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## Criminal Friends of Entertainment: Analysing Results from Recent Peer-to- Peer Surveys

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### **Abstract**

*We conducted a survey to find out P2P (peer-to-peer) users attitudes toward copyright and P2P services. The survey results suggest that P2P users are aware that they are breaking the law and about half of the users even consider the use of illegal file sharing sites as morally wrong. Even though survey participants knew what amounted to copyright infringement, they had difficulties in recognising the legal uses of works that copyright law permits.*

*The biggest payoff for the illegal file sharers was the immediate access to large catalogue of works which were free of charge and DRM-free. Yet nearly half of the respondents would be willing to pay monthly for a service that enabled unlimited music and video file sharing and downloading.*

*Rights owners' actions and amendments in the legislation have not had any noticeable impact on file sharing. File-sharers are aware of the punishments but the risk of getting caught was considered miniscule.*

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## 1. Introduction

Peer to peer has turned out to be a disruptive technology that has had profound impact to the content ecosystem. Copyright owners are worried that file sharing is destroying their business and legislators have reacted by enacting laws that criminalise illegal file sharing. Industry and researchers disagree on how the illegal file sharing affects legal sales. IFPI estimates tens of billions of illegal music files are traded annually worldwide at an estimated ratio of 20 illegal downloads per every track sold.<sup>1</sup> The conservative International Policy Institute calculated the total piracy loss to US sound record industries from global piracy to equal \$5,3 billion.<sup>2</sup> Such numbers are only reliable if file sharing is a direct substitute. A recent Canadian study<sup>3</sup> did not uncover either a positive or negative relationship between the number of files downloaded from P2P networks and CDs purchased.<sup>4</sup> However, the study suggested that of the Canadian P2P file sharing subpopulation, there is a strong positive relationship between P2P file sharing and CD purchasing. The study estimated that the effect of one additional P2P download per month increases music purchasing by 0.44 CDs per year. According to a widely discussed study by Oberholzer-Gee and Strumpf, “downloads have an effect on sales that is statistically indistinguishable from zero.”<sup>5</sup> They concluded that file sharing is not the main reason for the decline in music sales. However, Oberholzer-Gee and Strumpf’s results have been since questioned.<sup>6</sup>

Getting a reliable result of the impact of illegal file sharing is hard. Nevertheless, rights owners consider it a serious enough problem to warrant spending a considerable amount of money on copyright enforcement in massive and costly trials. In recent case, Sony BMG’s head of litigation Jennifer Pariser testified that record labels have spent “millions” on the lawsuits, and that the record companies are losing money with the litigation program.<sup>7</sup> Yet the file sharing phenomenon has not

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<sup>1</sup> IFPI *Digital Music Report*, 2008 at 18, available at: <http://www.ifpi.org/content/library/DMR2008.pdf>.

<sup>2</sup> S Siwek, “The True Cost of Sound Recording Piracy to the U.S. Economy” (2007) *IPI Policy Report* 188, 2007, 6-10  
([http://www.ipi.org/ipi%5CIPublications.nsf/PublicationLookupFullTextPDF/51CC65A1D4779E408625733E00529174/\\$File/SoundRecordingPiracy.pdf?OpenElement](http://www.ipi.org/ipi%5CIPublications.nsf/PublicationLookupFullTextPDF/51CC65A1D4779E408625733E00529174/$File/SoundRecordingPiracy.pdf?OpenElement)).

<sup>3</sup> B Andersen and M Frenz, “The Impact of Music Downloads and P2P File sharing on the Purchase of Music: A Study for Industry Canada” 33 (2007), [http://strategis.ic.gc.ca/epic/site/ippd-dppi.nsf/vwapj/IndustryCanadaPaperMay4\\_2007\\_en.pdf/\\$FILE/IndustryCanadaPaperMay4\\_2007\\_en.pdf](http://strategis.ic.gc.ca/epic/site/ippd-dppi.nsf/vwapj/IndustryCanadaPaperMay4_2007_en.pdf/$FILE/IndustryCanadaPaperMay4_2007_en.pdf)

<sup>4</sup> See also IFPI 2008 (See note 1), at 18 (citing two studies that show decrease of buying among file sharers).

<sup>5</sup> F Oberholzer-Gee and K Strumpf, “The effect of file sharing on record sales: an empirical analysis” (2007) 115 *The Journal of Political Economy* 1, at 1-2.

<sup>6</sup> S Liebowitz, “How Reliable is the Oberholzer-Gee and Strumpf Paper on File sharing?” Unpublished (2007). Available at SSRN: <http://ssrn.com/abstract=1014399>.

<sup>7</sup> E Bangeman, “RIAA anti-P2P campaign a real money pit, according to testimony” *ArsTechnica.com* (2007), available at: <http://arstechnica.com/news/ars/post/20071002-music-industry-exec-p2p-litigation-is-a-money-pit.html>.

disappeared and some studies suggest it to be on the rise.<sup>8</sup> Why are people massively infringing copyright law? Do file sharers see changes in their consumption from legal sources? Do they know what they are doing is illegal or do they just not care? The problem calls for further study. We conducted a web survey and asked questions about file sharing and copyright law. This paper describes the results of that survey.

## **2. Survey Methodology and Demographics**

We conducted an online survey, the goal of which was to find out about the attitudes of P2P users to law and their practices of file sharing [the HPS survey].<sup>9</sup> The questions concentrated on the use of P2P, the users' attitudes to laws governing file sharing, how they saw their file sharing affecting the media industry and vice versa. Previous surveys conducted in 2007 in the UK<sup>10</sup> [DMS], Sweden<sup>11</sup> [RB] and Canada<sup>12</sup> [CAN] were used as reference points for drafting the questions. Some results from the previous surveys are presented in footnotes. The goal of the survey was to produce numbers for the public discussion. The aim of this paper is to describe the data set, but the detailed explanation and cross analysing will be done later. The collected dataset is available for further study at HIIT website and the authors invite anyone interested in this subject to work with it.<sup>13</sup>

The survey was conducted online on three Sanoma WSOY magazine's web pages.<sup>14</sup> During the time the survey was online (15 to 22 August 2007) it was filled out 6103 times.<sup>15</sup> Two of the three websites where the survey was displayed were technology news sites. This partly led to selection of the respondents to users of file sharing services. A typical respondent was a male with a technical background who used file sharing networks at least once a week.<sup>16</sup> Even though 37% of the respondents were students, over 50% reported monthly income that exceeded €1500. Most of the respondents were 17-35 year old.<sup>17</sup> The young age and high rate of file sharing use are in line with previous studies that found that there is a digital divide among age groups.<sup>18</sup> According to Statistics Finland, the Internet was used by 79% of the

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<sup>8</sup> The 2007 Digital Music Survey, in association with Olswang, available at: [www.entertainmentmediaresearch.com/reports/EMR\\_Digital\\_Music\\_Survey2007.pdf](http://www.entertainmentmediaresearch.com/reports/EMR_Digital_Music_Survey2007.pdf). [Later referred as DMS] (implies that illegal music downloading is spreading, with 43% of the respondents claiming that they are illegally downloading tracks).

