

# **Music downloading**

## **A comparative study between Sweden and Spain**

Master thesis, 10 credits, INF 800, in Informatics

*Presented:* June, 2006

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Master thesis presented June, 2006

Size: 120 pages

Supervisor: Par-Ola Zander

**Abstract**

File sharing programs have changed the music industry in the last few years, as a lot of Internet users have started to download music. While the access to music has spread though the population of most countries, music sales have also dropped. The music industry has been pressuring political institutions to change laws to protect music copyrights. Sweden and Spain are two different countries with different social, economic, technological and legal characteristics. It is interesting to measure whether there is a difference in music downloading habits between both countries, and the effect that those differences have in the decision of downloading music and the intensity of this behaviour. Furthermore, Sweden and Spain are interesting countries because they have a big difference in legal issues about downloading music: in Spain is legal while in Sweden is illegal. This difference makes it interesting to carryout a comparison and try to discover the influence of legal issues on music downloading habits, because more changes in the law may happen during next years in different countries.

In order to answer these questions, the authors conducted a survey in Sweden and Spain to find out the music downloading habits of both populations. The research model to analyze the data collected in the survey was an extension of Unified Theory of Acceptance and Use of Technology (UTAUT) model considering economical and legal issues. No big differences in downloading habits were found between Sweden and Spain. However, there are few differences in the factors that influence the decision of downloading and number of songs downloaded per month. Our study shows that in Sweden, where downloading music is illegal, law has an influence in the decision of downloading but not in the intensity of this behavior. In Spain, no influence on music downloading is found by legal issues in people who know the law.

**Key words**

Downloading, music, comparative, Sweden, Spain

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# 1 Introduction

*This chapter begins with the description of the problem area. The background and the researcher's interest in the subject as well as the purpose of the study are also explained in this section. Finally, we can find a description of the considered research questions and the delimitations taken into account during the research process.*

## 1.1 Problem Area

This study is related to the information technology acceptance models and how their factors can be modified by the different traits of a society. Thus, our research should be placed in the Area of the Social Informatics and also be related to Information Technology Acceptance.

Social Informatics is examining the social aspects of computerization. A more formal definition is “the interdisciplinary study of the design, uses and consequences of information technologies that takes into account their interaction with institutional and cultural contexts” (Rob Kling, 1999). In the age of the Internet, the social informatics are needed to understand the interactions between users and technologies and to find their consequences.

Information Technology Acceptance is trying to explain the reasons that make a technology to be accepted or refused by users, trying to find what makes the difference between a failure and a success.

At the end, the important issue about informatics is how they impact on the society and how they change our life and our environment creating new habits and new needs, and sometimes, like in the music downloading case, even new laws to control these new habits. For a technology, the first step to have an impact over the society is to be accepted by the users.

## 1.2 Subject Interest

What makes computers interesting is how they are changing our world. As researchers in the computer area, we are interested in the impact of computer over the society and how the technological advances related to computers are changing our environment. From an ethical issue, it is also our duty to be aware of the social and economical consequences of the Informatics and the new habits, behaviours and problems they are introducing in our society.

In the last years, music downloading has become a new habit and also a threat to the music industry as well as an important topic with high presence on the media and even forcing to create new laws. The impact of music downloading and MP3 sharing is due to the wide acceptance of peer to peer programs that allow users to share their music with people from the whole world.

Theories like the Technology Acceptance Model (TAM), Model of PC Utilization (MPCU), Innovation Diffusion Theory (IDT) or Unified Theory of Acceptance and Use of Technology (UTAUT) are trying to explain the use and acceptance of new technologies, what makes a technology to succeed or to fail. Some factors taking into account in these theories can be influenced by different characteristics across the countries like economy, technology or ethics and morality. Carrying a comparative study between two countries, we can find how the differences between them have an influence on technology acceptance models.

Due to the youth of the P2P technology, there is a lack of studies in this subject. Despite some studies have been looking for the reasons that lead to music downloading, most of them have been focused on the impact of music downloading over music sales. These studies try to find the answer to the question “Is music downloading the main factor in the music sales decrease during the last years?” (Zentner (2003), Oberholzer and Strumpf (2004), Rob and Waldfogel (2004), Peitz and Waelbroeck (2004)).

The new legal situation in Sweden is also adding interest to the subject. Some previous studies have been conducted in Sweden looking for the reasons to download music from the Internet. These studies were made before the application of the new Swedish laws banning file sharing. Since the current Spanish laws are still allowing music downloading, a comparative study can show if the new Swedish law is making the difference or it is not.

In a world immersed in a globalization process, a comparison between countries can show us how important are the cultural differences in the social acceptance of a new technology. Are the new P2P technologies being used in the same way everywhere or have they a different impact in every country? Are the differences between Spain and Sweden strong enough to have an impact over music downloading?

### **1.3 Background**

P2P and the music sharing phenomenon is one more of the multiple consequences of the popularization of the Internet during last years. The Internet is allowing new ways of communication between users separated by long distances; one of these new ways of communication is file-sharing. The Internet, and the compressed data formats such as MP3, make possible to millions of peer-to-peer users all over the world to share music and other kind of files. File-sharing allows everyone with an Internet connection to have access to an unlimited amount of culture including music, movies or books, without paying the high prices fixed by the retailers. “File-sharing is democratizing the access to the culture, making it possible to millions of citizens that never before could even imagine it” (David Bravo, 2005)

Compressed music formats allow users to store a huge volume of music files in a relatively small disk space. They also make possible to share music in a fast way even if a fast Internet connection is not available.

Nowadays, MP3 is the most popular compressed music format. MP3, stands for MPEG-1 Audio Layer 3, was invented and standardized in 1991 by a team of engineers directed by the Fraunhofer Society in Erlangen, Germany. The MP3 format was created by a working group consisting on JD Johnston, Gerhard Stoll and Yves François Dehery. They took some concepts from previous audio formats Musicam and ASREC and added they own ideas with

the goal of reducing the amount of data required to represent audio, but to still sound like a faithful reproduction of the original to most of the listeners. The compression in MP3 is based in discarding portions that are considered less important to human hearing. The MP3 format also allows using different bit rates, providing a range of tradeoffs between data size and sound quality.

### *1.3.1 The music and the Internet*

Some years before the MP3 revolution began; the Internet Underground Music Archive became the first high-fidelity music web-site. IUMA hosted thousands of authorised MP2. It starts in the University of California, Santa Cruz in 1993. Its purpose was to be a tool for unsigned artists to share their music and communicate with their audience.

In 1994 the Fraunhofer Society released 13enc, the first software for MP3 encoding. In September 9<sup>th</sup> 1995 the first software MP3 player, Winplay3 was released and just two years later (1997) Nullsoft's Winamp first version was available.

During the first half of 1995 and though late 1990s, MP3 files began to flourish on the Internet. Once the first encoders and players were released, the people were able to encode and playback their own MP3 files. The relatively small drives available in this age make this technology essential to store and record music in a personal computer. In 1999 Napster was released, the music revolution in the Internet had just begun.

Napster was released in June 1999 by Shawn Flanning, a young 18 years old student. It was born from a simple idea: to put together a file sharing program and a music search engine to provide an easy method to find music on the Internet. Once installed, Napster allowed its users to share the music stored in their computers and to look for new music through the Napster central servers. Communication between users was also possible using a message service.

Napster was just the first popular peer-to-peer program, after it came Kazaa, Grokster, Audiogalaxy, eDonkey or Bittorrent. These programs spread faster among the Internet users. Music downloading and file-sharing became common habits among the young people, especially in universities and colleges, where the students could use their broadband connections to get a high-speed file sharing.

### *1.3.2 Crisis in the music industry*

After a high increasing during the nineties, global music sales have been decreasing during the last six years. According to the International Federation of the Phonographic Industry (IFPI), global sales of units of CDs fell in 2001 for the first time since its introduction in 1983. Album sales have been growing from 24.1 \$ billion in 1990 to 39.4 \$ billion in 1996, remaining at a high level until 1999, and have been falling during the last years. In 2003 and 2004 the sales where around 33.6 \$ billion and during 2005 decreased a 2%, with a dollar value of 34.2 \$ billion. Since this decreasing coincides with the proliferation of peer-to-peer programs (Napster was released June 1999) the music industry claims that the main factor to understand this downturn is file-sharing. *"If music is free no one will pay for it, if no one pays, artists and producers will stop creating music"* (Condry, 2004).

The music industry pointed to Napster and other file-sharing programs as the main reasons to the sales decreasing. Some studies have been carried in the last years trying to find the impact of music downloading over music sales (Pollock, 2005; Blackburn, 2004; Rob and Waldfogel, 2004). No one of these studies could find file-sharing as the only factor determining the decrease in global music sales, and some of them (Rob and Wladfogel, 2004) even find positive effects on the new music downloading habits.

Trying to finish with the music downloading problem, the Recording Industry Association of America (RIAA) filed a claim against Napster charging their authors with tributary copyright infringement, accusing the program to collaborate and facilitate copyright violations. This was the beginning of the end of Napster. On 12<sup>th</sup> February 2001, Napster lost the trial against RIAA and the main American recording companies, and died like a free music sharing service. Napster file was not the only one music industry carried against P2P programs. Kazaa, Grokster, Streamcast, Morpheus and Audiogalaxy were also filed. On May 24<sup>th</sup>, the RIAA and the NMPA filed against Audiogalaxy for copyright infringement. Despite Audiogalaxy had been trying to prevent its users from sharing copyrighted material. As the result of this file, Audiogalaxy had to pay a “substantial sum based on its assets” and to operate a “filter in” system which required Audiogalaxy to get consent from a songwriter, music publisher and/or recording company before making their material available.

Lawsuits were just the first reaction from music industry to fight against the file-sharing problem but not the only one. New security measures like DRMs, the Secure Digital Music Initiative, or new music formats that allow associating new security related metadata to music files are the next step in fighting against free music downloading.

### *1.3.3 The New European Directive and its consequences*

One of the consequences of Industry’s reaction against music sharing is the new European Directive affecting file sharing. The *Directive on measures and procedures to ensure the enforcement of intellectual property rights*, or directive 2004/48/EC, was formally adopted on April the 29th, 2004. It enforces member states to introduce measures which are normally only applied for counterfeiting of physical goods to all kinds of Intellectual Property. These measures include very detailed requirements for third parties to provide information on possible infringements, raids undertaken by private companies and freezing of bank accounts without warning. All the EU member states have to transpose the directives into their national statute books within two years to harmonize them with the new European directive.

This directive is affecting the file-sharing, but the measures found on it can only be taken when the action is made with a commercial goal. Then, individuals acting in good faith and not on a commercial scale would be excluded from the directive which should mean that e.g. for an occasional private download, the harsh measures of this directive do not necessarily have to apply. Every Member state in agreement with the music, film and software industries have to decide what good faith is and what is not.

The new directive was approved just two days before the enlargement of the European Union to 25 countries; as a result, the 10 new members had no influence on this directive.

As a consequence of the application of this new directive the Swedish laws affecting downloading and file-sharing were modified. Since July the 1<sup>st</sup>, 2005 file-sharing is illegal in Sweden.

The Spanish laws were also revisited after the application of the new European Directive. Despite the new Spanish laws have introduced some changes affecting file sharing; music downloading in Spain is still legal. The different consequences of the application of the new European Directive in Sweden and Spain have drawn different legal frames in these countries.

Information and communication technologies are deeply implicated in the global changes that are taking part in our age. These technologies, and specially the Internet, are allowing new modes of communication that bring changes in social activities. In a world of Globalization, seems that a technology like file-sharing, available all over the world should have the same acceptance over the users in every country. Theories as glocalization and some studies based in Hofstede's five dimensions point towards the selective appropriation of new ideas in different ways by different individuals, organizations or societies. This different appropriation is corresponding with the different local characteristics that can be able to attenuate the impact of a global process. The different legal frame in Sweden and Spain together with the economical, social, and ethical differences between them should draw a different situation in music downloading in both countries.

## 1.4 Purpose

File-sharing has an important impact over music industry and music consumption. Sweden and Spain are different countries in social, economical, technological and legal aspects. Since in Spain it is legal to download music and in Sweden it is illegal, it is important to focus on the legal issue but without forgetting all the other differences between these countries.

The previous Swedish study by Nettleingham et al., in which we are based, uses the Unified Theory of Acceptance and Use of Technology to explain why people are downloading music. Our purpose is to extend this study looking for the impact of differences between Spain and Sweden over an extended UTAUT model and to find out whether the differences between Sweden and Spain are big enough to be reflected in the model or not.

## 1.5 Research questions

The aim of our study is to answer the next questions:

- **Is there any difference in music downloading habits between Sweden and Spain?**

The aim of our study is to find the differences in music downloading habits between Sweden and Spain. To find them include evaluating Sweden and Spain in several factors and find the impact of their differences over the proposed model. These considerations are leading us to the next research question.

- **Which social and economic factors in Sweden and Spain influence the downloading habits?**

Since Spain and Sweden are very different countries, does it have some influence on the music downloading habits? There are social as well as economical differences between Sweden and Spain. We will try to find out if this and other factors have some relevance on music downloading in both countries.

- **Do the differences in the laws between Spain and Sweden lead to differences in downloading?**

Spanish and Swedish legislations affecting file-sharing are quite different. While in Sweden file-sharing is illegal, in Spain you can share some kind of files (music, films and books) if the action is not related to obtain an economical profit. We will try to find out if these differences have some influence on the file-sharing habits in the countries under study.

## **1.6 Delimitations**

The purpose of the study is not to analyse in depth the causes of the differences between Sweden and Spain. The intention of our research is to find and measure the impact of these differences over file-sharing and music downloading. We are not trying either to find the influence of music downloading on music sales. Finally, it is not our aim to defend music downloading or to go against it, as researchers our position is objective and neutral in this subject.

Another limitation to consider is the samples used on the study. The Swedish data was mainly collected in Lund by students in Lund University. A large percentage of Lunds' population are university students, this makes its residents rather young and can be reflected on the average age of the sample. According to previous studies in Information Technology Acceptance models (Venkatesh et al., 2003) age is an important factor to take into account in this type of models; thus, the youth of the sample could be important for the results in our study. The Spanish data collection was carried out online. This decision was taken to face the impossibility of carrying data collection in another way since the authors are currently living in Sweden. Carrying the survey online potentially allows everybody with an Internet connection to take part on it, reality show us that the Spanish Internet users are quite young. The average age of Spanish respondents is expected to be close to the Swedish one's.

## 2 Literature review

*This chapter starts with a review of the previous studies in the research area and it is followed by a description of our research model. Finally, there is a description and a comparison of Sweden and Spain in terms of social, economical, technological and legal issues.*

### 2.1 Previous Studies

The literature review has been done about different aspects about downloading music from Internet. We can group all previous studies in three different groups:

- Studies about the influence of downloading music from Internet on music sales
- Studies about the factors which influence the use of file sharing software or other systems or new technologies
- Studies that compare two or more countries in downloading music habits

#### *2.1.1 Studies analysing the influences of downloading music in music sales*

Most of the studies have been done in relation to the influence of downloading songs and the music sales. The number of studies related to this issue is very high but the results differ so much: some of them claim that music download is the main reason for the drop of music sales; while others claim that has no influence or a very small one. In (Zentner, 2003), the results of this study suggest that peer-to-peer usage reduces the probability of buying music by an average of 30%. Blackburn (2004) states that the overall sales have been reduced due to music downloading from the Internet, but he claimed that there is a difference between well-know artists (where the sales has drop) and the others, that could be helped by P2P technologies. In Peitz & Waelbroeck, (2004), the results suggest that internet piracy played a significant role in the decline in music sales during the early days of file-sharing networks.

On the other hand, Oberholzer and Strumpf (2004) claim that downloads have an effect on sales which is statistically indistinguishable from zero, in their empirical analysis about the effect of file sharing on record sales. In (Rob & Waldfogel, 2004), they stated that each album download reduces music purchases by 0,2 albums in the OLS classification.

#### *2.1.2 Studies about factors which influences downloading music by file sharing programs*

We have only found three studies focused on the factors which influence the acceptance of file sharing programs (Amoroso & Guo, 2006), or the ones that influences downloading music through file sharing programs (Nettleingham et al., 2004; Levin et al., 2004). The first ones works with an extension of the TAM (Technology Acceptance Model) adding some

factors like age, gender, etc. The second ones are based in Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003). This theory, which is explained in this chapter, also integrates TAM model and 7 more models that try to explain user's acceptance of a new technology. Levin et al (2004), in his study "Money for nothing...", analyzed ethical and technological issues that influences downloading music and its effects on the number of CD purchased and owned in people's collection.

Furthermore, there are studies that analyse different adoptions of new technologies (not downloading music), but they are interested in finding out factors that can influence the adoption of a generic technology and can help us to find different factors for our model. Once our research model will be done, it will allow us to compare both populations. Gefen and Straub (1997) claim that women and men differ in their perceptions of IT systems and recommend that this factor should be taken in consideration in IT diffusion models. Other studies also consider *gender* as a variable to study (Brandcheau & Wetherbee, 1990; Rogers, 1995; Sindi, 1992).

In (Madden and Lenhart, 2003), the authors provide a description of the population's characteristics of people who download music in United States, their age, family incomes, education, internet experience, etc.

### *2.1.3 Comparison of different countries in terms of downloading music*

Condry (2004) wrote a comparison of the US and Japan about their cultures of music piracy. It is a qualitative study, instead of the quantitative study that is this thesis. He analyzed the differences in piracy between the two countries, the use of P2P networks, the initiatives of the music industry in two countries to fight against the piracy.

Hence, considering all the studies done in the different areas, this study differs to all of them as it tries to find the differences in downloading habits between Spain and Sweden through a quantitative study using a research model to compare both populations. The previous studies give some ideas to develop the research model that consider all the factors that influence downloading music by a file sharing program.

It has been done also a research about the differences between the two countries in terms of GDP, Internet use, bandwidth connections, laws, etc. in order to know the differences between both countries.

## **2.2 Research Model**

### *2.2.1 Information Technology Acceptance Models*

Research in Information Technology acceptance is trying to find the reasons that make an IT to be a success or a failure. Success of an Information technology is measured by the degree the users are accepting the technology itself.

The research in this area has drawn many competing models, each one with a different set of acceptance factors. The work of Venkatesh et al. in 2003 (User acceptance of information technology: toward a unified view) resulted in a new model: the Unified Theory of Acceptance and Use of Technology (UTAUT), which is based upon conceptual and empirical similarities across the next Information Technology Acceptance Models:

- Theory of reasoned action (TRA)
- Technology acceptance model (TAM)
- Motivation model (MM)
- Combined TAM and TPB (C-TAM-TPB)
- Model of PC Utilization (MPCU)
- Innovation Diffusion Theory (IDT)
- Social Cognitive Theory (SCT)
- Theory of Planned Behavior (TPB)

According to UTAUT, the basic concept underlying under every IT Acceptance model takes into account three basic factors:

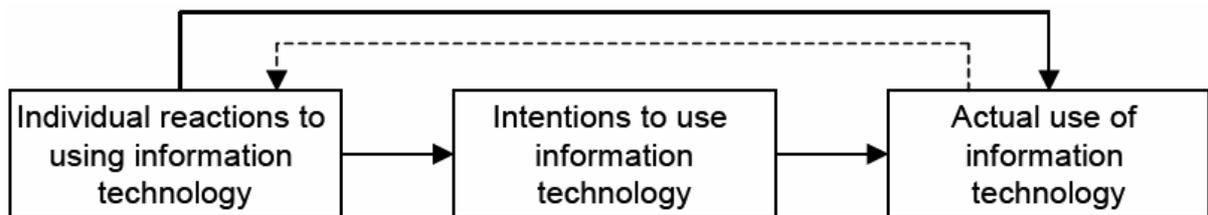


Figure 2-1. Basic concept underlying User Acceptance Models

After analyzing the different Information Technology models, Venkatesh et al. decide to take into account four main factors. These factors appeared to be determinant in intention of usage in one or more of the analyzed models. “Performance Expectancy”, “Effort Expectancy”. “Social Influence” and “Facilitating Conditions” are the main factors over intention of usage in the model. “Gender”, “Age”, “Experience” and “Voluntariness of use” are used as key moderators over the factors.

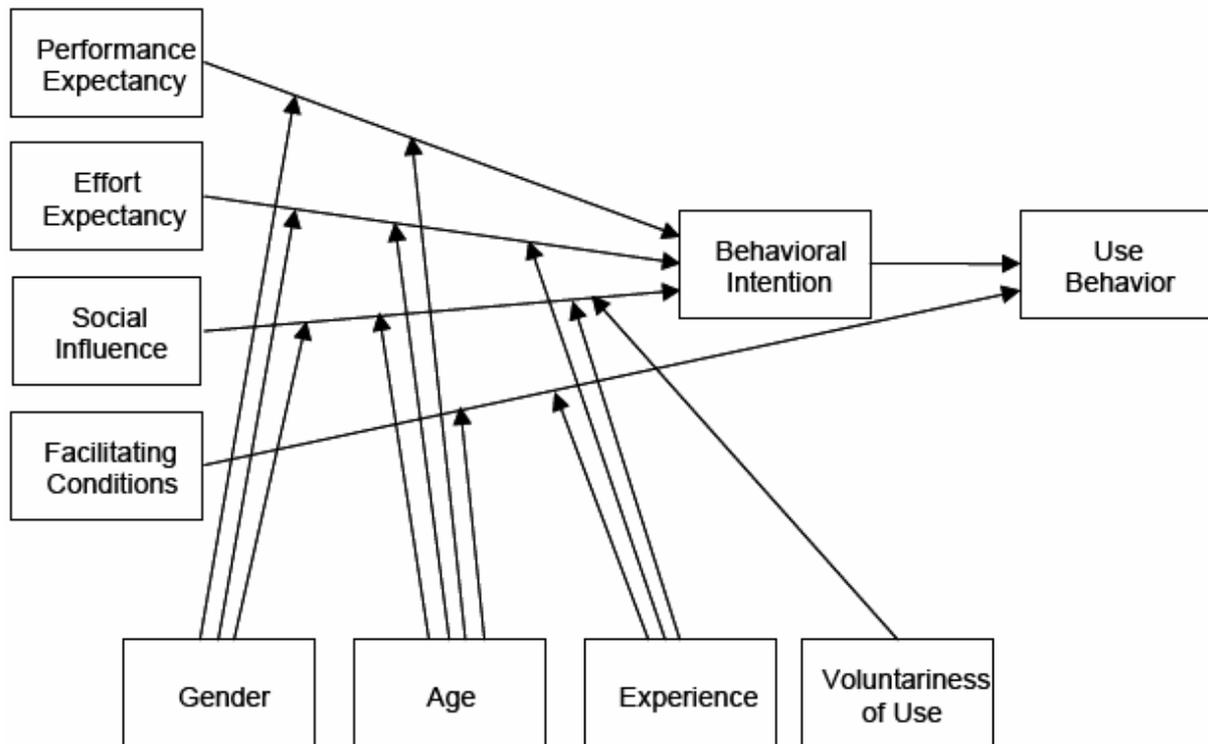
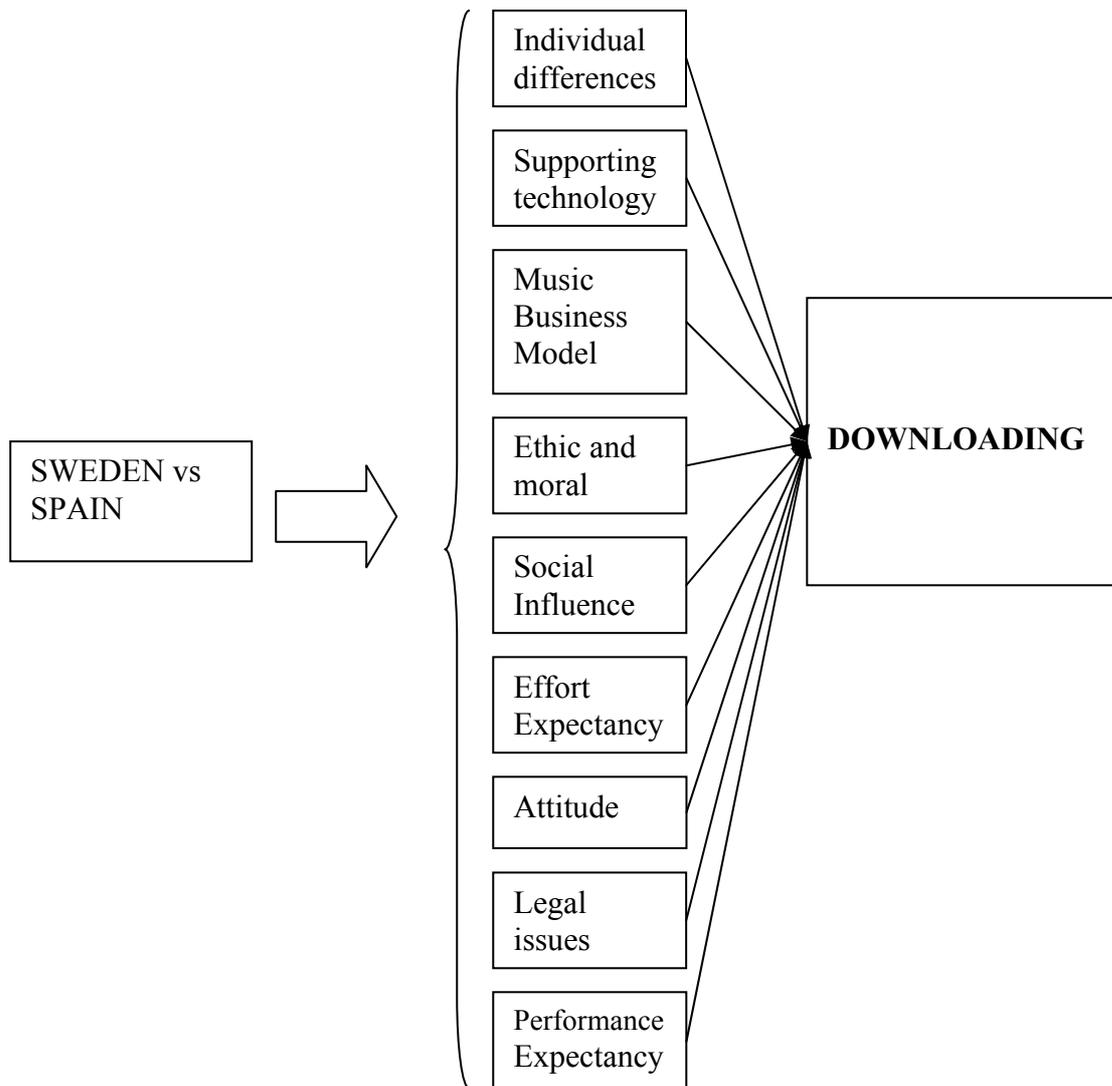


Figure 2-2. UTAUT model

Following the ideas found in (Nettleingham et al., 2004), our model is based in UTAUT but with some modifications to make it more suitable to the particular music download case. The differences between Sweden and Spain are playing the role of key moderators.

