behavior in purchasing books online. *Computers in Human Behavior* 24 pp.1977-1992
- Cherrier, H, (2009) Anti-consumption discourses and consumer-resistant identities. *Journal of Business Research* 62 pp.181-190
- Chiou, J., Huang, G., & Lee, H. (2005). The Antecedents of Music Piracy Attitudes and Intentions. *Journal of Business Ethics*, 57(2) pp.161-174
- Cho, V, Hung, H, Wong, Y (2009) Ethical reciprocity in digitalized transactions: An empirical study of pre- and post-contractual behavior. *Computers in Human Behavior* 25 pp.21-28
- Clark, R (2007) Illegal downloads: sharing out online liability: sharing files, sharing risks. *Journal of Intellectual Property Law and Practice*, 2 (6) pp.402-418
- Clemons, E (2007) An Empirical Investigation of Third-Party Seller Rating Systems in E-Commerce: the case of buySafe. *Journal of Management Information Systems*, 24 (2) pp.43-71
- Cohen E, Cornwell L (1989a) College Students Believe Piracy is Acceptable. *CIS Educator Forum: A Quarterly Journal*, 1(3) pp.2-5
- Cohen E, Cornwell L (1989b) A Question of Ethics: Developing Information Systems Ethics. *Journal of Business Ethics*, 8 pp.431-437.
- Colley, A, Maltby, J (2008) Impact of the Internet on our lives: Male and female personal perspectives. *Computers in Human Behavior*, 24 pp.2005-2013
- Consumer Focus (2009) UK has worst copyright laws - "by far" *Consumer Focus website* Available online at: http://www.consumerfocus.org.uk/en/content/cms/News_Press/UK_has_worst_copyrig/UK_has_worst_copyrig.aspx (accessed 12.03.09)
- Craft, A (2007) Sin in cyber-eden: understanding the metaphysics and morals of virtual worlds. *Ethics and Information Technology*, 9, pp.205-217
- Cromwell, P, Alexander, G, Dotson, P (2008) Crime and Incivilities in Libraries: Situational Crime Prevention Strategies for Thwarting Biblio-Bandits and Problem Patrons. *Security Journal*, 21, pp.147-158
- Cronan, T. P., & Al-Rafee, S. (2007). Factors that Influence the Intention to Pirate Software and Media. *Journal of Business Ethics*, 78(4), pp.527-545
- CyberPsychology & Behavior*. 11 (5) pp.549-554
- de Châtel F, Hunt R. (2003) *Retailisation*, Routledge, London
- Datta, P, Chatterjee (2008) The economics and psychology of consumer trust in intermediaries in electronic markets: the EM-Trust Framework. *European Journal of Information Systems*, 17, pp.12-28
- David, P, Rubin, J (2008) How Many Scanned Books on the Web? *SIEPR Policy Brief, December 2008* Available online at: <http://siepr.stanford.edu> (accessed 03.03.09)
- Davis, L, Wang, S, Lindridge, A (2008) Cultural influences on emotional responses to on-line store atmospheric cues. *Journal of Business Research*, 61 pp.806-812
- Davis, R (2001) A cognitive-behavioral model of pathological Internet use. *Computers in Human Behavior*, 17 pp.187-195
- De Latt, P (2005) Trusting virtual trust. *Ethics and Information Technology*, 7, pp.167-180
- De Latt, P (2008) Online diaries: Reflections on trust, privacy and exhibitionism. *Ethics and Information Technology*, 10, pp.57-69
- Dickinger, A, Arami, M, Meyer, D (2008) The role of perceived enjoyment and social norm in the adoption of technology with network externalities. *European Journal of Information Systems*, 17 pp.4-11
- Dune M (2009) Premier League fears web pirates *BBC News Online* Available online at: http://news.bbc.co.uk/sport1/hi/football/eng_prem/7902769.stm (accessed 02.03.09)
- Eckhardt, G., Devinney, T., & Belk, R. (2007, January). Why don't consumers behave ethically? The social construction of consumption. *Advances in Consumer Research - North American Conference Proceedings*, 34, pp.12-13
- EMR (Entertainment Media Research) (2008) Digital Music Survey Enforcement: Taking Forward the Gowers Review of Intellectual Property. Proposed changes to copyright exceptions. Available online at: www.ipa.gov.uk/consult-copyrightexceptions.pdf (accessed 24.02.09)