<sup>9</sup> Later referred as 2007 HIIT P2P Survey or HPS.

<sup>10</sup> DMS, see note 8.

<sup>11</sup> S Tavakoli, "Rörliga Bilder 2007, MMS studie om konsumtion på olika plattformar" (2007). [Later referred as RB].

<sup>12</sup> CAN, see note 3.

<sup>13</sup> <http://inhiit.blogspot.com/2007/09/p2p-survey-results.html>

<sup>14</sup> <http://www.mbnet.fi/>, <http://www.digitoday.fi/>, <http://www.taloussanomat.fi>

<sup>15</sup> HPS, see note 4 (the respondent's average time to fill out the questionnaire was 13 minutes.).

<sup>16</sup> HPS, see note 4 (94% males 61% with a technical background 53% used file sharing networks at least once a week).

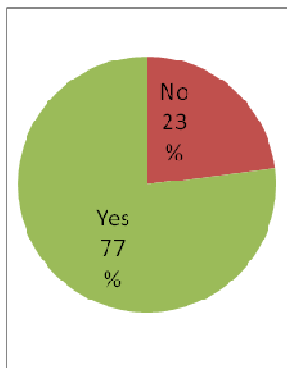
<sup>17</sup> Ibid (75% of the respondents were 17-35 year old).

<sup>18</sup> See e.g., CAN at notes 3 and 34.

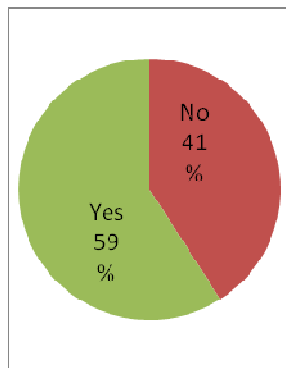
Finnish population at the beginning of 2007.<sup>19</sup> 41% of the Internet users used Internet for listening to music online or downloading music on a PC or another device.<sup>20</sup>

87% of the participants had used P2P file sharing sites.<sup>21</sup> Three quarters of the respondents had downloaded unauthorised music or videos from P2P networks<sup>22</sup> and 59% had shared illegal music, movie or TV series files,<sup>23</sup> while less than 10% of the respondents had been the first peers to upload content.<sup>24</sup> 10% of the participants had used P2P sites only for legal purposes.<sup>25</sup> This use can be explained by free and open source software and Creative Commons licensed works<sup>26</sup> that are shared legally.

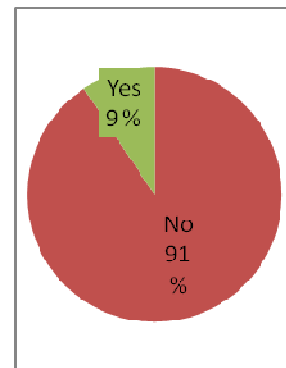
*Fig. 1: I have downloaded unauthorised music, movie and TV series files*



*Fig. 2: I have shared unauthorised music, movie and TV series files*



*Fig. 3: I have been a first file sharer*



<sup>19</sup> Use of information and communications technology, Statistics Finland (2007) [http://www.stat.fi/til/sutivi/2007/sutivi\\_2007\\_2007-09-28\\_tie\\_001\\_en.html](http://www.stat.fi/til/sutivi/2007/sutivi_2007_2007-09-28_tie_001_en.html)

<sup>20</sup> Use of information and communications technology, Statistics Finland (2007) [http://www.stat.fi/til/sutivi/2007/sutivi\\_2007\\_2007-09-28\\_tau\\_001\\_en.html](http://www.stat.fi/til/sutivi/2007/sutivi_2007_2007-09-28_tau_001_en.html)

<sup>21</sup> HPS, note 4. (Have you ever downloaded or shared files in P2P file sharing sites? Yes: 87 %, No: 13%).

<sup>22</sup> See fig. 1.

<sup>23</sup> See fig. 2.

<sup>24</sup> See fig. 3. (the concept of 'first sharer' varies between different P2P file sharing programs. In Bittorrent client programs the first sharer can be of two kinds. First of all, a person who makes a .torrent file and puts it into server could be considered as a first distributor, also known as a first peer. Secondly, a person who transfers the .torrent file to another server where it was not previously available can be considered a first distributor).

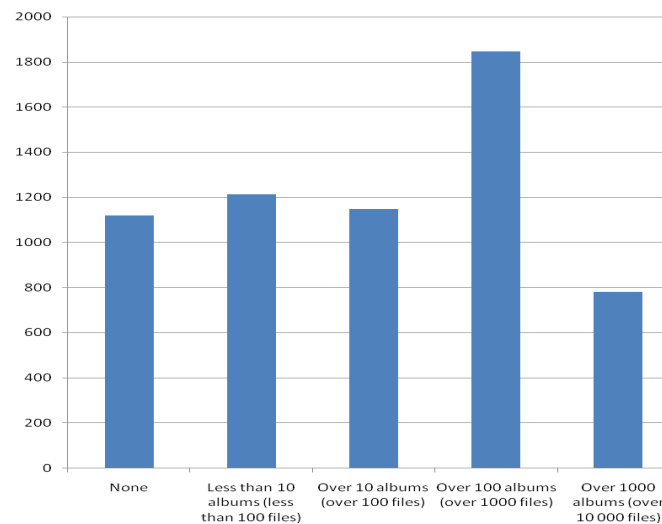
<sup>25</sup> HPS, note 4. (87%-77%=10%; 87% of the participants had used P2P file sharing sites, 77% of the respondents had downloaded unauthorised music or videos from P2P networks).

<sup>26</sup> E.g., *Star Wreck in the Pirkinning* movie that is distributed with CC By-Nc-Nd fi 1.0 license <http://www.starwreck.com/>

Nearly 80% of the users had used BitTorrent to download files.<sup>27</sup> About half of the respondents had used Direct Connect and less than half had used FastTrack based services like Kazaa.<sup>28</sup> It appears that peer-to-peer use is still connected to computers as mobile phone P2P client programs Symella and SymTorrent were almost unknown.<sup>29</sup>

Many of the survey respondents connect to file sharing network frequently. Half of the respondents share or download files at least once a week.<sup>30</sup> Both music and video file downloading were considerable. The most common answer to the question regarding the amount of downloaded files was over 100 albums (over 1000 files) of downloaded music<sup>31</sup> and over 200 movies or episodes of TV series.<sup>32</sup>

*Fig. 4: How many music files have you downloaded from P2P file sharing sites?*



<sup>27</sup> HPS, note 4 (Which of the following ways have you used for downloading files? BitTorrent (e.g. Piratebay, Swebits, Finreactor) 77% WWW sites (YouTube, MTV) 74%, FTP 57%).

<sup>28</sup> Ibid. (Which of the following ways have you used for downloading files? Direct Connect DC 53%, Kazaa, limeWire, BearShare 40%).

<sup>29</sup> Ibid. (Which of the following ways have you used for downloading files? Symella and symtorrent 1.3%).

