



Broadband technologies transforming business models and challenging regulatory frameworks – lessons from the music industry

MusicLessons - Deliverable 5

Trends in downloading and filesharing of music

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Summary

The digitalization have made music easy to store, copy and distribute. The main source for digital music is CDs, their own or from family and friends, but also music websites and filesharing at P2P networks play a more and more important role.

In this report we have presented results that show that filesharing stimulates the interest for music. Even if old favourites are most popular, many downloaders also discover new music and new artists, and many of them later buy a CD or visit a concert with this artist. It also happens frequently that downloaders buy music that they have downloaded and already listened to. Most often it happens for heavy downloaders, which once again show that fileshares also are big spenders on legal music downloads.

Even if the majority of fileshares say that they buy the same or more music than before, there is a minority of 10-35 percent who say that their downloading have decreased their purchases. How strong this negative effects is on music sales is however impossible to say.

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1. The coming of digital music

Never has the offering of music been so overwhelming as today. In hundreds of radio channels, in television, in shopping centres and on the Internet can music be found, listened to, copied and shared. The possibility to digitalize music has made music easier and cheaper to produce, distribute, store and manifold. The Internet users, especially the young ones with a strong interest in music, realized early these new possibilities that Internet was offering. But the music industry was slow to react and tried to stop and infect the Internet networks, instead of listen to their customers and take the opportunity to offer them music on the Internet according to their demands.

In earlier reports we have described what has happened, the actions of the music industry, the actions of the politicians, the discussion about the copyright law and the need to find a fair balance between the right of the music creators and the need and demand of the music consumers.¹ We have also analyzed data about the downloaders: Who they are and what they are doing. We have described the long history of sharing music, a tradition that started long before Internet, and we have interviewed frequent fileshares about their driving forces, opinions and thoughts.²

Today it is possible to download music from CDs and MP3players, from e-mail and messages as well as from many different sources on the Internet. One of these Internet sources are peer-to-peer networks where you can share music with others. *Downloading* is the general term we will use for copying digital music and that includes many different sources, while *filesharing* is the term related to P2P networks.

In this report we will look closer at what the digital music users are doing with their music: where the music come from, what kind of music they are looking for and their motives to use Internet and peer-to-peer networks to share music with others. We will also try to validate or falsificate the two contradictory hypothesis about the effects of filesharing.:

- Is filesharing stimulating the listening and interest for music with the result of more music sales?
- Or is filesharing of music a compensation for buying music and thus with the consequence of decreased music sales?

1.1. Methodology

To answer these questions we will use data from World Internet Institute's longitudinal database. A sample of 2 000 people representative of the Swedish population (18+) has been followed since 2000. Every year a new sample of Swedes has been chosen as a reference and control group. The data collection is made through personal interviews by telephone. The questions cover a wide range of peoples media and everyday activities, their thoughts and opinions not only about Internet but also about their life and the world where they are living. Data will be used from September-October 2004 and 2005.³

¹ Musiclessons (2005). Report on technology versus usage and effects

² Musiclessons (2005). File sharing in peer-to-peer networks - actors, motives and effects

³ Data from 2005 is still preliminary.

We will also use some results from another user study ordered by the EU-supported Indicare project. It is a consumer study, made by the German Consumer Institute GfK, of a representative sample (10+) of digital music users selected from an online panel of Internet users. The data collection was made in February 2005 and includes 4852 individuals in seven European countries (Germany, UK, Spain, France, Hungary, the Netherlands and Sweden).

1.2. The era of digitalization

If we consider music sales from a longer perspective we can see that the CD as a format distributing music became more and more popular during the 90-ties with it's optimum year 2000. At the same time audio cassettes sales were lagging. And just as records were replaced by cassettes and cassettes were replaced by CDs were are now witnessing a new format change when CDs are beginning to be replaced by music DVDs and MP3s. So we have just seen the CD peak year 2000 as the Cassette peak happened 1989-1989. Then the CD decline after 2000 has not so much to do with file-sharing as with a change in format. Just as cassettes were replaced by CDs, now CDs are beginning to be replaced by MP3. But they will all coexist for many years.