We use the four main factors of UTAUT “Effort Expectancy”, “Social Influence”, “Facilitating conditions” (as Supporting Technology) and “Performance Expectancy”. The Attitude factor is also taken from the UTAUT model. The key moderators “Gender” and “Age” as well as some individual economical factors are together in “Individual Differences”. Some factors that seem to be important in previous studies about music downloading are also taken into consideration. These factors are “Ethic and moral issues”, “Legal issues” and “Music Business Model”.



### 2.2.2 Differences between countries

Differences between countries can be important over Information Technology Acceptance Models as well as over the behaviour of their inhabitants facing music downloading.

Glocalization is a theory about how the different threats of a culture can influence on the process of acceptance of a new technology. “Glocalization is a neologism meaning the combination of intense local and extensive global interaction” (Wellman, 2001). Glocalization is referring to the capacity of different cultures to adapt a global process in different ways according to their different characteristics. In many cases local forces, such as cultural, economical or legal characteristics, can attenuate or modify the impact of a global process. Related to one of the bigger agents in the globalization process, the Internet, P2P programs and their use can also have a different effect over different countries. Since they are available on the Internet all over the world, the use of peer-to-peer programs as well as file-sharing and music downloading should be seen as a global process.

According to Robertson (1992), Globalization refers both to the compression of the world and the identification of consciousness of the world like a whole. “Globality means that we are living in a world society in the sense that the notion of closed spaces has become illusory. No

country or group can shut itself from the others” (Beck, 2000). In a world of globality and globalization, new technologies are spreading faster than ever over the countries, being adapted everywhere in a short period of time. But according to Walsham (2001), the changes introduced for these new technologies are not uniform and are adapted by the selective appropriation of new ideas by different individuals, organizations and societies in a process of Glocalization. “Glocalization reflects the ways in which the global aspects of contemporary life are appropriated locally” (Walsham, 2001).

Companies are also worried about the differences between cultures and how these differences can affect the acceptance of a certain technology, In this way, Intel has carried some studies concluding that “the way in which people view and use technologies varies substantially across cultures” (Intel, 2005).

According to Bodega (2000), traits of a culture make it possible to predict behaviours most commonly accepted. The differences among countries have been studied in depth by Hofstede finding five dimensions that can be used to describe a country. These dimensions are Power Distance Index, Individualism, Masculinity, Uncertain Avoidance Index and Long Term orientation. Individualism pertains to societies in which the ties between individuals are loose: everyone is expected to look after himself or herself and his or her immediate family. Collectivism as its opposite pertains to societies in which people from birth onwards are integrated into strong, cohesive in-groups, which throughout people's lifetime continue to protect them in exchange for unquestioning loyalty (Hofstede, 1994). Previous studies in software, music and film piracy have demonstrated a relationship between the collectivism rate in a country and its levels of piracy. According to Schwarz and Bilsky (1990) members of collectivist cultures tend to show great concern for the welfare of members of their own in-group but relative indifference to the needs of the outsiders. This threat can lead people to share a copy of their software or music CDs. Husted (2000) found that collectivistic countries place great emphasis on social harmony and the well being of the group insisting that knowledge (like films, software or music CDs) will be shared. Masculinity is other of the Hofstede's five dimensions. In masculine cultures, the dominant values are achievement and success. The dominant values in feminine cultures are caring for the others and quality of life. In masculine cultures, performance and achievement are important. There is also a substantial role differentiation between males and females. In feminine cultures, there is less role differentiation (de Mooij & Hofstede, 2003). Uncertainty avoidance is the extent to which people feel threatened by uncertainty and ambiguity and they try to avoid them. In cultures of strong uncertainty avoidance, there is a need for rules and formality to structure life and competence is a strong value resulting in belief in experts. Uncertainty avoidance is related to technology acceptance, according to de Mooij and Hofstede (2003) early adoption of technologies is expected in weak uncertainty avoidance cultures. Scandinavian countries scoring low to medium in this dimension were among the first to embrace the Internet and are still leading its use, whereas countries with strong uncertainty avoidance are lagging.

### 2.2.3 *Individual differences*

In this group of factors which can help us to explain the use of file sharing programs to download music, we consider the gender, the age of the person and personal incomes. Regarding to gender, there are several studies as (Gefen & Straub, 1997) which claim that women and men differ in their perceptions of IT systems and recommend that this factor should be taken in consideration in IT diffusion models. In another study (Amoroso & Guo, 2006), the researchers introduce the gender to study students habits with respect to music

downloading and its impact on buying compact disks (CDs). Their proposed research model extends the Technology Acceptance Model (TAM), in which gender is also added in order to determine if it influences Perceived Easy of Use (PEOU) and the Perceived Usefulness (PU) of the TAM model. Another paper studying the adoption of Peer-to-peer (P2P) technologies (Song & Walden, 2003), they state that female likelihood of the adoption decision is correlated with the relative level of adoption (network externalities). Thus, if the use of a technology is spreading females will use it after males, so the use of the technology will be higher in men rather than women.

Other factor in this group is the age. There are different studies which claim that age influences the technology adoption such as (Brandcheau & Wetherbee, 1990), but others suggests there is no influence at all (Rogers, 1995; Sindi, 1992). In (Amoroso & Guo, 2006), the hypotheses tested by the authors about the influences of the age in PEOU and PU where not supported. However, another study shows that the older the internet user, the less likely is to have downloaded music (Madden and Lenhart, 2003). In this study, half of the subjects who participate between 18 and 29 years old have ever downloaded music, and the 10% of them download music every day. The 27% of people between 30 and 49 have done at least one, while the percentage in people with more than 50 years was only the 10%. Hence, we think there is a correlation between the age of a person and the use of the technology, but we think it is necessary to group the ages in different groups as there is no reason why two people in the same group should download different number of songs only due one was born one year before/after the other. However, there should be a difference between younger ones and the older ones as some studies shows.

The third factor is the money that everyone has for spending (personal incomes). Madden and Lenhart (2003) studied the effect of income level on downloading without finding any statistically significant differences between groups. In Holm (2003), it is stated that country GNI/capita among other factors has a relation with the piracy level. Nettleingham et al. (2004) also studied the effect of personal income in downloading habits, and we think the money available should influence the decision to download music and the number of songs downloading. The higher the income level, the fewer songs someone downloads because he/she can afford them.

In conclusion, we are going to test in our model these six hypotheses:

H<sub>1a</sub>: The gender of a person influences the number of downloaded songs. Concretely, men download more songs than women

H<sub>1b</sub>: The age of a person influences the number of downloaded songs. The older the person, the less number of songs he/she is downloading per month.

H<sub>1c</sub>: The amount of money available for a person influences the number of downloaded songs. The more the money he/she has available, the less number of songs he/she is downloading per month.

H<sub>1d</sub>: The gender of a person has no influence whether a person downloads music from Internet – null hypothesis

H<sub>1e</sub>: The age of a person has no influence whether a person downloads music from Internet – null hypothesis

H<sub>1f</sub>: The amount of money available has no influence whether a person downloads music from Internet – null hypothesis

#### 2.2.4 *Supporting Technology*

Technical issues, such what kind of internet connection a person has and the speed of the connection can be facilitators to download music. There is a big difference between spending 25 minutes to download a song in a dial-up connection than no more than 5 in an ADSL connection of 256 Kb/s, or less than one minutes with a LAN connection. The quality of the connection makes easier to download music as the files are not small. Another problem is that with a dial-up connection, when you are on Internet your phone line is busy for this reason; while with ADSL you can call and be connected at the same time. Faster Internet access provided by cable, ADSL and LAN connections removes barriers that may have previously limited user's ability to download songs because of extensive time requirements. In (Levin et al., 2004), it is tested and supported by the data collected a hypothesis that claims: "respondents with at home high speed connection are more likely to download music" than the ones with a dial-up connection. Not only time is an important reason, but also the costs associated to an Internet connection are also important. While with a high speed access, people use to pay a certain fee every month which is independent of the time he/she is connected; in other types of connections you have to pay per second or per Kbits sent and/or received. In a qualitative study comparing the music piracy in Japan and United States (Condry, 2004), it is stated that one of the main reasons why Japanese are downloading less than Americans is the type of connections they use and their associated costs. For a Japanese person, it is more expensive to download the whole CD than rent it and burn it due to the connection fees. In Japan, broadband internet access for college students and households has lagged behind rates in the US, so they used another kind of connection.

Thus, it seems obvious that Internet connection and the speed of people's connection have a great influence in the music downloading habits because they facilitate them and they have different connection fees: ones dependent of the time or data sent/received, and the others are independent and only cost a monthly fee. Broadband users and frequent users of the Internet are much more likely to have ever downloaded songs (Madden and Lenhart, 2003). In this study done in the US, the 41% of Internet users with a broadband connection at home have ever downloaded music versus a quarter of dial-up users.

For our research model, we are going to consider that the type of Internet Connection and the speed of this connection influence the number of downloaded songs, increasing the amount. Thus, the next two hypotheses are going to be tested with the data collected:

H<sub>2a</sub>: The type of internet connection has no influence whether a person downloads music from Internet – null hypothesis

H<sub>2b</sub>: The speed of the internet connection influences the number of songs downloaded. The higher the speed, the higher the number of songs downloaded

### 2.2.5 *Music business model*

Music sales model affects in different ways the music downloading habits in the population. There are different considerations about this issue: from the fairness of the CD price to the placement of the nearest shop for the potential customers. From a microeconomic perspective, the price is what an individual is willing to pay for a given quantity of a good. This amount of money is also influenced (increased) by person's income (Holm, 2003). Thus, if the prize is considered unfair, users of file sharing program are more likely to download a CD rather than to buy it. This factor is studied in also in (Condry, 2004) and they noted in this study carried in Japan and US that music fans voice the same complaints: CD prices are too high for albums with only one or two good songs. Regarding to the last consideration, it is also important to consider people's fair idea of CD price, how much do they willing to pay for a CD? If there is a big difference between the real prize and how much they accept to pay, they can choose the option to get the CD in another way: downloading. However, it is important to mention that not only economic issues determine the use of file sharing programs to download music. Lots of music is already available for free *and* people pay for music anyway. Sales of bottled water show that the presence of a free alternative does not necessarily eliminate markets (Condry, 2004). File sharing programs only provide an alternative to the traditional music sales channels (including internet stores like Amazon). The purchasing power of the people can also influence in the decision of downloading songs as it is shown in (Madden & Lenhart, 2003), where the percentage of people with lower level incomes in higher than people with higher level incomes.

Another important issue is regarding the offer provided by shops, their opening hours and their placements in relation to people's work place or home. If this global offer is considered poor, a person will be more likely to download music rather than buy, because maybe it is impossible to find in the shop what he or she is looking for, the opening hours are not enough to have time to go to the shop or the shop could be so far away that takes so much time to reach it. All these situations or a part of them increase the willingness to download music from internet. There are not a lot of studies that consider this factor as important and that has an influence in downloading music, only Nettleingham et al. (2004) consider this factor in the research model as a one that can reduce the number of downloaded songs.

H<sub>3a</sub>: Respondents who consider the CD price fair are less likely to download music than the ones that consider the price as unfair

H<sub>3b</sub>: The higher the fair price considered by respondents (and the closer to the current prices in the shops), the less number of songs they download

H<sub>3c</sub>: The quality of the offer provided by the different kind of shops influences the number of downloaded songs, reducing the amount of songs downloaded per month

H<sub>3d</sub>: The consideration of the fairness of a CD price has no influence whether a person downloads music from Internet – null hypothesis

### 2.2.6 *Ethic and moral considerations*

Ethic and moral considerations help people to decide which actions and behaviours are right and which ones are wrong and, consequently, should be avoided. In Levin et al. (2004), there

are described different ethical and moral issues that can influence the use of file sharing programs for downloading music. In a moral or ethical decision, the consumer must measure the level of harm or the consequences of the decision. Then, the consumer analyses his/her relationship with the potential victim, including the economic consequences or financial risk associated to the action. Finally, the opportunity to engage the act is considered. An unethical behaviour from a customer becomes more acceptable for oneself when the seller suffers no or little economic harm due to the action (Fullerton et al, 1996). Moreover, it is difficult to understand for people that downloading a song is harming an artist who is earning millions of dollars or an industry with billions of dollars of incomes (Condry, 2004). It is also stated that downloading a CD is different from stealing from a store, because online digital copies are goods which do not disappear after someone have downloaded them. A copy always remains on the original sharer's computer.

Ethical considerations are also studied as a factors affecting downloading music through Peer-to-Peer programs in (Madden & Lenhart, 2003). The data collected showed that the majority of those who download music are not concerned about the copyright status of those music files.

Hence, all previous literature that has analysed moral and ethical issues about downloading stated that these considerations have very low influence in the number of downloading songs of people who downloaded music. However, they could have some influence in the decision of using or not file sharing programs; but once someone has decided to use them they have no influence at all.

H<sub>4a</sub>: In people who download music, the number of downloaded songs is not affected by their ethical/moral considerations about downloading songs for free.

H<sub>4b</sub>: The ethical considerations of downloading music have no influence whether a person downloads music from internet – null hypothesis

### *2.2.7 Social Influence*

Social influence is focused on the influence that others (or the society) have on persons consideration and use of a technology. The ideas of your friends, family or people in your workplace influence the personal perception about a new system. In Venkatesh et al. (2003), the authors differentiated the social influence in two different cases: in mandatory and voluntary context. In a mandatory context, the use of a technology is due to there is a responsible forcing to use it. In a voluntary context, no one is forcing someone to use a new system and people use it because they think it provides new features or advantages. It also includes the degree to which use of an innovation is perceived to enhance one's image or status in one's social system. If the use of a technology enhances one's image in a social environment, people will tend to use it in order to increase their social acceptance.

Music falls into that category of things you are normally obligated to share with your mates, family, and friends (Condry, 2004). If asked directly by a friend to share music, sharing is the only reasonable thing to do. No one expect an answer like 'we have to protect music industry. Go to the music shop and get an original CD'. Let someone to know a new band produces a pleasure in the person who is introducing a friend to a new band. However, share music with a friend that can help to create social bonds; it is very different to share music with millions of users in a P2P network. There are no social bonds to create or enhance (though it is possible

to meet people who share your music preferences) but sharing your files enhances the music available in the net, making it better. There is nothing to lose by sharing your files, the files will be there after one person, two or more people have downloaded them from one's computer.

There are not so many studies about music downloading considering the social influence as one of the factors that influence this behaviour. In our literature review, only Nettleingham et al. (2004) consider this factor, and this is due to they based their model in UTAUT model. However, there are models of technology acceptance that consider this influence, but they have never been used to explain music downloading. In Model of PC Utilization (MPCU) (Thomson et al, 1991), the individual internalisation of the reference group's culture is considered as a factor that can influence the acceptance of a technology, that means the influence in a person because all the people in his/her workplace use a system, the support of the organization in using this system and the supervisors. Moore and Benbasat (1991), support also the idea that the degree to which one can see others using the system in the organization influence on the adoption of a new technology. As file sharing programmes are a new technology, all these social factors can influence in the adoption and use. Instead of organization and company workers, society, friends and relatives should be considered as an influence to use this type of software. It should be appointed that not all technology acceptance models consider social influence as a factor, but some of them consider it as an important one.

Hence, social attitudes and influences can have a great influence on an individuals behaviour as a user of file sharing programs for downloading songs. In our model, we will test the next hypothesis:

H<sub>5a</sub>: Social influences and attitudes have an influence in the number of downloaded songs per month. The more it is accepted and encouraged in a person's environment, the more this type of software is used

H<sub>5b</sub>: The level of acceptance of the society about downloading music has no influence whether a person downloads music from internet – null hypothesis

H<sub>5c</sub>: The using of file sharing programs by people a person knows has no influence whether a person downloads music from internet – null hypothesis

H<sub>5d</sub>: The opinion of someone's relatives about if he/she should use file sharing programs has no influence whether a person downloads music from internet – null hypothesis

### 2.2.8 *Effort Expectancy*

Many different models of technology acceptance deal with this factor, maybe with different names but the idea remains the same: the difficult to use and learn to use a new system. The next list show how it is called and the theory that uses it:

- Perceived Ease of Use (PEOU), Technology Acceptance Model (TAM)
- Effort Expectancy, Unified Theory of Acceptance and Use of Technology (UTAUT)

- Complexity, Model of PC Utilization (MPCU)
- Easy of use, Innovation Diffusion Theory (IDT)

All these theories consider, in a similar way, the difficulty to learn a system and use it as one of the factors that influence the use of a system. Effort Expectancy is defined as the degree of ease associated with the use of the system (Venkatesh et al., 2003). The definitions of PEOU and Easy of Use are similar and mean the degree to which a person believes that using a particular system would be free of effort. Complexity is defined in MPCU as: “the degree to which an innovation is perceived as relatively difficult to understand and use” (Thompson et al. 1991, p. 128).

There are different studies analyzing this kind of factors influencing the acceptance of file sharing technologies, such as Amoroso & Guo (2006) who adapted the TAM model to explain the acceptance of file sharing programmes with some other factors influencing PEOU, Perceived Usefulness (PU), etc. Others have used TAM to explain the use of the email (Gefen and Straub, 1997) and every study, which has used TAM model to explain how a technology is accepted, has considered the ease of the use of the technology.

Hence, this factor measures the ease of learn and use of the file sharing programmes. If a new system is very difficult to learn or use for a group of people, they will not use it or use it the less possible times. Probably, it is one of the most important factors that influence the use of a system. In our model, we will test the next hypothesis:

H<sub>6a</sub>: Perceived Ease of Use in file sharing programmes for downloading music influence the use of this kind of software. The easier it is considered, the more it will be used increasing the number of downloaded songs per month

H<sub>6b</sub>: The ease of learning how to use file sharing software's has no influence whether a person downloads music from internet – null hypothesis

H<sub>6c</sub>: The ease of use of file sharing programs has no influence whether a person downloads music from internet – null hypothesis

### 2.2.9 Attitude

An attitude is an individual's disposition to respond favourably or unfavourably to an object, person, institution, or event, or to any other discriminant aspects of the individual's world (Thompson et al., 1994). The Attitude factor is taking into consideration the possibility of downloading music just for the enjoyment of this activity without considering any external influence or expected outcome. In their formulation of the UTAUT model, Venkatesh et al. (2003) define the attitude toward using a technology as “an overall affective reaction to using a system”. The attitude factor in UTAUT is built considering previous constructs in different Information Technology Acceptation models as TAM, TRA or TPB.

*Attitude towards behaviour* is a factor taken into account in Theory of Reasoned Action (TRA), Theory of Planned Behaviour (TPB) and Combined TAM and TPB (C-TAM-TPB). This construct is defined as the individuals' positive or negative feelings about performing the target behaviour (Davis et al., 1989). According to TRA, a person's attitude towards

behaviour is determined by his/her salient beliefs about performing the behaviour and the evaluation of the consequences of performing the behaviour.

*Intrinsic motivation* is a factor included in the Motivational Model (MM). That construct is defined as the perception that users want to perform an activity for no apparent reason, but the process of performing the activity itself, purely for the enjoyment of performing the activity itself (Atkinson & Kydd, 1997).

*Affect toward use* is included on Model of PC Utilization (MPCU) and is defined as the feelings of joy, relation, pleasure or depression, disgust, displeasure or hate associated with an individual with a particular act.

*Affect* is used in the Social Cognitive Theory (SCT). Campeau and Higgins refer to affect as “individual liking the behaviour” (1995)

The attitude factor has been found in some cases as the strongest predictor over behavioural intention in technology acceptance models like TRA, TPB or MM. Our aim is to find the importance of this factor over music downloading.

H<sub>7</sub>: Attitude towards file sharing programmes for downloading music influence the number of songs downloaded per month

#### 2.2.10 Performance Expectancy

Performance expectancy is defined in UTAUT model as the degree to which an individual believes that using the system will help him or her to attain gains job performance (Venkatesh et al., 2003). In the music downloading case our aim is to use this factor oriented to the expected benefits of users using music downloading programs.

Performance Expectancy has been taken into account in music downloading and music piracy studies considering UTAUT in its theoretical background (Overby et al., 2003; Nettingham et al. 2005).

Some constructs from different Information Technology Acceptance models are taken into account in the definition of this factor in UTAUT by Venkatesh et al. (2003). Among these factors, Perceived Usefulness, Extrinsic Motivation and Relative Advantage are fitting in the music downloading case.

*Perceived Usefulness* is taken into account in Information technology models as TAM or TAM 2 and is defined as the degree to which a person believes that using a particular system would enhance his or her job performance (Davis, 1989). In the music downloading case, this factor is fitting in the consideration of users about music downloading programs, what do they expect from them and which uses are they going to give them. Perceived Usefulness has been demonstrated to be positively correlated with the consumer's behavioural intention of downloading music (Amoroso & Guo, 2006).

*Extrinsic Motivation* is part of the Motivational Model (MM) and is defined as the perception that users will want to perform an activity because it is considered to be instrumental in achieving valued outcomes that are distinct from the activity itself (Davis, 1992). To find

more music (new or old music) is an extrinsic motivation clearly related to the use of music downloading programs.

*Relative advantage* is used in Innovation Diffusion Theory (IDT) and is defined as the degree to which, using an innovation is perceived as being better than using its precursor (Moore & Benbasat, 1991). In music sharing, the use of P2P is a clear advantage over the traditional exchange system. File sharing programs are allowing users to share music potentially with million of users around the world and not just with close relatives.

H<sub>8</sub>: Performance Expectancy is affecting the use of file sharing programs and music downloading regarding the number of songs downloaded.

### 2.2.11 Legal issues

The Internet has the property of being over any territorial border. What is a clear advantage when talking about its capacity to be a communication tool across countries; it's also a problem when talking about the legal issues related to its use. Since a copyrighted work upload to the Net is going to be available from different countries, the possible copyright infractions should be treated under the different legislations in every country (Johnson and Post, 1996).

In some countries, like Sweden, the current legal situation is opposed to music downloading. The possibility of going against the law as well as the consequences of this act should be taken into account when downloading music. The risk of being punished or fined is an important issue, and should make music downloading decrease in the countries where it is an illegal act.

Legal issues have been studied in music downloading in previous researches. According to Madden and Lenhart (2002) "Two-thirds of those who download music files or share files online say they don't care whether the files are copyrighted or not". Thus, it seems that legal issues are not taken into account for the most of the users when downloading music. Nevertheless according to other sources, the legal factor is an important weapon to fight against music downloading and copyright infractions. Holm, writing about file-sharing, points that countries with efficient judicial institutions should have lower piracy rates (Holm, 2003). The International Federation of Phonogram and Videogram Producers (IFPI) shares Holm's findings about the importance of legislation over music downloading. In the last years, the IFPI have been carrying several lawsuits about P2P program's creators as well as against P2P users. In its digital music report from 2006, the IFPI concludes that "35% of illegal file-sharers have cut back or stopped the activity, while only 14% have increased it", and "Half of illegal file-sharers who cut back on illegal file-sharing did so because of concern over the legal consequences."

Previous literature findings are sometimes contradictory in this point. But the current legal situation in the countries under study makes necessary to take the legal factor and its related issues into account.

H<sub>9a</sub>: Legal issues affecting file sharing programmes and music downloading influence the number of downloaded song per month.

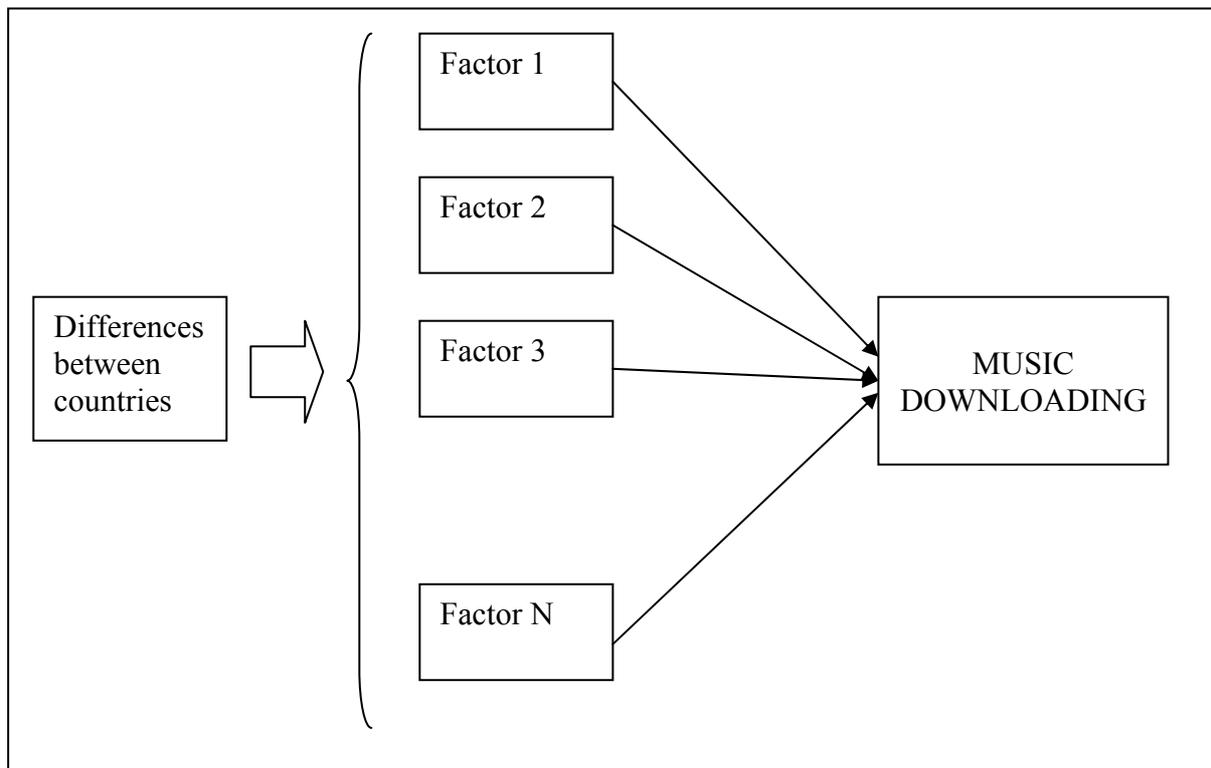
H<sub>9b</sub>: The perception of legality of downloading music has no influence whether a person downloads music from Internet

H<sub>9c</sub>: The risk of being punished has no influence whether a person downloads music from Internet.