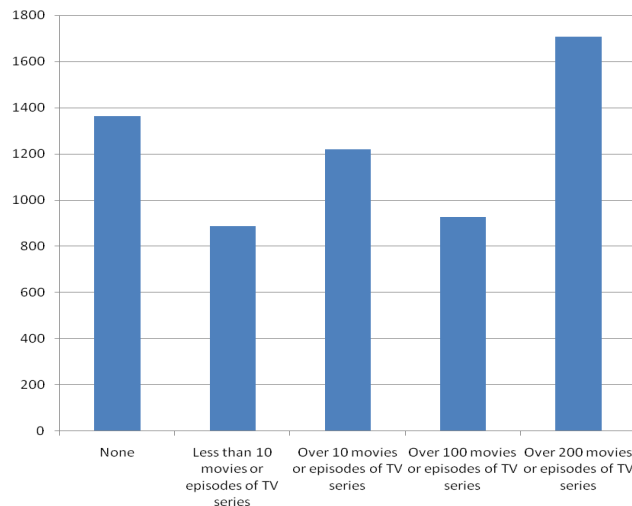
<sup>30</sup> Ibid. (How frequently do you use P2P for sharing or downloading files?)

Every day 17 %, Several times each week 23%, Once a week 12%, Once every two weeks 8%, Once a month 11%, Once every six months or rarely 14%, I have never used P2P 14%).

<sup>31</sup> See fig. 4.

<sup>32</sup> See fig. 5.

*Fig. 5: How many movies or TV series episodes have you downloaded from P2P file sharing sites?*



Conducting surveys with people who are involved in activities that carry criminal punishment can be challenging and thus the results must be taken with a grain of salt. P2P file sharing is a subject that generates passion. This was seen in the comments that several discussion forums received. Some of the comments thought that the survey makers were collecting data for future prosecution or that the researchers were errand boys of the record industry. The general suspicions lead to a point where only two thirds of the respondents left their contact information for a prize raffle. The first prize had to be redrawn as the winner had left in the place of contact info a message “*up yours KRP, I won’t give you my contact info; losers@krp.fi.*”<sup>33</sup> Some of the commentators even thought that the two mobile phones that were offered as a raffle prize were bugged by the police to collect incriminating evidence.

### **3. Finnish Law and File sharing**

The Copyright Act (1961/404) and the Penal Code of Finland (39/1889) set forth the remedies that a copyright holder may obtain upon a finding of infringement. Illegal peer-to-peer downloading is not criminalised. Due to year 2005 amendments, downloading from an illegal source might, however, lead to civil sanctions, such as liability to pay compensation or damages (section 57 of the Finnish Copyright Act) to the rights owners. The technical structure of the BitTorrent blurs the line between file sharing and downloading. The downloaded pieces of the work are instantly shared. It is hard to draw a line when an infringement occurs: is it when the first package is shared or the whole file downloaded?

When the copyright law was amended in 2005, the provision in the Penal Code concerning unauthorised file sharing in information networks was also made tighter. In contrast to other copyright offences, an intention to benefit financially is not required when the infringement takes place in information networks. Because of this,

<sup>33</sup> KRP is a Finnish National Bureau of Investigation which is in charge of cyber crime investigations. <http://www.poliisi.fi/poliisi/krp/home.nsf/pages/indexeng>.

the maximum penalty for unauthorised file sharing is now two years in prison even when there is no commercial intention involved in sharing. The raising of the maximum penalty allows the usage of coercive means, such as house searches and computer confiscations. The courts have so far used their powers to punish the file sharers cautiously. Typically, the most effective parts of the file sharing sentences have been the confiscation of the computer and considerable compensation rewarded to rights owners. It seems that the sudden raising of the maximum limit is mainly serving the rights owners' needs to use coercive measures when investigating the infringements. In addition, the threat of sanctions is used to prevent undesired behavior.<sup>34</sup>

In 2004 police raided dozens of homes and confiscated servers in investigation of *Finreactor* service. *Finreactor* was a closed BitTorrent tracker and website that had over 10,000 members. Over thirty administrators of the service and dozens of users who had shared files were prosecuted in the case. The compensations that the right owners were seeking rose to nearly €4 million. One issue that the court had to solve was who was responsible for the illegal file sharing. Was it the users who submitted the torrent files that link to the content, the people who were downloading the content or the service providers that enabled the file sharing? The district courts have sentenced both individual users and service administrators to fines. The courts have typically cut the civil compensation claims to one tenth of the rate that were originally claimed. It must be noted that the Finnish courts have not found that rights owners have suffered damages but only awarded them compensations for the unauthorised reproduction and making available to public. The *Finreactor* administrators' case is currently at the appeal court. The *Finreactor* case may have an effect on Swedish Pirate Bay litigation because Finland and Sweden share a common legal tradition.

According to the respondents' evaluations, there have not been significant changes in their behaviour due to rights owners' actions. Only about 10% of the P2P users answered that the new copyright law had at least somewhat decreased their P2P usage.<sup>35</sup> It appears that the maximum penalty for P2P file sharing is not matching the respondents' sense of justice. When compared to other crimes with the same maximum penalty, illegal file sharing was seen as less condemnable.<sup>36</sup> However, it should be noted that in fact most of the respondents had infringed copyrights and committed a copyright offence according to the penal code. Offenders typically perceive their own actions less harmful than the general population. When analysing the results of the survey this fact must be taken into account.

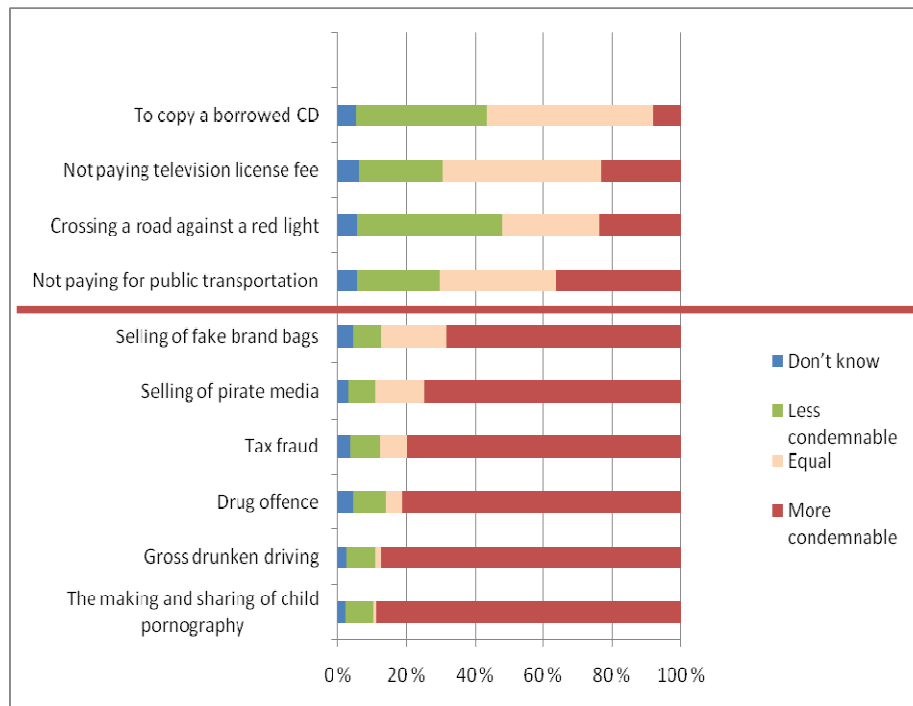
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<sup>34</sup> IFPI *Digital Music Report 2007*, 2 <http://www.ifpi.org/content/library/digital-music-report-2007.pdf>).