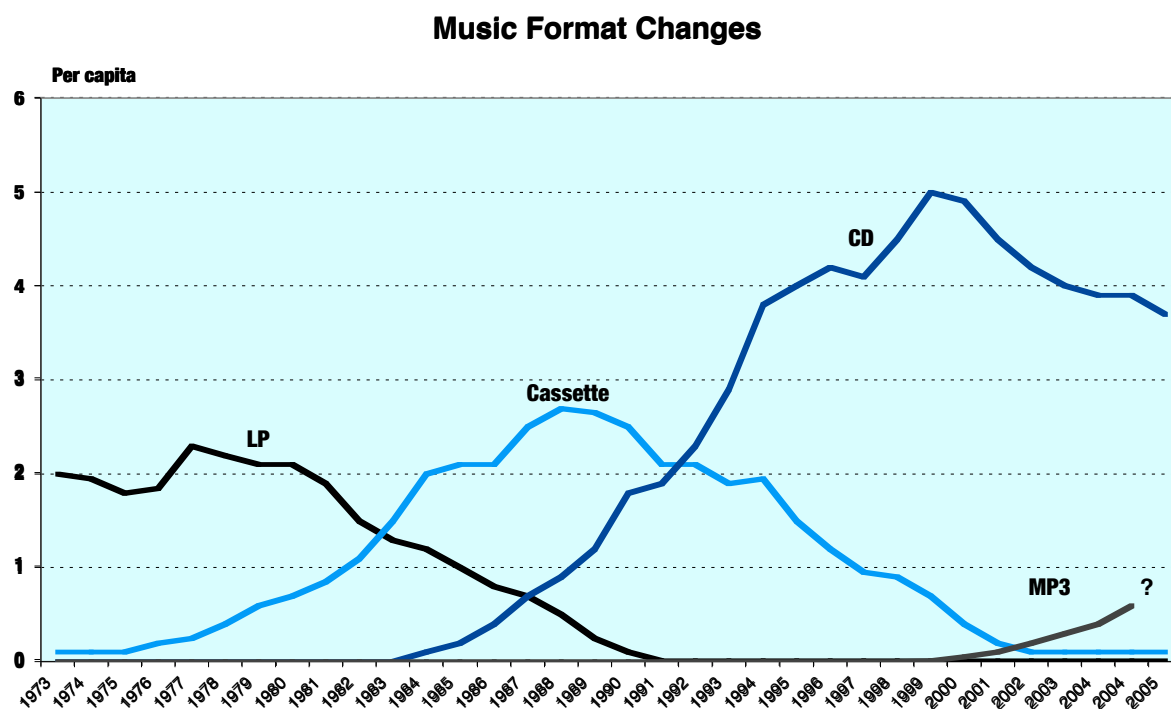


Diagram 2. Changes in music format 1973 - 2005 measured in purchases per capita in US

At the same time as the music format changes there is also a tougher competition from other formats, not only from MP3. There are DVDs and games and music DVDs. The individual entertainment budget has to cope with all these alternatives and even if the budget increase there is less left for CDs.

Table 1 . Changes in the personal entertainment budget

Sales \$ (billions)	1998	1999	2000	2001	2002
Videogames	13	14,5	14	13,5	15,5
CD	11,5	13	13,5	13	12
DVD	0.5	1,5	2	5,5	9
Audio cassette	1,5	1	0,7	0,5	0,2
Total	26,5	30	30,2	32,5	36,7

Source: Sound & Vision, June 2003 (RIAA, Ernst&Young, Screen Digest)

As we showed in a earlier report, concurrently with the spread of Internet in the population downloading of music became more common. The development started in US but has during the last years also increased in Europe. As more and more of the Internet users got a broadband connection they spend more time with Internet and use Internet for entertainment activities, like listen to music. In their computers they store not only software and documents, but also pictures, music and video. The computer become more and more their music store.

According to a study of 4852 Internet users in seven European countries (Germany, UK, Spain, France, Hungary, the Netherlands and Sweden) 69% of the Internet users have experience with digital music in their computers, and 34% more frequently (at least once a month). (Indicare, 2005).

- 34% listen to digital music
- 18% listen to digital radio
- 22% listen to music from MP3 players
- 7% listen to music from a mobile

But still the majority of the Internet users do not download music and half of them do not know how to do it. If we look backwards the last five years to year 2000, when World Internet Institute started their longitudinal study of Internet users, the users Internet skills has developed , but it is not until the last year when the number of users with broadband connections has increased that also the number of users who download music in one way or the other also has increased. Today more than 40% of the population have access to a broadband connection and 27% of the Swedish population at least sometime download music and store digital music in their computers. We have here to make a distinction between the wider concept of downloading and filesharing as a more restricted concept. Filesharing (In Sweden 8% of the population) is related to peer-to-peer networks while downloading of music in general (27% of the population) can be done in many ways, for example via music websites, e-mail, messages, online stores and P2P networks. What we can expect for the next years is a growing number of downloaders as more people get broadband and more people learn how to download and share music with others.

1. 3. The sources of digital music

It is important to observe that digital music is not only music downloads from Internet. On the contrary the main source for digital music is CDs; own CDs and CDs from family and friends. Then comes P2P downloads and just as frequent are music related websites. Digital music is also widely spread via messages. Online music stores and subscriptions are still not so common as sources of digital music.

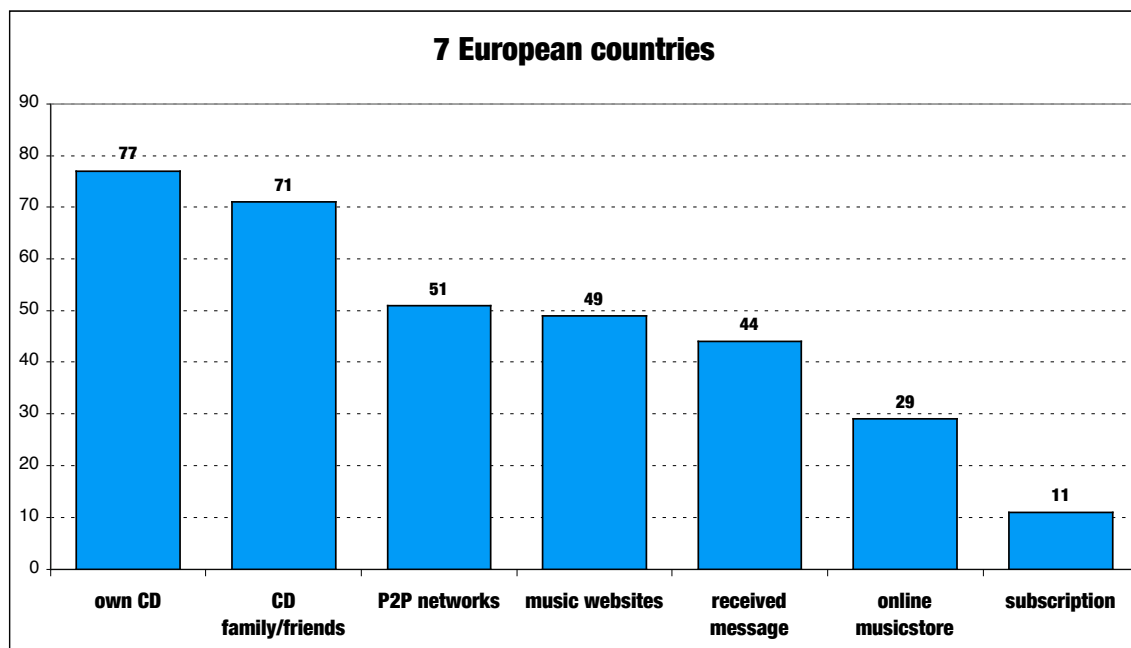


Diagram 2. What are the sources of digital music in 7 European countries?
(Percentage of digital music users. Source: Indicare 2005)