- Entertainment Law Review (2009) Netherlands: Internet – piracy – the home copying exception. *Entertainment Law Review* 23 (1) pp.3-4
- e-Skills (2008a) Technology Counts: IT and Telecom Insights 2008 report, p1-102 Available online at: www.e-skills.com/insights08 (accessed 18.04.09)
- e-Skills (2008b) *UK ICT Inquiry*, Available online at: www.e-skills.com/cgi-bin/go.pl/newscentre/news/news.html?uid=918 (accessed 14.03.09)
- FAC (Featured Artists Coalition) (2009) FAC Charter, Available online at: www.featuredartistscoalition.com/our_charter.html (accessed 09.04.09)
- Farchy, J (2004) P2P and Piracy: Challenging the Cultural Industries' Financing System. *Review of Economic Research on Copyright Issues*. 1 (2) pp.55-69
- Floridi, L (2006) Four Challenges for a Theory of Information Privacy. *Ethics and Information Technology*, 8. pp.109-119
- Frabboni, M, (2008a) ISPs not to disclose the identity of their users: a green light for file-sharers? *Entertainment Law Review*, 19 (1) pp.19-20.
- Frabboni, M, (2008b) From copyright collectives to exclusive 'clubs': the changing faces of music rights administration in Europe.. *Entertainment Law Review* 19 (5) pp.100-105
- Frambach, R, Roest, H, Krishnan, T. (2007) The Impact of Consumer Internet Experience on Channel Preference and User Intentions Across the Different Stages of the buying process. *Journal of Interactive Marketing*. 21 (2) pp.26-41.
- Freestone, O., Mitchell, V. (2004). Generation Y Attitudes Towards E-ethics and Internet-related Misbehaviours. *Journal of Business Ethics*, 54(2), pp.121-128
- Frick, A., Bachtiger, M. T., Reips, U.D. (2001). Financial incentives, personal information and dropout in online studies. In Reips U.D. Bosnjak M. (Eds.), *Dimensions of Internet Science* Lengerich: Pabst. pp.209–219.
- Frost V (2009) Waiting for the iPod moment Guardian Online Available online at: <http://www.guardian.co.uk/media/2009/apr/20/interview-victoria-barnsley-harper-collins> (accessed 20.04.09)
- Gadd, E., Loddington, S., & Oppenheim, C. (2007). A comparison of academics' attitudes towards the rights protection of their research and teaching materials. *Journal of Information Science*, 33(6), pp.686-701
- Gan, L, Koh, H, (2006) An Empirical Study of Software Piracy among tertiary institutions in Singapore *Information and Management* 43(5) pp.640-649
- Garde-Perik, E, Markopoulos, P, de Ruyter, B, Eggen, B, Ijsselsteijn, W. (2008) Investigating Privacy Attitudes and Behavior in Relation to Personalization. *Social Science Computer Review*. 26 (1) pp.20-43.
- Garland, E, Page, W (2008) In Rainbows, On Torrents. *Economic Insight*, 10 pp1-5.
- Geiger, C (2008) Legal or Illegal? That is the question! Private copying and downloading on the Internet. *International Review of Intellectual Property and Competition Law*. 35 (5) pp.597- 603
- Giles, D, Pietrzykowski, S, Clark, K (2007) The psychological meaning of personal record collections and the impact of changing technological forms. *Journal of Economic Psychology*, 28, pp.429-443
- g-IP-news Agency (2004) *Understanding 'Copyright' Isn't Enough to Prevent Piracy – poll* Available online at: http://www.ag-ip-news.com/GetArticle.asp?Art_ID=358&lang=en (accessed 21.03.09)
- Glass, S, Wood, A. (1996) Situational determinants of software piracy: an equity theory perspective, *Journal of Business Ethics*, 15(11), pp.1189-1198.
- Goles, T., Jayatilaka, B., George, B., Parsons, L., Chambers, V., Taylor, D., et al. (2008). Softlifting: Exploring Determinants of Attitude. *Journal of Business Ethics*, 77(4) pp481-499.
- Gopal, R.D, Bhattacharjee, S, Sanders, G.L. (2006) Do Artists Benefit from Online Music Sharing? *Journal of Business*, 79 (3) pp.1503-1534
- Gopal, R.D. Sanders, L. (1997), "Preventive and deterrent controls for software piracy", *Journal of Management Information Systems*, Vol. 13 No. 4, pp.29-47.
- Gowers A (2006) *Gowers Review of Intellectual Property* London: The Stationary Office. Available online at: http://www.hm-treasury.gov.uk/d/pbr06_gowers_report_755.pdf
- Grodzinsky, F.S, Tavani, H.T, (2005) P2P networks and the Verizon v RIAA case: Implications for personal privacy and intellectual property. *Ethics and Information Technology*, 7 pp.243-250
- Guardian Online (2009) iPlayer users notch up 8m requests in Christmas week *Guardian Online* Available online at: <http://www.guardian.co.uk/media/pda/2009/jan/06/bbc-iplayer> (accessed 11.03.09)
- Harvey M (2009) Music Boss Fires Broadside at Pirate Bay *Times (Online)* Available online at: http://technology.timesonline.co.uk/tol/news/tech_and_web/article5808865.ece (accessed 15.04.09)
- Hausman, A, Siekpe, J.S. (2009) The effect of web interface features on consumer online purchase intentions. *Journal of Business Research*, 62, pp.5-13
- Healey J (2008) File 'sharing' or 'stealing'? *Los Angeles Times (Online)* Available online at: http://www.latimes.com/news/opinion/la-oe-w-healey18feb18_0_5092348_story (accessed 03.04.09)
- Helmer S, Davies I, (2009) File Sharing and Downloading: goldmine or minefield? *Journal of Intellectual Property Law and Practice*. 4 (1) pp.51-56
- Henning-Thurau, T, Gwinner, K, Walsh, G, Gremler, D (2004) Electronic Word of Mouth via Consumer-Opinion Platforms: What Motivates Consumers to Articulate Themselves on the Internet? *Journal of Interactive Marketing*. 18 (1) pp.38-52.
- HESA (Higher Education Statistics Agency), (2009) *Press Office* Available online at: http://www.hesa.ac.uk/index.php?option=com_content&task=category§ionid=1&id=1&Itemid=161 (accessed 17.04.09).
- Higgins, G, Wilson, A,L, Fell, B,D (2006) Digital Piracy: Assessing the Contributions of an integrated self-control theory and social learning theory using structural equation modeling. *Criminal Justice Studies*, 19 (1) pp.3-22
- Higgins, G, Wilson, A,L, Fell, B,D, (2005) An Application of Deterrence Theory to Software Piracy, *Journal of Criminal Justice and Popular Culture*, 12 (3) pp.166-184
- Higgins, G, Wilson, A,L, Fell, B,D, (2007) low self-control and social learning in understanding students' intentions to pirate movies in the united states *Social Science Computer Review* 25(3) pp.339-357
- Higgins, G., Wolfe, S., & Ricketts, M. (2009). Digital Piracy: A Latent Class Analysis. *Social Science Computer Review*, 27(1), pp.24-40

- Higgins, G.E., Wolfe SE, Marcum CD. (2008). Digital Piracy: An Examination of Three Measurements of Self-Control. *Deviant Behavior*. 29(5) pp.440-460
- Himma, K,E, (2007) The Concept of Information Overload: a preliminary step in Understanding the nature of a harmful information-related condition. *Ethics and Information Technology*, 9, pp.259-272.
- Hinduja, S. (2001) Correlates of Internet Software Piracy. *Journal of Contemporary Criminal Justice* 17 , pp.369-382
- Hinduja, S. (2003) Trends and patterns among online software pirates. *Ethics and Information Technology*, 5, pp.49-61
- Hinduja, S. (2007) Neutralization Theory and online software piracy: an empirical analysis. *Ethics and Information Technology*, 9, pp.187-204
- Hinduja, S. (2008) Deindividuation and Internet Software Piracy. *CyberPsychology and Behavior*, 11(4), pp.391-398
- HMG (Her Majesty's Government) (2008) Information Matters: building government's capability in managing knowledge and information Available online at: <http://www.nationalarchives.gov.uk/services/publications/information-matters-strategy.pdf> (accessed 02.04.09)
- Hogg, M, Bannister, E, Stephenson, C (2009) Mapping symbolic (anti-) consumption. *Journal of Research*, 62, pp.148-159
- Hohn, D, Muftic, L, Wolf, K (2006) Swashbuckling students: An Exploratory Study of Internet Piracy. *Security Journal*, 19, pp. 110-127
- Horning, M (2007) Putting the Community Back into Community Networks: A Content Analysis. *Bulletin of Science, Technology and Society*. 27 (5) pp.417-426.
- How-to-record-streaming-media.com (undated) Overview on Capturing Streaming Video Available online at: <http://www.how-to-capture-streaming-media.com/index.php> (accessed 04.03.09)
- Hsu J, Shiu C.(2008) Consumers' Willingness to Pay for Non-pirated Software. *Journal of Business Ethics* 81(4) pp.715-732
- Huang E. (2007) A DVD Dilemma: Ripping for Teaching. *Convergence*. 13 (2) pp.129-141.
- Huang, M-H, Wang, E, Seidmann, A (2007) Price Mechanism for Knowledge Transfer: An Integrative Theory. *Journal of Information Management Systems*, 24 (3) pp.79-108.
- Huberman, B, Romero, D, Wu, F. (2009) Social Networks that Matter: Twitter under the Microscope. *First Monday*. 14(1) Available online at: http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/rt/prinFRIENDLY/2_317/2063 (accessed 03.04.09)
- Hui, W, Yoo, B, Tam, K,Y. (2007) The Optimal Number of Versions: why does Goldilocks pricing work for information goods? *Journal of Management Information Systems*. 24 (3) pp.167-191.
- Human Capital (2009) *Youth and Music Survey* Available online at: [http://www.marrakeshrecords.com/Youth%20and%20Music%20Survey%202009%20\(c\)%20Marrakesh%20Records%20Ltd.pdf](http://www.marrakeshrecords.com/Youth%20and%20Music%20Survey%202009%20(c)%20Marrakesh%20Records%20Ltd.pdf) (accessed 23.03.09)
- Hunter, D, (2003) Cyberspace as place and tragedy of the digital anticommons, *California Law Review*, 91 (2) pp.439-519
- Iacovelli, A, Valenti, S, (2009) Internet's effect on likeability and rapport. *Computers in Human Behavior*. 25 pp.439-443
- IFPI (International Federation of the Phonographic Industry) (2009) *Digital Music Report: New Business Models for a Changing Environment*. London: International Federation of the Phonographic Industry Available online at: <http://www.ifpi.org/content/library/DMR2009.pdf> (accessed 03.03.09)
- IFPI (International Federation of the Phonographic Industry) (2005) *IFPI 05: Digital Music Report* London: International Federation of the Phonographic Industry Available online at: <http://www.ifpi.org/content/library/piracy2005.pdf> (accessed 24.03.09)
- Industry Trust (2008) *Copyright Theft Campaign Exceeding Expectations*, press release Available online at: www.copyrightaware.co.uk/contentlibrary/index.asp (accessed 24.02.09)
- InfoSecurity (2009) 'Drop zones' hold treasure trove of stolen goods *Infosecurity.com* Available online at: <http://www.infosecurity-us.com/view/492/drop-zones-hold-treasure-trove-of-stolen-goods/> (accessed 20.04.09)
- Ingram, J.R., Hinduja, S (2008). Neutralizing Music Piracy: An Empirical Examination. *Deviant Behavior*, 29 (4) pp.334-366
- Intellect (2008a) *Helping Innovation Flourish. Reviewing the current provision for supporting innovation and R&D*. Available online at: http://www.intellectuk.org/component/option,com_docman/task,doc_download/gid,3261/Itemid,102/ (accessed 12.03.09)
- Intellect (2008b) *Realising our Digital Potential*. Available online at: http://www.intellectuk.org/component/option,com_docman/task,doc_download/gid,3129/Itemid,102/ (accessed 12.03.09)
- IP Rights (2004) UK Tackles counterfeiting and piracy – launch of national IP Crime Strategy, *Alert, Press Release, August 2004, issue 156*. Available online at: www.iprights.com/publications/Alert_156.pdf (accessed 02.03.09)
- IPOQUE (2006) P2P Survey 2006. Available online at: <http://portal.ipoque.com/downloads/index/study> (accessed 02.03.09)
- IPOQUE (2009a) Copyright Protection in the Internet. Available online at: <http://www.ipoque.com/resources/white-papers> (accessed 02.03.09)
- IPOQUE (2009b) Internet Study 2008/2009. Available online at: http://www.ipoque.com/resources/internet-studies/internet-study-2008_2009 (accessed 20.04.09)
- IPOQUE (2009c) Study finds web and streaming outgrows P2P traffic. Available online at: <http://www.ipoque.com/news-and-events/news> (accessed 20.04.09)
- James, S (2008) The times they are a'-changin': copyright theft, music distribution and keeping the pirates at bay. *Entertainment Law Review*, 19 (5) pp.106-108
- Johnson, D (2007) Achieving Customer Value From Electronic Channels Through Identity Commitment, Calculative Commitment, and Trust in Technology. *Journal of Interactive Marketing*. 24 (2) pp.2-22
- Johnsson, M (2009) why unreal punishments in response to unreal crimes might actually be a really good thing. *Ethics in Technology* (in press).
- Joinson AN, Woodley A, Reips UD (2007) Personalization, authentication and self-disclosure in self-administered Internet surveys *Computers in Human Behavior* 23(1) pp.275-285
- Jones, T (1991) Ethical Decision Making by Individuals in Organisations. *The Academy of Management Review*. 16 (2) pp.366-395
- Jordan, J, Bolton, S, (2004) Peer-to-Peer file sharing: capturing value from digital products. *European Business Journal* 16(3) pp.105-113
- Jung, Y, Perez-Mira, B, Wiley-Patton, S. (2009) Consumer adoption of mobile TV: Examining psychological flow and media content. *Computers in Human Behavior*. 25 pp.123-129.