<sup>35</sup> See fig. 7.

<sup>36</sup> See fig. 10.

*Fig 6: How would you rate the following activities in comparison to the large-scale file sharing? (The acts below the red line are crimes with the same maximum penalty. However, in case of aggravated action the maximum penalty is higher than two years imprisonment in tax fraud, drug offence and making and sharing of child pornography.)*



### 3.1. File Sharers and the law

The Finreactor case has been well discussed among the Finnish file sharing community. Our survey suggests that the community thinks that the responsibility should lie on the individuals who are making the file sharing possible. Only 12% of our survey respondents thought that the administrator of a file sharing site should be primarily responsible and 52% thought that initial up-loader or the person who is allowing others to download the content should be primarily responsible for the illegal file sharing.

Economics views law-breaking as both rational and irrational behaviour.<sup>37</sup> Several aspect or variables affect human behaviour: the understanding of right and wrong, the chance of getting caught, the expected punishment/payoff of the crime and moral valuations. The payoff for the infringement in file sharing includes getting files for free but also better service and access to works that are not available otherwise. We asked the respondent a series of questions to find out how they perceive the other factors.

<sup>37</sup> See e.g., R Cooter & T Ulen, *Law & Economics*, 4<sup>th</sup> Ed (2004) at 445-477.



The respondents understood typically what is illegal according to copyright law. Almost 90% of the respondents answered that it is illegal to download unauthorised music from P2P file sharing sites.<sup>38</sup> Nearly half of the users saw the use of illegal file sharing sites as morally questionable.<sup>39</sup> Evidently the file sharers are not breaking the law because they are unaware of it.

One of the reasons why copyright law might have little effect is that people generally consider the risk of getting caught miniscule.<sup>40</sup> When asked how the risk of getting caught at illegal file sharing compares to other risks the closest comparison was to winning a lottery jackpot.<sup>41</sup> Other free-riding offences like shoplifting, getting a speeding or parking ticket or getting caught for not paying for public transport or TV licenses were considered less probable.<sup>42</sup>

The entertainment industry has been busy enforcing its rights. According to Litman, by 2005 RIAA alone had sued over 15,000 individuals.<sup>43</sup> IFPI and affiliate recording industry bodies continued the global campaign against illegal file sharing in 2006, bringing legal actions against more than 10,000 individuals in 18 countries<sup>44</sup> while the total number of legal actions by recording industry is over 30,000.<sup>45</sup> Most of the cases have been settled out of court<sup>46</sup> and the majority of trials were won by rights owners. There are different views how legal actions affect the file sharing in the industry. IFPI is of the view that legal actions have helped to contain the illegal file sharing and refers to Jupiter Research's finding that "while broadband household penetration is rapidly rising, the percentage of internet users engaged in frequent unauthorized P2P usage is actually falling."<sup>47</sup> In contrast, the DMS study suggests that while there was a slight reduction in 2006, in 2007 unauthorised downloading in UK increased to its all time highest level to date (43%). Jupiter's numbers (11%) deviate substantially from DMS's (36%). According to Litman, research done by businesses that monitor traffic over peer-to-peer networks does not suggest a

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<sup>38</sup> HPS, note 4 (As far as I understand the following actions are in accordance with the law: To download unauthorized music from P2P file sharing sites: Don't know 4%, No86%, Yes 10%).

<sup>39</sup> Ibid. (In my opinion it is condemnable to download unauthorized files: Don't know 4.9%, Disagree 37.3%, Somewhat disagree 26.6%, Somewhat agree 22.1%, Agree 9.1%.

In my opinion it is condemnable to share unauthorized files: Don't know 4.8%, Disagree 19.3%, Somewhat disagree 21.2%, Somewhat agree 32.6%, Agree 22.1%).

<sup>40</sup> DMS, see note 8, at 7 (survey suggests that consumers are less concerned about prosecution than before).

<sup>41</sup> HPS, see note 4. (The probability to be caught at unauthorized P2P file sharing is smaller than: Winning the jackpot in lottery: No 55%, Yes 45%).

<sup>42</sup> HPS, see note 4 (The probability to be caught of unauthorized P2P file sharing is smaller than: Getting caught shoplifting: No 10%, Yes 90%; Getting a parking ticket: No 12%, Yes 88%; Getting caught free riding on public transportation: No 15%, Yes 85%; Getting caught not paying television license fee: No 20%, Yes 80%).

<sup>43</sup> J Litman, *Digital Copyright* (2006), 198-199.

<sup>44</sup> IFPI, see note 34, at 18.

<sup>45</sup> Ibid at 3.

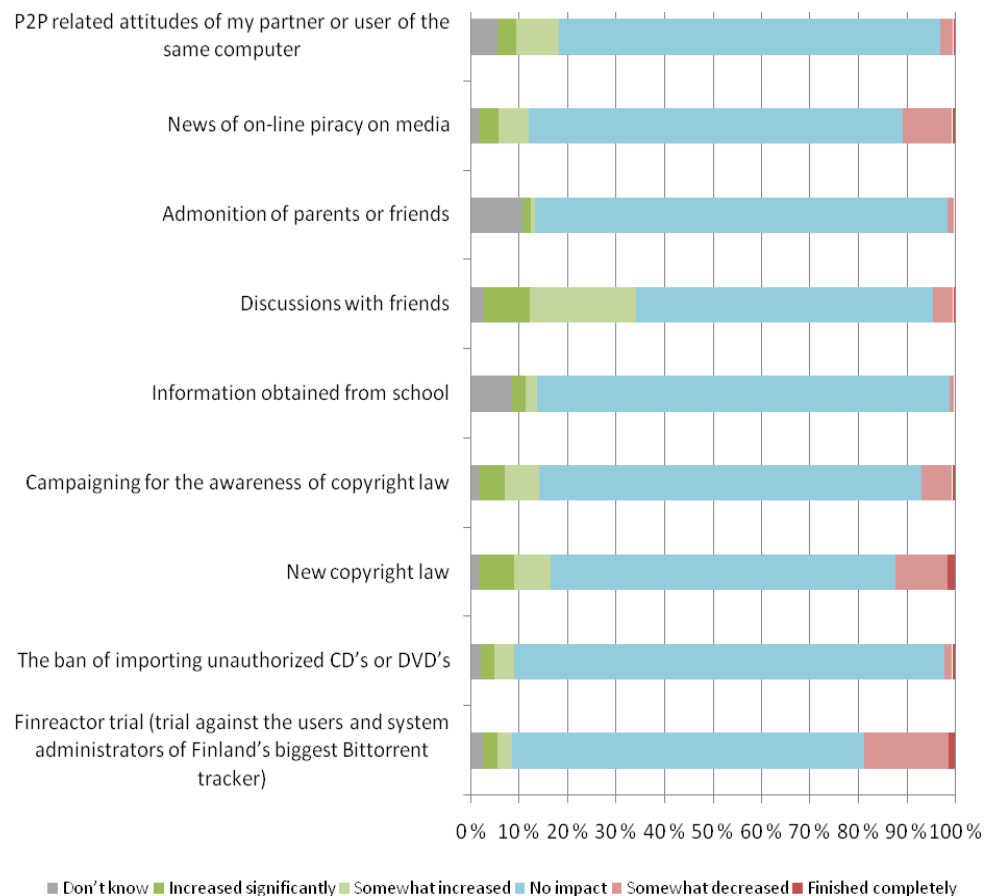
<sup>46</sup> Ibid at 18 (the average legal settlement in these cases was 2,420 €).