Today there are many sources of digital music. P2P networks is only one source among many. That holds also for US. There 27% of Internet users (36 million) say they download either music or video files and about half of them have found ways outside traditional peer-to-peer networks or paid online services to swap their files (Pew, 2005)⁴. This is a major change that has happened during the last years. One in five downloaders have copied files from other people's iPods or MP3 players. One in four gets files via e-mail or instant messaging. One in four is getting music from online music services like iTunes. Below are the figures from US how current downloaders download music:

- 27% from online music stores like iTunes
- 20% from messages (e-mail or instant messages)
- 17% from music related websites (online magazines, artist homepage)
- 16% from peer-to-peer networks
- 19% copy files from someone else's player like iPod.
- 7% from music or video blogs

⁴ 1 421 adult Internet users were interviewed in January-February 2005. Pew Institute, 2005.

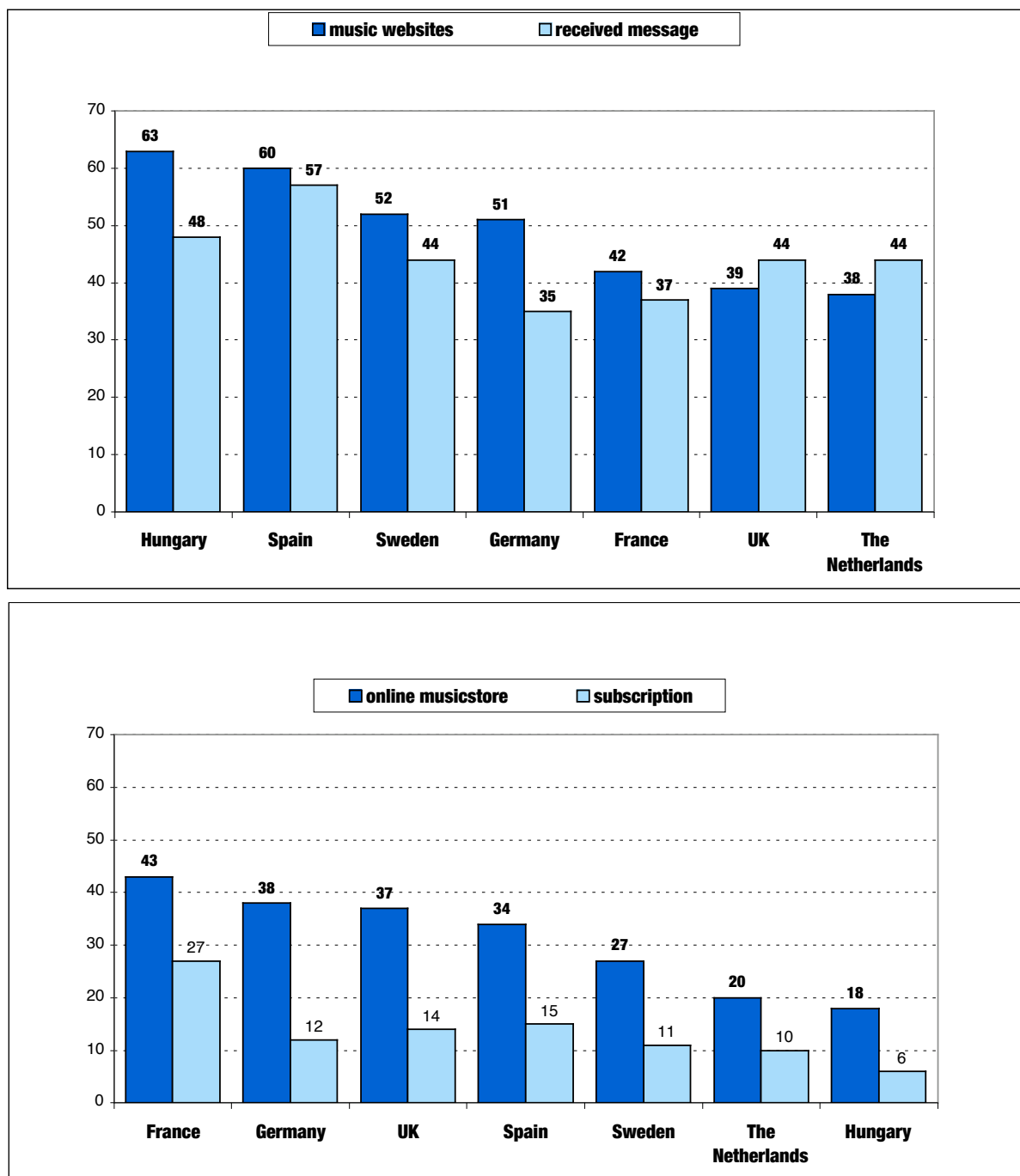


Diagram 3, 4. Sources of digital music. A Comparison between European countries (Indicare, 2005)

Music websites seems to be most popular in Hungary and Spain and less popular in UK and the Netherlands. Digital music attached to messages occurs frequently in all countries. Online music stores are most successful in France, Germany and UK and less successful in The Netherlands and Hungary. France is also a country where subscription services has become an important source for music.