## 2.3 Sweden and Spain

### 2.3.1 Introduction

Despite both countries are situated in the European Union, Sweden and Spain are very different countries from a social, cultural, technological and legal perspectives. The main importance of these differences between both countries is that they can have a huge influence over the factors in our model. Every factor can be altered by these differences, and in consequence, the differences between both countries can change the importance of every factor inside the model. Previous studies (Holm, 2003; Marron and Steel, 2000) have found links between factors like GNI per capita and the efficiency of judicial institutions and the piracy of digital intellectual property level in a country. According to these studies, countries with high (low) incomes should have a low (high) piracy level. In the same way, countries with efficient judicial institutions should have lower piracy rates. The demonstrated importance of economical and legal factors makes us focus on looking for the differences between them in the both countries.



Beginning for basic characteristics, such as the size and the population as well as the climate and the religion, Spain and Sweden are rather different countries. We can also find some similar characteristics like similar levels in life expectancy or in quality of life.

Spain is located in the Southwest of Europe, bordering with the Mediterranean Sea and close to the North African coast. The Spanish Area is near 500.000 square kilometres, with a population of more than 40 million (40.379.842) that results in a population density close to 80 inhabitants per square kilometre. The median age in Spain is near 40 years with a 67,8% of the population between 15 and 64 years, and the population is well balanced in terms of males and females. The Spanish climate is temperate with clear, hot summers in interior and more moderate and cloudy along coast. The winters are cloudy and cold in the interior and partly cloudy and cool along the coast.

Sweden is in the North of Europe, bordering with the Baltic Sea and between Norway and Finland. It is also bordering in the southwest with Denmark. Sweden has a population of 9.016.596 inhabitants. With an area similar to the Spanish one (449.964) but with just one quarter of their inhabitants, the Swedish density is near 20 inhabitants per square kilometre. The median age is 40.9 years, slightly higher than the Spanish median. A 65.7% of the population is between 15 and 64 years old.

Sweden, as well as Spain, has high life expectancy over 80 years. Both countries are also sharing the same kind of government, a constitutional monarchy. We can find an important difference between both countries when talking about religion. Spain is clearly a Roman Catholic country, where the 94 % of the population is under this religion. The main religion in Sweden is Lutheranism with a 87% of the population but Roman Catholic, Orthodox, Baptist, Muslim, Jewish, Buddhist are also represented.

Both countries are also well positioned in quality of life. The quality of life index by The Economist Intelligence Unit is based in a subjective life satisfaction survey as well as in 9 determinant factors like material wellbeing, health, political stability and security, climate and geography, etc. Spain is in the 10<sup>th</sup> place in the *The Economist Intelligence Unit's quality on life index* whilst Sweden is even better placed reaching the 5<sup>th</sup> place in 2005.

### 2.3.2 *Social and cultural traits*

Spaniards and Swedes are quite different people. Despite being among the western countries and members of the European Union, Spain and Sweden have different historical backgrounds as well as culture and traditions. These factors have an impact over their value systems and behaviours.

Swedish people describe themselves like organised, polite, honest, ethical, controlled, equal and as 'lagom'. Most of these qualifications are considered positive by the Swedes because they describe the behaviour expected of them according to their value system (Martinsson, 1991). But, according to the same source, Swedish people are also quite auto-critical and are aware that some of these characteristics can also mean: inflexible, over-cautious, unsociable, shy and scared of making fools of themselves. Lewis (1996) include some criticism from Moran to the Swedes, according to that, Swedes are characterized by avoidance of conflict or taking sides, fear of confrontation, reliance on the team for initiatives and avoidance of competition with others.

'Lagom' is an important word for Swedes. The English translation to lagom is "not too much and not too few" and it seems a quite accurate word to describe Swedish society. Lagom is the Swedish way of conforming to the unwritten laws of society – not to stand out (Martinsson,

1991). This trait seems to make Swedes very concerned about what people think about them. Since the Social factor is included in our model, this characteristic can have an impact over the results. Some authors, like Martinsson (1991) or Lewis (1996), also consider Swedes very afraid about taking any risk. Considerations about risks taken in music downloading are observed in the proposed model. Swedish behaviour facing risks can have an important influence on the results in our research

Honesty is also an important trait among Swedes. For Swedish people, to be honest means telling the truth and keeping their word. However, some people consider Swedes dishonest because they are not direct and never saying what they think (Martinsson, 1991).

Another important trait in Swedish society is the egalitarianism. In Sweden, the gaps between people living standards are unusually narrow and everyone is meant to have the same rights. This trait is reflected on the studies by Hofstede that place Sweden as one of the lowest countries in the Power distance index (clearlycultural.com). The power distance index measures the extent to which, the less powerful members of organizations accept and expect that power is distributed unequally (Hofstede, 1994). Swedish position in the Power distance index reflects a country with an equal distribution of power.

Going on with Hofstede's findings, individualism is another useful trait to characterize a country. Individualism is defined as the opposite to collectivism, which is the degree in which individuals are integrated in groups. In the individualism index, Sweden is in a rather high position (clearlycultural.com) showing a preference for the individual aspect Sweden stands out in one of the Hofstede's dimensions. Sweden is the most feminine culture. In contrast to masculine cultures where the dominant values are success, money, rewards, objects and possession; feminine countries are characterized by interpersonal aspects like quality of life, physical environment, rendering service and nurturance, in short the creation of a caring society (Lewis, 1996). Sweden also scores low in the Uncertainty avoidance index. Early adoption of technologies is expected in countries with a weak uncertainty avoidance index.

According to individualism ranks made taking into account Hofstede's findings, Spain is a more collectivist country than Sweden. As members of a more collectivist society, Spaniards give more importance to the welfare of members of their own in-group and show relative indifference to the needs of the outsiders. This trait can lead to a certain behaviour according laws accomplishment and have some impact over Spanish ethical considerations. The relationship between culture and ethical practices is very complex (Wines and Napier, 1992), but previous studies about Tax morale found that Spanish people are less aware about the compliment of Social norms than people from other countries (Alm et al., 1995 & 2005).

According to other authors (Lewis, 1996), Spain is characterized by the individualism of its inhabitants. Individualism in Spain has resulted in refractoriness to authority and organization, even scorn for the government. Lewis also points that this trait is even more important on the southern part of the country, where the hot climate reinforces a tendency towards apathy and inertia were laws and regulations are concerned.

According to Hofstede's dimensions, Spain is an example of strong uncertainty avoidance. Since countries with strong uncertainty avoidance are characterized by be lagged in the acceptance of new technologies, like the Internet, this trait could be reflected in the results of our study.

As well as Swedes define themselves as honest, for the most of the Spaniards honour is a very important trait. According to Lewis (1996) “they may be poor by they are noble. They may have been in jail but they are honest. They may be unpunctual but they are true. They may owe you money, but they are sure to pay you when they can. They have failed, but they cannot be humiliated”. Spaniards are characterized by this honour and it is something nobody can question.

In an overview the social differences between Spain and Sweden an expected to have an impact over the ethical, technological, legal and social factors on the model.

### 2.3.3 *Economics*

The first economical difference we can notice between Sweden and Spain is their currency. Spain is using the Euro since it was launched like a currency in 2002. Sweden, together with Denmark and the United Kingdom, is one of the few EU member states outside of the monetary union. Recently, in 2003, a consultative referendum was held on the Euro. The result was a rejection of the common currency.

Spanish and Swedish economies are both service-oriented economies with a quite important industrial sector and, like the most of the EU countries, a small agricultural sector. The services sector in Spain is generating the 67,19% of the GDP while the industry is generating the 28,9% and the agriculture only 3,4%. In Sweden the situation is similar, the services-sector is generating the 69,7% of the GDP, 28,6% belongs to the industry sector and finally 1,8% to the agriculture, (CIA, 2006) being this last sector even a less important than in Spain.

Some economic indicators can help us to see the differences between the economies of both countries. The GDP or Gross Domestic Product is defined as the market value of all final goods and services produced within a country in a given period of time. According to the World Bank GDP figures of 2004, Spain has the 8<sup>th</sup> largest economy in the world just after the G-8 members (excluding Russia). The Spanish GDP is about 1.039.000 US million dollars. In the same year Sweden was placed in the 19<sup>th</sup> position on the same ranking with a GDP around 346.000 US dollars millions. According to these numbers, it is possible to think that Spain is a quite richer country than Sweden, but since Spain has population 4 times bigger than the Swedish one we must also consider other numbers like the GNI per capita. The Gross National Income comprises the total value of goods and services produced within a country (GDP) together with its income received from other countries. When we measure it “per capita”, we are dividing the GNI between the populations of the country. According to the 2004 GNI per capita ranking made by the World Bank, Sweden is placed in the 10<sup>th</sup> position with a GNI per capita around 35,840 US dollars while Spain is in the 34<sup>th</sup> position with 21,530 US Dollars.

Finally, if we want to know the purchasing power of the both countries we can use the PPP, (purchasing power parity) conversion that take into account different prices of goods and services in every country. This measure also provides a more real value of the output produced by a country compared with the other countries. Using these conversion factors, Sweden is placed in the 17<sup>th</sup> position while Spain is in the 33<sup>rd</sup> with 29,880 and 24,750 US dollars of GNI per capita (World Bank, 2006).

In a world frame, Spanish economy is more important than the Swedish one. However, taking into account the population of both countries, Sweden is a richer country and, although Swedish prices are higher, the purchasing level in Sweden is higher than the purchasing power among Spanish inhabitants.

#### 2.3.4 *Technology*

The main subject in our study is the differences in music downloading between Spain and Sweden. Music downloading is a technology related subject. The availability of computers, the situation of the Internet in both countries as well as its use, penetration and related topics are important to draw down the different technological background in Sweden and Spain.

The technological situation in the countries under study is quite different. A possible factor to measure the technological level of a country is the number of mobile cellular phones. In Sweden there are 9.775.000 mobile cellular phones that mean more mobile phones than inhabitants. In Spain there are 36.646.800 mobile phones. According to these factors the situation in both countries should be rather similar, but although it is possible to find some similarities, checking other factors we find how different the situation is. To find the first differences, we can take a look to the expenditures in Information and communications technology in Spain and Sweden. According to the World Development Indicators figure from 2003 provided by the World Bank, Spain expended 3,8% (773 US Dollars per capita) of its GDP in information and communications technology. In the same year, the expenditure in Sweden was about 7% of the GDP, 2365 per capita.

As we have mentioned before, two are the main technological aspects to take into account in our study. First, the computer availability and second the Internet penetration. According to the statistics provided by OECD (Organisation for Economic Co-operation and Development) of Spain in 2004, 52,13% of the households had access to a home computer. There are no data about this subject referred to Sweden in 2004, but in 2001, the last year in which data is available, 69,9% of the households had access to a home computer (OECD, 2006).

We can find similar results when looking at the Internet availability in Spanish and Swedish households. In 2004, 33,6% of the households had access to the Internet in Spain. The last data available about Sweden is from 2001, in this year, 53,3% of the Swedish households had access to the Internet (OECD, 2006).

More data about the importance of the Internet usage is provided by InternetWorldStats (<http://www.internetworldstats.com/top25.htm>). According to them, Spain is in the 14<sup>th</sup> position in Internet users with 17.142.198 while Sweden is in the 28<sup>th</sup> position with 6.800.000. Since Spain has more than twice Internet users than Sweden, it could seem that the Internet penetration in Spain is higher than in the Nordic country. But we need to have into account that Sweden has only 9 million inhabitants, quite far from the 40 million inhabitants in Spain. Thus, according to the OECD the Internet penetration in Sweden is near 75% (74,5%) while in Spain is only about 39 % (38,7%). This results (from October 2004) place Sweden in the third position in Internet penetration all around the world; while Spain is quite far from the first places in this rank.

Since some studies (Madden and Lenhail, 2003; Levim et al., 2004) have demonstrated that a fast connection to the Internet is an important factor over music downloading, the differences

in the penetration of broadband connections in Sweden and Spain is a main factor to take into account. According to OECD statistics from December 2005, Sweden is the 9<sup>th</sup> country in Broadband penetration with 20,3 % and Spain is placed 20<sup>th</sup> with 11,7%. These numbers refer to broadband connections per 100 inhabitants and place Sweden quite far from Spain in broadband usage with almost twice of the users.

The studies carried by Hofstede can help us to understand the difference in Internet penetration in both countries. According to these studies, countries with a weak uncertainty avoidance index (like Sweden) are expected to have an early acceptance of new technologies, while the countries with a high score in this index are lagging in this aspect (de Mooij & Hofstede, 2002). Economical reasons can be also found to explain the slow growth of the Internet sector in Spain as well as the low penetration of the Internet, and especially of the broadband connections. The high prices of connections in Spain are a problem to face when someone wants to connect to the Net. Spanish ADSL prices are 32% than the European mean, placing Spain in the third position among the most expensive ADSL connections in Europe, just Norway and Portugal has higher prices for ADSL than Spain. Another significant piece of information is that in Spain an ADSL line costs 435% more than a Dial-UP connection. The high differences between the prices of Dial-UP and ADSL connections are making difficult to Dial-UP users to jump to a new broadband line and are placing Spain in the second place among the countries where ADSL is growing more slowly.

The technological situation in Spain and in Sweden is quite different, especially if we focus in the most important technology in our study, the Internet. While Sweden is placed among the top positions in Internet and broadband penetration, Spain is just an average country in this technologies. Despite the number of Internet and broadband users is increasing every year in Spain, there is still a long way to do before Spain can reach the Swedish levels in this subject.

### 2.3.5 *Legal*

The legal situation in Spain and Sweden is quite different. While in Spain music downloading is legal, in Sweden the new laws in use since July 2005 make file-sharing illegal.

According to [www.sweden.gov](http://www.sweden.gov), on 1<sup>st</sup> July 2005 the Act on Copyright in Literary and Artistic Works (Swedish Code of Statutes, SFS 1960:729), also known as the Copyright Act, was amended in order to adapt it to the technological development. The new copyright rules are largely based on the new European Directive on measures and procedures to ensure the enforcement of intellectual property rights.

The former Swedish law allowed users to download files but not to share them on the Internet, downloading was legal but file-sharing (intended as an illegal communication of copyrighted material) was illegal. The legal situation together with the high availability of Broadband connections placed Sweden among the first places in file-sharing. According to Henrik Ponten, legal council at the Swedish Anti-piracy Bureau, at least 500.000 Swedish people were using file sharing programs to share music, video games and films. According to other sources this number is even higher, and 10% of the nine million inhabitants on Sweden were sharing their files over the Internet (1<sup>st</sup> July 2005, <http://news.bbc.co.uk/1/hi/technology/4642373.stm>).

The new Swedish law mean that distribution, uploading, downloading and copy of movies and music you do not the own the right to is illegal (The Ministry of Justice, 2005). Breaking this law means being fined or punished. According to the current Swedish laws on copyright, “Anyone who, in relation to a literary or artistic work, commits an act which infringes the copyright enjoyed in the work (...) shall, where the act is committed wilfully or with gross negligence, be punished by fines or imprisonment for not more than two years”.

In Spain, the topics related to music downloading and file-sharing as well as all the topics related to copyright infringement are ruled by the law “Ley Organica 15/2003” contained into the Spanish penal code. This law was recently changed, to make it suitable to the new technological frame as well as to harmonize it with the new European directives. The Spanish law over intellectual property (LPI or Ley de Propiedad Intelectual in Spanish) is currently being changed.

The reforms on the penal code and the interpretation of this reforms made by the rights management societies like SGAE, create some confusion among the Spanish users. To solve this situation, a circular was published by “Fiscalia General del Estado”. According to this circular, and to the current laws themselves, to download copyrighted material from the Net, when not commercial profit is involved, is considered a realization of a private copy and thus, is not illegal. In addition, upload copyrighted material or sharing it using a peer to peer system without the author’s consent is considered an act of non authorised public communication, and should be managed under civil rights if there is no commercial benefit is involved (extract and translated from “Circular 1/2006 Sobre los delitos contra la propiedad intelectual e industrial tras la reforma de la ley orgánica”)

According to Article 31st in the Spanish law over intellectual property (LPI), it is allowed to reproduce a copyrighted material without any authorization from the author when the goal is the private use of who is making the copy whenever the copy is not related to a commercial profit (Ministerio de Cultura, 1996).

Since September 2003 and due to a deal between SGAE (Spanish acronym for Authors and Editors General Society) and ASIMELEC, (for Multi-sector Association of Spanish Companies in Electronics and Communications) to compensate the artists and the right management associations for the sales missed due to private copies, some articles like blank CDs and DVDs are charge with a compensatory canon.

Despite file sharing is legal in Spain, some copyright-management associations like SGAE and ACAM (Music Composers and Authors Association) are trying to convince people about the illegality of downloading using aggressive marketing on TV, cinemas, press and other media. These campaigns are based on comparing music downloading and file sharing with piracy and stealing. Since the main business to these associations is right management, these actions are just obeying to the aim of defending their interests

The disinformation coming from these associations is creating some confusion, leading people not aware of the current laws to believe that music downloading is actually illegal.

The totally opposed situation in file sharing and music downloading legislation in Sweden and Spain should be reflected in a different importance of the legal factor in both countries.

### 3 Empirical Studies

*In this chapter, it is provided a description of the research method, the characteristics of the survey, and the tools and techniques used to analyze the data collected. Finally, there is a summary of hypotheses and their related questions in the instrument.*

#### 3.1 Research Method

In order to answer to the main research questions, it is necessary to collect data from the music downloading habits in Spain and Sweden. This thesis re-uses the information collected in a survey from Swedish people that was done for the course “Quantitative Methods” at Ekonomihögskolan in Lund University (Sweden). This survey, carried out by the students of this course (the writers of this study also), collects information about downloads habits in downloading music. Each student of the course should collect 40 questionnaires. The way that each student collected their questionnaires was not under control of the researchers of this study. The final Swedish sample consists of 646 responses.

In order to collect the same kind of information in Spain, the survey was translated to Spanish and distributed in Spain through different channels. The translation was done by Swedish people in collaboration with the authors of this study to get an accurate translation of each question. Once it was translated, it was checked in order to avoid misunderstood or leading questions. Data collection was done, as it is defined in Lombard (2001), in a cross-sectional survey: information is collected from one sample at a single point of time (no trend analysis is searched).

The assessment of the instrument was done in a similar way as it was in (Wixom and Watson, 2001; Gefen & Straub, 2000): the survey was developed, tested (in a pilot study), refined and finally generated. The number of testing and refining cycles and the people involved in them differs from one study to the others, but the main idea remains: ensure the quality of the survey questions (non ambiguous ones) in order to get the correct information needed in the analysis plan. The use of a survey to collect data makes it impossible to explain the questions and instructions once it has been sent. Thus, the control of the survey is lost and questions should be well understood in the way they are intended to be. To ensure this it is recommended pre-testing the instrument (Lombard, 2001). In this study, as it is based in distributing the survey in 2 different countries with different languages, a great effort has to be done in ensuring that the questions ask the same and in the same way. To ensure this, special emphasis was done in the translating process enhanced by Swedish people. Once translated to Spanish, a pilot pre-test took place in order to validate the instrument before data collection. The pre-test was done with 10 people who filled the survey and then were asked to explain their opinions about the questions and they way to improve them if they thought it was necessary. After these considerations, the test was considered ready to distribute.

The distribution of the original survey in Sweden was done in last two weeks of February 2006. The distribution through Spanish population was done in April 2006. The set of questions were formatted into an online survey to facilitate the distribution. The advertising effort was done in two ways: sending emails to relatives and ask them to fill the survey and

re-send the link to more people, and publicising the survey in different Internet pages. The sample could not be representative of the total Spanish population since it only includes self-selected Internet users and the people who have received a mail with the survey information. However, self-selected survey is suitable for exploratory research according to (Hair et al. 2001) and (Kinnear and Taylor, 1996). Moreover, we tried to advertise this survey to a balanced mix of Internet pages in order to minimize this shortcoming. The resulting sample of data collected from Spanish people has 184 surveys. One of the two methods used to get the surveys is called *snowball sampling* (Statpac Sampling methods, 060511). It is a method where the initial subjects who participate in the sample generate additional subjects. It is a low cost method to distribute the survey, but introduces bias to the sample due to this technique reduces the likelihood that the sample will represent a good cross section of the population.

### 3.1.1 Characteristics of the instrument

The instrument has 41 different questions and 118 different items if we consider that some of the questions are multiple. There are different kinds of questions to get information about what people think about music shop system, the social influence about downloading music, their attitudes to download, the technologies that support it, ethics and morale questions about downloading music, the legal system and personal information. The survey uses, in most of questions, Likert scales of five intervals to evaluate the level of agreement/disagreement in each on the statements (from strongly disagree to strongly agree). In the survey, Likert scale is translated to a numerical scale from 1 to 5. Last two questions, number 40 and 41, are the only open questions and it is due to they ask what people give and receive when they receive and give music from/to others.

**Table 3-1- Likert Scale**

<b>1</b>	Strongly disagree
<b>2</b>	Disagree
<b>3</b>	Undecided
<b>4</b>	Agree
<b>5</b>	Strongly Agree

The survey has two different parts: one of them should be answered by all the participants of the survey and the second part only for the ones who answer “yes” to the question if they download music (question number 22). The first part of the questionnaire contains the questions 1 to 22 and from the question number 38 to the 41. The other part of the survey, only answered by the ones who download music, goes from the question 23 to 37 and it is focused of downloading habits of the people: number of songs downloaded per month, in total, number of hours that they spend in downloading music every month, etc.

Personal information was collected to let us know the personal characteristics of the population under study, such as gender, age, in which kind of house they live, what is their main occupation, etc. It is general information about the people who participate in the survey that has no direct relation with music or downloading music, but it can influence downloading music habits. The rest of questions have a direct relation with our research model, music and music downloading habits.

The instrument has some questions asking about the considerations of the participants about the music sales model with regard to the fair prize of a CD, the open times of the shops, their situation in relation where people live, etc. There is another group of questions with regard to ethical and moral issues to get information about how people's downloading behaviour is affected by their moral considerations. Legal considerations and beliefs has another group of questions, as it is one of the main differences between Sweden and Spain, i e if they consider downloading music as an illegal action, the possibility of being fined for downloading music, etc.

Some part of the questionnaire contains the questions regarding the attitudes of the participants about downloading music and the acceptance of this behaviour by the society: beginning asking whether they download music, following by their considerations about file sharing programs (ease of use, if they are accepted by the society, whether it is good to use them ...). Considerations about the technology that facilitate downloading music such as type of internet connection, speed of the internet connection, capacity of hard disks, standards in shared files (mp3, mp4), ... are the main issues studied in another part of the instrument.

The next table shows the different parts of the survey and the questions associated to each part:

<i>Area of study</i>	<i>Questions</i>
Individual Differences	1-8
Music Business Model	9-14, 31, 34-35, 39-41
Legal Issues	19-21
Attitudes and Performance Expectancy	19, 23-30, 32-33, 38
Ethic and Moral Issues	20-22
Supporting Technology	15-18, 36-38
Effort Expectancy	38
Social Influence	38

### *3.1.2 Tools and techniques for analysis - Data processing*

Once all the responses were filled, the data was exported to an Excel file to import it later to SPSS to carry all the statistics analysis. Both files, the Swedish and the Spanish, were joined in the same file, differencing the samples from one country to the other with a dummy variable.

After this process, we analyzed data with the statistic software called SPSS (Statistical Package for Social Sciences). SPSS is a software that allow us to do several different types of statistical analysis to collected data. This software let us import data from difference sources, such as Excel, and also allow us to do advanced statistical analysis in a straightforward way. It also provides the capabilities to calculate easily derived information from information collected and convert the format of some information fields, which can be useful for the development of the thesis.

First, we calculate some descriptive statistics of all the variables that are used to describe the basic features of the data in a study. It is a good way to know the basic characteristics of the

samples collected in the survey (Hair et al. 1998), present quantitative descriptions in a manageable form and help us to simply large amounts of data in a sensible way. In this way, we can get the general characteristics of the population that participate in both surveys.

First of all, we are going to deal with the missing values in the collected data. There are different ways of handling this problem as it is claimed in different studies (Hair et al. 1998; GAO/PEMD – 10.1.11, 1992). The chosen option was combination of two different methods: *delete case(s) and/or variables* and *imputation methods*. Delete case and/or variables method consists in analyzing the number of missing values in all cases and variables. If a variable or case has an excessive level of missing values, it is deleted. Imputation methods are used to estimate the missing value based on valid values of other variables and/or cases in the sample (Hair et al. 1998). There are different methods of calculating the value, such as mean substitution, cold deck imputation, regression imputation or multiple imputation, where more than one of these methods are used. Mean substitution is one of the most widely used methods and as it can be deduced by its name, it is based in replacing the missing values for a variable with the mean value of all the valid responses in that variable. In cold deck imputation, the missing values are replaced by a constant value that can be derived from external sources or previous research. In regression imputation, regression analysis is used to calculate the missing values based on their relation of other values in the data collected in the survey. For example, in question number 36 the instrument asks for the supporting technologies of downloading music. If someone answered to mp3 players and not to IPOD, the value can be inferred as an IPOD is mp3 player. In this study, the mean substitution was the chosen method that was only applied after deleting cases and variables with so many missing values.

To compare the two populations and to have the same number of samples for each one, an amount of samples of the larger population sample size will be randomly selected to have the number of samples than the smaller population sample size (GAO/PEMD – 10.1.11, 1992).

After this first analysis, a factor analysis was done to all the variables that we consider in the same group of factors that can influence music downloading, in order to analyse them and group them in common factors. Factor analysis can be used to analyze interrelationships among large number of variables collected in the survey and explain them in terms of their common underlying dimensions, also known as factors (Hair et al. 1998, p.14). Thus, information is condensed into a smaller set of variables with a minimum loss of information. Data reduction is achieved by calculating scores for each underlying dimension and using these scores instead of the original variables (Hair et al. 1998, p.91). This analysis is done with both population data: the Swedish and the Spanish. After, some t-tests were done to compare the habits of both populations: number of downloaded songs per month, number of years downloading music, the fair prize of a CD, etc.

Finally, we tried our research model in both populations performing cross-tables, Chi-square test and regressions analysis with both populations. The data used to perform the factor analysis and regression includes only people who answered that they download music, because they are the only ones who provided information about their downloading behaviour.