<sup>47</sup> Ibid. (quoting as source: Jupiter Research, Sep 2006: UK, France, Germany, Italy, Spain, Sweden).

reduction in the number of people engaging in peer-to-peer file sharing or in the volume of files they trade.<sup>48</sup>

Although IFPI has carried out several actions, according to its statement: “*the principal aims of the [legal] campaign are education and deterrence,*”<sup>49</sup> the actions taken by rights owners such as campaigning for the awareness of copyright law or media attention had no significant effect on the popularity of the P2P services among the respondents. However when we asked specifically about the trial against the users and system administrators of Finland’s biggest BitTorrent tracker, Finreactor, numbers were larger. The usage of P2P had decreased among 20% of the users. News of on-line piracy in the media had a minor impact on the P2P usage, since only 10% of the users had decreased their usage as a result.<sup>50</sup> General campaigning for the awareness of copyright law had also insignificant impact among the respondents.<sup>51</sup>

*Fig. 7: Please rate how the following incidents or issues have impacted your P2P-usage.*



<sup>48</sup> See note 43, at 198-199.

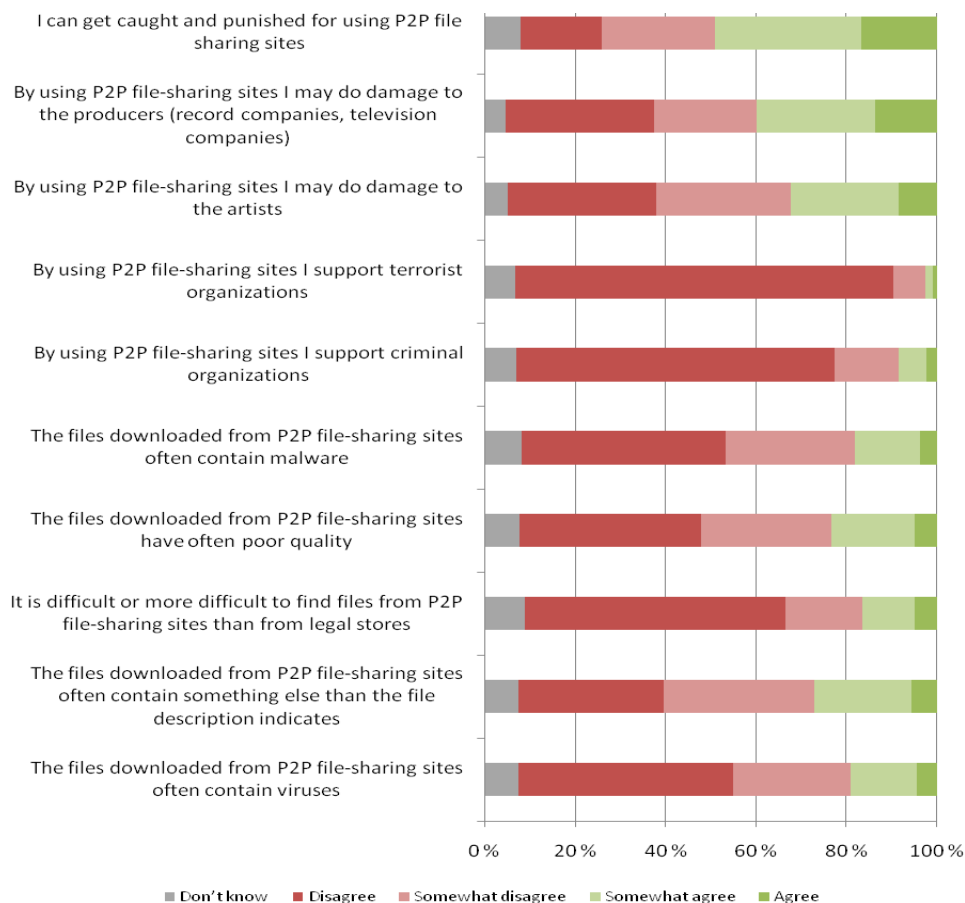
<sup>49</sup> IFPI, see note 34, at 18.

<sup>50</sup> See fig. 7.

<sup>51</sup> See fig. 7.

The film and recording industries try to send a strong message that P2P file sharing is illegal. Buying a pirate CD or downloading songs from P2P networks is compared to stealing a car and P2P users are told that file sharing can compromise their computers.<sup>52</sup> The rhetoric used by the copyright owners was not considered believable.<sup>53</sup> Respondents found it hard to relate to a car thief or the mafia. Only a couple of percent of respondents at least somewhat agreed to the statement that P2P usage supports terrorists and less than 10% of the respondents considered P2P usage to support criminal organisations.<sup>54</sup>

*Fig. 8: The following statements relate to the usage of P2P file sharing:*



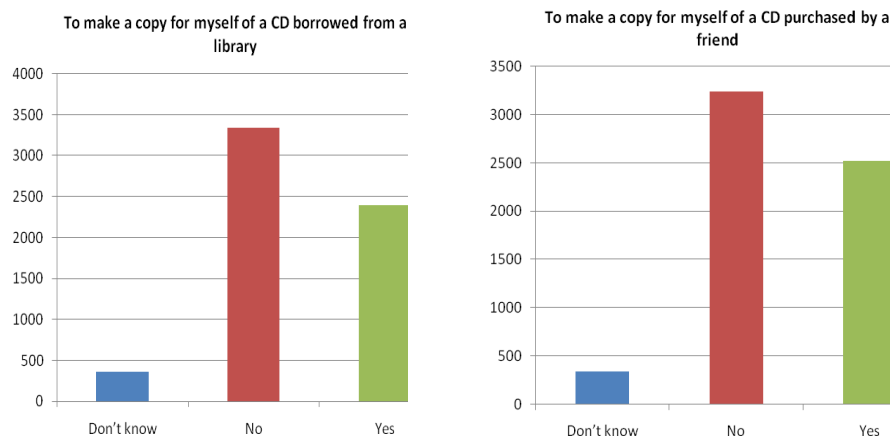
<sup>52</sup> See O R Goodenough and G Decker, “Why Do Good People Steal Intellectual Property?” The Gruter Institute Working Papers on Law, Economics, and Evolutionary Biology Volume 4, Issue 1 2006 Article 3 <http://www.bepress.com/cgi/viewcontent.cgi?article=1017&context=giwp> (Arguing that property-related primitives are not readily recruited and mobilized by concepts of intellectual property.)