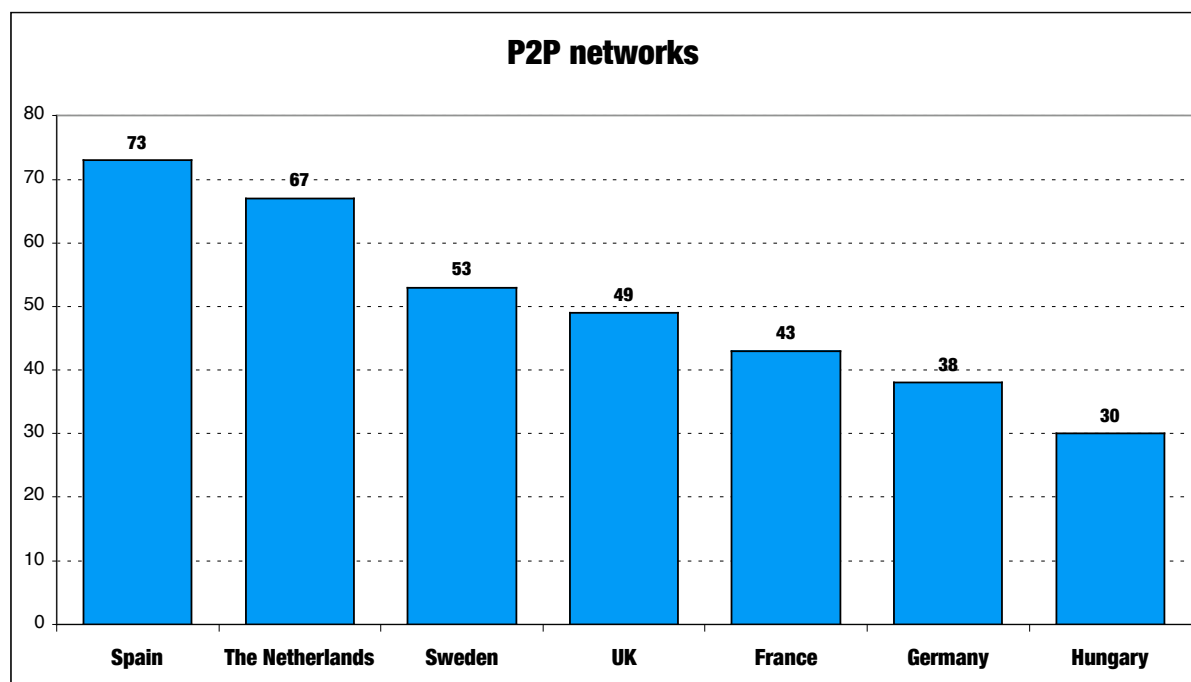


Diagram 5. % of digital music users who have P2P as a source for music (Indicare, 2005)

Downloading music via peer-to-peer networks seems to play a much more important role in Spain and the Netherlands than in other countries like Germany and Hungary. But it is important to note here that the percentages in the diagram above refers to digital music users. Of those who use digital music in their computers 73% have P2P as a music source in Spain but only 30% have P2P as a source in Hungary. The percentage of the population who download music via P2P networks is of a completely different magnitude. In US and Canada there are about 20% fileshares in the population, in some European countries around 10%, in South Europe a few percent and in East Europe less than 1 percent (see below)

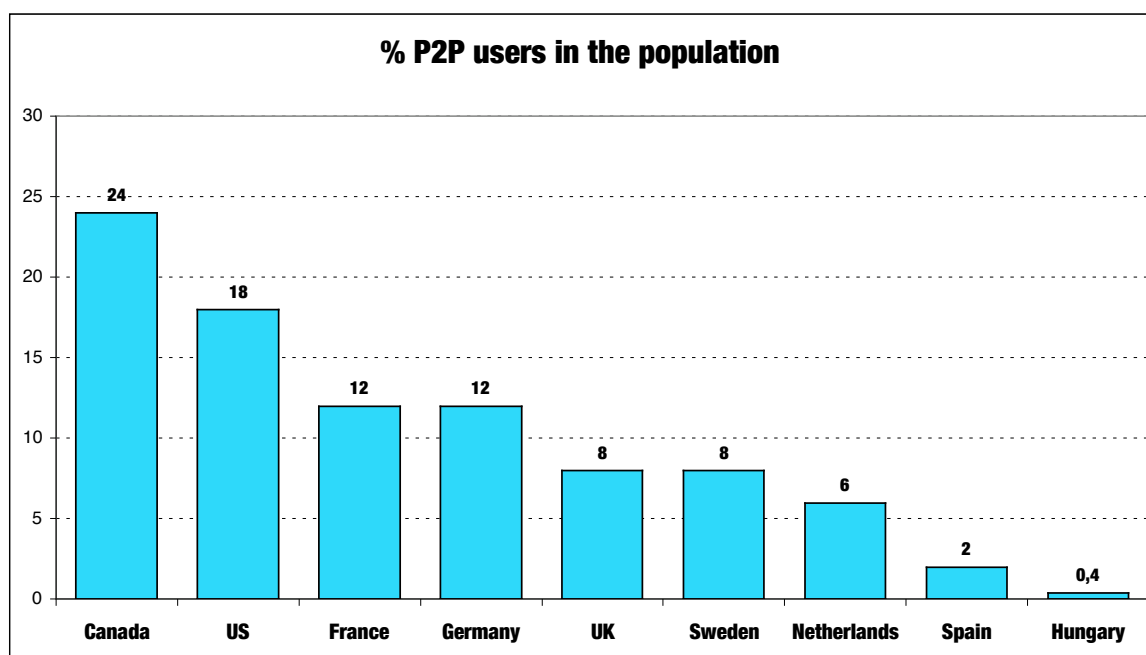


Diagram 6. Percentage of P2P downloaders in different countries (OECD, 2005)

2. The use of digital music

As we have seen there are many sources of digital music. Most common are CDs, the own or CDs from family and friends. Consequently it is common among digital music users to burn their own mixes of music to CDs and share them with others. 80% have burned CDs and among the teens 39% have done so several times per month or more often (Indicare, 2005). 73% have shared music files with family and friends the last 6 month. 60% have done so with other people.