Once having analyzed each population alone, we began the process of comparing them and compared the difference influence of each factor in the downloading habits of each population. In order to find if there is a relationship between the decision of downloading and the factors in our research model, we use cross-tables and Chi square tests. We tried to find if there is a significance difference in the regression factors between the two populations under

study and explain them. In order to determine whether there is a difference in regressions coefficients between both populations under study, we follow the instructions for all the courses about statistical computing of the University of California, L.A. (Stat Computing UCLA, 060427). This analysis is done testing the null hypothesis; in this case we always suppose that there are no significant differences between coefficients from both populations. We did a regression analysis to test this hypothesis as it is described for the courses in UCLA, where we generated a new variable which is a product of a dummy variable (0 or 1 depending where the case is from: Spain or Sweden) and the independent variable of the regression. For example, if we are comparing the influence of the bandwidth of the Internet connection on the number of downloaded songs in both populations, a regression has to be done with these variables:

- Dependent: *number of downloaded songs*
- Independents: *country* (dummy variable), *bandwidth* and *bandwidth\*country*

The coefficient in the regression of the new variable, created as the product of the independent and the dummy variable, shows the difference of slopes in the regression analysis for both groups. We can check if there is a significance difference between both groups by looking at the significance level of this variable. This information is available in the output data from a regression analysis in SPSS. Thus, we had to repeat this procedure by every factor that we had considered in our model to find out whether there are differences between Spain and Sweden.

### **3.2 Summary of hypotheses and related questions**

In this section is presented a summary of the hypotheses related to music downloading and to the number of downloaded songs as well as the questions from the surveys taken into account in every hypothesis. The summary is presented in two different tables.

In the first table (table 3-2) are shown the hypotheses and related questions taken into account when looking for the factors that have an influence over music downloading.

**Table 3-2 - Hypotheses and related questions in music downloading**

Hypothesis	Description	Questions
<b>H<sub>1d</sub></b>	The gender of a person has no influence on whether a person downloads music from Internet	<b>1</b>
<b>H<sub>1e</sub></b>	The age of a person has no influence on whether a person downloads music from Internet	<b>2</b>
<b>H<sub>1f</sub></b>	The amount of money available has no influence on whether a person downloads music from Internet	<b>8</b>
<b>H<sub>2a</sub></b>	The type of Internet connection has no influence on whether a person downloads music from Internet	<b>15</b>
<b>H<sub>3d</sub></b>	The consideration of the fairness of a CD price has no influence on whether a person downloads music from Internet	<b>9</b>
<b>H<sub>4b</sub></b>	The ethical considerations of downloading music have no influence on whether a person downloads music from Internet	<b>20</b>
<b>H<sub>5b</sub></b>	The level of acceptance of the society about downloading music has no influence on whether a person downloads music from Internet	<b>38</b>
<b>H<sub>5c</sub></b>	The using of file sharing programs by people a person knows has no influence on whether a person downloads music from Internet	<b>38</b>
<b>H<sub>5d</sub></b>	The opinion of someone's relatives about if he/she should use file sharing programs has no influence on whether a person downloads music from internet	<b>38</b>
<b>H<sub>6b</sub></b>	The ease of learning how to use file sharing software has no influence on whether a person downloads music from Internet	<b>38</b>
<b>H<sub>6c</sub></b>	The ease of use file sharing programs has no influence on whether a person downloads music from internet	<b>38</b>
<b>H<sub>9b</sub></b>	The perception of legality of downloading music has no influence on whether a person downloads music from Internet	<b>20</b>
<b>H<sub>9c</sub></b>	The risk of being punished has no influence on whether a person downloads music from Internet.	<b>20</b>

The second table (table 3-3) include the hypotheses and related questions taken into account when looking for the factors with an influence over the number of downloaded songs.

**Table 3-3 - Hypotheses and related questions in number of downloaded songs**

Hypothesis	Description	Questions
<b>H<sub>1a</sub></b>	The gender of a person influences on the number of downloaded songs. Concretely, men download more songs than women	<b>1</b>
<b>H<sub>1b</sub></b>	The age of a person influences on the number of downloaded songs. The older the person, the less number of songs he/she is downloading per month	<b>2</b>
<b>H<sub>1c</sub></b>	The amount of money available for a person influences on the number of downloaded songs. The more the money he/she has available, the less number of songs he/she is downloading per month.	<b>8</b>
<b>H<sub>2b</sub></b>	The speed of the internet connection influences on the number of songs downloaded. The higher the speed, the higher the number of songs downloaded	<b>16</b>
<b>H<sub>3a</sub></b>	Respondents who consider the CD price fair are less likely to download music than the ones that consider the price as unfair	<b>9</b>
<b>H<sub>3b</sub></b>	The higher the fair price considered by respondents (and the closer to the current prices in the shops), the less number of songs they download	<b>11</b>
<b>H<sub>3c</sub></b>	The quality of the offer provided by the different kind of shops influences the number of downloaded songs, reducing the amount of songs downloaded per month	<b>9,12,31,34,35</b>
<b>H<sub>4a</sub></b>	In people who download music, the number of downloaded songs is not affected by their ethical/moral considerations about downloading songs for free	<b>20,22,38</b>
<b>H<sub>5a</sub></b>	Social influences and attitudes have an influence in the number of downloaded songs per month. The more it is accepted and encourage in a person's environment, the more this type of software is used	<b>38</b>
<b>H<sub>6a</sub></b>	Perceived Easy of Use in file sharing programmes for downloading music influence the use of this kind of software. The easier is considered, the more will be used increasing the number of downloaded songs per month	<b>38</b>
<b>H<sub>7</sub></b>	Attitude towards file sharing programmes for downloading music influence the number of songs downloaded per month	<b>38</b>
<b>H<sub>8</sub></b>	Performance Expectancy is affecting the use of file sharing programs and music downloading regarding the number of songs downloaded	<b>23</b>
<b>H<sub>9a</sub></b>	Legal issues affecting file sharing programmes and music downloading influence the number of downloaded song per month	<b>20</b>

## 4 Results

*This section includes the results of our study. First the outcomes of the descriptive analysis are presented including a short comparison between the results in both countries. In the second part of the chapter are presented the results of a more in depth analysis and the comparisons in the results in Spain and Sweden.*

### 4.1 Descriptive and Comparative Data Analysis

#### 4.1.1 Introduction

The aim of our research is to find the differences between Spain and Sweden in music downloading. Our goal is to discover how the variations between these countries are affecting the factors included in the proposed model.

As a first step in the data analysis process we carried a Descriptive and Comparative Data Analysis over the Spanish and Swedish data. The purpose of this first analysis is to characterize the samples used in the study and to find and shortly discuss the first differences between Spain and Sweden in music downloading.

The Descriptive and Comparative Data Analysis was carried checking the answers to selected questions (presented in table 4-1). These questions were chosen taking into account their relevance to get information from the sample as well as to check some important threats in both countries that can help us to answer the proposed research questions.

**Table 4-1 - Selected questions**

Question Number	
1	Gender
2	Age
9.1	The prices of music CDs are fair/correct
16	What types of connection to the Internet do you have or are you using?
20.1	It is illegal to download music
20.2	It is non ethic/moral to download music
20.3	It is a risk of being punished
20.4	It is a risk of being fined

22	Do you download music from the Internet?
23.1	Interest on music
23.2	To replace music purchasing
23.3	To look for new music
23.4	To look for old music
24.	How many songs do you download every month, in average, through the Internet?
32.	How much time do you expend looking for music and downloading music through the Internet every month?
33.	How many years have you been downloading music?

#### 4.1.2 Gender

Gender is included in our model inside the “Individual differences” factor. In different information technology acceptance models as UTAUT, TAM and TPB, gender is considered a moderator (Venkatesh, 2003).

The gender distributions, showed in table 4-2, in the Swedish and Spanish samples are quite different. While in Sweden the distributions is near to 50-50 (50,6% men and 49,4% women) in Spain the distribution is less balanced with 68,1% men and 31,9% women.

A first reason to explain these differences is the data collection process. The data collection was carried in different ways in both countries. While in Sweden the surveys were distributed offline, in Spain an online distribution was done. The current situation of the Internet in Spain as well as its penetration in that country has an impact over the gender distribution in the sample. Some Technology Acceptance Models like TAM or the Theory of Planned Behaviour (TPB) suggest that women access later to new technologies (Venkatesh, 2003).

The technological delay in Spain, where the Internet penetration is far from reaching the Swedish numbers, together with the later access of women to technology could be the reasons for the differences in gender distribution between both countries.

**Table 4-2 - Gender**

	Sweden	Spain
Man	50,6	68,1
Woman	49,4	31,9

#### 4.1.3 Age

Age is considered a moderator in some information technology acceptance models like UTAUT or TPB (Venkatesh, 2003). In our model is included together with gender and some more items inside the “Individual differences” factor. Information about the characteristics of the age of each population is shown in table 4-3.

According to its role as a moderator, it is important to characterize this item as well as the possible differences related to age in the Swedish and Spanish samples.

**Table 4-3 - Age**

	Sweden	Spain
Minimum	13	15
Maximum	81	58
Mean	27,59	24,48
Std Dev	10,44	6,471

The mean age in both samples is quite similar (24,48 in Spain and 27,59 in Sweden). Nevertheless the highest mean age in Sweden is coming together with a higher standard deviation, reflecting that the age differences among the Swedish respondents is bigger than in the Spanish case.

The lowest average age in Spain could be related to the data collection method. The systems used to distribute the survey in this country could be the responsible for the lower mean age in comparison with Sweden. The survey was distributed both by e-mail and publishing it in some web-pages. Snowball sampling was used in the e-mail distribution. In the snowball sampling method the initial subjects that participate in the sample generate additional sampling, a related problem to this method the introduction of bias (Statpac Sampling methods, 060511). Since the subjects in the sample are distributing the survey among their friends and contacts, it is easy to think that some segments of the population are not going to be included in the sample. The segmentation could be related to age or gender as well as to other traits. The second method used to distribute the survey was to publicise it in different web pages, this method is also not free of introducing bias because the possible respondents are limited to the visitors of these web pages. A possible bias introduced by these methods is that the average age of the respondents should fit with the average age of the Internet users. Since in Sweden the survey was distributed offline, the respondents are not just Internet users and the mean age is higher.

To find the most important age groups inside every sample we made a categorization using different age ranges (<19; 20-29; 30-39; 40-49; >50) and the distribution is shown in percentage in the following table:

**Table 4-4 - Age distribution Sweden vs. Spain**

	Sweden	Spain
<19	11,8	11
20-29	65,6	80,2
30-39	13,7	4,9
40-49	2,6	1,1
>50	6,3	2,7

In both countries the most of the respondents are between 20 and 29 years old. We can also find a similar number of respondents in 19 or less years old. Nevertheless, the groups over 30 years are less important in Spain, where more than an 80% of the respondents are between 20 and 29 and less than a 10% are over this age. In Sweden, the 30-39 years old group is more important and so are all the groups over 30 years.

The younger mean age in the Spanish sample could be related to the online distribution of the survey in Spain. Since young people accept new technologies earlier than older (Venkatesh, 2003) the average age of the Internet is expect to be lower than the average age in a country.

The mean age in the Swedish sample is also far from the Swedish average age (40,9 years according to the CIA World Fact Book). The reason to this difference could be found in the big number of students in Lund, main place where the Swedish data collection was carried.

The different data collection methods used in Sweden and Spain could be the explanation for the different age distribution and standard deviation found in both samples.

#### 4.1.4 Fairness of the prices of music CDs

The prices of music CDs have been considered a reason leading to music downloading in previous research (Condry, 2004). A not affordable price or just considering the current prices too high to be fair or correct can lead to download music from the Internet.

This question is trying to measure in which degree the respondents agree with the current price of music CDs. It is also a main question to take into account in the “Business Factor” in our model.

In both countries most of the respondents disagree or strongly disagree with the prices of music CDs (see table 4-5). In Spain 52,7% of respondents “strongly disagree” and 32,1 % “disagree” with the current prices. In Sweden the results also reflect the a high disagreement with the prices of music CDs, a 44,4 % of the respondents “strongly disagree” while 29,1% just “disagree”. The number of respondents undecided on this topic is higher in Sweden (19,4% in Sweden and 9,8% in Spain). Nevertheless the number of people strongly agreeing with the prices is quite similar and low in both countries (3,0% in Sweden and 3,3% in Spain).

The higher disagreement in Spain can be related to a higher perception of a not affordable price. Since the prices of music CDs are quite similar in both countries, the purchasing power in both countries should be taken into account. Previous studies have found the purchasing power as an important factor leading to music downloading (Madden & Lenhart, 2003) .The differences in purchasing power between Sweden and Spain are around 20%. The purchasing power is higher in Sweden (29,880 US dollars) than in Spain (24,750 US dollars) according to the World Bank (2006). This difference seems to be important enough to be reflected in the opinion of respondents about what a fair price for a CD is.

The purchasing power differences between Sweden and Spain can be the explanation to the different consideration about the fairness of the prices of music CDs in both countries.

**Table 4-5 - Prizes of music CDs Sweden vs. Spain**

	Sweden	Spain
Strongly disagree	44,4	52,7
Disagree	29,1	32,1
Undecided	19,4	9,8
Agree	4,1	2,2
Strongly agree	3,0	3,3

#### 4.1.5 *Type of connection to the Internet*

Downloading music would be impossible without the Internet. Previous studies have found that a faster Internet connection is a facilitator to download music concluding that users with a high speed connection at home are more likely to download music (Levin et al., 2004). According to Madden and Lenhart (2003) Internet users with a broadband connection are more likely to download music than the ones using Dial-up connections. Type of connection is an item in our model and it is included in the “Supporting technology” factor; consequently, the differences found in this item could be reflected in the results of our study.

The difference in Internet use and penetration between Sweden and Spain can have an impact over the results in both countries. In one hand to have an Internet connection available at home is a relatively new commodity in Spanish households. Results from OECD surveys show that the Internet penetration is more than twice in Sweden than in Spain (74,5% in Sweden and 38,7% in Spain). An important factor to explain the lack in Internet penetration in Spain is the high prices of broadband connections in that country, according to Forrester (2006) ADSL prices in Spain are 32% higher than the European mean price. As we can check in table 4-6, the technological differences between both countries are also present in the speed of the Internet connections.

**Table 4-6 - Connection to the Internet Sweden vs. Spain**

	Sweden	Spain
N/A	28,5	17,9
≤ 0,25 Mbits/s	4,5	2,2
≤ 0,5Mbit/s	8,8	11,4
≤ 2 Mbit/s	9,9	51,6
≤ 8 Mbit/s	16,7	8,7
≥ 8 Mbit/s	31,6	7,6

The results show us big differences between the connections used in Spain and Sweden. While in Spain the most common connection is 2 Mbit/s in Sweden the most common is more than 8 Mbit/s. While in Spain most than 50% of users are using a 2 Mbit/s connection in Sweden just the 9,9% of users are using that connection type. Moreover, while in Sweden more than a 30% of users have a 8 Mbit/s connection, in Spain just a 7,6% of the users can afford this kind of connection.

The youth of the Internet sector in Spain together with the high prizes for fast speed connections can be the responsible for the differences in the Internet connections between Sweden and Spain.

#### 4.1.6 *Music downloading*

Age, gender, technological background, ethical and moral considerations and the possible risks when downloading music are taken into account in our model. These issues are part of the factors in our model, and the factors are trying to explain what is leading to music downloading. Thus, the different answers in the previous questions should lead to differences in music downloading, and then, in differences in the answer to the current question.

The differences in music downloading are quite important between Spain and Sweden, as it is shown in table 4-7. It seems that possible facilitators like the faster connections in Sweden are not as important as other factors like ethical, legal and the possible risks. The composition of both samples can also be a factor to take into account. Some factors have to be taken into account to explain the different results in Sweden and Spain. First to consider is that the Spanish data collection was carried online, that implies that all the respondents were Internet users, a higher number of Internet users among the respondents should come together with a higher number of P2P programs users .A second subject to consider is the younger average age of Spanish respondents. Young people are the main users of file sharing programs, and that could be reflected on the results.

In the Spanish sample more than 90% of the respondents are downloading music while in the Swedish one only 61,3% of respondents are doing it. The differences are big enough to be important, but we can not forget the previous considered issues.

**Table 4-7 - Music downloading Sweden vs. Spain**

	Sweden	Spain
Yes	61,3	90,8
No	38,7	9,2

The different methods using in data collection together with the younger average age in the Spanish sample can explain the differences in the results in this item.

#### *4.1.7 Purpose / interest on music downloading*

People are downloading music for different reasons. In this section we check the importance given by the respondents to the possible purpose and interests behind music downloading.

The items analyzed on this section are included in the Performance Expectancy factor in our model. This factor take into account all the extrinsic elements and motivations behind music downloading.

Interest in music is one of the selected items. As usual in the study the possible values in the answers are from “strongly disagree” to “strongly agree”. The distributions in both Spain and Sweden are quite similar; around 70% of the respondents in both samples strongly agree with Interest in music like an important purpose on music downloading (70,7% in Spain and 66,2% in Sweden). The 18,8 % of respondents in Sweden and the 15,6% in Spain are agreeing with the importance of “Interest in music”. Just a small percentage of respondents in both countries answered with disagree or strongly disagree to the related question. While around a 10% of respondents in both countries said to be undecided. A T-Test does not show that there are statistical differences in the mean of both populations.

**Table 4-8 - Interest on music**

	Sweden	Spain
Strongly disagree	2,3	2,4
Disagree	2,3	1,2
Undecided	10,4	10,2
Agree	18,8	15,6
Strongly Agree	66,2	70,7

The second item taken into account in this section is “to substitute music purchasing”. The possible related economical factors make this item quite interesting to analyze.

**Table 4-9 - Substitute of music purchasing**

	Sweden	Spain
Strongly disagree	17	31,3
Disagree	14,1	18,1
Undecided	21,9	18,7
Agree	14,1	11,4
Strongly Agree	32,6	20,5

Some differences can be found in the answers from both countries. While in Spain 31,3% of the respondents strongly disagree with this purpose in Sweden just a 17% or respondents choose this option. In the same way we can find differences among the respondents that strongly agree with this purpose. While in Sweden 32,6% of respondents highly agree with it in Spain just 20,5% of them do. The differences in economical and ethical/moral issues between both countries make these results quite surprising. A T-Test does show that there are significant statistical differences in the mean of both populations.

The differences in two more purposes “to find new music” and “to find old music” were also checked. The results in both items are quite similar Sweden and Spain. More than a 75% of respondents in both countries agree or strongly agree with this purpose.

**Table 4-10 - New music and old music Sweden vs. Spain**

	Sweden		Spain	
	New music	Old music	New music	Old music
Strongly disagree	2,4	7,2	2,6	3,4
Disagree	3	4,2	5,7	4,7
Undecided	12,6	6,6	8,8	15,8
Agree	24,6	25,6	24,3	23,3
Strongly Agree	57,3	56	58,7	53

The last checked item was the percentage of downloaded music that is listened by the user. In both countries a high percentage was found. While in Sweden the respondents said to listen a

84,9% of the music they download, in Spain the percentage is 86,1%. A T-Test was done to look for possible statistical differences. No significant statistical differences were found.

In an overview both countries present similarities in the motivations behind music downloading, interest in music as well as finding new and old music are the main interests leading to music downloading in Sweden and Spain. In both countries the respondents say to listen to the most of the music they download. Surprisingly some differences are found in substituting music purchase as a purpose on music downloading. Swedish respondents are more interested in this reason than Spanish ones.

#### 4.1.8 *Number of downloaded songs per month*

Although having slower Internet connections Spanish users are downloading more songs than the Swedish, the Spanish mean value is 68,54 downloaded songs per month while the Swedish one is 50,47. Therefore it is not just a higher percentage of individuals downloading music among Spanish respondents; the respondents downloading music in Spain are downloading more songs than the Swedish ones.

To classify the answers five groups were made taking into account the number of songs downloaded every month (1 to 25, 26 to 50, 51 to 100, 101 to 200 and more than 200).

Even though there are some differences, the distribution of the answers in both countries is quite similar; the number of respondents in every group is decreasing when the number of downloaded songs is increasing. Thus, in both countries the most of the people is downloading between 1 and 25 songs every month (46,1% in Spain and 60% in Sweden), The percentage of people that is downloading between 26 and 50 songs and from 51 to 100 is bigger in Spain and there are more respondents that download from 101 to 200 songs in Sweden. Finally, it is a big difference between respondents downloading more than 200 songs. While in Sweden only 3,2% of the respondents are choosing this answer in Spain more than 7% (7,2%) of the respondents is downloading more than 200 songs every month. A T-Test was done to find statistical differences, no statistical differences were found between the mean of both samples.

**Table 4-11 - Downloaded songs Sweden vs. Spain**

	Sweden	Spain
1 to 25	60,0	46,1
26 to 50	20,0	29,3
51 to 100	11,3	12,6
101 to 200	5,5	4,8
More than 200	3,2	7,2

The results found in this question are contradicting previous studies defending that a faster connection to the Internet is leading users to download more songs (Condry, 2004). In the Sweden - Spain case other factors are more important than the availability of a high speed connection to the Internet.

#### 4.1.9 Experience and dedication

The experience (number of years using file-sharing programs) as well as the time expended every month can be interesting in the way to characterize the samples.

First of all we checked the experience of the users in every country. In Sweden the main value for this item was 4,46 years while in Spain it was 4,89 years. The T-Test revealed no significant statistical differences between these results.

The number of hour dedicated every month was also checked.

**Table 4-12 - Number of hours expend every month**

	Sweden	Spain
Less than 1 hour	35,9	38,5
1 to 5 hours	41,2	34,9
6 to 10 hours	14,4	12,1
More than 10 hours	8,5	14,5

As seen on the table the results are quite similar in both Spain and Sweden. The most of the respondent said to spend less than 5 hours per month in downloading music. The percentages are comparable in the group of respondents that say to expend less than an hour every month (35,9% in Sweden and 38,5% in Spain) and in the group of respondents that expend between 6 and 10 hours (14,4% in Sweden and 12,1% in Spain). Some differences can be found in the group using between 1 and 5 hours per month to download (41,2% in Sweden and 34,9% in Spain) and among the respondents expending more than ten hours every month (8,5% in Sweden and 14,5% in Spain).

The higher experience among the Spanish respondents is a surprise due to the penetration of the Internet in both countries. Since the use of the Internet is more spread in Sweden a higher experience in using file-sharing programs was expected.

#### 4.1.10 Legal issues in music downloading

The different legal situation in Sweden and Spain should be reflected in the answers to this question. However, there is still some confusion in both countries about the legality or illegality of this action and it could have an impact over the results. Some misinformation campaigns were carried in Spain by right management and artists societies like Promusicae or SGAE. In Sweden the high opposition to new copyright laws is reflected in facts like the existence of the Pirate Party.

The considerations about music downloading illegality are included in our model in the “legal issues” factor.

The answers to this question (shown in table 4-13) reflect the different legal situation in both countries. The most of the Spanish respondents are not taking into account that music downloading could be illegal when they are downloading music. Since music downloading is legal in Spain these results are not a surprise. What it is more surprising is to find that more than a 30% of the Swedish respondents consider that the illegality of music downloading is

not and issue to take into account when downloading music. The reason for this result can be related with the ignorance in relation with the new Swedish copyright laws, in use since 1<sup>st</sup> July 2005, as well as with a high disagreement with them.

The rest of the answers are quite spread in the Swedish results, where no more than a 20% in any option. The Spanish results are very different; the most of the respondents disagree or highly disagree with the importance of the legal issues when downloading music. Just a 5,6% answered to be undecided. The disinformation campaigns carried by associations like SGAE are also reflected in the results. A 3,9% of the respondents answer that they highly agree with the influence of “music downloading is illegal”. This percentage is really low, but since music downloading is legal in Spain nobody should be worried about this issue. The misinformation and the confusion in Spain surrounding the new laws affecting file-sharing should be the related to this result.

**Table 4-13 - Illegality of music downloading Sweden vs. Spain**

	Sweden	Spain
Strongly disagree	30,8	77,7
Disagree	16,2	12,3
Undecided	18,3	5,6
Agree	15,2	0,6
Strongly Agree	19,4	3,9

The different legal situation has an impact over the influence of “music downloading is illegal” in Sweden and Spain. The confusion surrounding this subject is also reflected in the results.

#### *4.1.11 Ethical and moral issues in music downloading*

Swedish and Spanish societies are quite different. According to Hofstede’s five dimensions Sweden is a fairly more individualist country than Spain. These differences can be reflected in different ethical and moral considerations. According to other authors (Martinsson, 1991; Lewis, 1996) Swedish people are rather aware about the opinion of the others about themselves. Previous studies have demonstrated that Spanish people is less aware of accomplishing social norms than people from other countries (Alm et al., 1995). The difference between Spanish and Swedish society should lead to different ethical codes. The different morality on these countries should be reflected in the answers to this question.

The question taken into account is “In which degree are you influenced by these factors when downloading music: music downloading is non-ethical/moral”. This item is taken into account in the “Ethical/moral” factor in our model. The possible answers to the question, as usual, were from “strongly disagree” to “strongly agree”.

**Table 4-14 - Ethical/moral issues Sweden vs. Spain**

	Sweden	Spain
Strongly disagree	34,7	68,5
Disagree	18,1	12,7
Undecided	20,4	11,0
Agree	10,4	4,4
Strongly Agree	16,4	3,3

The results between Spain and Sweden are quite different in the ethical/moral subject. The most of the Spanish sample (68,5%) highly disagree with the proposed sentence in the question; reflecting that they don't find or they are not taking into account any ethical/moral issue on downloading music from the Internet. In the Swedish sample just 34,7 % of respondents strongly disagree with "music downloading is non-ethical/moral"

It's also interesting to find that the second most answered value among the Swedish sample is "undecided", considered as a lack of opinion in the subject. Its also a important percentage of people that agree or highly agree with "downloading music from the Internet is not ethical/moral": 10,4% of the sample answered "agree" while a 16,4% answered with "strongly agree".

The second most answered value in Spain is "disagree". More than 12% of the respondent in the sample disagree with "is not ethical or moral to download music from the Internet". 11% of the respondents are undecided about it and just a 4,4% answered with "agree" and a 3,3% "strongly agree".

The different legal situation could be an important factor influencing the answers to this question. Sometimes people associate what is legal to what it's ethical or moral and in this way the illegality of music downloading in Sweden can make people think that downloading music is also unethical or immoral. In the same way, since downloading music from the internet is legal in Spain, people could think that music downloading it's not affected by any kind of ethical or moral issues.