- Junglas, I, Johnson, N, Spitzmüller. (2008) Personality traits and concern for privacy: an empirical study in the context of location-based services. *European Journal of Information Systems*. 17 pp.387-402
- Kabay, M,E, (1998) Anonymity and Pseudonymity in Cyberspace: Deindividuation, Incivility and Lawlessness Versus Freedom for Privacy. *Paper presented at the Annual Conference of the European Institute for Computer anti-virus Research, 16-18 March, 1998* Available online at: www.mekabay.com/overviews/anonpseudo.pdf (accessed 13.04.09)
- Kallman, E, Grillo J (1996) *Ethical Decision Making and Information Technology: an introduction with cases*. New York: McGraw Hill
- Kang, Y,S, Hong, S, Lee, H. (2009). Exploring continued online service usage behavior: The roles of self-image, congruity and regret. *Computers in Human Behavior*. 25 pp.111-122
- Kettell, S (2008). The Political Economy of Open Source Software in the United Kingdom. *Bulletin of Science, Technology & Society*. 28 (4) pp.306-315.
- Khouja, M, Park, S. (2008) Optimal Pricing of Digital Experience Goods Under Piracy. *Journal of Management Information Systems*. 24 (3) pp109-141.
- Kim, H, Davis, K. (2008) Towards a comprehensive theory of problematic internet use: evaluating the role of self-esteem, anxiety, flow and the self-rated importance of Internet activities. *Computers in Human Behavior* 25(2) pp. 490-500
- Kim, J (2009) 'I want to be different from others in cyberspace'. The role of visual similarity in virtual group identity. *Computers in Human Behavior*. 25, pp.88-95.
- King, M., Loddington, S., Manuel, S., & Oppenheim, C. (2008). Analysis of academic attitudes and existing processes to inform the design of teaching and learning material repositories: A user-centred approach. *Active Learning in Higher Education*, 9(2) pp.103-121
- Knight I (2009) Generation Freeload has a Nasty Shock Coming *Times (Online)* Available online at: http://www.timesonline.co.uk/tol/comment/columnists/india_knight/article5864407.ece (accessed 15.04.09)
- Knopper, S. (2007) RIAA campaign rejected by colleges, *Rolling Stone*, April 19, p.12.
- Koo, A (2008) Distribution over peer-to-peer network. *European Intellectual Property Review*. 30 (2) pp.74-76
- Kravets D (2008) Judge Says First-Ever RIAA Piracy Trial May Need a Do-Over *Wired (Online)* Available online at: <http://blog.wired.com/27bstroke6/2008/05/jammie-thomas-n.html> (accessed 22.04.09)
- KRC Research (2008) Microsoft Survey of Teen Attitudes on Illegal Downloading. Available online at: www.microsoft.com/presspass/press/2008/feb08/02-13MSIPSurveyResultsPR.mspx (accessed 14.02.09)
- Kuo, Y-F, Yen, S-N (2009) Towards an Understanding of the behavioral intention to use 3G mobile value-added services. *Computers in Human Behavior*. 25, pp.103-110.
- Kwong, T, Lee, M. (2002), Behavioral intention model for the exchange mode internet music piracy, *Proceedings of the 35th Hawaii International Conference on System Science*, pp.156-60.
- Lang, K,R, Vragov, R (2005) a Pricing Mechanism for Digital Content Distribution Over Computer Networks. *Journal of Management Information Systems*. 22 (2) pp.121-139
- LaRose R, Kim J (2007) Share, steal, or buy? A social cognitive perspective of music downloading. *Cyberpsychology & behavior* 10(2) pp.267-277
- Larsson, H,K. (2009) Uncertainty in the scope of copyright: the case of illegal file sharing in the UK. *European Intellectual Property Review*. 31 (3) pp.124-134
- Lau EK (2006) Factors motivating people toward pirated software *Qualitative Market Research* 9(4) pp.404-419
- Le, N (2004) Sunk costs, free-riding justifications, and compulsory licencing of interfaces. *Review of Economic Research on Copyright Issues*. 1 (2) pp.29-53
- Leadbetter, C (2009) *The Digital Revolution: the coming crisis of the Creative Class. Response to 'Digital Britain'*. Available online at: www.charlesleadbeater.net/cms/xstandard/Digital%20Britain%20Response.pdf (accessed at: 18.03.09)
- Le, N (2004) Sunk costs, free-riding justifications, and compulsory licencing of interfaces. *Review of Economic Research on Copyright Issues*. 1 (2) p29-53
- Lee, E.J (2008) When Are Strong Arguments Stronger than Weak Arguments?: Deindividuation Effects on Message Elaboration in Computer-Mediated Communication. *Communication Research*. 35 (5) pp.646-665
- Lee, G. D. R. Low (2004) *Internet Pirates: Generational Attitudes Towards Intellectual Property Online*, paper presented at the ANZMAC conference, Wellington, New Zealand. Available online at: <http://smib.vuw.ac.nz:8081/WWW/ANZMAC2004/CDsite/papers/Lee6.PDF> (accessed 13.03.09)
- Leitman R (2004) *Americans Think Downloading Music for Personal Use Is an Innocent Act: The Harris Poll no. 5*, January 28, 2004 Available online at: http://www.harrisinteractive.com/harris_poll/index.asp?PID=434 (Accessed 10.03.09)
- Levin, A., Dato-on, M., & Manolis, C. (2007). Deterring illegal downloading: The effects of threat appeals, past behavior, subjective norms, and attributions of harm. *Journal of Consumer Behaviour*, 6(2/3), pp.111-122
- Lim, K,H, Sia, C,L, Lee, M,K, Benbasat, I (2006). Do I Trust You Online, and If So, Will I Buy? An Empirical Study of Two Trust-Building Strategies. *Journal of Management Information Systems*. 26 (2) pp.233-266
- Lim, Y.F. (2006) Is it really just a game? Copyright and online role-playing games. *Journal of Intellectual Property Law and Practice*. 1 (7), pp.481-491
- Limayem M, Khalifa M, Chin WW (2004) Factors Motivating Software Piracy: A Longitudinal Study *IEEE Transactions On Engineering Management*, 51(4) pp.414- 425
- Lin, C-F, Wang, H-F (2008). A Decision-Making Process Model of Young Online Shoppers. *CyberPsychology & Behavior*. 11 (6) pp.759-761
- Lipsey, R (2007) Technological Transformation, IPRs and Second Best Theory. *Keynote to the Society for Economic Research on Copyright Issues. 2007*. Available online at: www2.hu-berlin.de/gbz/downloads/pdf/SERCIACpapers/lipsey.pdf (accessed 10.03.09)
- Little, L, (2008) Privacy, Trust and Identity Issues for Ubiquitous Computing. *Social Science Computer Review*. 26 (1) pp.3-5.
- Logsdon, J.M., Thompson, J.K. Reid, R.A. (1994) Software piracy: Is it related to level of moral judgment? *Journal of Business Ethics* 13 pp.849-857
- Low, T (2009) From Baidu to Worse. *Entertainment Law Review*. 20 (2) pp.64-67
- Lysonski, S Durvasula, S. (2008). Digital piracy of MP3s: consumer and ethical predispositions. *Journal of Consumer Marketing*, 25(3), pp.167-178