<sup>53</sup> See fig. 8.

<sup>54</sup> See fig. 8.

Nearly all of the respondents knew that illegal file sharing can lead to fines, monetary compensations and to confiscation of computers.<sup>55</sup> Even though survey participants knew what counted as copyright infringement,<sup>56</sup> they had difficulties in recognising the legal uses of works that copyright law permits. Over half of the respondents answered that it is not in accordance with law to “to make a copy for myself of a CD borrowed from a library” or “to make a copy for myself of a CD purchased by a friend,” even though the Copyright Act permits copying for private use from a legal source.<sup>57</sup>

*Fig. 9: As far as I understand the following actions are in accordance with the law:*



The concept of legal source is rather new, having been introduced in the 2006 Copyright Act. A purchased or borrowed CD constitutes as a legal source but a private copy does not. It is clear that the concept is not understood. Over 50% of the respondents thought that it is legal to copy a TV show recorded by a friend [illegal].<sup>58</sup> While this is an example where people conceived illegal copying to be legal the converse also applied. Nearly half of the respondents saw copying a borrowed CD [legal] to be as condemnable as large scale file sharing<sup>59</sup>.

<sup>55</sup> HPS, see note 4. (According to law large-scale P2P file sharing can lead to: The file sharer can be fined: Don't know 4%, No 3%, Yes 90%.

The file sharer can be made to pay damages to right owners: Don't know 4%, No 3%, Yes 92%; The computer of the file sharer can be confiscated: Don't know 5%, No 5%, Yes 90%.)

<sup>56</sup> Ibid. As far as I understand the following actions are in accordance with the law: To download unauthorized music from P2P file sharing sites Don't know 4%, No 86%, Yes 10%.

<sup>57</sup> See fig. 9.

<sup>58</sup> Ibid. As far as I understand the following actions are in accordance with the law: To copy a TV program recorded by a friend: Don't know 9%, No 36%, Yes 55%.

<sup>59</sup> Ibid. How would you rate the following activities in comparison to the large-scale file sharing? To copy a borrowed CD: don't know 5%, less condemnable 38%, equal 48%, more condemnable 8%. See fig. 10: How would you rate the following activities in comparison to the large-scale file sharing?

### 3.2 The impact of file sharing

As previously noted it is hard to get reliable results of file sharings substitute effects. One of the ways is to ask directly the users of file sharing networks. Over half of the respondents of our study at least somewhat agreed that P2P file sharing sites increase music sales.<sup>60</sup> The survey suggested that the use of P2P file sharing sites has not significantly affected the use of other media, except for portable record devices, like iPod, the use of which it had slightly increased.<sup>61</sup> In reality consuming, for example, an illegally downloaded TV series must inevitably have an impact on the consumption of that same programs legal TV-broadcast. More than 80% of the respondents were aware that they can watch shows from file sharing networks before they are broadcasted on Finnish TV.<sup>62</sup> Other studies have shown that as people have limited time for media consumption, the consumption of illegally acquired programs has an effect on time spent on other entertainment.<sup>63</sup>

P2P file sharing may help to increase the diversity of culture consumption in two respects. First, over 80% of the participants thought that there are works available in P2P file sharing sites that are not available in digital download stores.<sup>64</sup> Second, over

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<sup>60</sup> HPS, see note 4. (The following statements relate to the usage of P2P file sharing: P2P file sharing sites increase music sales. Don't know 15%, Disagree 14%, Somewhat disagree 20%, Somewhat agree 33%, Agree 19%.)

<sup>61</sup> Ibid. (How P2P usage has impacted your usage of the following Medias?)

DVD-movies purchased through internet (e.g. Amazon): Don't know 4%, Increased significantly 6%, Somewhat increased 13%, No impact 57%, Somewhat decreased 3%, Decreased significantly 4%

CDs purchased through Internet: Don't know 3%, Increased significantly 7%, Somewhat increased 15%, No impact 53%, Somewhat decreased 4%, Decreased significantly 5%

DVD-movies purchased from traditional store: Don't know 2%, Increased significantly 6%, Somewhat increased 18%, No impact 46%, Somewhat decreased 9%, Decreased significantly 6%

CDs purchased from traditional store: Don't know 2%, Increased significantly 6%, Somewhat increased 15%, No impact 51%, Somewhat decreased 9%, Decreased significantly 4%

Going to a movie theater: Don't know 1%, Increased significantly 6%, Somewhat increased 15%, No impact 51%, Somewhat decreased 9%, Decreased significantly 4%

Renting of movies: Don't know 2%, Increased significantly 4%, Somewhat increased 9%, No impact 50%, Somewhat decreased 12%, Decreased significantly 10%

Usage of portable media players (e.g. iPod): Don't know 3%, Increased significantly 24%, Somewhat increased 17%, No impact 40%, Somewhat decreased 1%, Decreased significantly 1%

and IFPI (see Note 34), at 4 (the same seems to be true for legal downloads).

<sup>62</sup> RB, see note 11, at 6 (study found out that 4% of 16-30 year old respondents were following the American series "Heroes" even though it was not broadcasted or made otherwise legally available in Sweden).

<sup>63</sup> Ibid at 4-5 (the study found out that young mens use of TV had declined 13 % in four years when at the same time womens use had increased somewhat. At the same time males were using new platforms to gain access to entertainment twice as much as women.)

<sup>64</sup> HPS, see note 4 (The following statements relate to the usage of P2P file sharing: There are works available in P2P file sharing sites which are not available in digital download stores: Don't know 8%, Disagree 3%, Somewhat disagree 4%, Somewhat agree 19%, Agree 65%.) See also Note 43, at 198-199. (Arguing that people are turning to P2P services to get access to songs that are not available in legal stores because of the licensing problems).

80% of the participants thought that P2P file sharing sites allowed new music and artists to become known.<sup>65</sup> Limited sampling features, where songs can be listened for 30 seconds, have been introduced into most web stores as well. In addition, record companies have used data from P2P networks to find out about consumer demand for newly released songs.<sup>66</sup>

Quality of downloads might be one issue that affect whether file sharing services are supplements or complements to legal services. In some contexts there have been statements that the files downloaded from P2P file sharing sites often have poor quality and contain malware.<sup>67</sup> However, this claim was not supported in this survey. Only about 20% of the respondents somewhat agreed at least to the statement that the files downloaded from P2P file sharing sites often are of poor quality.<sup>68</sup> The result is similar to the earlier studies made in UK (17%) and Sweden (22%).<sup>69</sup> Moreover, about 10% of the respondents in the DMS answered that they are likely to download tracks more often from unauthorised file sharing sites due to improving quality of the tracks.<sup>70</sup> In addition about 50% of the respondents in the Swedish survey were extremely satisfied with the quality of downloaded content on top of almost 40% being fairly satisfied. All things considered it is reasonable to conclude that the P2P users are fairly satisfied with the quality of downloaded files, and that for P2P services subject to a charge, it is not necessary to change the downloaded tracks to tracks of better quality, such as was the case with early commercial file sharing sites.