#### *4.1.12 Risk of being punished or fined*

The similarities of these two issues make us discuss about them in the same section. The possibility of being punished or fined is a consequence of the legal situation on music downloading in every country. Risk of being punished and risk of being fined are items included in the "Legal issues" factor in the model.

Since music downloading its illegal in Sweden the risk of being punished or fined should be taken like a real threat when downloading music. The legality of music downloading in Spain should make this issue empty of any value, but the disinformation campaigns carried in this country can make people think that actually exists a risk of being punished or fined when you are downloading music from the Internet. In relation with this topic we should talk about a campaign titled "Ahora la ley actua" ("Now the law is acting"). This campaign was alerting the users about the possibility of being punished or fined for piracy acts. The problem with

the campaign was that was mixing piracy and file-sharing without making any distinction between them, creating confusion among the users.

**Table 4-15 - Considerations about the risks of being punished and fined Sweden vs. Spain**

	Sweden		Spain	
	Punished	Fined	Punished	Fined
Strongly disagree	32,7	28,5	61,7	62,2
Disagree	16,9	19,7	20,0	18,9
Undecided	17,4	18,9	11,1	11,7
Agree	15,3	16,3	5,0	5,6
Strongly Agree	17,6	16,5	2,2	1,7

The different legal situation in both countries seems to be reflected in the different importance that Spanish and Swedish users give to the possibility of being fined or punished when downloading music.

Since in Spain it is legal to download music the most of the users are not worried about these issues when they are downloading music, thus the most of the respondents chose “strongly disagree” or “disagree”. The number of respondents its decreasing when we check how many people is undecided about this issue (around 11% in both questions) and is even lower if we check how many people is agreeing or strongly agreeing. Two considerations should be taken related to the Spanish answers. First, both questions have almost the same distribution, looking at the data we can notice that people use to give the same answer to both questions. Second is that even is not a risk of being punished or fined, a little percentage of people answered with “agree” or “strongly agree”. Actually, more than a 5% of respondents are worried about these risks when they are downloading music. The disinformation campaigns carried in Spain should be the explanation behind these answers.

Checking the Swedish results the differences with the Spanish answers is quite significant. Since downloading music is illegal in Sweden these differences are not a surprise. What it’s a surprise its that even with the new laws (economical fines or imprisonment up to two years are possible for copyright infringement), the most of the respondents don’t seem to be really worried about the possibility of being fined or punished; In both cases, a percentage near 50% is answering “disagree” or “strongly disagree”. Since Swedish people is carrying a reputation of being over-cautious (Martinsson, 1991) this results are even more surprising. Nevertheless in both questions a considerable percentage of people are answering with “agree” or “strongly agree” meaning they are aware of the current laws and they are worried about the possibility their consequences.

## **4.2 Analysis of the research model in both countries**

This part of the study contains the analysis of each factor for every country and its influence on the decision of downloading music and on the number of downloaded songs. In order to find out if a factor influences whether a person downloads, a cross-table between the factor and the answer to the question 22 (“Are you downloading music from the Internet?”) was

used. Then, a Chi-square test was done checking the null hypothesis to discover if there is a relation between these two variables. This analysis is done for each country and the results are compared in order to find differences between them.

The regression analysis was used to find out whether there is a relation between a factor and the number of downloaded songs. However, instead of considering every item of the questionnaire as an input to the regression, a factor analysis was done before. The output of the factor analysis was used as one of the inputs in the regression analysis.

All tables that are not shown in this chapter are available in the Appendix B.

#### 4.2.1 Individual differences

In this section it is analyzed whether individual differences, such as gender, age and money available to a person influence his/her decision to download music and the number of downloading songs. All the hypotheses  $H_1$  were tested.

First, we are going to compare if in both countries the gender influences in the decision of downloading music and this is done with two cross-tables, one for each country. In Spain and Sweden the Chi-square tests show a relation between the gender of a person and the decision of downloading music: men download music more than women. In both countries, the p-value is 0,000; so the null hypothesis can be discarded. The next table shows the percentages of men and women downloading music in both countries:

**Table 4-16. Percentage of people who download music in Spain and Sweden classified by gender**

		Sweden		Spain	
		Man	Woman	Man	Woman
Do you download music?	Yes	73,0	49,5	97,6	75,9
	No	27,0	50,5	2,4	24,1

Testing whether there is a relationship between age and if people download music, was done in the same way in both countries. In order to analyze, people is group by age in 5 different groups: from 10 to 19, 20 to 29, 30 to 39, 40 to 49 and more than 50 years old. Cross-tables were generated and then checked if there was a relationship between both variables. The Chi-square test allows us to discard the null hypothesis in both countries with a significant level of 0,000. Thus, the age if the person influences if people download music in both countries, they are not independent variables. In Sweden, more than a 66% of people who is younger than 30 years old download music while in the older groups (older than 40 years) only the 15,1 % of the people do it. In Spain, most of the people (94,6%) younger than 30 download, while people in older groups only the 14,1% do it.

Money available at the end of month (question 8 in the instrument) can be is also considered as an individual difference. The amount of money is group also in 4 groups: from 0 to 1 999 kr, 2 000 to 3 999 kr, 4 000 to 5 999 kr, and more than 6 000 kr. As the survey was done in two different countries with different currencies, the results in Spain were translated from euros to Swedish crones. The cross-table between money available and downloading music

were generated and Chi-square tests were done to check the null hypotheses. In Spain, it is possible to discard the null hypothesis with a significance level of 0,007. However, the Swedish data does not allow to discard the null hypothesis ( $p$ -value = 0,222). Thus, only in Spain there is a relation between the money available and whether people download music.

Regression test were done to check the hypotheses  $H_{1a}$ ,  $H_{1b}$  and  $H_{1c}$ .  $H_{1a}$  states that men download more number of songs per month than women,  $H_{1b}$  states that the older the person the less number of songs are download per month, and  $H_{1c}$  states the more money available the less number of songs are download per month. These three hypotheses are test in the regression analysis, where the dependent variable was the question 24 (“how many songs do you download per month”) and the independents variables were the age, gender and money of the subjects.

In Sweden, the regression with these three factors has an  $R^2$  of 0,070, so the 7% of variance in the dependent variable (number of songs downloaded per month) is explained by the variance of the independent variables, the three factors included. Only the coefficient of the gender has a significant level lower than 0,05; thus, as the coefficient is positive the hypothesis  $H_{1a}$  is supported and help to explain the number of downloaded songs. The other two hypotheses are not supported by the data from Sweden. The  $p$ -value of the age coefficient is 0,084, so it is close to support also the hypothesis  $H_{1b}$ .

In Spain, the regression with these three factors has an  $R^2$  of 0,043, so the 4,3% of variance in the dependent variable (number of songs downloaded per month) is explained by the variance of the independent variables, the three factors included. In this case, the only factor that helps us to explain the number of songs downloaded per month is the age, as its significance level is 0,035 (lower than 0,050). The coefficient is negative, so only the hypothesis  $H_{1b}$  is supported.

#### 4.2.2 *Supporting technology*

In this section, all the hypotheses  $H_2$  were tested. It is mainly analyzed the influence of the internet connection in the decision of downloading music, and the speed of the Internet connection in the number of songs downloaded.

First, we check the influence of the type of Internet connection (question 15) in the decision of downloading music (hypothesis  $H_{2a}$ ). Different types of connection have different kind of rates, such as charge tariff or flat rate. In Sweden, the cross-table between the type of connection and downloading, and the Chi-square test allow us to discard the null hypothesis  $H_{2a}$  as the  $p$ -value is 0,000. Thus, there variables are not independent and there is a relationship between them. In people who have a local network or a broadband connection, the 67,5% download music from Internet; while people with dial-up connections or RDSI only the 43,5% of them download.

In Spain, the Chi-square test show that there is a relationship between the type of connection and the decision of downloading music because the significance level is 0,01 (lower than 0,05). The 92,8% of people who has a broadband access or a LAN access download music, while only the 80,0% who has a dial-up access do it.

Two regression tests were done to test the hypothesis  $H_{2b}$ , one for each country. This hypothesis claims that the higher the speed, the higher the number of songs downloaded. This

hypothesis is tested in the regression analyses where the number of downloaded songs per month (question 24) is the dependent variable and the question 16 is the independent variable.

In Sweden, the regression with these three factors has an  $R^2$  of 0,059, so the 5,9% of variance in the dependent variable (number of songs downloaded per month) is explained by the variance of the independent variable, the speed of the Internet connection. As the coefficient is positive (3,291) and the significance level is 0,003 (lower than 0,05), the hypothesis  $H_{2b}$  is supported by the data.

In Spain, the regression with these three factors has an  $R^2$  of 0,023, so the 2,3% of variance in the dependent variable (number of songs downloaded per month) is explained by the variance of the independent variable. The coefficient is also positive (the faster the connection, the higher the number of songs downloaded per month), but the significance level is 0,074; thus the hypothesis  $H_{2b}$  is not supported by the data if we consider the limit the 5%.

#### 4.2.3 *Music business model*

In this section, it are analyzed all the  $H_3$  hypotheses, which consider the music business model and its influence in the number of downloaded songs per month and whether someone decides to download music.

As it has been done in the factors before, we are going to check the influence of the fairness of a CD price in the decision of downloading music from Internet. This analysis was done on the data collected from both countries and the hypothesis  $H_{3d}$  was checked. A cross-table (between first item in question 9 and 22) and a Chi-square test were done to check the independence of these two variables. In Sweden and Spain it is possible to discard the null hypothesis as the significance level are 0,000 (Sweden) and 0,003 (Spain). Hence, the variables are not independent and there is a relationship between downloading music and the consideration of CD prices. Among the people who consider that the price is completely unfair, 68,8% of them download music in Sweden and 92,8% do it in Spain. On the other hand, among people who consider that the prize is fair (the ones that agree or strongly disagree according to the Likert scale), the 40,0% download music in Sweden. However, in Spain remains a high percentage (about the 90%) of people who download music. A good reason could be that the number of people that consider the price fair is very low and it influences the results.

Before testing the other  $H_3$  hypotheses which have to be tested with a regression analysis, a factor analysis was done for every country to all variables in the music business model factor that we considered can influence the music downloading. For the factor analysis, we use all the items on question 9 (except the one considering the fairness of the CD price), 12, 31, 34 and 35. The table 4-17 shows the final analysis factor of these variables in Sweden. One of the questions (number 34), was dropped because it was in two components. Components scoring lower than 0,050, are not shown in the table. The factor analysis found two factors: one of them is based on the offer (component 1) and the other in the relationship between music downloading and the money spent in CDs (component 2).

**Table 4-17 - Factor analysis hypothesis H3c for Sweden**

	Component	
	1	2
The availability of music is good (near shops, ...)	,827	
Open hours of the stores are enough	,813	
The quality and variety of the offer is good	,764	
35. If you cannot download music, how do you think is going to change your expenses in CDs?		,508
31. How much money do you think are you going to spend in CDs if you cannot download music?		,723
12. How much money do you spend per month in CDs?		,607

The factors got from the factor analysis were introduced as inputs in the regression analysis, together with the question number 11 (“What do you think is a fair price for a music CD?”) and the first item of the question 9 (“the price of music CDs is fair”). The regression with these four factors has an  $R^2$  of 0,040, so the 4% of variance in the dependent variable (number of songs downloaded per month) is explained by the variance of the independent variables. No one of the coefficients has a significance level lower than 0,050; thus, no one of the hypotheses tested are supported by the data and helping to explain the number of downloaded songs by a person. Just the first factor in the factor analysis got a p-value close to 0,050; it got a 0,094 with a negative coefficient that would support the hypothesis  $H_{3c}$  in the Swedish case.

In Spain, the results of the factor analysis are shown in the table 4-18. There are also two factors and the first one has the same items than in the Swedish analysis. The regression analysis was done in the same way that with the Swedish data. The  $R^2$  of the regression is 0,051 and only the first factor (the one who has the items analysing the quality of the offer) of the factor analysis gets a significance level lower than 0,050. Thus, only the hypothesis  $H_{3c}$  is supported because the coefficient is also negative and helps to explain the variation of the number of downloaded songs.

**Table 4-18 - Factor analysis hypothesis H3c for Spain**

	Component	
	1	2
The availability of music is good (near shops, ...)	,816	
Open hours of the stores are enough	,790	
The quality and variety of the offer is good	,762	
35. If you cannot download music, how do you think is going to change your expenses in CDs?		
12. How much money do you spend per month in CDs?		,752
34. How often do you buy CDs that you have downloaded before?		,685

#### 4.2.4 Ethical and moral issues

In this section is analyzed the influence of ethical and moral issues on music downloading as well as their relationship with the number of downloaded songs by the respondents. All the hypotheses  $H_4$  were tested.

First we are going to find if the ethical and moral issues about downloading music are having an influence on music downloading itself in both countries. This test was done using different cross-tables for every country.

In both cases, Spain and Sweden, the Chi-Square test shows a relationship between ethical and moral considerations and music downloading. The p-value is 0,000 in both Spain and Sweden; so the variables “It is no ethical/moral to download music from the Internet” and “Are you downloading music from the Internet?” are dependent. Null hypothesis for hypothesis  $H_{4b}$  is discarded.

Before testing the  $H_{4a}$  hypothesis “In people who download music, the number of downloaded songs is not affected by their ethical/moral considerations about downloading songs for free” A factor analysis was done on every country using the items in the ethical/moral factor that were considered to have an influence on music downloading. These variables are “It is not ethical/moral to download music”, “To download music from the Internet is as bad as stealing a record from a shop” and “The society has accepted music downloading”.

The factorization show different results in both countries. While in Sweden just one component was found in Spain, we have two components one of them governed by “the society has accepted music downloading” and the other one by the other two items. It’s also remarkable that in the Swedish factor analysis the “society has accepted music downloading” item has a negative value.

The factors got from the factor analysis were introduced as inputs in the regression analysis were the dependent variable was question 24 (“How many songs do you download per month?”)

**Table 4-19 - Factor analysis H4a for Spain**

	Component	
	1	2
Is not ethical/moral to download music from the Internet.	,714	
To download music from the Internet is as bad as stealing a record from a shop	,818	
The society has accepted music downloading		,896

In Spain the regression was done with the factors shown in table 4-19. The regression results show us a  $R^2$  of 0,02 meaning that 2% of variance in the dependent variable is explained by the variance in the independent variables. The coefficients have a significance level over 0,050; so is not relationship between the number of downloaded songs and the ethical and moral considerations about music downloading. Hypothesis  $H_{4a}$  is supported by the data in the Spanish case.

**Table 4-20 - Factor analysis H4a for Sweden**

	Component
	1
Is not ethical/moral to download music from the Internet.	,577
To download music from the Internet is as bad as stealing a record from a shop	,645
The society has accepted music downloading	-,656

In Sweden the regression analysis shows us a  $R^2$  of 0,050; thus 5% of variance in the dependent variable is explained by the variance in the dependent variables. The coefficient has a significance level of 0.368, higher than 0,050 showing no relationship between the number of downloaded songs and the ethical and moral considerations about downloading music. Hypothesis  $H_{4a}$  is supported by the data in the Swedish case.

#### 4.2.5 Social Influence

In this section we analyze the hypotheses  $H_5$ , which check the impact of social influence in the decision of downloading songs and the number of downloading songs per month. Cross-tables and Chi-square analyses were done to test hypotheses  $H_{5b}$  and  $H_{5c}$ . A regression analysis was done to check hypothesis  $H_{5a}$ .

The hypothesis  $H_{5b}$  tests whether there is a relation between the decision of downloading music (question 22) and the consideration if the “society has accepted the use of file sharing programs” (item in question 38).  $H_{5c}$  tests if there is a relation between downloading music and if the people, who someone knows, use file sharing programs (item in question 38). Finally,  $H_{5d}$  tests if there is a relation between download music and what your relatives if you should use file sharing program.

In Sweden, the Chi square test for the hypothesis  $H_{5b}$  has a significance level of 0,000; so the null hypothesis can be discarded and there is a relation between if someone considers that the society has accepted the use of file sharing program and the decision of downloading music. Null hypothesis  $H_{5c}$  can be discarded as the p-value in the Chi square test is 0,001. Thus, there is a relation between these two variables. However, it is not possible to discard null hypothesis  $H_{5d}$  because the significance level is 0,277 (higher than 0,050). Hence, these two variables in the cross table are independent.

In Spain, all the null hypothesis cannot be discarded as the significance levels are higher than 0,050; thus the variables in the cross-tables are independent.  $H_{5b}$  has a significance level of 0,804,  $H_{5c}$  has 0,250, and  $H_{5d}$  has 0,051.

Before testing hypothesis  $H_{5a}$  which has to be tested with a regression analysis, a factor analysis was done for every country to all variables about social influence that they can influence the music downloading. For the factor analysis, we consider some items in question 38. The table 4-17 shows the final analysis factor of these variables in Sweden where two different factors were found.

The regression analysis for the Swedish data with the factors got from the factor analysis has an  $R^2$  of 0,008, so 0,8% of variance in the dependent variable (number of songs downloaded per month) is explained by the variance of the independent variables. No one of the factors has a significance level higher than 0,050; thus, they do not help to explain the number of downloaded songs per month. Hence, the hypothesis  $H_{5a}$  is not supported.

**Table 4-21 - Factor analysis hypothesis H5a for Sweden**

	Component	
	1	2
People who are important for me think I should use file sharing programs	,697	
People who I have relation with use file sharing programs		,781
File sharing programs allow me to be more popular between my friends	,851	
Society has accepted the use of file sharing programs		,789
People who use file sharing programs have more prestige than the others	,789	

The same procedure was done with the Spanish data. Table 4-22 shows the factor analysis which found one component at the end of the process. The item “people who use file sharing programs have more prestige than the others” was deleted in a previous analysis because it appeared in two components. The factor found was introduced as the independent variable on the regression analysis with the number of downloaded songs as the dependent variable (question 24). The regression analysis result shows a  $R^2$  of 0,003, so 0,3% of variance in the dependent variable (number of songs downloaded per month) is explained by the variance of the independent variables. The coefficient has a significance level of 0,495 and as it is higher than 0,050 the hypothesis  $H_{5a}$  is neither supported in the Spanish sample.

Table 4-22 - Factor analysis hypothesis H5a for Spain

	Component
	1
People who are important for me think I should use file sharing programs	,768
People who I have relation with use file sharing programs	,614
File sharing programs allow me to be more popular between my friends	,611
Society has accepted file sharing programs	,661

#### 4.2.6 Effort Expectancy

This section analyses the influence of Effort Expectancy in the decision of downloading music from Internet and the number of songs downloaded per month. The hypothesis  $H_{6a}$ ,  $H_{6b}$  and  $H_{6c}$  were tested. The first one is tested with a regression analysis and the last two with a cross-table and a Chi square test.

The hypothesis  $H_{6b}$  tests whether there is a relation between the decision of downloading music (question 22) and the difficulty of learning how to use file sharing programs (item in question 38).  $H_{6c}$  tests if there is a relation between downloading music and the ease of use file sharing programs (items in question 38).

The analysis began generating the cross-tables for each country to test the null hypotheses  $H_{6b}$  and  $H_{6c}$ . In Sweden, the Chi-square test for the hypothesis  $H_{6b}$  has a significance level of 0,000; so the null hypothesis can be discarded and there is a relation between the difficulty of learning how to use file sharing programs and the decision of downloading music. The 87,4% of people who consider that it is easy to learn how to use file sharing programs download music. On the other hand, only the 18,5% of people who consider it is difficult to learn how to use this kind of programs, download music.

The Chi-square test for hypothesis  $H_{6c}$  has a significance level of 0,000 (lower than 0,050). Thus, it is possible to discard the null hypothesis and consider that there is a relationship between the consideration of ease of use of a file sharing program and the decision of downloading music. 88,2% of people who find easy to use file sharing programs download music; while only 39,2% do it if they consider them difficult to use.

In Spain, hypothesis were impossible to discard as the significance value of the two hypotheses were 0,320( $H_{6b}$ ) and 0,745( $H_{6c}$ ). Thus, both variables in both analyses are independent.

Before testing hypothesis  $H_{6a}$  which has to be tested with a regression analysis, a factor analysis was done for every country on all the variables about perceived easy of use of file

sharing programs. For the factor analysis, we consider 3 items in question 38. For the Swedish data, the table 4-23 shows these items. Only one component was found in the factor analysis.

In Sweden, the regression has an  $R^2$  of 0,060, so 6% of variance in the dependent variable (number of songs downloaded per month) is explained by the variance of the independent variable (the output from the regression analysis). The coefficient has a significant level of 0,002 (lower than 0,050); thus, as the coefficient is positive the hypothesis  $H_{6a}$  is supported and help to explain the number of songs downloaded.

**Table 4-23 - Factor analysis hypothesis H6a for Sweden**

	Component
	1
It is easy to learn how to use file sharing programs	,944
It is easy to become skilful in using file sharing programs	,929
It is easy to use file sharing programs	,892

Table 4-24 shows the factor analysis for the data collected in Spain. Only one component was found, and it was introduced as the input in the regression analysis with the dependent variable set to “the number of songs downloaded per month”. The regression has an  $R^2$  of 0,003, so 0,3% of variance in the dependent variable (number of songs downloaded per month) is explained by the variance of the independent variable. The coefficient of the factor has a significance level higher than 0,050 (0,528); thus, they do not help to explain the number of downloading songs per month. Hence, the hypothesis  $H_{6a}$  is not supported.

**Table 4-24 - Factor análisis hipótesis H6a for Spain**

	Component
	1
It is easy to learn how to use file sharing programs	,874
It is easy to become skilful in using file sharing programs	,778
It is easy to use file sharing programs	,877

#### 4.2.7 Attitude

In this section it is analyzed if the attitude factor has an influence on music downloading as well as on the number of downloaded songs. The hypothesis  $H_7$  was tested.

Before testing the  $H_7$  hypothesis a factor analysis was done on every country using the items in the attitude factor that were considered to have an influence on the number of downloaded songs. The items are “These programs are useful to download music”, “They make possible to

find music faster”, “Using these programs increase my access to music”, “To use file-share programs is a good idea”, “These programs make music more interesting”, “To download music with these programs is funny”, “I feel worried when I’m using file-share programs” and “These programs are repugnant”.

On the Spanish factorization one of the items “I’m worried when I’m using file sharing programs” was dropped because it was present in two components. One item was dropped for the same reason on the Swedish factorization “These programs make music more interesting”. On the Spanish case the item “These programs are repugnant” has a value under 0,050, being not important in none of both components. The same behaviour was found with the item “Downloading music with these programs is funny” on the Swedish factorization.

**Table 4-25 - Factor analysis H7 for Spain**

	Component	
	1	2
These programs are useful to download music	,693	
They make possible to find music faster	,725	
Using these programs make music more interesting.	,716	
To use file-sharing programs is a good idea.	,721	
To download music with these programs is funny		,737
These programs are repugnant		
These programs make music more interesting		,720

In the Spanish data the regression analysis was done with the items shown in table 4-25. The results show us a  $R^2$  of 0,002 meaning that 0,2 % of variance in the dependent variable is explained by the variance in the independent variables. The coefficients have values of 0,692 and 0,738, both higher than 0,050; so is not relationship between the number of downloaded songs and the attitude factor. Hypothesis H<sub>7</sub> is not supported by the data in the Spanish case.

In the Swedish case the regression was done with the items in table 4-26. The regression resulted in a  $R^2$  value of 0,03 meaning that 3% of variance in the dependent variable is due to the variance in the independent variables. The two coefficients have values over 0,050, showing no relationship between the inputs and the dependent variable. Hypothesis H<sub>7</sub> is not supported by the data in the Swedish case.

**Table 4-26 - Factor analysis H7 for Sweden**

	Component	
	1	2
These programs are useful to download music	,883	
They make possible to find music faster	,891	
Using these programs increase my access to music.	,850	
To use file-sharing programs is a good idea.	,680	
Downloading music with these programs is funny.		
I'm worried when ilm using file-share programs		,841
These programs are repugnant		,734

#### 4.2.8 Performance Expectancy

In this section it is analyzed if the attitude factor has an influence on music downloading as well as on the number of downloaded songs. The hypothesis H8 was tested in this section.

Before the regression analysis was done, a factor analysis was carried out with the data collected in both countries. Items considered important on the number of downloaded songs were taken into account. These items are: “Interest on music”, “To substitute music purchasing”, “To search for new music”, “To search for old music”, “To search for music for other people”, “Like a hobby”, “To collect music” and “Others”.

Some items were dropped in both factorizations due to be in more than one component. On the Spanish factorization “Like a hobby” and “Others” items were dropped. In the Swedish case the dropped items were “To search for new music” and “To search for old music”.

Tables 4-27 and 4-28 show the final Spanish and Swedish factorizations.

**Table 4-27 - Factor analysis H8 for Spain**

	Component	
	1	2
Interested on music	,714	
to substitute music purchasing		,808
To search for new music	,747	
To search for old music	,715	
To search for music for other people		,520
To collect music		

On the Spanish factorization two components were obtained. After the regression was done we obtained a R<sup>2</sup> value of 0,071; so the 7,1 of variance in the dependent variable can be explained by the variance in the independent variables. Component number 1 in the factorization formed by the items “Interested on music”, “to search for new music” and “to search for old music” has a coefficient with a significance level of 0,002 showing a relationship between the items in the component and the number of downloaded songs. Hypothesis H<sub>8</sub> is supported by the data in the Spanish case.

**Table 4-28 - Factor analysis H8 for Sweden**

	Component	
	1	2
Interested on music		,674
to substitute music purchasing		-,520
To search for music for other people	,640	
Like a hobby	,644	
To collect music	,799	
Other	,573	

In the Swedish case we found an R<sup>2</sup> value of 0,036 that means that the 3,6% of variance in the dependent variable is due to the variance in the independent variables. The components have coefficients of 0,098 and 0,973 showing no relationship between the Performance Expectancy factor and the number of downloaded songs. Hypothesis H<sub>8</sub> is not supported by the data in the Swedish case.

#### 4.2.9 *Legal issues*

In this section it is analyzed whether legal issues in both countries are leading users to download music and having an influence on the number of downloaded songs. All the hypothesis H<sub>9</sub> were tested

In a first step we check if in both countries legal issues are having an influence on music downloading. This test is done using two cross-tables, one for each country.

In Spain the Chi-Square test shows us that is no relationship between the considerations about the illegality of downloading music and downloading music itself. The p-value is over 0,050, a value that doesn't allow us to discard the null hypothesis  $H_{9b}$ .

In Sweden the p-value is 0,000, thus we can discard the null hypothesis.