- Maffioletti, A, Ramello, G. (2004) Should we put them in jail? Copyright infringement, penalties and consumer behavior: insights from experimental data. *Review of Economic Research on Copyright Issues*. 1 (2) pp.81-95
- Magar, E, Phillips, L.H, Hosie, J (2008) Self-Regulation and Risk Taking. *Personality and Individual Differences*. 45. pp.153-159.
- Maneker, M (2009) The Kindle Revolution - Digital readers will save writers and publishing, even if they destroy the book business. *The Big Money*. Available online at: <http://tbm.thebigmoney.com/articles/> (accessed 15.03.09)
- Martin, A (2004) Student Attitudes Towards Intellectual Property. *Academic Exchange Quarterly* Available online at: <http://www.thefreelibrary.com/Student+attitudes+toward+intellectual+property.-a0116450614> (accessed 20.04.09)
- Martin, S.S, Camarero, C (2008) Consumer Trust to a Web Site: Moderating Effect of Attitudes toward Online Shopping *Cyberpsychology and Behaviour* 11(5) pp.549-554
- Massey, R (2008) Internet Service Providers or industry's secret police? The role of the ISP in relation to users infringing copyright. *Entertainment Law Review*. 19 (7) pp.160-162.
- McGowan, M., Stephens, P., & Gruber, D. (2007). An Exploration of the Ideologies of Software Intellectual Property: The Impact on Ethical Decision Making. *Journal of Business Ethics*, 73(4), pp.409-424
- McMahon, J.M, Cohen,R (2009) Lost in cyberspace: ethical decision making in the online environment. *Ethics and Information Technology*. 11(1) pp1-17
- Meale, D (2007) Parallel imports: more CD than WOW? *Journal of Intellectual Law & Practice*. 2 (9) pp.613-618..
- Molnar, K., Kletke, M., & Chongwatpol, J. (2008, December 30). Ethics vs. IT Ethics: Do Undergraduate Students Perceive a Difference?. *Journal of Business Ethics*, 83(4), pp.657-671
- Moore G (1965) Cramming more Components onto Integrated Circuits, *Electronics*, 38(8) pp114-117
- Moore, R, McMullan E.C. (2004) Perceptions of Peer-to-Peer File Sharing Among University Students. *Journal of Criminal Justice and Popular Culture*. 11 (1) pp.1-19.
- Morris, R (2008) Media Constructions of Identity Theft. *Journal of Criminal Justice and Popular Culture*. 15 (1) pp.76-93.
- Mostrous A,Ford R (2009) Information Commissioner Richard Thomas warns of surveillance culture *Times Online* Available online at: <http://www.timesonline.co.uk/tol/news/politics/article5812076.ece> (accessed 03.04.09)
- Mulkern C (2007) What is a 'Fair' Share? *Video Business 2007 Anti-Piracy Report*, 27, pp.20-20
- Music Ally (2008) P3 Working Group Report. *Report by Music Ally, P3 Working Group, IFPI, MPA, December 19, 2008*.
- Music Ally (2009) Survey finds ISPs Number One Choice of Music Provider. *The Leading Question/Media Ally Survey, January 2009*. Available online at: <http://www.musicbank.co.uk/reports/isps-the-number-one-choice-of-music-provider> (accessed 10.03.09)
- MusicTank (2009) Let's Sell Recorded Music . Available online at: <http://www.musicbank.co.uk/newsletters/lets-sell-recorded-music-pt-4-squaring-the-circle/view> (accessed 12.04.09)
- Nagin, D.S, Pogarsky, G (2003) An Experimental Investigation of Deterrence: Cheating, Self-Serving bias and impulsivity. *Criminology*. 41 (1) pp.167-177.
- Newspaper Society (2006) *Submission to the Gowers Review of Intellectual Property*. Available online at: http://www.hm-treasury.gov.uk/d/newspaper_society_413_75kb.pdf (accessed 24.03.09)
- Newspaper Society (2008) *Copyright and Intellectual Property Enforcement Directorate* Available online at: www.newspapersoc.org.uk/pdf/8-April-2008_Gowers-Review-Exceptions.pdf (accessed 09.03.09)
- Newspaper Society (2008) Submission on the Green paper on copyright in the knowledge economy Available online at: www.newspapersoc.org.uk/pdf/30-November-2008_Submission-on-EU-Green-Paper-on-Copyright.pdf (accessed 03.04.09)
- Nunes J, Hsee C, Weber E (2004) Why Are People So Prone to Steal Software? The Effect of Cost Structure on Consumer Purchase and Payment Intentions. *Journal of Public Policy & Marketing*; 23(1) pp.43-53
- Nwogugu, M (2008a) Economics of digital content: new digital content control and P2P control systems/methods, *Computer and Telecommunications Law Review* 14(6), pp.140-149
- Nwogugu, M (2008b) Pricing Digital Content: the marginal cost and open access controversies. *Computer and Telecommunications Law Review*. 14 (7) pp.198-208.
- O'Baoill, A. (2008) Review of: (Jenkins, H) *Convergence Culture: Where Old and New Media Collide*. 26 (2) p252-271.
- O'Brien, D (2009) Filesharing Clampdown doomed to Fail. *Irish Times*, Available online at: www.irishtimes.com/newspaper/finance/2009/0206/1233796244215.html (accessed 20.04.09) .
- O'Shea, T (2009) BERR consultation on legislative options to address illicit P2P file sharing. *Entertainment Law Review*. 20 (1) pp.30-33.
- Ofcom (2007) *Communications Market – niche ISPs*. Available online at: www.ofcom.org.uk/research/cm/nicheisp/niche.pdf (accessed 21.03.09)
- Ofcom. (2007) The Consumer Experience. Available online at: <http://www.ofcom.org.uk/research/tce/ce07/> (accessed 03.04.09)
- Olswang (2008) *Convergence Consumer Survey 2008*, London: Olswang
- ONS (Office of National Statistics) (2008a) Internet Access online at: <http://www.statistics.gov.uk/CCL/nugget.asp?ID=8> (accessed 01.03.09)
- ONS (Office of National Statistics) (2008b) Educated People More Likely to Have Internet. *News Release, August 2008*. Available online at: www.statistics.gov.uk/pdfdir/intnr0808.pdf (accessed 05.04.09)
- ONS (Office of National Statistics) (2008c) Internet Sales Rose by 30% in 2007. *News Release, November 2008*. Available online at: <http://www.statistics.gov.uk/pdfdir/ecomnr1108.pdf> (accessed 23.03.09)
- ONS (Office of National Statistics) (2009) Internet Connectivity. *News Release, February 2009*. Available online at: www.statistics.gov.uk/pdfdir/intc0209.pdf (accessed 15.03.09)
- Open Business (2006) UK Artists – Their approaches to copyright and creative commons. *Report, October 2006*. Available online at: www.openbusiness.cc/wp-content/uploads/2006/11/ACEReport.pdf (accessed 19.03.09)
- Oppenheim, C (2008) Electronic Scholarly Publishing and open access. *Journal of Information Science*. 34. pp.577-590.
- O'Shea, T (2009) BERR consultation on legislative options to address illicit P2P file sharing. *Entertainment Law Review*. 20 (1) p 30-33
- Papacharissi, Z, Rubin, A. (2000) Predictors of Internet Use. *Journal of Broadcasting and Electronic Media*. 44 (2) pp.175-196.