This means that it is very important for users of digital music that there is an ability to transfer music between different devices as well as that there is a possibility to share the music with friends and family. When it comes to music stores and buying music most digital music users are willing to pay a little extra for more usage rights and interoperability.

2.1. Problems with downloading music

In earlier reports we have described how the music industry has tried to destroy the activities on the P2P networks and how the fileshares have moved from one open network to more hidden networks. The result of these disturbances produced by the industry is that most users of P2P networks have encountered many problems. 84% have downloaded bad tracks and 82% have found out that songs are not available.

In our interviews with heavy downloaders it became also clear that filesharing at P2P networks can be a complicated and time-consuming business.⁵ If there was a music store that could offer a very large music archive at a reasonable price with good quality, many P2P users are prepared to be paying customers.

Unfortunately many people who have been using digital music stores also have had problems. They can not find (70%) the music they are looking for and they are not properly informed of their limited usage rights. They also lack prelisting and recommendations that they can find on the P2P networks.

As the project Indicare concludes, there is a need for European online music stores to improve and they must give a better information on the DRM-enforced usage restrictions.

⁵ Musiclesssons (2005). File sharing in peer-to-peer networks - actors, motives and effects.

3. The reasons for and content of downloading

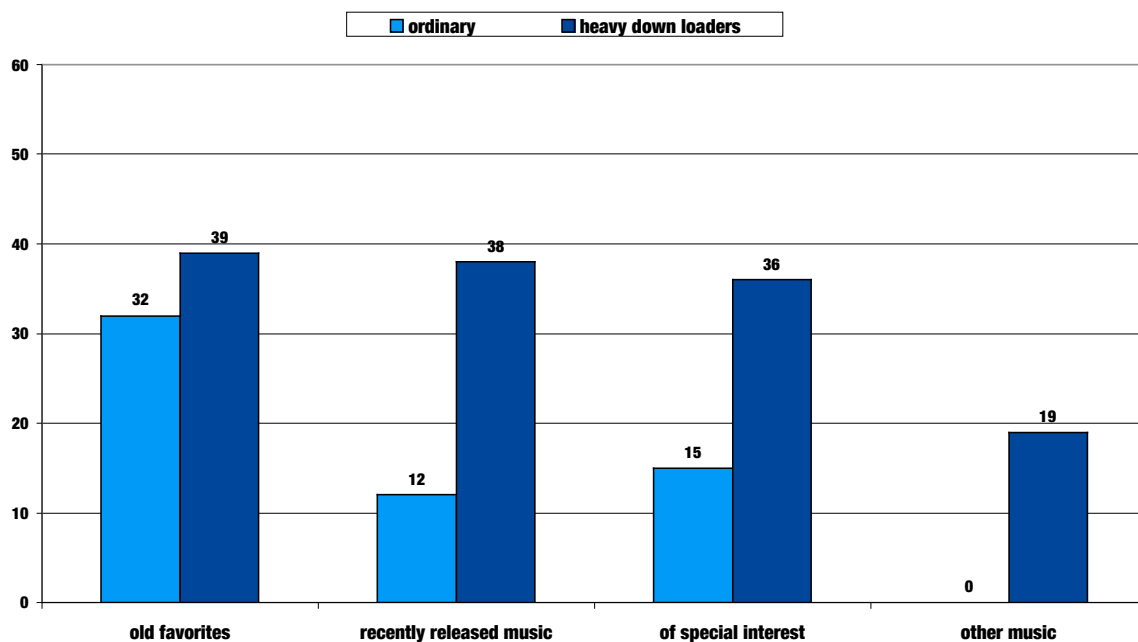


Diagram 7. What kind of music are the fileshares often downloading? (WII, 2005)

Old favourites seems to be the most popular kind of music that fileshares are downloading on the P2P networks. But here is also music suited to the individual's special interests to be found. The recently released music is popular to download among the frequent downloaders, who are mainly young men. The frequency of downloading video and TV-programs is still rather restricted, but even here can we see that old films are more popular than new.

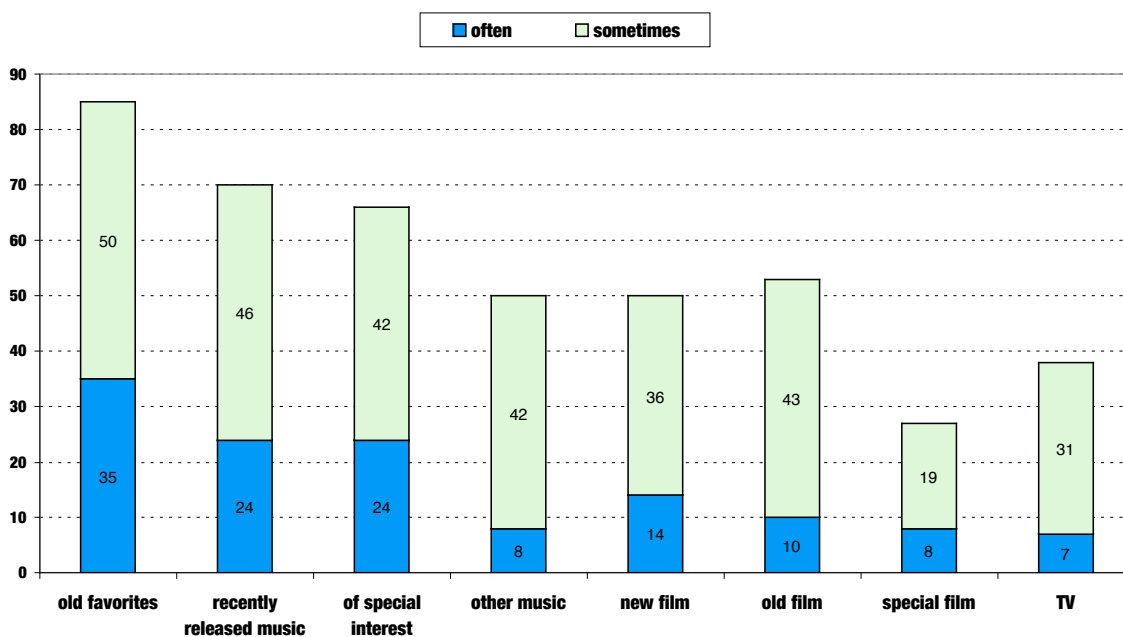


Diagram 8. How often are fileshares downloading music and film? (WII 2005)