In a second test we check if there is an influence of the risk of being punished on music downloading in Spain and Sweden. The Chi-square test shows an existing relationship between the risk of being punished and music downloading in both countries. The p-values on the Spanish and Swedish tests were 0,018 and 0,001; both under 0,050 allowing us to discard the null hypothesis  $H_{9c}$  in both countries.

Before testing the other  $H_9$  hypotheses, which have to be tested in a regression analysis, a factor analysis was done on the items from the legal issues factor that we considered can have an influence on music downloading. In the factor analysis we take into account the next items in question 20: "Music downloading is illegal", "There is a risk to be punished", "There is a risk to be fined", "There is a risk to lose the connection to the Internet" and "It's illegal to share music". One of the items "It's illegal to share music" was dropped on the Spanish factorization due to it was in two components.

The factors got from the factor analysis were introduced as inputs in the regression analysis where the dependent variable was question 24 ("How many songs do you download per month?")

**Table 4-29 - Factor analysis H9b for Spain**

	Component
	1
It is illegal to download music	,629
There is a risk to be punished	,936
There is a risk to be fined	,942
There is a risk to lose the connection to the Internet	,752

In Spain the regression with the selected factors in table 4-29 has an  $R^2$  of 0,078, so 7,8% of variance in the dependent variable ("number of songs downloaded per month") is explained by the variance in the independent variables. The coefficient has a significance level of 0,01 meaning that the tested hypothesis  $H_{9a}$  is supported by the data allowing to explain the number of songs downloaded per month with the selected factors.

**Table 4-30 - Factor analysis H9b for Sweden**

	Component
	1
It is illegal to download music	,788
There is a risk to be punished	,920
There is a risk to be fined	,920
There is a risk to lose the connection to the Internet	,874
There is illegal to share music	,807

In Sweden the selected factors were the ones showed in table 4-30. The regression carried out with these factors using as dependent variable (“number of songs downloaded per month”) has an R<sup>2</sup> of 0,003, so 3% of variance in the dependent variable can be explained by the variance in the independent variables. The coefficient has a significance level higher than 0,050; thus the tested hypothesis H<sub>9a</sub> is not supported by the data in the Swedish case.

### 4.3 Summary tables about the hypotheses

The next table shows the null hypothesis results about the factors that influence if someone downloads music:

		SWEDEN	SPAIN
<b>H<sub>1d</sub></b>	The gender of a person has no influence on whether a person downloads music from Internet	<b>Discard</b>	<b>Discard</b>
<b>H<sub>1e</sub></b>	The age of a person has no influence on whether a person downloads music from Internet	<b>Discard</b>	<b>Discard</b>
<b>H<sub>1f</sub></b>	The amount of money available has no influence on whether a person downloads music from Internet	<b>Not possible</b>	<b>Discard</b>
<b>H<sub>2a</sub></b>	The type of Internet connection has no influence on whether a person downloads music from Internet	<b>Discard</b>	<b>Discard</b>
<b>H<sub>3d</sub></b>	The consideration of the fairness of a CD price has no influence on whether a person downloads music from Internet	<b>Discard</b>	<b>Discard</b>
<b>H<sub>4b</sub></b>	The ethical considerations of downloading music have no influence whether a person downloads music from Internet	<b>Discard</b>	<b>Discard</b>
<b>H<sub>5b</sub></b>	The level of acceptance of the society about downloading music has no influence on whether a person downloads music from Internet	<b>Discard</b>	<b>Not possible</b>
<b>H<sub>5c</sub></b>	The using of file sharing programs by people a person knows has no influence on whether a person downloads music from Internet	<b>Discard</b>	<b>Not possible</b>
<b>H<sub>5d</sub></b>	The opinion of someone's relatives about if he/she should use file sharing programs has no influence on whether a person downloads music from internet	<b>Not possible</b>	<b>Not possible</b>
<b>H<sub>6b</sub></b>	The ease of learning how to use file sharing softwares has no influence on whether a person downloads music from Internet	<b>Discard</b>	<b>Not possible</b>
<b>H<sub>6c</sub></b>	The ease of use file sharing programs has no influence on whether a person downloads music from internet	<b>Discard</b>	<b>Not possible</b>
<b>H<sub>9b</sub></b>	The perception of legality of downloading music has no influence on whether a person downloads music from Internet	<b>Discard</b>	<b>Not possible</b>
<b>H<sub>9c</sub></b>	The risk of being punished has no influence whether a person downloads music from Internet.	<b>Discard</b>	<b>Discard</b>

Next table shows the hypothesis results about the influence of some factors in the number of songs downloaded

		SWEDEN	SPAIN
<b>H<sub>1a</sub></b>	The gender of a person influences on the number of downloaded songs. Concretely, men download more songs than women	<b>Supported</b>	<b>Not supported</b>
<b>H<sub>1b</sub></b>	The age of a person influences on the number of downloaded songs. The older the person, the less number of songs he/she is downloading per month	<b>Not supported</b>	<b>Supported</b>
<b>H<sub>1c</sub></b>	The amount of money available for a person influences on the number of downloaded songs. The more the money he/she has available, the less number of songs he/she is downloading per month.	<b>Not supported</b>	<b>Not supported</b>
<b>H<sub>2b</sub></b>	The speed of the internet connection influences on the number of songs downloaded. The higher the speed, the higher the number of songs downloaded	<b>Supported</b>	<b>Not supported</b>
<b>H<sub>3a</sub></b>	Respondents who consider the CD price fair are less likely to download music than the ones that consider the price as unfair	<b>Not supported</b>	<b>Not supported</b>
<b>H<sub>3b</sub></b>	The higher the fair price considered by respondents (and the closer to the current prices in the shops), the less number of songs they download	<b>Not supported</b>	<b>Not supported</b>
<b>H<sub>3c</sub></b>	The quality of the offer provided by the different kind of shops influences on the number of downloaded songs, reducing the amount of songs downloaded per month	<b>Not supported</b>	<b>Supported</b>
<b>H<sub>4a</sub></b>	In people who download music, the number of downloaded songs is not affected by their ethical/moral considerations about downloading songs for free	<b>Supported</b>	<b>Supported</b>
<b>H<sub>5a</sub></b>	Social influences and attitudes have an influence on the number of downloaded songs per month. The more it is accepted and encourage in a person's environment, the more this type of software is used	<b>Not supported</b>	<b>Not supported</b>
<b>H<sub>6a</sub></b>	Perceived Easy of Use in file sharing programmes for downloading music influences on the use of this kind of software. The easier is considered, the more will be used increasing the number of downloaded songs per month	<b>Supported</b>	<b>Not supported</b>
<b>H<sub>7</sub></b>	Attitude towards file sharing programmes for downloading music influences on the number of songs downloaded per month	<b>Not supported</b>	<b>Not supported</b>
<b>H<sub>8</sub></b>	Performance Expectancy is affecting the use of file sharing programs and music downloading regarding the number of songs downloaded	<b>Not supported</b>	<b>Supported</b>
<b>H<sub>9a</sub></b>	Legal issues affecting file sharing programmes and music downloading influence on the number of downloaded song per month	<b>Not supported</b>	<b>Supported</b>

## 5 Discussion

*In this chapter, the results from our empirical research are discussed. Each factor of our research model is analyzed through the empirical findings and the theory, trying to find an explanation of each result.*

### 5.1 Individual differences

Individual differences are one of the main issues studied in the literature about technology acceptance. The age and the gender of a person have been considered in extensions of the TAM (Amoroso & Guo, 2006), and in the UTAUT model as a moderators of the factors which influence the intention of use and the use of a technology.

Our data show that age and gender has an influence on the decision of downloading music in both countries. The percentage of younger people who download is higher than older people. Also, more men download music than women do. The importance of the gender was supported by Gefen & Straub (1997), which states that women and men differ in their perceptions of IT systems. These results are also supported by Madden and Lenhart (2003), where more men download music than women.

The age also influences if someone downloads music as younger people are more predisposed to adapt new technologies rather than older ones. This happens in Sweden and Spain were our data shows that younger people are more likely to download than older ones. The study carried by Madden and Lenhart (2003) also shows this relation; hence our study confirms their results.

However, there is a difference in personal incomes and its influence on he/she downloads music from Internet. While in Sweden there is no relation and these variables are independent (in all groups the percentage of people download is around 60%), in Spain people with less money are more likely to download music. We think that these differences between countries can be explained as Spanish people with lower incomes consider downloading music a way to have access to the culture and some of them, when they get better incomes, stop downloading music. Although this process does not happen in Sweden, the percentage of people who download is always higher in Spain.

Regarding the intensity of the use of the technology (downloading music), the amount of money has no influence on the number of downloaded songs per month in Sweden or Spain. Once a person has decided to download music, the amount of money he/she has, does not influence the number of downloaded songs. Thus, there must be more than economic reasons when someone decides to download an album, not only the amount of money he/she is going to save.

Nevertheless, there is a difference between both countries in the age factor. In Spain the older the person, the less number of songs he/she is downloading per month. While in Sweden there

is no linear relation between these two variables. According to the OECD, the Internet penetration in Sweden is near 75% (74,5%) while in Spain is only about 39 % (38,7%). Thus, technologies associated to Internet can have a wider penetration to more groups of the population in Sweden, not only the younger ones. This data can help to explain why age has no influence in the number of downloaded songs per month among Swedish population.

The gender of the person influences the number of downloaded songs in Sweden, where men download more songs per month than women. In UTAUT (Venkatesh et al, 2003), the gender has a key moderating influence in the acceptance and use of a technology. However, in Spain there is no relation between the gender and the number of downloaded songs per month. The way the Spanish data was collected and the fact that only 26,3% of the people who download were women, can introduce a limitation in the effect of this factor in the regression analysis.

In conclusion, individual factors have an important influence whether someone decides to download in both countries. Age and gender in both countries, and the amount of money available in Spain influence on this decision. In the intensity of the technology use, there are differences between Sweden and Spain in age and gender, but no in the amount of money which has no influence at all.

## 5.2 Supporting technology

In this factor, two hypotheses were used to compare Sweden and Spain:  $H_{2a}$  and  $H_{2b}$ . The first one is used to determine if there is a relation between the Internet connections that someone use and if that person downloads music. The last one tests the relation in both countries between the speed of the connection and the number of downloaded songs per month.

Hypothesis  $H_{2a}$  can be discarded in both countries through a Chi square test; thus, there is a relation between the types of connection someone has and if that person downloads music. There are no differences in this case between Sweden and Spain, but the results go in the same way that the results found by (Condry, 2004) where the difference in type connection influence in the decision of downloading. The type of connection can determine also the speed and the type of rate you get:

- Flat: a fix amount of money every month independent the time you use a connexion
- By time: every minute is charged
- Charge tariff: the use is charged for the data send or received, not for the time

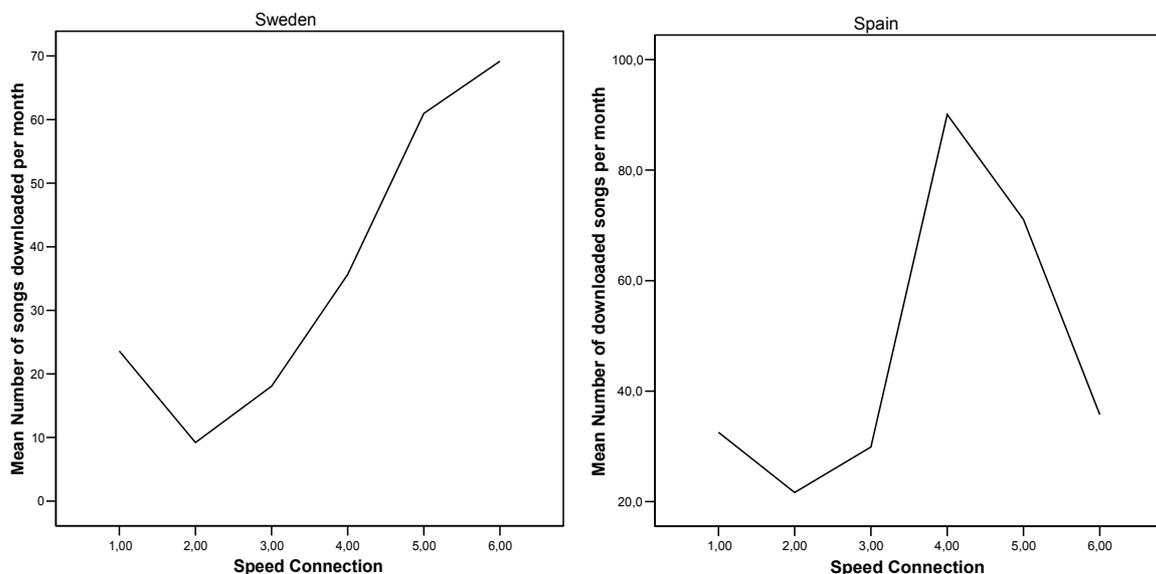
Some of these types of rates make you impossible to download music in a cheaper way than go to the shop and buy the CD. The kind of connection also let you have faster Internet connections, which makes possible to download songs faster. Thus, the connection is a supporting technology that facilitates downloading music, acting as a facilitating condition in the UTAUT model developed by Venkatesh et al (2003).

Regarding the question if a faster connection makes people download more music, we have found two different conclusions in Sweden and Spain. In Sweden, the higher the Internet connection, the higher the number of songs downloaded as the significant level of the regression coefficient is lower than 0,05. This result is normal, as the better the connection,

the easier to get some songs as you get them faster. However, in Spain there is not a linear relation found in the regression analysis.

In order to find a reason why there is not a linear relation between connection speed and the number of downloaded songs in Spain, it is possible to check the descriptive statistics of this variable in Spain. It shows that 51,6% of the people who participate in the survey has a connection below 2Mbit/s. Thus, there is a big group of people who has the same connection with regard to the speed. People who have a better connection only represents around 15%. This is due to most people can only have this speed access in Spain. There are several reasons to this problem: the prices are higher than in Sweden and the technology to get faster speeds is not available everywhere in the country (OECD, 2006). Hence, this factor is not good in Spain due to most of participants have the same type of connection as they cannot afford a better one because the purchasing power of Spanish person is also lower than the Swedish (World Bank, 2006).

Next figures show the mean of number of downloaded songs depending on the connection in both countries. As it is possible to observe, Swedish number of downloaded songs per month follows more a linear relation to the speed of the connection that a person has. Spanish data does not show this lineal relation between these two variables.



In conclusion, the type of Internet connection influences whether someone download music in both countries. However, there is only in Sweden a linear relation between the connection speed and the number of songs downloaded per month, because a faster connection makes easy to download music as it takes less time to get one song. In Spain, it is not possible for the reasons explained before.

### 5.3 Music business model

In this section we consider the overall offer provided by the music stores. One of the main issues of the offer is CD price and its influence on the decision of buying or downloading music. First, we want to measure the influence of the consideration of the fairness of the CD price on whether someone downloads in Sweden and Spain. In order to answer this question,

we used the hypothesis H3a and the results are that there is a relation between both variables. In both countries, people who consider that music prices are unfair, download more music than people who do it. In Sweden, 67,1% of the people that consider that CD prices are unfair (answers “Strongly disagree” and “Disagree” in question 9) download music, while in Spain this percentage raises till 93,6%. Condry (2004) also studied this factor as one of the most important reasons for music piracy as people consider that prices are too expensive for only a couple of good songs in a CD.

Moreover, 73,2% of Swedish people and the 84,8% of Spaniards consider that prices are unfair. The differences could be explained by the bigger purchasing power of Swedish people (World Bank, 2006). The purchasing power of the people can also influence in the decision of downloading songs as it is shown in Madden & Lenhart (2003), where the percentage of people with lower level incomes is higher than people with higher level incomes. The price is what an individual is willing to pay for a given quantity of a good. This amount of money is also influenced (increased) by person's income (Holm, 2003). If the price a person wants to pay for an item gets closer to its real price, the considered fairness is higher. As the purchasing power is lower in Spain, the results showing that the price is considered more unfair than in Sweden is normal. The piracy level of one country is related to the purchasing power of the population, as it is stated in Whinston et al. (2004). All these reasons can explain why people in both countries download music from Internet, and why there is a higher percentage of Spanish people who consider that prices are unfair.

Hypotheses H<sub>3a</sub>, H<sub>3b</sub> and H<sub>3c</sub> measures the influence of the fairness of CD price, the price that is considered to be fair and the quality of the offer on the number of downloaded songs per month. In Sweden and Spain, the H<sub>3a</sub> and H<sub>3b</sub> are not supported, so there is no relation between the number of downloaded songs per months and fair price considered by a person and his/her consideration of the prices of the CDs. However, hypothesis H<sub>3c</sub> is supported in Spain but not in Sweden. That means that the quality of the offer has an influence in the number of downloaded songs in Spain: the better the offer is perceived, the less the number of songs downloaded per month. Although hypothesis H<sub>3c</sub> is not supported in Sweden, the significant level is not so high (0,094) and if we had fixed the limit to 10%, the data would support the hypothesis. In this case, there would be no difference between both countries.

A person will be more likely to download music rather than buy it because it might be difficult to find in the shop what he or she is looking for, the opening hours are not enough to have time to go to the shop, or the shop could be so far away that takes so much time to reach it.

Most of the studies published about music downloading try to measure the effect of this behaviour in the music sales. Some of them, such as Peitz & Waelbroeck (2004), Zentner, (2003) and Blackburn (2004), claim that overall sales have been reduced due to music downloading from Internet. Others suggest that the effect is statistically indistinguishable from zero (Oberholzer and Strumpf, 2004). Our data shows that, in both countries, about half of the participants in the survey would spend the same amount of money in purchasing CDs if they could not download music (Sweden: 47,0%; Spain: 50,9%). Furthermore, only 33,7% in Sweden and 22,8% in Spain answer that they would spend more money. Hence, only a small part of the participants spends less money for downloading and the effect on the overall sales is not clear. More studies have to be done in this area, analyzing what kind of music is downloaded, whether people download music that would buy or download music that would never buy.

In conclusion, what people consider about the fairness of CD prices influences on the decision of downloading music in Sweden and Spain. Prices are considered more unfair in Spain, and it can be explained by the lower purchasing power that Spanish people have. Any good reason could not be found to explain why the number of songs downloaded per month is affected only in Spain by the quality of the offer perceived. Only small differences in the significant level and the limit fixed to decide whether a hypothesis is supported can explain it.

#### **5.4 Ethical/moral issues**

Some differences were found between Sweden and Spain in the influence of ethical and moral factors on music downloading.

In the first descriptive analysis, we found some differences between the answers to the question “In which degree are you influenced by these factors when downloading music: Is not ethical/moral to download music?”. While in the Spanish sample, 68,5% strongly disagree with being influenced by this factor, among the Swedish respondents just 34,5% of the respondents choose this answer. Considering the respondents that answer they disagree with this influence, 80% of Spanish respondents disagree or strongly disagree with the influence of this factor; while just 53% of Swedish respondents do. Spain is a more collectivist society, and these societies are characterized to show great concern about the welfare of members in their own in-group and relative indifference to the needs of the outsiders (Schwarz and Bilsky, 1990). In our case, we can consider P2P users as the in-group and the music industry as the outsiders. The distancing between the music industry and the users, due to the industry’s policy of comparing music downloading and piracy, and chasing P2P users have to be taken into account when considering the outsider status of record companies and right management societies. The ethical and moral considerations are influenced by the collectivist status of Spain.

On a deeper analysis, we look for the influence of the ethical considerations about music downloading and music downloading itself. In Spain, ethical and moral considerations are influencing music downloading. The number of people downloading music is lower among the respondents saying to be influenced by the ethical factors. In the same way, the percentage of respondents downloading music is higher among the ones that said no to be influenced by ethical and moral issues. The same situation was found in the Swedish sample. These results are in agreed with results found in previous studies on music downloading as Madden & Lenhart (2003). The factor is strong enough to be not influenced by the differences between countries.

The last analysis that was done was trying to find the relationship between the ethical and moral considerations and the number of downloaded songs. No linear relation was found in both countries between these variables

In conclusion, ethical and moral issues influence in a similar way in both countries. They have a great influence on the decision of downloading music, but once a person has decided whether to download music, it has no influence on the number of downloaded songs. Hence, ethical issues have an influence in the decision of downloading but not in the intensity of this behavior.

## 5.5 Social influence

In this section we discuss the findings in the influence of the social factor on music downloading. Some differences were found in the impact of this factor in both countries.

Before testing the influence of the Social factor over the number of downloaded songs some previous tests were done. In these tests, we were looking for the impact of some items related to social considerations over music downloading.

The first test was trying to find the relationship between the acceptance of music downloading by the Society and music downloading itself. The results show that there is no impact of the acceptance on music downloading in Spain. However, there is a relationship between these variables in Sweden. In the Spanish sample, people download music independently if they agree with “the society has accepted music downloading”. In the Swedish sample, there are more people downloading music among the respondents agreeing with the acceptance of music downloading by society. Moreover, there are less people downloading music among the ones thinking that music downloading is not accepted by society. Spain is a more collectivist society where collectives like family or close friends are more important than the whole society (Schwartz & Bilky, 1990).

In a second analysis, we try to find the relationships between the use of file sharing programs by people close to the respondent (friends, family, workmates) and music downloading itself. The results show us that while there is no relationship between the variables in the Spanish sample, Swedish respondents are influenced by whether their close people download music from the Internet. According to some authors, Swedish people give a strong importance to what the others do and this is a big influence to their own behaviour. To become average is a good thing in Sweden, just doing like the others and not try to stand out of the group (Lewis, 1996). This behaviour can explain the impact of the others over the individual when deciding whether to download music or not.

The next item to check its influence over music downloading was the opinion about someone's relatives about if someone should use file sharing. In both countries, it was found no influence of this item over music downloading. As a tested item inside the subjective norm, taken into account in TRA, TPB, SCT (Venkatsh et al., 2003), it was supposed to have a relative importance on the model. Since the item has been just tested in information technology acceptance models and just once in the music downloading case, it is possible to think that the music downloading case is not an standard information acceptance case.

The last test was carried to find the influence of the social factor over the number of downloaded songs. The social factor has shown not to have any influence over the number of downloaded songs in both countries.

The social factor has been found a important factor in previous studies about information technology acceptance (Condry, 2004; Thomson et al.,1991, Moore and Benbasat, 1991) as well as a factor taken into account in previous studies about music downloading (Nettleingham et al.,2004). The factor is also considered in Information Technology acceptance models like UTAUT and the models in which this one is based as TAM, TRA, TPB/DTPB. The results in our study found that this factor and its importance in the model can be influenced by the differences between countries.

## 5.6 Effort Expectancy

There are big differences in the influence of Effort Expectancy on the downloading behaviour between people from Spain and Sweden. While in Sweden Effort Expectancy influences the number of download songs per month (intensity of use) and the decision of downloading songs; in Spain, this factor has no influence in the use or the intensity. The only issue that both countries share is that file sharing programs are easy to learn and easy to use. It should not be a difference in both countries as both of them are developed economic countries where most of the population is used to use technologies like mobile phones or Internet (though there are still differences between Internet penetration between Sweden and Spain) (OECD, 2006).

In Sweden, as UTAUT, TAM, MPCU and IDT state, the Perceived Easy of Use has an influence in the decision of downloading music from Internet and the number of songs downloaded per month. The easier is considered, the more should be used increasing the number of downloaded songs. These theories support that if a new system is very difficult to learn or use for a group of people, they will not use it or use it the less possible times.

In the decision of downloading in Swedish people, these theories explain why only 33,8% who consider that file sharing programs are difficult to learn, download music. On the other hand, between people who consider that it is easy to learn, 85,5% download music. We get similar percentage if we analyse the question if these programs are easy to use. 32,9 % of people who consider that it is difficult download music; while 85,2% of people who consider that it is easy, download music.

As it has been stated before, there is no relation between the easy of use file sharing programs and the decision to download and the number of songs downloaded per month in Spain. It may be another reason making people, who consider it is not easy, download music. Probably, economic factors might be one of the reasons as this study shows that they influence in the decision of downloading in Spain, but not in Sweden. Anyway, this interrelation is only a hypothesis and many other factors can be involved in this situation.

It could be discussed that an explanation for this behaviour in Spain can be the way that data was collected. It was done via Internet and one might argue that the distribution influences on the technological experience of the sample. However, even people who consider these programs are not easy to learn and use, download music and there is no linear relation with the number of downloaded songs per month.

## 5.7 Attitude

Attitude is referred to the intrinsic considerations about music downloading. It has been found the strongest predictor for intentional behaviour in some cases like TRA, TPB/DTPB and MM. However in other cases (C-TAM-TPB, MPCU and SCT) it is not significant.

In our research we found no relationship between the attitude factor and the number of downloaded songs in the Swedish and in the Spanish cases. According to the results obtained in the analysis the intrinsic motivations are not important in music downloading. Finding the same results in both countries, no comparison between them can be done and we can consider this factor free of the influence of the differences between countries.

Attitude was a dropped factor in one of the reference models in our research, UTAUT. The attitude factor is quite interesting since is considered an important factor in some Information Technology Acceptance models but it is not considered at all in some others. According to Venkatesh et al. (2003), attitude was found to be significant in models that are not including specific cognitions related to performance and Effort Expectancy. Since Performance Expectancy and Effort Expectancy are included in our model it can justify the lack of importance of Attitude in the model.

No influence of attitude over the model was found. Thus, no comparison between countries was possible.

## **5.8 Performance Expectancy**

Performance expectancy is defined as the degree to which an individual believes that using the system will help him/her to attain gains in job performance (Venkatesh et al., 2003). It has been found as the strongest predictor over intentional behaviour in several studies about Information Technology Acceptance models.

The factor seems to strong enough to be not influenced by the differences between countries. However the results in Spain and Sweden are different.

In an early analysis, some traits related to music downloading were analyzed in this analysis. Similar motivations were found related to music downloading in the Spanish and the Swedish respondents. 70,7% of the Spanish respondents strongly agree with the interest in music like and important reason to download music. In Sweden, this factor is similar and also quite high: 66,2%. Another motivation taken into account to download music was the replace of music purchasing. It is a small surprise to find that, among the Swedish respondents, there is a high percentage of people that strongly agree with music downloading as a substitute of music purchasing. Concretely in Spain, just 31,9% of the respondents agree or strongly agree with this item, while in Sweden the percentage is over 46%. If we check the interest of the respondents in looking for new and old music, we find similar numbers in both countries. In both countries, around 80% of respondents agree or highly agree with this reason to use music downloading programs.

Despite the similar answers to the reason for downloading music, the performance expectancy factor has a different influence over the number of downloaded songs in both countries. While in Spain we can find a relationship between this factor and the number of downloaded songs, in Sweden, there is not any relationship between them. The higher the interest in music, the higher the number of songs downloaded.