- Parsell, M (2008) Pernicious virtual communities: identities, polarisation and Web 2.0. *Ethics and Information Technology*. 10 pp.41-56
- Patent Office (2006) Counter Offensive. An IP Crime Strategy. *Report, November 2006*. Available online at: www.ipo.gov.uk/ipcrimestrategy.pdf (accessed 30.03.09)
- Paternoster, R (1996) Sanction Threats and Appeals to Morality: Testing a Rational Choice Model of Corporate Crime. *Law & Society Review*. 30 (3) pp.549-583
- Peace, A.G. (1997), Software piracy and computer-using professionals: a survey, *Journal of Computer Information Systems*, Vol. 38 No. 1, pp.94-9
- Pearson, E. (2009) All the World Wide Web's a Stage: The performance of identity in online social networks. *First Monday* 14 (3) Available online at: <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2162/2127> (accessed 19.04.09)
- Peitz, M, Waelbroeck, P (2004) The Effect of Internet Piracy on Music Sales: Cross-Section Evidence. *Review of Economic Research on Copyright Issues*. 1 (2) pp.71-79.
- Petric, G (2006) Conceptualizing and measuring the social uses of the Internet: the Case of Personal Web Sites. *Information Society*, 22 pp.291-301
- Phillips, J (2008a) The impossible nightmare? IP in recession. *Journal of Intellectual Property Law & Practice*. 3(9) p535
- Phillips, J (2008b) Authorship, ownership, wikiship: copyright in the twenty-first century. *Journal of Intellectual Law & Practice*. 3 (12) pp.788-798.
- Picard, R, Toivonen (2004) Issues in Assessment of the Economic Impact of Copyright. *Review of Economic Research on Copyright Issues*. 1 (1) pp.27-40
- Prahalad, C,K, Ramaswamy, V (2004) Co-Creation Experiences: the next Practice in Value Creation. *Journal of Interactive Marketing*. 18 (3) pp.5-14.
- Publishing Research Consortium (PRC) (2009) *Journal Authors' Rights: perceptions and reality. Preliminary Report*. Available online at: http://www.publishingresearch.net/author_rights.htm (accessed 01.03.09)
- Qiu, G, Papatla, P (2008) An Empirical Analysis of Inter-Acquisition Time of Free Online Content. *Journal of Interactive Marketing*. 22 (2) pp.19-27.
- Ramello, G. B.,(2007) Access to vs. Exclusion from Knowledge: Intellectual Property, Efficiency and Social Justice (November 1, 2007). *POLIS Working Paper No. 100*. Available online at: <http://ssrn.com/abstract=1031884> (accessed 12.04.09)
- Rawlinson, D., Lupton, R. (2007). Cross-National Attitudes and Perceptions Concerning Software Piracy: A Comparative Study of Students From the United States and China. *Journal of Education for Business*, 83(2), pp.87-93
- Reading Teacher (2004) Majority of youth understand copyright but continue to download illegally. *Reading Teacher* 58(1) p.120-120
- Robledo, J. R. (2005). The effect of litigation on intellectual property and welfare, *Working Paper Nr. 0511*, Department of Economics, Universität Wien
- Sabina, C, Wolak, J, Finkelhor, D (2008) The Nature and Dynamics of Internet Pornography Exposure for Youth. *CyberPsychology & Behavior*. 11 (6) pp.691-693.
- SABIP (Strategic Advisory Board for Intellectual Property Policy) (2009) *Strategic Priorities for Copyright* Available online at: <http://www.sabip.org.uk/copyright-100309.pdf> (accessed 20.04.09)
- Sandford.P, Parish, D.J, Sandford, J.M. (2007). Understanding Increasing Traffic Levels for Internet Abuse Detection. *Security Journal*. 20. pp.63-76.
- Selwyn, N. (2008) A Safe Haven for Misbehaving? : An Investigation of Online Misbehavior Among University Students. *Social Science Computer Review*. 26 (4) pp.446-465.
- Shang, R., Chen, Y., Chen, P. (2008). Ethical Decisions About Sharing Music Files in the P2P Environment. *Journal of Business Ethics*, 80(2), pp.349-365.
- Shim, JP, Taylor GS (1989), Practicing Managers' Perception/Attitudes Towards Illegal Software Copying, *OR/MS Today* 16(4), pp.30-33.
- Shoham, A., Ruvio, A., & Davidow, M. (2008). (Un)ethical consumer behavior: Robin Hoods or plain hoods?. *Journal of Consumer Marketing*, 25(4), pp.200-210
- Sims, R., Cheng, H., Teegen, H.(1996) Toward a Profile of Student Software Pirates *Journal of Business Ethics*, 15(8) pp.839-849.
- Siomos, K, Dafouli, E.D, Braimiotis, D, Mouzas, O.D, Angelopoulos, N.V. (2008) Internet Addiction among Greek Adolescent Students. *CyberPsychology & Behavior*. 11 (6) pp.653-657.
- Siponen, M.T, Vartianinen, T. (2005) Attitudes to and factors affecting unauthorized copying of computer software in Finland. *Behavior and Information Technology*. 24 (4) pp.249-257.
- Small, L (2007) Theft in a wireless world. *Ethics and Information Technology*. 9. pp.179-186.
- Solomon, S.L. O'Brien, J.A. (1990), "The effect of demographic factors on attitudes toward software piracy", *Journal of Computer Information Systems*, Vol. 30 No. 3, pp.41-6
- Spinellpo, R (2003) The future of intellectual property. *Ethics and Information Technology*. 5 pp.1-16.
- Stelter B, Stone,B (2009) Digital Pirates Winning Battle With Studios. *New York Times* Available online at: <http://www.nytimes.com/2009/02/05/business/media/05piracy.html> (Accessed March 15, 2009)
- Stern, S.R. (2004) Expressions of Identity Online: Prominent Features and Gender Differences in Adolescents' World Wide Web Home Pages. *Journal of Broadcasting and Electronic Media*. 48 (2) pp.218-243.
- Stokes, S (2006) Art and Copyright: some current issues *Journal of Intellectual Property Law & Practice* 1(4) pp.272-282
- Stromdale, C (2008) I-Player Exposes ISPs 'Unlimited' Broadband. *Entertainment Law Review*. 19 (6) pp.125-127
- Sugden, P (2008) You can click but you can't hide: copyright pirates and crime – the 'Drink or Die' prosecutions. *Entertainment Intellectual Property Review*. 30 (6) pp.222 – 231
- Suler, J. (2008) Image, Word, Action: Interpersonal Dynamics in a Photo-sharing Community. *CyberPsychology & Behavior*. 11 (5) pp.550-560.
- Suter T, Kopp S, Hardesty D (2006) The effects of consumers' ethical beliefs on copying behaviour *Journal of Consumer Policy* 29 (2), pp.190-202
- Talk Talk (2009) *Talk Talk Response to Digital Britain: Interim Report* Available online at: http://www.culture.gov.uk/images/publications/TTG_DBIRResponse.pdf (accessed 21.04.09)