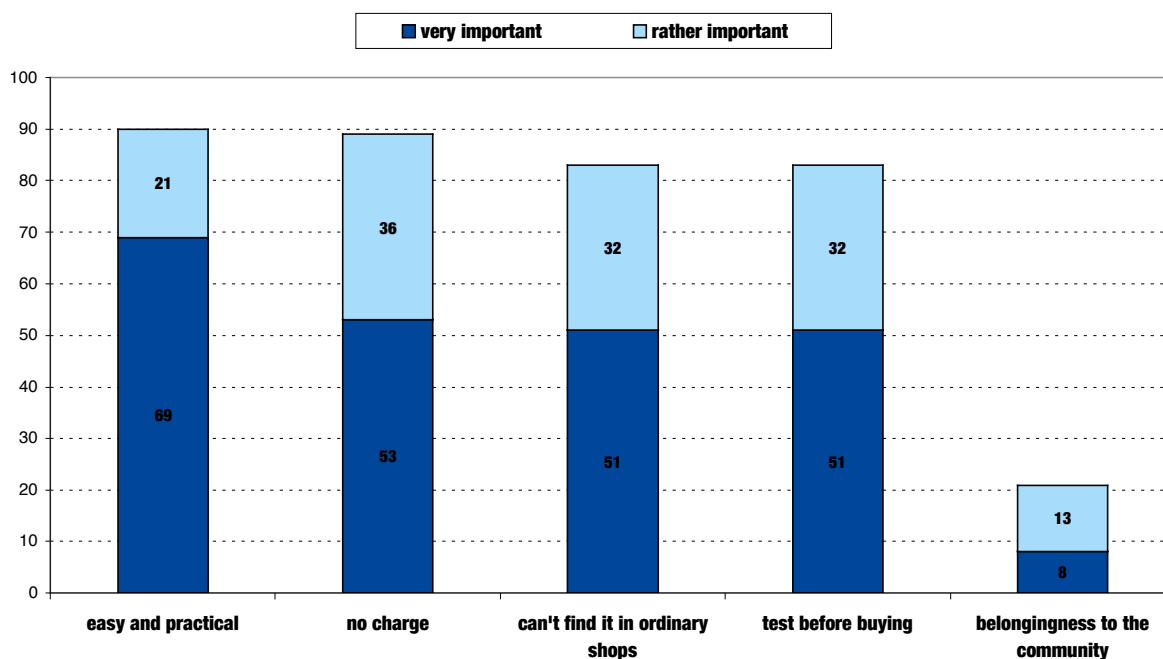


Diagram 9. What are the important reasons for filesharing? (WII, 2005)⁶

There are several reasons for using a P2P network to download music. For an experienced Internet user it is an easy and very practical way to share music with others. But as we have seen earlier it is not always unproblematic.

The free access to music is also an important reason which means that you can download a lot of music, much more than you ever can buy.

The great number of music files and the diversity is also an important reason. You can find music that you cannot find in ordinary music stores. You can find both old music that has disappeared from the market and the new music that has not yet entered. As we will see later downloaders often discover new music in this way. Online music stores has not yet a comparable diversity.

As you can download music for free, you do not have to restrict yourself to music you already know. That means you can listen very short, some fileshares say 2 seconds, to find out if the tune was of some interest. This possibility is also of high value for many.

To be active on P2P networks is sometimes said to be like a member of a special community. However, this is not a major driving force for downloaders, except for a rather small group of devoted frequent fileshares.

⁶ The results from WIIs 2005 study is still preliminary and small changes can occur.

4. The effects of downloading

4.1. The effects on music sales. User studies

A common method to estimate the effects of file-sharing is direct questions to those users of Internet who are practicing downloading and file-sharing. One report of this kind was the RIIA evidence against Napster presented in the "Fine report" showed that sales fell in stores near a college campus compared to more typical record stores. College students were supposed to make up the main body of file sharing. But it was later shown that this was not an effect of file sharing as the sales fell in student shops the year prior to Napster as well as the year following its birth (Liebowitz, 2003. not 42.)

The usual procedure is however to ask the filesharers in what way their downloading of music free of charge has had any effects on their music purchase. Do they buy less music or more music than before or have there been no change? Most of these research have been ordered by the music industry.

Research 1.

RIIA report say that 23% do not buy CDs because of P2P. But the drop was only for audio tapes, CD singles, vinyl records and music videos. CD sales up 3%.

Research 2.

(Jupiter Research May 2001. 3319 persons interviewed)

14% say that they stopped buying, 34% by more and 52% like before.

So 86% of people downloading buy as before or more, 14% buy less.

Research 3.

(IPSOS Raid. August 2002.)

81% say their purchases remain the same or more. 19% buy less.

84% informs themselves on the net about music, their favourites and how to purchase.

Half of them had bought CD on the basis of this information

One third have changed favourite genre.

Research 4 and 5

(Forrester Research 2002, Jupiter Media Metrix, 2002)

Neutral or positive effects were found. Consumers who share files increased their spending on music. Another finding was that frequent downloaders were also frequent buyers of CDs.

Research 6.