In the Spanish case, after carrying the factorization and the regression analysis we found that the number of downloaded songs is correlated with a component including the next items "Interested on music", "to search for new music" and "to search for old music". Looking at

these items we can find that all of them are related to an interest over music. The Spanish respondents, that are more interested on music, are also the ones who are downloading more songs. Since the aim of using music downloading programs is to download music, these results are no surprising.

The results in Sweden are quite different. In the Swedish sample, no relationship was found between performance expectancy and the number of downloaded songs. Among the Swedish respondents, the interest on music is not a strong predictor of the number of downloaded songs. Respondents strongly agreed with interest in music as an important reason to download music are not always in the group of the ones downloading more songs; actually a lot of them are in the group of people downloading fewer songs.

The explanation to the differences in this factor is not clear. The first analysis carried over the items included in the factor show a high importance of “Interest on music”, “to find new music” and “to find old music” among both samples. In both countries, most of the respondents agree or strongly agree with the importance of these factors but, this is not reflected in the same way over the number of downloaded songs in the two countries.

The differences between Spain and Sweden have an impact over the performance expectancy factor giving us opposite results. While in Spain the performance expectancy is a factor to take into account, in Sweden no relationship between this factor and music downloading was found.

## **5.9 Legal Issues**

The legal differences between both countries are reflected in the different results on the legal factor.

Looking at the descriptive analysis, it is possible to find huge differences between Spain and Sweden. Since in Spain music downloading is not illegal, the most of the respondents are not worried about the possibility of doing something illegal, about the risk of being punished or fined for downloading music. The results are quite different in Sweden, where the new copyright laws seem to be effective and makes people to be more aware about the illegality and possible risks taken when downloading music. Nevertheless, some aspects are surprising in this first approximation and are important enough to be emphasized.

First of them, despite that music downloading is illegal in Sweden, an important percentage of the respondents (47%) are not influenced by the illegality of music downloading. This result can be due to misinformation or to disagreement with the current Swedish laws. A second important aspect to emphasize is that a small percentage of the Spanish respondents are worried about the illegality of downloading music. Near 5% of the respondents said to be influenced by the illegality of music downloading, looking at the results about risk considerations this percentage is even higher, around 7%. Since in Spain it is totally illegal to download music, whether is not a commercial intention behind this action, these results must be due to other factors. A good explanation for them could be disinformation campaigns carried out by associations like SGAE or Promusicae. Music downloading is compared with piracy in these campaigns, creating a confusing situation around music downloading and confusing the users about this subject.

In further analysis we tried to find the influence of the risk of being punished over music downloading, as well as the influence of illegality of downloading music over the number of downloaded songs and over music downloading itself. The legal differences between both countries are reflected again in the results.

Surprisingly, the risk of being punished influences on music downloading in both countries. According to the analysis of hypothesis  $H_{9c}$ , it is possible to discard the null hypothesis in both countries. However, in a deeper analysis over the data, there are differences between the Spanish and the Swedish results. Since in Spain it is not a real risk of being punished and, most of the Spanish respondents said to download music, it seems to be a correlation between the risk of being punished and music downloading; when the reality is that everybody was answering both questions in the same way. Swedish cross-table shows a clear relationship between the risks of being punished and music downloading itself. In the Swedish sample, the percentage of people that is not downloading music increases among the people worried about the risks of being punished.

The influence of the perception of illegality has a different impact over music downloading in both countries. While in Sweden there is a clear relationship between both variables; in Spain the variables are independent. According to previous literature, laws are working to fight music downloading (IFPI, 2006; Holm, 2003). The existence or not of laws against music downloading is reflected in these results. The illegality of music downloading in Sweden is an important issue to take into account when downloading music. A high percentage of people worried about the illegality of music downloading is not downloading music (41,5% of respondents who responded “agree” and 53,3% of respondents who responded “strongly agree”). Since in Spain is not illegal to download music, the perception of illegality is not a factor taken into account for people when downloading music, 60% of respondents who respond “strongly agree” and 100% of respondents who responded “agree” are downloading music.

Talking about the influence of illegality of music downloading over the number of downloaded songs, the results are quite different. According to Madden and Lenhart most of the people that is downloading music doesn't care about the illegality of this action, the Swedish results seem to agree with that. No relationship could be found between the variables in the Swedish sample. Among the Swedish people, the respondents worried about the illegality of music downloading and are downloading music are downloading the same amount of songs that the respondents downloading music and not worried by legal issues. The situation is different in Spain where the few respondents worried about legal issues are downloading less songs than the respondents not worried about these matters.

## 6 Conclusions

*In this final chapter are presented the findings of our study. The research questions are reviewed and answered. Considerations for future research are also discussed.*

### 6.1 Findings

In analyzing the items taken in consideration in the factors included in the model, we can find more similarities than differences between the Spanish and the Swedish sample. However, the differences between both countries are reflected in some results. Looking at the number of downloaded songs per month, Spanish users download more songs than Swedish ones but the difference is not significant. The time spent in music downloading is similar in both countries and also the experience (number of years) in using file-sharing programs. In both countries the respondents listen to the most of the music they download.

Checking the purposes and interests behind music downloading, Spanish and Swedish respondents give similar importance to “interest in music” as well as to find new and old music. Some differences are found when checking “to substitute music purchasing” as a reason leading to music downloading: Swedish respondents give more importance to this purpose than Spanish ones.

Sweden and Spain are two different countries with different culture, social and economic characteristics. In Sweden the decision of downloading music is influenced by the next factors: *individual differences* (age and gender), *supporting technology* (type of Internet connection), *music business model* (fairness of CD-price), *ethical issues*, *social influence*, *effort expectancy* in file sharing programs and *legal issues*. In Spain, the factors which influence the decision of downloading music are: *individual differences* (gender, age and the money available), *supporting technology* (type of Internet connection) and *ethical issues*. A relationship between *legal issues* (risk of being punished) and music downloading was also found.

The factors that influence the number of downloaded songs in Sweden are *individual differences* (gender), *supporting technology* (speed of Internet connection), and *ease of use*. In Spain, the factors are: *individual differences* (age), *music business model* (quality of the offer), *performance expectancy*, and *legal issues*.

As we have explained in the discussion, these differences in the factors are mainly based in the economical differences between both countries, different characteristics of the societies, different levels of technology development, and as expected the different laws affecting file sharing in Sweden and Spain.

Regarding the third and last research question of the study, we wanted to measure the influence of the different legal frame on downloading music in Sweden and Spain. In a moment where the music industry puts pressure on the political institutions to change the laws protecting copyright, it is good to know the influence of the legal factor in two countries like Sweden and Spain, which have different laws affecting music downloading: in Sweden is illegal and in Spain is legal. Our data shows that the new Swedish copyright laws have a great influence in the decision of downloading music, but once a person has decided whether to download music, it has no influence in the number of downloaded songs. Hence, law has an influence in the decision of downloading but not in the intensity of this behavior.

In Spain, where downloading music is legal, considerations about the legality have no influence on the decision of download music. However, there is a relation between the number of songs that a person downloads every month and his/her considerations about the legality of downloading music. As it is explained before, this relation can be due to the disinformation campaigns carried out by associations connected to the music industry, and it has no sense because downloading is legal.

More studies should be done in different countries with different copyright laws in order to the relationships between the legality of file sharing and the downloading habits (if they download and the intensity of the action). In Sweden the new laws influence the decision of downloading, future law changes in other countries can act in the same way but need to be studied.

## **6.2 Future Research**

As it is written few lines above, a study about the influence of the law on music downloading habits in different countries can be useful to find out whether similar laws have the same effect in different countries. Also, comparative studies measuring the downloading habits before and after the introduction of a new law can help to decide if a change in the legal frame is related with a reduction in music downloading.

As we have stated in some parts of our discussion, the way that the survey was distributed in Spain might have produced some distortions in some results. Thus, it would be interesting to check if the results in this study are the same if the survey is distributed in the same way it was done in Sweden.

Qualitative studies could provide a more detailed view in some studied topics, allowing the further investigation in the differences between Spain and Sweden.

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## **Appendix A: Instrument in Swedish and Spanish**

### **Swedish**

#### **Undersökning av värdet av nerladdning av musik från Internet**

Vi är studenter vid institutionen för Informatik vid Ekonomihögskolan, Lunds Universitet, som undersöker värdet av nedladdning av musik från Internet: Därför behöver vi din hjälp att besvara denna enkät. Nedan följer ett antal frågor som behandlar dina vanor och ditt beteende på Internet samt din syn på nerladdning. Enkäten behandlas konfidentiellt.

Din medverkan är mycket värdefull för oss!

Med vänliga Hälsningar

#### **Förtydliganden av begrepp:**

När vi talar om CD-skivor i enkäten så avser vi färdiginspelade skivor man köper i butik, d v s producerade av ett skivbolag.

Med begreppet fildelningsprogram avser vi program som är skapade i syfte att dela musik, film eller liknande filer med andra personer.

---

1. Är du man   
eller kvinna
2. Vilket år föddes du \_\_\_\_\_
3. Civilstånd
- Ogift   
Gift/sambo   
Frånskild/separerad   
Änka/änkling
4. Vilken är din nuvarande boendeform?
- Villa/radhus   
Lägenhet   
Korridor   
Annat boende
5. Hur många är ni i hushållet? \_\_\_\_\_ pers.
6. Har du barn?  
Ja  Nej  Om ja, hur gammalt är det yngsta barnet \_\_\_\_\_
7. Vilken är din huvudsakliga sysselsättning?
- Anställd   
Studera, grundskola eller gymnasium   
Studera, högskola/universitet   
Studera, annan utbildning   
Pensionerad   
Föräldraledig/tjänstledig   
Sjukskriven   
Arbetslös   
Annat
8. Hur mycket pengar har du att disponera varje månad efter räkningar (räkna även alternativa inkomster och gåvor)?
- Summa \_\_\_\_\_
9. Värdera följande påståenden kring traditionell musikförsäljning  
1= Instämmer inte alls, 5= Instämmer helt,
- |   | 1                        | 2                        | 3                        | 4                        | 5                        |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Prissättningen på CD-skivor är rimlig   | <input type="checkbox"/> |
| Tillgängligheten till musik är god (t ex butikens närhet, antal återförsäljare) | <input type="checkbox"/> |
| Återförsäljares öppettider är tillräckliga                                      | <input type="checkbox"/> |
| Utbudet hos återförsäljare är tillfredsställande                                | <input type="checkbox"/> |
10. Var köper du huvudsakligen CD-skivor?
- Musikaffär   
Internetbutik   
Dagligvarubutik   
Bensinmack   
Postorder   
Köper aldrig CD-skivor   
Annat

11. Vad är ett rimligt pris för en CD-skiva enligt din uppfattning? \_\_\_\_\_sek

12. Hur mycket pengar spenderar du totalt på musik (CD-skivor) per månad?

0 – 299 kr      300 – 599 kr      600 – 899 kr      Mer än 900 kr  
                                                                 

13. Hur mycket pengar spenderar du på att köpa låtar över Internet?

0 – 299 kr      300 – 599 kr      600 – 899 kr      Mer än 900 kr  
                                                                 

14. Hur långt har du till närmaste återförsäljare av CD-skivor?

0 - 1 km      1,1 - 2 km      2,1 - 5 km      5,1 – 10 km      Mer än 10 km  
                                                                                       

15. Vilken eller vilka typer av Internetanslutning har du tillgång till (välj ett eller flera alternativ)?

Uppringd anslutning (modem eller ISDN)        
 Bredband        
 3G-mobiltelefon        
 Lokalt nätverk (t ex LUNET)        
 Har ej tillgång till Internet        
 Vet ej        
 Annat     

16. Vilken hastighet har din huvudsakliga Internetanslutning

Upp till 0,25 Mbit/s        
 Upp till 0,5 Mbit/s        
 Upp till 2 Mbit/s        
 Upp till 8 Mbit/s        
 Mer än 8 Mbit/s        
 Vet ej     

17. Hur ofta och var använder du Internet?

	Dagligen	Minst en gång / vecka	Minst en gång / månad	Mindre än en gång / månad	Inte alls
Hemma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jobbet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skolan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Biblioteket	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Internetcafé	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hos vänner/släkt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Annat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**18. Jag använder Internet för att:**

	Dagligen	Minst en gång/vecka	Minst en gång/månad	Mindre än en gång/månad	Inte alls
Skicka/ta emot e-post	<input type="checkbox"/>				
Använda Internettelefoni eller videokonferens	<input type="checkbox"/>				
Annan kommunikation (t.ex. chat)	<input type="checkbox"/>				
Lyssna eller se på radio eller TV	<input type="checkbox"/>				
Spela spel	<input type="checkbox"/>				
Ladda ner musik mot betalning	<input type="checkbox"/>				
Ladda ner musik illegalt	<input type="checkbox"/>				
Läsa eller ladda ner nättidningar	<input type="checkbox"/>				
Göra bankärenden (Internetbank)	<input type="checkbox"/>				
Söka info om varor och tjänster	<input type="checkbox"/>				
Köpa/beställa varor eller tjänster	<input type="checkbox"/>				
Sälja varor och tjänster	<input type="checkbox"/>				
Hämta information från myndigheters hemsidor	<input type="checkbox"/>				
Skicka formulär eller blanketter till myndigheter, t ex deklARATIONER	<input type="checkbox"/>				
Följa distansutbildning	<input type="checkbox"/>				
Följa traditionell utbildning (via e-post, diskussionsgrupper o dyl)	<input type="checkbox"/>				

**19. Värdera följande påståenden kring din anonymitet på Internet**

1= Instämmer inte alls, 5= Instämmer helt,

	1	2	3	4	5
Jag känner mig trygg på Internet	<input type="checkbox"/>				
Jag har lättare för att bryta mot lagen	<input type="checkbox"/>				
Jag har möjligheten att utge mig för att vara någon annan	<input type="checkbox"/>				
Jag kan uttrycka mig fritt utan oro för påföljder	<input type="checkbox"/>				
Jag vågar diskutera känsliga saker	<input type="checkbox"/>				

**20. I hur stor grad påverkar följande faktorer din musiknedladdning?**

1=ingen påverkan alls, 5=stor påverkan,

	5	4	3	2	1
Det är olagligt att ladda ner musik	<input type="checkbox"/>				
Det är oetiskt/omoraliskt att ladda ner musik	<input type="checkbox"/>				
Det är risk för fängelsestraff	<input type="checkbox"/>				
Det är risk för böter	<input type="checkbox"/>				
Det är risk för avstängd Internetförbindelse	<input type="checkbox"/>				
Det är risk för virus/spionprogram	<input type="checkbox"/>				
Det är olagligt att sprida musik	<input type="checkbox"/>				

**21. Det är lika allvarligt att ladda ner upphovsrättsskyddad musik via Internet som att stjäla en CD- skiva från en butik. (markera din överensstämmelse)**

1= Instämmer inte alls, 5= Instämmer helt,

1                      2                      3                      4                      5

**22. Laddar du ner musik från Internet?**Ja  Nej 

**Om du svarat nej på fråga 22 ber vi dig att besvara fråga 38 och tackar dig för din medverkan!**

**Nu följer ett antal frågor kring nedladdning av musik****23. Vilket eller vilka syften har du med att ladda ner musik?**

1=instämmer inte alls, 5=instämmer helt

	1	2	3	4	5
Intresserad av musik	<input type="checkbox"/>				
Ersätta köp av musik	<input type="checkbox"/>				
Söka efter ny musik	<input type="checkbox"/>				
Söka efter gammal musik	<input type="checkbox"/>				
Söka musik åt andra	<input type="checkbox"/>				
Gör det som ett tidsfördriv	<input type="checkbox"/>				
Samlar musik	<input type="checkbox"/>				
Annat	<input type="checkbox"/>				

24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)? \_\_\_\_\_

25. Hur ofta misslyckas du med nedladdning, ange i procent (avbrott, etc)? \_\_\_\_\_

26. Hur ofta laddar du ner fel låt, ange i procent? \_\_\_\_\_

27. Hur många låtar har du totalt laddat ner (uppskattningsvis)? Ange antal \_\_\_\_\_

28. Hur mycket musik har du totalt laddat ner (uppskattningsvis)? Ange i Gigabyte \_\_\_\_\_

29. Hur stor andel av musiken du laddat ner avser/planerar du att lyssna på, ange i procent: \_\_\_\_\_

30. Hur stor andel av musiken har du lyssnat på, ange i procent: \_\_\_\_\_

31. Hur mycket pengar tror du att du skulle spendera på CD- skivor per månad om du inte kunde ladda ner musik från Internet?

0 – 299 kr      300 – 599 kr      600 – 899 kr      Mer än 900 kr

32. Hur mycket tid lägger du ner på att söka och ladda ner musik per månad?

Mindre än 1 timme      1-5 timmar      6-10 timmar      Mer än 10 timmar      Laddar inte hem alls

33. Hur många år har du laddat ner musik? \_\_\_\_\_

34. Hur ofta köper du CD-skivor som du redan har laddat ner?

- Alltid   
 Ofta   
 Ibland   
 Sällan   
 Aldrig

35. Om du inte kunde ladda ner/kopiera musik, tror du detta skulle öka dina inköp av CD-skivor?

- Jag skulle troligen köpt lika mycket   
 Jag skulle troligen köpt färre CD-skivor   
 Jag skulle troligen köpt fler CD-skivor

36. Vilka stödteknologier är viktiga för dig för nedladdning av musik?

1=ej viktigt, 5=mycket viktigt

	1	2	3	4	5
Internet	<input type="checkbox"/>				
Bredband	<input type="checkbox"/>				
Fildelningsprogram	<input type="checkbox"/>				
CD-brännare	<input type="checkbox"/>				
MP3 spelare	<input type="checkbox"/>				
IPOD	<input type="checkbox"/>				
Inspelningsbara CD-skivor (CD-R, CD-RW etc)	<input type="checkbox"/>				
Standardiserade filformat (t ex AVI, MP3)	<input type="checkbox"/>				
Storlek hårddisk	<input type="checkbox"/>				
Annat	<input type="checkbox"/>				

37. Vilket eller vilka fildelningsprogram använder du och hur ofta

	Dagligen	Minst en gång / vecka	Minst en gång / månad	Mindre än en gång / månad	Inte alls
Kazaa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Limewire	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Soulseek	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Audiogalaxy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Morpheus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Direct Connect	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gnutella	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Annat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

38. Vad anser du om fildelningsprogram?

1=instämmer inte alls,

5=instämmer helt

	1	2	3	4	5
Fildelningsprogram är användbara för att ladda ner musik	<input type="checkbox"/>				
Fildelningsprogram gör det möjligt att få tag på musik snabbare	<input type="checkbox"/>				
Användning av fildelningsprogram ökar min åtkomst av musik	<input type="checkbox"/>				

Att lära sig fildelningsprogram är lätt	<input type="checkbox"/>				
Det är lätt att bli duktig på att använda fildelningsprogram	<input type="checkbox"/>				
Användning av fildelningsprogram är en bra idé	<input type="checkbox"/>				
Fildelningsprogram gör musik mer intressant	<input type="checkbox"/>				
Nerladdning av musik med fildelningsprogram är roligt	<input type="checkbox"/>				
Jag känner mig ängslig/orolig för att använda fildelningsprogram.	<input type="checkbox"/>				
Jag är tveksam till fildelningsprogram av rädsla att göra fel	<input type="checkbox"/>				
Fildelningsprogram är avskräckande	<input type="checkbox"/>				
Människor som är viktiga för mig anser att jag borde använda fildelningsprogram	<input type="checkbox"/>				
Människor som jag umgås med (släkt/vänner) använder fildelningsprogram	<input type="checkbox"/>				
Fildelningsprogram ökar mina möjligheter att bli populär bland kompisar	<input type="checkbox"/>				
Samhället har accepterat fildelningsprogram	<input type="checkbox"/>				
Människor som använder fildelningsprogram har mer prestige än de som inte laddar ner	<input type="checkbox"/>				
Att använda sig av fildelningsprogram är lätt	<input type="checkbox"/>				

### 39. Några avslutande frågor kring nerladdning av musik

	I mycket hög omfattning	I ganska hög omfattning	I viss omfattning	I låg omfattning	Inte alls
Säljer du musik som du har laddat ner	<input type="checkbox"/>				
Köper du musik som är nerladdad	<input type="checkbox"/>				
Ger du bort nerladdad musik till andra	<input type="checkbox"/>				
Får du något i gengäld/tillbaka	<input type="checkbox"/>				
Får du musik av andra	<input type="checkbox"/>				
Ger du bort något i gengäld/tillbaka	<input type="checkbox"/>				

### 40. Om du får gåvor i utbyte mot musik, vad får du vanligen?

\_\_\_\_\_

\_\_\_\_\_

### 41. Om du ger gåvor i utbyte mot musik, vad ger du vanligen?

\_\_\_\_\_

\_\_\_\_\_

Stort tack för din medverkan!

## Spanish

### **Investigación sobre la descarga de música en España**

Somos dos estudiantes de la Universidad de Lund (Suecia) y de la UPC que estamos investigando las descargas de música en España para compararlas con las que se realizan en Suecia. Es por eso que necesitamos su ayuda contestando este cuestionario. Sus respuestas serán tratadas de manera confidencial.

Por favor, complete el cuestionario, guarde los cambios y envíe el documento a [enquestadownload@yahoo.es](mailto:enquestadownload@yahoo.es)

Su participación es muy valiosa para nosotros. ¡Gracias por su colaboración!

*POR FAVOR, EN LAS PREGUNTAS QUE MUESTRAN MAS DE UNA POSIBLE OPCION DE RESPUESTA, MARQUE TAN SOLO UNA CASILLA.*



- Gasolineras
- Compra por correo
- Nunca compro CDs
- Otros

11. ¿Cuál considera que sería un precio justo/correcto para un CD de música? €

12. ¿Cuánto dinero gasta en música en la compra de CDs cada mes?
- 0 – 29 €  30 – 59 €  60 – 89 €  Más de 90 €

13. ¿Cuánto dinero gasta mensualmente en la compra de música a través de Internet?
- 0 – 29 €  30 – 59 €  60 – 89 €  Más de 90 €

14. ¿A qué distancia se encuentra la tienda de música más cercana?
- 0 - 1 km  1,1 - 2 km  2,1 - 5 km  5,1 – 10 km  Más de 10 km

15. ¿A qué tipo de conexiones a Internet tiene acceso (Elija una o varias alternativas)?

- Conexión por marcación (MODEM o RDSI)
- Banda Ancha (ADSL / Cable)
- Telefonía móvil de tercera generación – UMTS
- LAN/ Red local
- No tengo acceso a Internet
- Ni idea
- Otro tipo

16. ¿Que tipo de conexión a Internet tiene o usa?

- Hasta 0,25 Mbit/s
- Hasta 0,5 Mbit/s
- Hasta 2 Mbit/s
- Hasta 8 Mbit/s
- Más de 8 Mbit/s
- Ni sabe / no contesta

17. ¿Con qué frecuencia y dónde usa Internet?

	Diariamente	Al menos una vez por semana	Al menos una vez por mes	Menos de una vez al mes	Nunca
En casa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
En el trabajo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
En la escuela/ universidad	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Biblioteca	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Internetcafé / Cybercafé	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
En casa de amigos/familiares	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Otros	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**18. Usa Internet para:**

	Diaria mente	Al menos una vez a la semana	Al menos una al mes	Menos de una al mes	Nunc a
Enviar/Recibir correos electrónicos	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Usar telefonía por Internet y videoconferencias	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Otros tipos de comunicación (Chat/Messenger/skype)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Escuchar la radio o ver televisión	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jugar a juegos	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Descargar música	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Descargar música de pago	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prensa online	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Banca a través de Internet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Buscar información de productos y/o servicios	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comprar productos y/o servicios	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vender productos y/o servicios	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Consultar información en las paginas Web de organismos oficiales	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Enviar formularios o declaraciones a organismos oficiales	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Seguir una formación a distancia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Seguir formación tradicional (vía correo, grupos de discusión, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**19. Valore las siguientes afirmaciones sobre el anonimato que le proporciona Internet**

1= completamente en desacuerdo, 5= Completamente de acuerdo

	1	2	3	4	5
Me siento seguro	<input type="checkbox"/>				
Me facilita no cumplir las normas y/o leyes	<input type="checkbox"/>				
Considero posible que alguien se pueda hacer pasar por mi	<input type="checkbox"/>				
Puedo expresarme libremente sin pensar en las consecuencias	<input type="checkbox"/>				
Me atrevo a discutir temas sensibles	<input type="checkbox"/>				

**20. ¿En que grado le influyen los siguientes factores al descargar música?**

1=poca o nula influencia, 5=gran influencia,

	1	2	3	4	5
Descargar música es ilegal	<input type="checkbox"/>				
No es ético/moral descargar música	<input type="checkbox"/>				
Existe riesgo de ser penado	<input type="checkbox"/>				
Existe riesgo de ser multado	<input type="checkbox"/>				
Hay riesgo de quedarse sin conexión a Internet	<input type="checkbox"/>				
Hay riesgo de virus o programas espía	<input type="checkbox"/>				
Es ilegal compartir música	<input type="checkbox"/>				

21. Es igual de malo robar un disco en una tienda que bajar música de Internet sin pagar por ella?

1= completamente en desacuerdo, 5= Completamente de acuerdo,

1       2       3       4       5

22. Descarga música de Internet?

Sí       No

**Si ha contestado NO a la pregunta 22, pase a la pregunta 38, muchas gracias por su colaboración.**

## Preguntas sobre descarga de música

23. ¿Qué intereses/propósitos tiene al descargar música?

1 = completamente en desacuerdo, 5 = completamente de acuerdo

	1	2	3	4	5
Interés en la música	<input type="checkbox"/>				
Sustituir la compra de música	<input type="checkbox"/>				
Buscar música nueva	<input type="checkbox"/>				
Buscar música antigua	<input type="checkbox"/>				
Buscar música para otros	<input type="checkbox"/>				
Como pasatiempo	<input type="checkbox"/>				
Coleccionar música	<input type="checkbox"/>				
Otros	<input type="checkbox"/>				

24. ¿Cuántas canciones descarga mensualmente en promedio a través de Internet?

25. ¿Con que frecuencia no encuentra lo que quiere descargar?(en porcentaje)

26. ¿Con qué frecuencia descarga una canción incorrecta? (en porcentaje)

27. ¿Cuántas canciones ha descargado en total? Indique cantidad

28. ¿Qué cantidad de música ha descargado? Indique en Giga bites

29. ¿Qué porcentaje de la música que ha descargado tiene pensado escuchar?