- Tang, J., Pam, C. (2005). The Effect of Interpersonal Influence on Softlifting Intention and Behaviour. *Journal of Business Ethics*, 56(2), pp.149-161.
- Taylor, S., Ishida, C., & Wallace, D. (2009). Intention to Engage in Digital Piracy: A Conceptual Model and Empirical Test. *Journal of Service Research*, 11(3), pp.246-262
- TechRadar.com (2009) Message on illegal downloads falling short: music industry not doing enough, says survey Available online at: <http://www.techradar.com/news/internet/message-on-illegal-downloads-falling-short-540358> (accessed 11.04.09)
- Thomas, R, Walport, M. (2008) *Data Sharing Review*. Available online at: <http://www.justice.gov.uk/data-sharing-review-report.pdf> (accessed 11.03.09)
- Torrentfreak (2008) Filesharing Report Shows Explosive Growth for uTorrent Available online at: <http://torrentfreak.com/p2p-statistics-080426/> (accessed 09.04.09).
- Torrentfreak (2009) Top 10 Most Pirated TV Shows on BitTorrent Available online at: <http://torrentfreak.com/top-10-most-pirated-tv-shows-on-bittorrent-090407/> (accessed 22.04.09)
- Treverton, G, Matthies, C, Cunningham, K, Goulka, J, Ridgeway, G, Wong, A. (2009) *Film Piracy, Organized Crime, and Terrorism. A RAND corporation report* Available online at: http://www.rand.org/pubs/research_briefs/2009/RAND_RB9417.pdf (accessed 23.04.09)
- Tufekci, Z (2008). Can You See Me Now? Audience and Disclosure Regulation in Online Social Network sites. *Bulletin of Science, Technology & Society*. 28. pp.20-37
- University of Hertfordshire/British Music Rights (2008) *Music Experience and Behaviour in Young People*. Available online at: <http://www.ukmusic.org/cms/uploads/files/UoH%20Reseach%202008.pdf> (accessed 10.02.09)
- Vazquez, F.J. and Watt, R. (2007) Copyright Piracy as Prey-Predator Behavior. Berlin, Germany: Society for Economic Research on Copyright Issues Annual Congress 2007, 12-13 Jul 2007.
- Vincent, O.B (2008) Secondary liability for copyright infringement in the BitTorrent platform: placing the blame where it belongs. *European Intellectual Property Review*. 30(1) pp.4-10
- Wakefield, R, Whitten, D. (2006) Mobile computing: a study on hedonic/utilitarian mobile device usage. *European Journal of Information Systems*. 15. pp.292-300
- Wall, DS. (2005). The Internet as a Conduit for Criminal Activity In Pattavina A (Ed.) *Information Technology and the Criminal Justice System*, Thousand Oaks, CA: Sage Publications pp. 78-94.
- Wang, W, Benbasat, I (2007) Recommendation Agents for Electronic Commerce: Effects of Explanation Facilities on Trusting Beliefs. *Journal of Management Information Systems*. 23 (4) pp.217-246.
- Warner B (2006) File Sharing? It's Great Business. *Guardian (Online)* Available online at: www.guardian.co.uk/media/2006/mar/09/newmedia.technology2. (Accessed 13.04.09)
- Web User (2009) iTunes goes 100% DRM-free *Web User* Available online at: <http://www.webuser.co.uk/news/280194.html> (accessed 08.04.09)
- Wetsch, L.R. (2008) The 'New' Virtual Consumer: Exploring the Experiences of New Users. *Journal of Virtual Worlds Research*. 1 (2). Available online at: <https://journals.tdl.org/jvwr/article/view/361/273> (accessed 21.02.09)
- Wichardt, P (2008). Identity and why we cooperate with those we do. *Journal of Economic Psychology*. 29 pp.127-139.
- Wikipedia (2009) *Rapidshare* Available online at: <http://en.wikipedia.org/wiki/Rapidshare>
- Wikipedia (2008) *Compete.com* Available online at: <http://en.wikipedia.org/wiki/Compete.com> (accessed 13.04.09)
- WIP (World Internet Project) (2008) *World Internet Report (Summary)* Available online at: <http://www.digitalcenter.org/WIP2009/WorldInternetProject-FinalRelease.pdf> (accessed 04.04.09)
- Wolfe, S, Higgins, G, Marcum, C. (2008). Deterrence and Digital Piracy: A Preliminary Examination of the Role of Viruses. *Social Science Computer Review*. 26 (3) pp.317-333

GLOSSARY

BitTorrent

An Internet protocol that enables the sharing of very large files such as music or films.

Blogging / blogs

Writing a diary or commentary on a website to share with others. Blogs (the entries) can be used for collaborative working or debating issues.

Central server

A main computer connected to a number of personal (or 'client') computers, and stores data for them, and provides access to users of each of the connected computers.

Cloud computing applications

Where the applications someone uses are based on a web server rather than on one's own computer.

Creative Commons

A nonprofit corporation dedicated to making it easier for people to share and build upon the work of others, consistent with the rules of copyright (see <http://creativecommons.org/about/>).

Data warehouses

Websites housing a large number of files for unauthorised sharing.

Digital convergence

The combining or convergence of information technologies, offering, for example, Internet access via a mobile telephone or TV reception through a computer.