(IFPI:05, Forester Research. August 2004)

A later study showed that among those who are downloading music monthly or more often, a majority (62 %) answered that the downloading had no effect on their purchase of music. 28% said that they buy less and 10% said that they buy more.

72% % of people downloading buy as before or more, 28% by less

Research 2005

(World Internet Institute 2005)

In our own user study we asked the filesharers if their P2P activities have had any effects on their purchase. And in agreement with earlier studies we found that 56% were buying as before, 10% bought more and 35% bought less. So among two of three there were neutral or positive effects and among one of three the effects were negative. The effects on video shopping were much smaller.

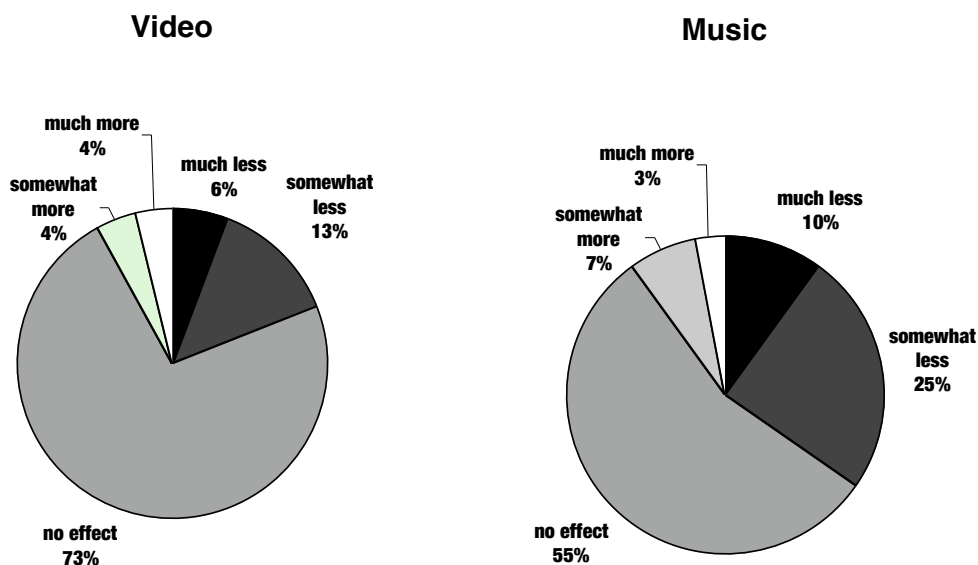


Diagram 10 & 11. The effects of P2P filesharing on buying music and video. (WII, 2005)

So even if 3 of 4 or 2 of 3 downloaders say that they buy music as before or more, it seems to be a small but not negligible negative effect. How strong this effect is in reality is difficult to say. It seems that this kind of self-estimation is not always in harmony with other independent measures.

It is for example, as was discussed earlier, often said that Internet use has a negative effect on television use. Those who use Internet watch less TV. And if we ask users, especially heavy users of Internet, they say that they watch much less television than before. But looking at audience figures collected by people meters or other time use studies, the decline of the TV audience after the introduction of Internet is hard to find. In Sweden more people are watching television today - when two of three Swedes have Internet at home - than during the 90ties. But the subjective experience of many users is that their Internet use takes time from TV.

Anyway both of the two hypothesis has been supported of the results from the surveys: There seems to be a positive effect from the downloading of music that inspires the user, the sampler, to listen to more music and to buy music. But there is also a negative effect on purchases. The free rider do not buy as much music as before. Let us look in more detail on the motives and results of downloading.

4.2. Filesharing and buying music at the same time

As we have seen from the user studies some downloaders say that they are buying less and some say they are buying more, but the majority say that they buy as before. What is clear however is that downloading music and buying music is not mutual exclusive. It is possible to download music for free and at the same time pay for music. Music downloading does not lead to substitute away from purchases in a one-to-one fashion. "It is thus very difficult to establish a basis to prove a causal relationship between the size of the drop in music sales and the rise of file sharing" (OECD, 2005).

Many heavy P2P users are downloading a lot of music that they never had bought even in the absence of file-sharing. It can be old favourites or special music that is hard to find in ordinary music stores. It can be new music that is not yet established in the music industry. And large amount of music is downloaded in the P2P networks with the purpose just to have something to upload. The more music you can offer other fileshares the better your position will be in the P2P networks. That is an important driving force behind the large amount of downloaded music.⁷ And for some of the heavy downloaders sharing of the newest music and the largest amount of files is more of a game and a technological challenge.

But what often happens is that people who have downloaded a music file or a video also sometimes, when they discovered that they like it, later buy it (WII, 2005). It happens for both frequent and not so frequent downloaders but most often for the heavy downloaders, which once again shows that free downloading of music stimulates the interest and purchases of music. The pattern is rather similar for both music and video.