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<sup>65</sup> Ibid. (The following statements relate to the usage of P2P file sharing: Through P2P file sharing sites I can get to know new artists and music: Don't know 7%, Disagree 5%, Somewhat disagree 5%, Somewhat agree 19%, Agree 64%).

DMS, see note 8, at 11 (More than half of the respondents of DMS used social networking sites such as Bebo and MySpace to discover new music. And almost a fifth of social network users said such discoveries had a "big/massive impact" on the way they bought music and 30% claim they "regularly/occasionally" buy CDs or downloads of music that they discovered on a social network site.) See also W Fisher, *Promises to Keep* (2004) at 225 (sampling of new music and video files belongs substantially to P2P usage as was suggested already in studies made in 1999).

<sup>66</sup> J Howe, "BigChampagne is Watching You" (2003), *Wired* Issue 11.10, <http://www.wired.com/wired/archive/11.10/fileshare.html> and Enigmax & Ernesto, *Record Labels Use Piracy Data to Please Fans*, <http://torrentfreak.com/record-labels-use-piracy-data-to-please-fans-070918/>

<sup>67</sup> See e.g., MPA, IVF and IFPI: "Copyright and Security Guide for Companies" 3, <http://www.ifpi.org/content/library/copyright-and-security-guide-2005/guide-english.pdf>.

<sup>68</sup> HPS, see note 4. See also fig. 8: (The following statements relate to the usage of P2P file sharing. The files downloaded from P2P file sharing sites have often poor quality: Don't know 8%, Disagree 40%, Somewhat disagree 29%, Somewhat agree 19%, Agree 5%).

<sup>69</sup> DMS, see note 8 (it is noteworthy that there is 5% fall compared to year 2006 in DMS, since in 2006 22% of the respondents answered that they are likely to download tracks less often owing to the quality of unauthorized files).

<sup>70</sup> Ibid at 75 (reasons to Download Unauthorised More Often: Why are you likely to download tracks more often from unauthorised file sharing sites? Quality of the tracks is improving 10% (2007), 8% (2006)).

#### 4. Legal Web Stores and Willingness to pay in the P2P Environment

According to IFPI in 2007 there were some 500 legitimate music services that provide over 4 million songs to download.<sup>71</sup> Several online video stores provide on-demand movies and TV-series. As there are more and more legal alternatives to file sharing, why has illegal file sharing not disappeared? In addition to the main answer: “You can’t compete with free product,” there are other factors as well.

Those who had not used legal web stores considered technical restrictions or Digital Rights Management (DRM) as the main for not doing so, with price coming second.<sup>72</sup> Those who had used web stores valued their ease of use and the possibility to buy a single song instead of an entire album.<sup>73</sup> Online stores have reacted by offering DRM-free downloads for purchase. Market leader iTunes charged a 29 cent premium for DRM-free tracks, but had to soon lower the price to the same level as DRM tracks because of competition.<sup>74</sup> Even though a lot has been done to satisfy consumers’ demand for DRM-free products, the playing field is not even. While the legal stores have to compete with inferior products with P2P network’s restriction free formats, they are format wise in a worse position.

The Digital Music Survey suggested that the music companies should consider introducing price discrimination, as 84 % of the respondents were of the opinion that older downloads should be cheaper and almost half of the respondents indicated willingness to pay more for newly released tracks.<sup>75</sup> Web stores have tried out some new pricing methods with bundled content.<sup>76</sup> The pricing is not solely in the hands of web stores. A large portion of the cost for downloads goes to collecting societies. Collecting societies’ pricing is very limited as they are acting under monopoly

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<sup>71</sup> IFPI, see note 34, at 4.

<sup>72</sup> HPS, see note 4 (What reasons have caused you not to use legal digital download stores?

The technical protection measures for music disturbs my usage: Don’t know 6%, Disagree 5%, Somewhat disagree 3%, Somewhat agree 13%, Agree 45%;

It is expensive to purchase from digital download stores: Don’t know 5%, Disagree 8%, Somewhat disagree 11%, Somewhat agree 22%, Agree 26%). DMS, see Note 8, at 20 (68 % of the DMS respondents who expressed an opinion conceded that legal downloads are “Only worth purchasing if free of DRM”).

<sup>73</sup> DMS, see note 8, at 17 (Results are in line with the Digital Music Survey, which revealed that the perceived price advantage of legal downloads over CDs had reduced 14% between 2006 and 2007.) See also Andersen and Frenz (Note 3), at 33 (finding indirect evidence that price influences CD purchasing, as the variable capturing the motivation to engage in P2P file sharing because of the perception that CDs were too costly was negatively associated with CD purchases).

<sup>74</sup> “iTunes Plus Now Offers Over Two Million Tracks at Just 99 Cents” <http://www.apple.com/pr/library/2007/10/17itunes.html> (“iTunes Plus has been incredibly popular with our customers and now we’re making it available at an even more affordable price”) Apple’s announcement came soon after Amazon.com started selling DRM free MP3 format music at AmazonMP3 store, <http://www.amazon.com/b?ie=UTF8&node=163856011>.

<sup>75</sup> DMS, see note 8, at 17.

<sup>76</sup> IFPI, see note 34, at 16 (Madonna’s latest album was released digitally with three price points in three bundles, reaching numbers one, two and four in the iTunes chart, with the most expensive bundle coming first.) See also Radiohead’s experiment with their “In Rainbows” record that was downloadable at a user defined price at <http://www.inrainbows.com/>.

regulation. This means that all clients and members must be treated equally which has thus far limited dynamic pricing.

It seems apparent that it is not enough to develop different kinds of pricing systems. On the contrary, it is vital to seduce customers with convenient access to a more diverse range of entertainment.<sup>77</sup> Current web-based stores can be improved to enable attractive features that are already available through file sharing services. However, we suggest that there are even more attractive market opportunities within reach. Tapping into consumer willingness to use P2P sharing can provide additional income sources for rights owners. Previous surveys show that price is definitely one of the key advantages of file sharing. Almost 50% of the respondents in the Swedish study regarding video file consumption answered that lack of cost is the primary reason for downloading.<sup>78</sup> On the other hand, 5% agreed somewhat to the statement that there are no good alternatives available for file sharing.<sup>79</sup> In the United States, Apple's iTunes has taken steps toward becoming a universal web store where users can download anything from games to TV series. Finding a single source for extensive *legal* media downloads in Europe has proved impossible. It appears that illegal file sharing has managed to provide this service and users are quite satisfied with the file sharing services.<sup>80</sup> On this account we were interested in willingness to pay in the P2P environment. The results were somewhat encouraging.