Digital lockers

Systems that allow users to upload their music or other media files to the Internet and then access them from any computer or device. File sharing is undertaken by users allowing others to access their 'lockers'.

DRM (Digital Rights Management)

Technologies that allow rights owners (e.g. the content creators) to set and enforce terms by which people use their digital creations – music, films etc. The enforcement is usually by encrypting content so that authorisation is needed to access it.

DVD burners

A device for transferring files (normally video) to a DVD.

Embed (e.g. a video clip)

To put an application inside a web page. Thus, one can embed a video clip to a page of text.

E-Readers

Handheld devices that enable you to read books in electronic or digital format.

File sharing

Exchanging files via the Internet, using any of various methods.

File shifting

Exchanging files off-line, such as via storage media such as a flash-drive or hard-drive.

GDP (Gross Domestic Product)

The total value of all final goods and services produced in a particular economy.

IFPI (International Federation of the Phonographic Industry)

The organization that represents the interests of the recording industry worldwide, and is greatly concerned with copyright laws and digital piracy.

Internet telephony

The application that allows voice to be transmitted over the Internet, facilitating the equivalent of telephone calls.

IPRED: Intellectual Property Rights Enforcement Directive

An EU directive dealing with Intellectual Property Rights infringement or its aiding or inciting.

LimeWire

An application facilitating and promoting file-sharing.

Megaupload

A major file-hosting sites (see also 'Rapidshare'). Users can upload their media files to Megaupload and then share them with people to whom they give a personal URL.

Micro-blogging

Writing short blogs receivable on a variety of devices, including mobile phones.

mp3

A high quality file format for sound files, used extensively for listening to, downloading and sharing music on the Internet.

Non-generative

Technologies that require users to consume and use content they have purchased in only a prescribed way, such as radios and traditional telephones. This is in contrast to 'generative' technologies like the personal computer or mobile devices that can be programmed.

Off-line sharing

Exchanging or giving digital files without sending them over a network or via the Internet. Examples include copying onto CD or DVD for sharing.

Open source / Open technologies

A program, the 'source code' (the programming language) for which is available to the public.

Pirate Bay

A website that indexes, stores and tracks BitTorrent (.torrent) files.

Playlist

A list of songs – compiled by a professional to be, for example, a radio programme's content, or for domestic use by people to share with friends or burn to CD.

Proprietary gated systems

Systems in which content on the Internet is controlled by a provider, and paid for by the user, such as the original versions of AOL.

Protocol

The set of rules by which information is exchanged - the standard Web protocol is http (HyperText Transfer Protocol).

Rapidshare

One of the world's largest file-hosting sites (see also 'Megaupload'). As with Megaupload, users can upload their media files to Rapidshare and then share them with people to whom they give a personal URL.

RIAA

Recording Industry Association of America (RIAA) - the trade group that represents the U.S. recording industry. It tries to foster a business and legal climate that supports and promotes members' creative and financial interests.

Sampling

Downloading or streaming a song or other media resource to assess it for possible future purchase.

Self-efficacy

"...the belief in one's capabilities to organize and execute the courses of action required to manage prospective situations" (Bandura, 1995:p2).

Social media

The technology that enables people to create their own media (text, photos, video etc.) and share with others.

Social networks

Networks of people, connected through 'social networking' sites such as MySpace or Bebo, who share text, photos, video etc. and generally enjoy remote friendships.

Softlifting

Small-scale individual software copying.

Spyware

Computer software that is installed surreptitiously on a personal computer to collect information about a user, their computer or browsing habits without the user's informed consent.

Streaming (e.g. video)

content sent over the Internet and displayed by the viewer in real time. With streaming media (video or audio), a Web user does not have to wait to download a file to play it. Instead, the media is sent as a continuous data stream, and played as it arrives.

Throttling down access

Where the Internet Service Provider restricts download capacity to minimise illegal file sharing.

Time-shift

Being able to pause or stop live TV, and restart whenever convenient.

Torrent

A (large) file downloaded using BitTorrent.

Uniform Resource Locator (URL)

Specifies where an identified resource is available.

User generated content

Content generated by Internet users, such as personal photos etc.

Value added content

Extra content beyond what might be expected – such as a feedback page on a commercial website.

Widgets

A program added to a web page which generally invites the user to it in a number of ways. They include dialogue boxes and pop up windows.

APPENDICES

Appendix 1: Research methods

The systematic literature review

The academic literature review ranged across many disciplines - computing, information science, psychology, business studies, economics, marketing, management, sociology, law, communication theory, and Internet studies. The earliest papers considered software “piracy” in the late 1980s; the most recent (February 2009) looked at perceived growth in file sharing activities. We found no longitudinal studies of unauthorised downloading behaviours.

A large number of academic databases were searched using various combinations of the following search terms: “digital piracy”, filesharing, copyright, “intellectual property”, softlifting (a term discovered during initial searching, which refers to small-scale individual software copying), downloading, social networks, privacy, surveillance, “online behaviour”, search, etc.

The databases used had functions for truncating and combining search terms; and it was also possible to search authors’ most recent works that cited relevant articles. Citations to previous works by the same or other authors were noted and sought – either through citation records (e.g. the Social Science Citation Index) or by referring to references at the end of journal articles and tracking back.

The academic and research literature identified as having value was categorized as follows:

- *Class A documents*: studies with high validity, a robust methodology and highly cited. They were central to our initial scope (in terms of theme and timeframe). These documents formed the initial basis of the report.
- *Class B documents*: credible studies in which could not be placed with quite such a high degree of confidence. This was either because of a scope issue (i.e., the subject was not central, it was from another region or culture, or lacked currency); or a methodological issue - small-scale surveys, convenience sampling, limited case study interviews, etc. Nevertheless, these were documents that added weight to or contributed to the refutation of various arguments raised in the literature.
- *Class C documents*: research-based documents, which were marginal in terms of scope or not very sound in terms of methodology, rigour and validity. These studies were rejected unless they added further weight to the evidence base.
- *Class D documents*: those that had lesser research content (e.g. opinion pieces, commercial research, consumer surveys) that nevertheless scored highly on scope. They were not initially relied on in the sense of making new claims but were useful in identifying other literature or important issues that needed to be further examined. Later in the review process some of these documents – such as reports illustrating that between 44-79% of all Internet data traffic was taken up with file-sharing – were deemed important enough to have influence on our thinking.

After three months of assessment, and looking at the confused IP arguments that fill the policy arena about the role of the ISPs, search engines, P2P networks and websites that allow access to them, we can state categorically that no academic research we have seen gets close to even an accurate description of what the digital consumer is doing, why they are doing it, and – centrally – *who* they are.

Interviews

Interviews of between 45 and 120 minutes were undertaken with representatives from the Industry Trust on IP, UK Film, UK Music, the BPI, Ofcom, the Publishers Association, the Country Music Songwriters Association (of Nashville) and the Internet Service Providers Association. We also received a submission of policy documents from the Newspaper Society. We also organised a seminar within University College, London that gave an introduction to IP to a group of 20 self-selected post-graduate students. Questions in each of these interviews were open-ended, and were explicitly an opportunity for these

industries, regulators and individuals to demonstrate the “problem” as they found it. Many of the interviewees provided us with research, and these form part of our bibliography.

Interview transcripts were 'framework' analysed (Richie and Spencer 1994). This approach has been previously used successfully in studies undertaken by the present writers (Nicholas et al 2003, 2005; Williams 2005, Williams et al, 2009) in a variety of settings, and involves a systematic process of 'sifting, charting and sorting material according to key issues and themes.' (Richie and Spencer 1994: p177) Once such key themes were established, including a-priori topics informed by the research aims, together with issues raised by the interviewees, the original notes were thematically indexed and 'charted'. This operation requires data to be lifted from their original context and collated according to their thematic indexing. These 'charted' data were further examined to complete the research, by eliciting concepts, finding associations, assessing the strength and extent of elicited views and behaviour.