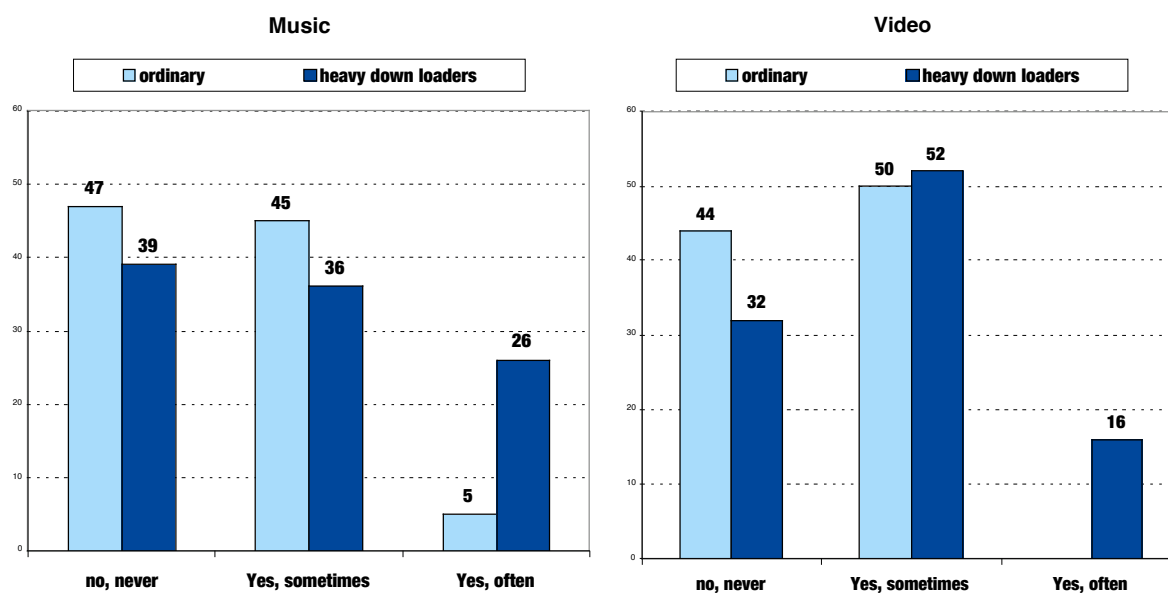


Diagram 12 & 13. Do you buy music or film that you already have downloaded and listened to? Percent of frequent (heavy) and not so frequent downloaders. Source: WII 2005.

⁷ See Musiclessons deliverable 4: File sharing in peer-to-peer networks - actors, motives and effects.

4.3. Fileshares are the most frequent buyers online

Contrary to the prejudices against fileshares, they are not all free riders that only download music for free. Most of them are very active e-buyers and that includes music.

Table 2. Buying music online. A comparison between Internet users and fileshares.

		Internet users	Not so frequent fileshares	Frequent fileshares
Buy music online? (CD, cassette not MP3 or digital forms)	yes	36%	50%	73%
Use special music services online? (Pay per tune like ITune or CD-on?)	several times			5
	a few times	3		5
	some time	6	16	14
	never	90	84	77

Source: World Internet Institute 2005

Similar results, that fileshares are frequent customers for the music industry, has repeatedly been found in other studies. The EU-supported project "Indicare" (2005) like the digital music research firm "The leading question" (2005) both point out that fileshares also are big spenders on legal music downloads. "The leading question" found that they spent four and a half times more on paid-for music downloads than average fans. Their recommendation was that the music industry should entice the downloaders to use legal alternatives, not to take legal actions against them. And Indicare concluded that Internet is an excellent tool for musicians and their labels to promote music. Sharing of music should be supported.

4.4. Less shopping at ordinary music stores

An effect of e-commerce is that shopping decrease somewhat in ordinary shops. This effect is usually not very strong but when it comes to music the negative effect on ordinary music stores is strong. That holds for both fileshares and ordinary Internet users.

Table 3. Have your shopping at Internet decreased your purchases from ordinary shops?

	Internet users	Fileshares
yes	11	22
yes, a little	46	54
no	43	24
	100	100

Source: World Internet Institute 2005

4.5. Downloading stimulates the interest for new music

Even if 85% of downloaders download known music from known artists, 44% download unknown music by known artist and 30% unknown music from unknown artist. Internet is thus a good source for music lovers to discover new music and new artists.

The great quantity and diversity of music available online, makes it easy for the downloaders to discover new music. Internet has also been the way new music groups can present themselves and their music. This stimulating effect on new music and artists is evident but not so evident is that also the sales of new music is stimulated. Two of three that have found a new artist on the net have later bought a CD by this artist. 16% have bought more digital music. This happens among both the younger and older downloaders, and seems to be most common in Germany and UK (Indicare, 2005).

In summary what happens when the downloaders are discovering a new artist on the Internet is:

- 2 of 3 download more, especially among the teens
- 2 of 3 bought CD
- 1 of 2 followed an artist in media
- 1 of 3 visited a concert
- 16% bought digital music

5. Conclusions

The number of Internet users are increasing in all European countries. But even if the percentage of Internet users are 70% in some countries, like Sweden, and even higher among teens in many big European cities, we should not forget that the average for Europe is 40%. That means that the majority of Europeans are still outside the world of Internet.

Anyway the digitalization have made the computer to the main storage of music for 2 of 3 Internet users. The main source for digital music is CDs, the own or from family and friends. But concurrently with the spread of broadband connections, more and more people are sharing music with others via the peer-to-peer networks. What are the effects of this free access to music? On the consumers, on the music creators and the music industry?

We tried to test two hypothesis: The first is that filesharing is stimulating the interest for music, especially new music and also stimulates music sales. The other hypothesis is that filesharing has a negative effect on music sales. Both hypothesis were in a way supported.

It is clear that filesharing stimulates the interest for music. But the reasons for filesharing is not only that music is free of charge. Filesharing is easy and practical and the choice of different kind of music, both old and very new, is large. Old favourites are most popular but also new released music and music of special individual interest. And even if 85% of downloaders download known music from known artist (old favourites), 44% download unknown music by known artists and 30% unknown music from unknown artist. Later two of three that have found a new artist on the net have later bought a CD by that artist. One of three visited a concert.

What happens is that people who already have downloaded and listened to a tune or watched a video later buy it. That happens for both frequent and not so frequent downloaders but most often for the heavy downloaders. These results once again show that fileshares also are big spenders on legal music downloads.

What then about the negative effects on music sales? These are more difficult to calculate as there is no direct relation between a download and a lost sale. However the user studies show that there are downloaders who say that they are not buying as much music as before and even if a majority of downloaders say that they buy the same or more a minority of 10 to 35 percent say that they buy less. So there seems to be group of free riders that supports the second hypothesis. But how strong this negative effect is on music sales is impossible to say.

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