In our survey almost 80% of the respondents were interested in, and almost 50% of the respondents would be willing to pay monthly for, a service that enabled unlimited music and video file sharing and downloading. In contrast the majority is not at all interested in a corresponding service with digital restrictions used on the files. In addition it is noteworthy that over 50% of the respondents are interested in a service that would enable converting single files downloaded from P2P file sharing sites to legal files, however only some 20% would be willing to pay for it. A free mobile phone P2P client program received more interest than mobile phone music subscription service with unlimited downloading.<sup>81</sup>

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<sup>77</sup> DMS, see note 8, at 13-14 (the DMS report suggests that live music webcasts might be an appealing new income stream as 10% of the respondents were very interested and prepared to pay for it, and 64% were interested but not prepared to pay).

<sup>78</sup> RB, see note 11, at 59.

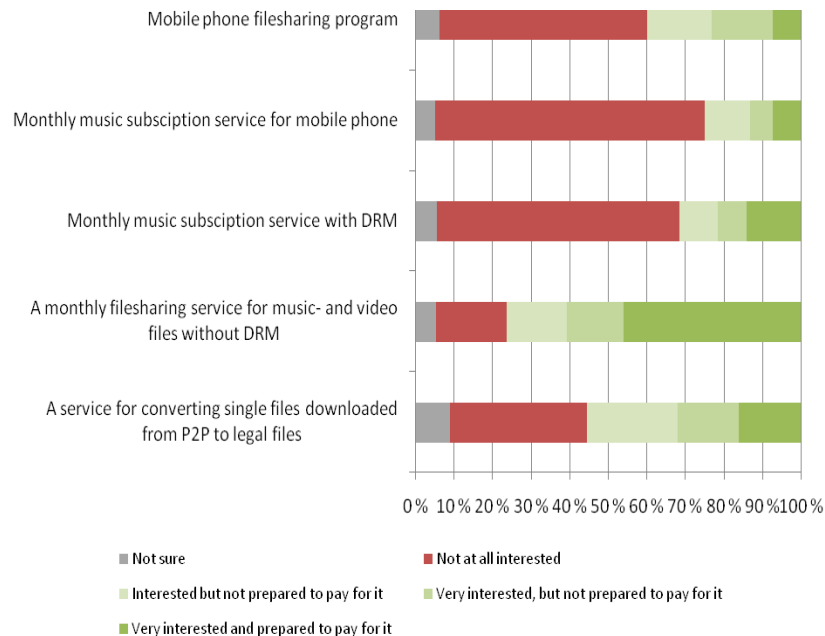
<sup>79</sup> Ibid at 61.

<sup>80</sup> Ibid at 53 (P2P downloading was the most popular way to download files) and id. 59 (More than half of the respondents found that downloading is easy and flexible).

<sup>81</sup> See fig. 6.



*Fig. 10: The following questions relate to services that require payment. Please indicate, how interested you are in the following services (The question is abbreviated from the original form presented to the respondents).*



When it comes to willingness to pay it can be concluded that the traditional album format is losing its value for digital consumers. In web stores consumers are interested in buying single songs<sup>82</sup> instead of entire albums, and in the P2P environment consumers are interested in a single fixed fee (flat rate) for a service regardless of the amount of use. This can be generalised in the following statement: in web stores quality rules over quantity, while in the P2P environment it is the other way around. In the light of the core features of P2P downloading this is quite understandable.

## 5. Conclusions and Discussion

### 5.1 Conclusions from the Survey

We conducted the survey to get information about file sharing services users' attitudes to, and knowledge of, copyright law. We were especially interested in how they perceive the chance of getting caught and what factors affect the punishment/payoff valuation. The data gives an overview of the file sharing community's views. The survey results show that P2P users are aware that they are breaking the law and most people also consider illegal file sharing morally condemnable. File sharers are aware of the punishments, but the risk of getting caught were considered very distant. The traditional method of tighter enforcement of harsher laws does not seem to work.

<sup>82</sup> IFPI, see note 34, at 4.

Amendments in the legislation and raising the level of punishments have not had a noticeable impact on respondents' file sharing. The new Copyright Act that has raised the penalty for sharing files online to the level of involuntary manslaughter was not considered proportionate. This suggests that raising the punishments may not raise the deterrent effect. Copyright enforcement is costly and easily creates negative PR, which draws the file sharers further away from the rights owners' camp. Our data suggests that even the recent massive legal suits against file sharers have only a minor impact on the file sharing community.

Even though survey participants knew what constituted copyright infringement, they had difficulties in recognising the legal uses of works that copyright law permits. Rights owners have used public money for copyright awareness campaigns but failed to inform the public about fair use rights. Having balanced information that also emphasises users' rights for fair use would generate a more balanced view of copyright law. This would most likely create a more positive view of the legislation and make it more acceptable.

The biggest payoff for the illegal file sharers was the immediate access to a large catalogue of works which were available free of charge and without DRM restrictions. The zero price was only one reason among others as nearly half of the respondents were willing to pay monthly for a service that enabled unlimited music and video file sharing and downloading.

## 5.2 Discussion of Issues Arising from Survey

Legal web stores have tried to adapt the features that file sharing has had like sampling and MP3 format. Nevertheless the legal stores cannot compete with their catalogue as film and TV industry likes to stick to the tiered release of their works and some record companies are not willing to sell tracks without DRM. This means that legal web stores do not only have to compete with free but also otherwise superior file sharing services.

Developing new services and licensing models that would take advantage of the P2P models could solve the problem. This would necessarily mean less control for the record and film industries. Legalising file sharing with compulsory licenses could tip the market equilibrium and would most likely mean hard times for current web stores. Such new innovative business models are necessary to solve the existing market failure that illegal file sharing has generated. Opposition from record industry and online stores would be likely but copyright is meant to protect society's ability to produce and consume culture – not the intermediaries who distribute it.

The music industry has had “*rock star economics*” where a few Britney Spears-type artists collect most of the revenues.<sup>83</sup> The concept of a “celestial jukebox” was introduced in a 1991 United States Copyright Office report.<sup>84</sup> The celestial jukebox has every song ever released available through digital technology. Having every

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<sup>83</sup> See e.g., S Rosen, “The Economics of Superstars” (1981) 71 *American Economic Review* 845-58.

<sup>84</sup> Register of Copyright, Report on Copyright Implications of Digital Audio Transmission Services (1991).

work ever released available would most likely change the music market.<sup>85</sup> Wide selection in file sharing networks brings more listeners to the long tail<sup>86</sup> of obscure forgotten songs. At the same time it would not reduce the rock star music consumption. Legal, unrestricted P2P file sharing system would best approximate the long tail concept.<sup>87</sup> Web stores are growing but their catalogue is still limited and they may never reach the celestial jukebox status.

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<sup>85</sup> Andersen and Frenz at note 3, at 33 (Canadian study found indirect evidence of the ‘market creation’ effect of P2P file sharing in the positive coefficient on the variable ‘Not available elsewhere’).

<sup>86</sup> C Anderson, *The Long Tail* (2004).

<sup>87</sup> James Love, “Artists Want to Be Paid: The Blur/Banff Proposal”.  
[http://www.nsu.newschool.edu/blur/blur02/user\\_love.html](http://www.nsu.newschool.edu/blur/blur02/user_love.html)