Non-academic research

The rapidly changing nature of the research topic necessitated the coverage of non-academic research as it was far more timely and central to the issues, and offered an additional snapshot of industry and media perceptions about the issue of digital consumers and intellectual property which we believed to be useful to the consultation process established by David Lammy, Minister for Higher Education and Intellectual Property in the Department for Innovation, Universities and Skills, and the areas of interest to SABIP (2009) outlined in its briefing document, *Strategic Priorities for Copyright*. These articles and reports were sourced from a variety of news outlets in the UK, Europe and North America, together with a host of websites which include CNET, Wired, the New York Times, the Guardian, the BBC website and Techcrunch. We searched using terms such as “digital piracy”, “illegal downloading”, and “social networking” etc.

Inevitably these pieces of research, and other data collated from news media, cannot be judged by the same criteria as the academic literature. However, they did inform our overall perspective, and made us aware of the vast gaps in the standard literature. In short: whilst the academic literature review shaped some of our thinking (about the legal positions taken and suggested to combat unauthorised downloading; digital consumers' ethical, situational and deterrence concerns; and more general ideas about the digital consumers' patterns of online search and consumption, and their views on privacy and surveillance) we found little to shape our view of the overall problems implicit in the relationship of digital consumer and IP: neither in terms of copyright infringements, or “user generated content” and the underling trends in these relationships. For this we turned to industry reports, news items, governmental publications and data found on the Internet itself. We make several recommendations for research to fill these gaps later in this document.

The Internet

Ultimately we also looked at the medium itself. We spent considerable time searching the Internet – the web, P2P networks, social media and communications applications – for evidence of the phenomenon of unauthorised downloading. We found much. We describe some of the myriad of process available to the digital consumer in this report. We started by using the approaches laid out in the Music Ally Working report, taking each technology in turn and using web-based search to seek out unauthorised content. We began by exploring the available technologies, such as computers, service providers, storage disks and software browsers. We followed this by downloading various P2P file-sharing technologies, streaming applications, and plug-ins which enabled us to view, listen to, or consume digital content within a web-browser. We followed this by searching for music blogs with “free music”, and search engines which aggregated these blogs, and once we had discovered a range of such websites we followed the embedded links found in these sites to data warehouses, or to pages which facilitated either a download, or a streamed feed of the content. Then we began to systematically explore search engines, including those that specialize in data warehousing content. Next we used a range of search criteria to investigate the types of content available on a P2P network. We also experimented with websites that “streamed” live sport, movies, and television content – both legal and unauthorised. Then, using only online search

we discovered a range of free software applications that enabled the recording of audio, video and other forms of digital content. We experimented by sending our (legal) digital files by email, through a “drop box” and via Bluetooth technologies. We practiced the embedding of video and sound in blog pages, and on social network sites; and investigated how such files could be downloaded to be re-mixed or edited using free software sourced from the web. We researched the capacity of the latest generation of hard drive storage, and the amounts of storage available to premium and normal users of data warehouses. And finally we undertook a series of searches using various search engines using criteria such as “free music”, “free DVDs” etc. and “Illegal downloads.”

Appendix 2: Database sources consulted

Academic Search Premier

Covers popular and scholarly journal articles with many full-text articles. Academic Search Premier provides information from a wide range of academic areas including information science, business, social sciences, humanities, general academic, general science, education. This multi-disciplinary database features full-text for over 4,000 journals and indexing for over 8,200 scholarly journals.

PsycINFO

The American Psychological Association's PsycINFO database, with over 2,000,000 covers the academic research and practice literature in psychology from over 45 countries. It includes materials from related disciplines such as education, law, criminology, social science, and organizational behaviour. It provides indexes to journals, dissertations, book chapters, books, technical reports, and other documents.

Business Source Premier

This database includes indexing, abstracting, and full text for more than 8,800 serials. It provides full text for more than 350 journals and searchable cited references back as far as 1998.

Communication and Mass Media Complete

CMMC is the major indexing and abstracting tool for Communication Studies and Journalism & Mass Communication. It indexes over 400 journals and includes the full text of over 200 journals in these fields.

Social Sciences Citation Index

(accessed via *Web of Science*) provides bibliographic data from over 1,950 of the world's leading social sciences journals across 50 disciplines, as well as 3,500 of the world's leading scientific and technical journals.

Appendix 3: Analytical proforma used for the literature review

Article

[filename:]

Discipline

Paper type

Research, literature review, commentary etc.

Aim

What methodology was used?

Very brief notes, e.g. survey, interviews, case study, secondary data, longitudinal method, multi-method, opinion piece, theoretical contribution

Sample (Where appropriate)

Number and characteristics (students, academics, 'public' etc.)

How robust is the research?

Score as follows: 1=major study with a high degree of representativeness, rigour and validity 2=useful contribution, with reasonable validity, but with some limitations 3=a limited study (scope or methodology) but adds weight to existing arguments 4= of marginal interest, but worth covering for one or two interesting facts or ideas 5=reject

What are the key findings?

Up to six bullet points summarising the main findings relevant to the project.

Any comparative information or insights into earlier studies?

Including any pre digital studies

Any obvious implications for SABIP?

Appendix 4: Twenty-nine ways to acquire content

- Buy content in a material format from a physical shop, rent it from a video store or library: copy to a computer.
- Buy it in a counterfeit copy from a market, pub, or a 'friend', copy to a computer.
- Buy it in an electronic format from a shop.
- Buy it in a material format online, either new (e.g. from Amazon), or second hand (e.g. from eBay).
- Buy it in an electronic format online; download legal free content.
- Buy it in an electronic format on a phone.
- Buy it in an on demand electronic format via the television, and record with DVR or hard drive.
- Stream it to a computer from a music service, such as Last.fm or Spotify (recording it digitally), stream it from a film service, watch it on i-Player, etc.
- Stream it to mobile phone (other device) from a music service, such as Last.fm or Spotify (recording it digitally), stream it from a film service, watch it on i-Player, etc.
- Listen via streamed Internet radio (record it).
- Consume it on the web via a 'subscription' service (such as Napster): essentially 'rent' the content.
- Consume on mobile via a 'subscription' service (such as Nokia's 'Comes With Music'): essentially 'rent' the content.
- Google search and download whatever is found.
- Consume via a licenced 'Podcast'.
- Consume via an unlicenced 'Podcast'.
- Find it via a 'content' blog which has posted it for 'sampling'.
- Find it via an aggregating website (e.g. Hype Machine) that links to either a web site, or a data warehousing site (such as Rapidshare or Megaupload).
- Discover it via a friend's recommendation on a social networking site such as Facebook or MySpace (and record it).
- Consume it via YouTube, Daily Motion (video sharing). Rip music file using free software.
- Find, copy, consume from a Peer-to-Peer file sharing network (BitTorrent, etc.).
- Find the torrent via a listing site on the web (e.g. Pirate Bay).
- Copy the content (freely) from a mobile phone using 'Bluetooth'.
- Copy the content (freely) from a digital television using a DVD recorder or hard drive.
- Copy the content from a friend's 'data warehouse'.
- Copy the content from a friend's computer, USB stick or hard drive.
- Receive 'unlicenced' content via a digital 'drop box'.
- Receive 'unlicenced' content via USENET.
- Receive via e-mail or instant messaging service.