30. ¿Que porcentaje de la música que ha descargado ha escuchado?

31. ¿Cuánto dinero cree que se gastaría en CDs de música al mes si no pudiese descargar música a través de Internet?

0 – 29 €      30 – 59 €      60 – 89 €      Más de 90 €

**32. ¿Cuánto tiempo invierte buscando y descargando música a través de Internet mensualmente?**

Menos de 1 hora       1-5 horas       6-10 horas       Más de 10 horas       No descargo música

**33. ¿Cuántos años lleva descargando música? \_ \_**

**34. ¿Con que frecuencia compra un CD que se ha descargado de Internet?**

Siempre   
A menudo   
A veces   
Casi nunca   
Nunca

**35. Si no pudiese descargar/copiar música, ¿cree que compraría más CDs?**

Creo que probablemente compraría la misma cantidad   
Creo que probablemente compraría menos CDs   
Creo que probablemente compraría más CDs

**36. ¿Qué tecnologías considera importantes para la descarga de música?**

1 =Sin importancia, 5 = muy importante

	1	2	3	4	5
Internet	<input type="checkbox"/>				
Acceso a Internet de banda ancha	<input type="checkbox"/>				
Programas de compartición de archivos	<input type="checkbox"/>				
Grabador de CDS	<input type="checkbox"/>				
Reproductor de MP3	<input type="checkbox"/>				
IPOD	<input type="checkbox"/>				
CDS grabables/ regrabables (CD-R, CD-RW, etc.)	<input type="checkbox"/>				
La estandarización de formatos (AVI, MP3, etc.)	<input type="checkbox"/>				
La capacidad del disco duro	<input type="checkbox"/>				
Otros	<input type="checkbox"/>				

**37. ¿Qué programas de compartición de archivos usa y con que frecuencia?**

	Diariamente	Al menos una vez a la semana	Al menos una vez al mes	Menos de una vez al mes	Nunca
Kazaa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Limewire	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Soulseek	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BitTorrent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Morpheus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Direct Connect	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gnutella	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
emule/eDonkey	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Otros	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 38. ¿Qué opina de los programas de compartición de archivos?

1 = completamente en desacuerdo, 5 = completamente de acuerdo

	1	2	3	4	5
Estos programas son útiles para descargar música	<input type="checkbox"/>				
Hacen posible conseguir música más rápidamente	<input type="checkbox"/>				
El uso de estos programas aumenta mi acceso a la música	<input type="checkbox"/>				
Los programas de compartición de archivos son fáciles de aprender a utilizar	<input type="checkbox"/>				
Es fácil ser experto en el uso de estos programas	<input type="checkbox"/>				
El uso de programas de compartición de archivos es una gran idea	<input type="checkbox"/>				
Estos programas hacen la música más interesante	<input type="checkbox"/>				
Descargar música a través de estos programas es divertido	<input type="checkbox"/>				
Me siento preocupado al usar los programas de compartición de archivos	<input type="checkbox"/>				
Tengo dudas de estar haciendo algo malo al usar estos programas	<input type="checkbox"/>				
Estos programas son repulsivos	<input type="checkbox"/>				
Las personas que considero importantes creen que debería descargarme música	<input type="checkbox"/>				
Las personas con las que me relaciono descargan música	<input type="checkbox"/>				
Estos programas aumentan la posibilidad de ser mas popular entre mis amigos	<input type="checkbox"/>				
La sociedad ha aceptado la descarga de música de Internet.	<input type="checkbox"/>				
Las personas que usan estos programas tienen mas prestigio que las que no los usan	<input type="checkbox"/>				
Usar los programas de compartición de archivos es fácil	<input type="checkbox"/>				

## 39. Algunas preguntas importantes sobre descargar música

	Siempre o casi siempre	A menudo	A veces	Casi nunca	Nunca
¿Vende la música que descarga?	<input type="checkbox"/>				
¿Compra música que ha sido descargada?	<input type="checkbox"/>				
¿Da música descargada a otros?	<input type="checkbox"/>				
¿Recibe algo a cambio de música descargada?	<input type="checkbox"/>				
¿Consigue música de otros?	<input type="checkbox"/>				
¿Da algo a cambio de música descargada?	<input type="checkbox"/>				

## 40. Si da música a través de intercambio, ¿qué recibe a cambio?

## 41. Si consigue música a través de intercambio, ¿qué da a cambio de la música?

## Appendix B: Data Compilation

H1: Individual differences  
Sweden

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,265(a)	,070	,058	25,6148

a Predictors: (Constant), gender, Age

**ANOVA(b)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7400,547	2	3700,274	5,640	,004(a)
	Residual	97761,622	149	656,118		
	Total	105162,169	151			

a Predictors: (Constant), gender, Age

b Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

**Coefficients(a,b)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	30,833	8,128		3,794	,000
	Age	-,550	,316	-,140	-1,740	,084
	gender	13,461	4,262	,254	3,159	,002

a Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,007(a)	,000	-,007	26,6100

a Predictors: (Constant), 8. Hur mycket pengar i kronor har du att disponera varje månad efter räkningar (räkna även alternativa inkomster och gåvor)?

**ANOVA(b,c)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4,856	1	4,856	,007	,934(a)
	Residual	104089,406	147	708,091		
	Total	104094,262	148			

a Predictors: (Constant), 8. Hur mycket pengar i kronor har du att disponera varje månad efter räkningar (räkna även alternativa inkomster och gåvor)?

b Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

## Coefficients(a,b)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	24,968	3,248		7,688	,000
	8. Hur mycket pengar i kronor har du att disponera varje månad efter räkningar (räkna även alternativa inkomster och gåvor)?	-4,78E-005	,001	-,007	-,083	,934

a Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

## 1. Är du \* 22. Laddar du ner musik från Internet? Crosstabulation

			22. Laddar du ner musik från Internet?		Total
			Ja	Nej	
1. Är du	eller kvinna	Count	157	160	317
		% within 1. Är du	49,5%	50,5%	100,0%
man		Count	235	87	322
		% within 1. Är du	73,0%	27,0%	100,0%
Total		Count	392	247	639
		% within 1. Är du	61,3%	38,7%	100,0%

## Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	37,058(b)	1	,000
Likelihood Ratio	37,486	1	,000
N of Valid Cases	639		

## Age grupus \* 22. Laddar du ner musik från Internet? Crosstabulation

			22. Laddar du ner musik från Internet?		Total
			Ja	Nej	
agegrupus	1,00	Count	48	25	73
		% within age grupus	65,8%	34,2%	100,0%
	2,00	Count	278	124	402
		% within age grupus	69,2%	30,8%	100,0%
	3,00	Count	42	43	85
		% within age grupus	49,4%	50,6%	100,0%
	4,00	Count	3	12	15
		% within age grupus	20,0%	80,0%	100,0%
	5,00	Count	5	33	38
		% within age grupus	13,2%	86,8%	100,0%
Total		Count	376	237	613
		% within age grupus	61,3%	38,7%	100,0%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	64,060(a)	4	,000
Likelihood Ratio	64,988	4	,000
N of Valid Cases	613		

**money in kr \* 22. Laddar du ner musik från Internet? Crosstabulation**

			22. Laddar du ner musik från Internet?		
			Ja	Nej	Total
money in kr	0-1999kr	Count	84	56	140
		% within money in kr	60,0%	40,0%	100,0%
	2000-3999kr	Count	139	71	210
		% within money in kr	66,2%	33,8%	100,0%
	4000-5999kr	Count	72	42	114
		% within money in kr	63,2%	36,8%	100,0%
	more than 60	Count	70	57	127
		% within money in kr	55,1%	44,9%	100,0%
Total		Count	365	226	591
		% within money in kr	61,8%	38,2%	100,0%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4,396(a)	3	,222
Likelihood Ratio	4,380	3	,223
N of Valid Cases	591		

## Spain

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,206(a)	,043	,029	25,9918

a Predictors: (Constant), Age, gender

**ANOVA(b,c)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4138,557	2	2069,279	3,063	,050(a)
	Residual	93229,102	138	675,573		
	Total	97367,660	140			

a Predictors: (Constant), Age, gender

b Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

c Selecting only cases for which Espanya = 1

**Coefficients(a,b)**

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	53,100	13,952		3,806	,000
	gender	5,711	4,939	,096	1,156	,250
	Age	-1,166	,548	-,178	-2,129	,035

a Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

b Selecting only cases for which Espanya = 1

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,010(a)	,000	-,007	26,7147

a Predictors: (Constant), 8. Hur mycket pengar i kronor har du att disponera varje månad efter räkningar (räkna även alternativa inkomster och gåvor)?

**ANOVA(b)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10,634	1	10,634	,015	,903(a)
	Residual	97059,859	136	713,675		
	Total	97070,493	137			

a Predictors: (Constant), 8. Hur mycket pengar i kronor har du att disponera varje månad efter räkningar (räkna även alternativa inkomster och gåvor)?

b Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

**Coefficients(a,b)**

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	29,315	2,765		10,602	,000
	8. Hur mycket pengar i kronor har du att disponera varje månad efter räkningar?	8,29E-005	,001	,010	,122	,903

a Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

b Selecting only cases for which Espanya = 1

**1-Sexo \* 22-¿Descarga música de Inet? Crosstabulation**

			22-¿Descarga música de Inet?		Total
			no	si	
1-Sexo	Hombre	Count	3	123	126
		% within 1-Sexo	2,4%	97,6%	100,0%
	Mujer	Count	14	44	58
		% within 1-Sexo	24,1%	75,9%	100,0%
Total		Count	17	167	184
		% within 1-Sexo	9,2%	90,8%	100,0%

## Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	22,421(b)	1	,000
Likelihood Ratio	20,894	1	,000
N of Valid Cases	184		

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5,36.

## Age groups \* 22-¿Descarga música de Inet? Crosstabulation

			22-¿Descarga música de Inet?		Total
			no	si	
agegroups	1,00	Count	0	20	20
		% within age groups	,0%	100,0%	100,0%
	2,00	Count	9	137	146
		% within age groups	6,2%	93,8%	100,0%
	3,00	Count	2	7	9
		% within age groups	22,2%	77,8%	100,0%
	4,00	Count	2	0	2
		% within age groups	100,0%	,0%	100,0%
	5,00	Count	4	1	5
		% within age groups	80,0%	20,0%	100,0%
Total		Count	17	165	182
		% within age groups	9,3%	90,7%	100,0%

## Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	54,455(a)	4	,000
Likelihood Ratio	30,840	4	,000
N of Valid Cases	182		

a. 6 cells (60,0%) have expected count less than 5. The minimum expected count is ,19.

## money in kr \* 22-¿Descarga música de Inet? Crosstabulation

			22-¿Descarga música de Inet?		Total
			no	si	
money in kr	0-1999 Kr	Count	0	38	38
		% within money in kr	,0%	100,0%	100,0%
	2000-3999 kr	Count	0	20	20
		% within money in kr	,0%	100,0%	100,0%
	4000-5999 kr	Count	5	19	24
		% within money in kr	20,8%	79,2%	100,0%
	6000 or more	Count	4	21	25
		% within money in kr	16,0%	84,0%	100,0%
Total		Count	9	98	107
		% within money in kr	8,4%	91,6%	100,0%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12,003	3	,007
Likelihood Ratio	15,235	3	,002
N of Valid Cases	107		

## H2: Supporting technology Sweden

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,243(a)	,059	,053	25,7253

a Predictors: (Constant), connexions

**ANOVA(b,c)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6176,856	1	6176,856	9,334	,003(a)
	Residual	98606,538	149	661,789		
	Total	104783,394	150			

a Predictors: (Constant), connexions

b Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

c Selecting only cases for which Espanya = 0

**Coefficients(a,b)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	11,121	4,862		2,288	,024
	connexions	3,291	1,077	,243	3,055	,003

a Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

b Selecting only cases for which Espanya = 0

## Spain

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,151(a)	,023	,016	26,1629

a Predictors: (Constant), connexions

**ANOVA(b,c)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2222,261	1	2222,261	3,247	,074(a)
	Residual	95145,398	139	684,499		
	Total	97367,660	140			

a Predictors: (Constant), connexions

b Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

c Selecting only cases for which Espanya = 1

**Coefficients(a,b)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	17,983	6,677		2,693	,008
	connexions	3,044	1,690	,151	1,802	,074

a Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

b Selecting only cases for which Espanya = 1

### H3: Business Model Sweden

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,199(a)	,040	,013	26,2750

a Predictors: (Constant), 11. Vad är ett rimligt pris för en CD-skiva enligt din uppfattning?, REGR factor score 1 for analysis 1, REGR factor score 2 for analysis 1, Prissättningen på CD-skivor är rimlig.

**ANOVA(b)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4158,746	4	1039,686	1,506	,203(a)
	Residual	100794,748	146	690,375		
	Total	104953,493	150			

a Predictors: (Constant), 11. Vad är ett rimligt pris för en CD-skiva enligt din uppfattning?, REGR factor score 1 for analysis 1, REGR factor score 2 for analysis 1, Prissättningen på CD-skivor är rimlig.

b Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

## Coefficients(a,b)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	28,921	6,536		4,425	,000
	Prissättningen på CD-skivor är rimlig.	-1,456	2,477	-,053	-,588	,558
	REGR factor score 1 for analysis 1	-3,713	2,200	-,143	-1,688	,094
	REGR factor score 2 for analysis 1	2,749	2,175	,106	1,264	,208
	11. Vad är ett rimligt pris för en CD-skiva enligt din uppfattning?	-,021	,068	-,028	-,312	,755

a Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

b Selecting only cases for which Espanya = 0

## Prissättningen på CD-skivor är rimlig. \* 22. Laddar du ner musik från Internet? Crosstabulation

			22. Laddar du ner musik från Internet?		Total
			Ja	Nej	
Prissättningen på CD-skivor är rimlig.	1	Count	192	87	279
		% within Prissättningen på CD-skivor är rimlig.	68,8%	31,2%	100,0%
	2	Count	118	65	183
		% within Prissättningen på CD-skivor är rimlig.	64,5%	35,5%	100,0%
	3	Count	62	60	122
		% within Prissättningen på CD-skivor är rimlig.	50,8%	49,2%	100,0%
	4	Count	10	16	26
		% within Prissättningen på CD-skivor är rimlig.	38,5%	61,5%	100,0%
	5	Count	8	11	19
		% within Prissättningen på CD-skivor är rimlig.	42,1%	57,9%	100,0%
Total		Count	390	239	629
		% within Prissättningen på CD-skivor är rimlig.	62,0%	38,0%	100,0%

## Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21,761	4	,000
Likelihood Ratio	21,378	4	,000
N of Valid Cases	629		

## Spain

## Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,226(a)	,051	,022	26,2395

a Predictors: (Constant), 11. Vad är ett rimligt pris för en CD-skiva enligt din uppfattning?, REGR factor score 1 for analysis 2, Prissättningen på CD-skivor är rimlig., REGR factor score 2 for analysis 2

## ANOVA(b,c)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4859,548	4	1214,887	1,765	,140(a)
	Residual	90194,856	131	688,510		
	Total	95054,404	135			

a Predictors: (Constant), 11. Vad är ett rimligt pris för en CD-skiva enligt din uppfattning?, REGR factor score 1 for analysis 2, Prissättningen på CD-skivor är rimlig., REGR factor score 2 for analysis 2

b Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

c Selecting only cases for which Espanya = 1

## Coefficients(a,b)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	41,877	6,934		6,039	,000
	Prissättningen på CD-skivor är rimlig.	-1,320	2,364	-,048	-,558	,577
	REGR factor score 1 for analysis 2	-4,586	2,308	-,172	-1,987	,049
	REGR factor score 2 for analysis 2	3,839	2,717	,123	1,413	,160
	11. Vad är ett rimligt pris för en CD-skiva enligt din uppfattning?	-1,177	,741	-,141	-1,588	,115

a Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

b Selecting only cases for which Espanya = 1

## 9-El precio de los CDS d música es correcto \* 22-¿Descarga música de Inet? Crosstabulation

			22-¿Descarga música de Inet?		Total
			no	si	
9-El precio de los CDS de música es correcto	1	Count	7	90	97
		% within 9-El precio de los CDS d música es correcto	7,2%	92,8%	100,0%
	2	Count	3	56	59
		% within 9-El precio de los CDS d música es correcto	5,1%	94,9%	100,0%
	3	Count	6	12	18
		% within 9-El precio de los CDS d música es correcto	33,3%	66,7%	100,0%
	4	Count	1	3	4
		% within 9-El precio de los CDS d música es correcto	25,0%	75,0%	100,0%
	5	Count	0	6	6
		% within 9-El precio de los CDS d música es correcto	,0%	100,0%	100,0%
Total		Count	17	167	184
		% within 9-El precio de los CDS d música es correcto	9,2%	90,8%	100,0%

## Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15,945(a)	4	,003
Likelihood Ratio	11,940	4	,018
N of Valid Cases	184		

H4: Ethic and moral considerations  
Sweden

## Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,074(a)	,005	-,001	26,4062

a Predictors: (Constant), REGR factor score 1 for analysis 7

## ANOVA(b,c)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	569,070	1	569,070	,816	,368(a)
	Residual	104593,100	150	697,287		
	Total	105162,169	151			

a Predictors: (Constant), REGR factor score 1 for analysis 7

b Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

c Selecting only cases for which Espanya = 0

#### Coefficients(a,b)

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	24,438	2,142		11,407	,000
	REGR factor score 1 for analysis 7	-1,934	2,141	-,074	-,903	,368

a Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

b Selecting only cases for which Espanya = 0

#### Det är oetiskt/omoraliskt att ladda ner musik \* 22. Laddar du ner musik från Internet? Crosstabulation

			22. Laddar du ner musik från Internet?		Total
			Ja	Nej	
Det är oetiskt/omoraliskt att ladda ner musik	1	Count	156	57	213
		% within Det är oetiskt/omoraliskt att ladda ner musik	73,2%	26,8%	100,0%
	2	Count	75	36	111
		% within Det är oetiskt/omoraliskt att ladda ner musik	67,6%	32,4%	100,0%
	3	Count	74	51	125
	% within Det är oetiskt/omoraliskt att ladda ner musik	59,2%	40,8%	100,0%	
	4	Count	27	37	64
	% within Det är oetiskt/omoraliskt att ladda ner musik	42,2%	57,8%	100,0%	
	5	Count	57	44	101
	% within Det är oetiskt/omoraliskt att ladda ner musik	56,4%	43,6%	100,0%	
Total		Count	389	225	614
	% within Det är oetiskt/omoraliskt att ladda ner musik		63,4%	36,6%	100,0%

#### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	25,176	4	,000
Likelihood Ratio	24,995	4	,000
N of Valid Cases	614		

#### Spain

##### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,042(a)	,002	-,013	26,5395

a Predictors: (Constant), REGR factor score 2 for analysis 8, REGR factor score 1 for analysis 8

**ANOVA(b,c)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	168,341	2	84,171	,120	,887(a)
	Residual	97199,318	138	704,343		
	Total	97367,660	140			

a Predictors: (Constant), REGR factor score 2 for analysis 8, REGR factor score 1 for analysis 8

b Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

**Coefficients(a,b)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	29,353	2,239		13,113	,000
	REGR factor score 1 for analysis 8	-,317	2,134	-,013	-,148	,882
	REGR factor score 2 for analysis 8	-1,019	2,184	-,040	-,467	,642

a Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

b Selecting only cases for which Espanya = 1

**20-No es ético/moral descargar música \* 22-¿Descarga música de Inet? Crosstabulation**

			22-¿Descarga música de Inet?		Total
			no	si	
20-No es ético/moral descargar música	1	Count	6	118	124
		% within 20-No es ético/moral descargar música	4,8%	95,2%	100,0%
	2	Count	1	22	23
		% within 20-No es ético/moral descargar música	4,3%	95,7%	100,0%
	3	Count	3	17	20
	% within 20-No es ético/moral descargar música	15,0%	85,0%	100,0%	
	4	Count	1	7	8
	% within 20-No es ético/moral descargar música	12,5%	87,5%	100,0%	
	5	Count	4	2	6
	% within 20-No es ético/moral descargar música	66,7%	33,3%	100,0%	
Total	Count	15	166	181	
	% within 20-No es ético/moral descargar música	8,3%	91,7%	100,0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	30,687	4	,000
Likelihood Ratio	16,586	4	,002
N of Valid Cases	181		

## H5: Social Influence Sweden

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,091(a)	,008	-,005	26,4564

a Predictors: (Constant), REGR factor score 2 for analysis 3, REGR factor score 1 for analysis 3

### ANOVA(b,c)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	870,556	2	435,278	,622	,538(a)
	Residual	104291,613	149	699,944		
	Total	105162,169	151			

a Predictors: (Constant), REGR factor score 2 for analysis 3, REGR factor score 1 for analysis 3

b Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

c Selecting only cases for which Espanya = 0

### Coefficients(a,b)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	24,477	2,147		11,400	,000
	REGR factor score 1 for analysis 3	,234	2,130	,009	,110	,913
	REGR factor score 2 for analysis 3	2,382	2,142	,091	1,112	,268

a Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

b Selecting only cases for which Espanya = 0

### Samhället har accepterat fildelningsprogram \* 22. Laddar du ner musik från Internet? Crosstabulation

			22. Laddar du ner musik från Internet?		Total
			Ja	Nej	
Samhället har accepterat fildelningsprogram	1	Count	32	14	46
		% within Samhället har accepterat fildelningsprogram	69,6%	30,4%	100,0%
	2	Count	41	22	63
		% within Samhället har accepterat fildelningsprogram	65,1%	34,9%	100,0%
	3	Count	96	81	177
% within Samhället har accepterat fildelningsprogram		54,2%	45,8%	100,0%	
4	Count	112	27	139	
	% within Samhället har accepterat fildelningsprogram	80,6%	19,4%	100,0%	
5	Count	75	17	92	
	% within Samhället har accepterat fildelningsprogram	81,5%	18,5%	100,0%	
Total	Count	356	161	517	
	% within Samhället har accepterat fildelningsprogram	68,9%	31,1%	100,0%	

## Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	33,855(a)	4	,000
Likelihood Ratio	34,240	4	,000
N of Valid Cases	517		

**Människor som jag umgås med (släkt/vänner) använder fildelningsprogram \* 22. Laddar du ner musik från Internet? Crosstabulation**

		22. Laddar du ner musik från Internet?		Total	
		Ja	Nej		
Människor som jag umgås med (släkt/vänner) använder fildelningsprogram	1	Count	17	17	34
		% within Människor som jag umgås med ...	50,0%	50,0%	100,0%
	2	Count	22	17	39
		% within Människor som jag umgås med ...	56,4%	43,6%	100,0%
	3	Count	79	52	131
		% within Människor som jag umgås med ...	60,3%	39,7%	100,0%
	4	Count	111	37	148
		% within Människor som jag umgås med ...	75,0%	25,0%	100,0%
	5	Count	125	42	167
		% within Människor som jag umgås med ...	74,9%	25,1%	100,0%
Total	Count	354	165	519	
	% within Människor som jag umgås med ...	68,2%	31,8%	100,0%	

## Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18,021	4	,001
Likelihood Ratio	17,677	4	,001
N of Valid Cases	519		

**Människor som är viktiga för mig anser att jag borde använda fildelnings program \* 22. Laddar du ner musik från Internet? Crosstabulation**

			22. Laddar du ner musik från Internet?		Total
			Ja	Nej	
Människor som är viktiga för mig anser att jag borde använda fildelnings program	1	Count	177	66	243
		% within Människor som är viktiga för mig ...	72,8%	27,2%	100,0%
	2	Count	50	24	74
		% within Människor som är viktiga för mig ...	67,6%	32,4%	100,0%
	3	Count	75	42	117
		% within Människor som är viktiga för mig ...	64,1%	35,9%	100,0%
	4	Count	23	13	36
		% within Människor som är viktiga för mig ...	63,9%	36,1%	100,0%
	5	Count	25	17	42
		% within Människor som är viktiga för mig ...	59,5%	40,5%	100,0%
Total		Count	350	162	512
		% within Människor som är viktiga för mig ...	68,4%	31,6%	100,0%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5,105(a)	4	,277
Likelihood Ratio	5,076	4	,280
N of Valid Cases	512		

**Spain**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,058(a)	,003	-,004	26,4222

a Predictors: (Constant), REGR factor score 1 for analysis 4

**ANOVA(b,c)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	326,960	1	326,960	,468	,495(a)
	Residual	97040,700	139	698,135		
	Total	97367,660	140			

a Predictors: (Constant), REGR factor score 1 for analysis 4

b Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

c Selecting only cases for which Espanya = 1

## Coefficients(a,b)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	29,418	2,228		13,204	,000
	REGR factor score 1 for analysis 4	1,532	2,238	,058	,684	,495

a Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

b Selecting only cases for which Espanya = 1

## 38-La sociedad ha aceptado la descarga de música \* 22-¿Descarga música de Inet? Crosstabulation

		22-¿Descarga música de Inet?		Total		
		no	si			
38-La sociedad ha aceptado la descarga de música	1	Count	0	7	7	
		% within 38-La sociedad ha aceptado la descarga de música	,0%	100,0%		100,0%
	2	Count	0	13	13	
		% within 38-La sociedad ha aceptado la descarga de música	,0%	100,0%		100,0%
	3	Count	3	40	43	
	% within 38-La sociedad ha aceptado la descarga de música	7,0%	93,0%		100,0%	
	4	Count	3	55	58	
	% within 38-La sociedad ha aceptado la descarga de música	5,2%	94,8%		100,0%	
	5	Count	4	51	55	
	% within 38-La sociedad ha aceptado la descarga de música	7,3%	92,7%		100,0%	
Total	Count	10	166	176		
	% within 38-La sociedad ha aceptado la descarga de música	5,7%	94,3%		100,0%	

## Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1,627	4	,804
Likelihood Ratio	2,734	4	,603
N of Valid Cases	176		

**38-Las personas con las que me relaciono descargan música \* 22-¿Descarga música de Inet?  
Crosstabulation**

		22-¿Descarga música de Inet?		Total
		no	si	
38-Las personas con las que me relaciono descargan música	1 Count	0	1	1
	% within 38-Las personas con las que me relaciono descargan música	,0%	100,0%	100,0%
	2 Count	0	2	2
	% within 38-Las personas con las que me relaciono descargan música	,0%	100,0%	100,0%
	3 Count	2	19	21
% within 38-Las personas con las que me relaciono descargan música	9,5%	90,5%	100,0%	
4 Count	2	44	46	
% within 38-Las personas con las que me relaciono descargan música	4,3%	95,7%	100,0%	
5 Count	6	100	106	
% within 38-Las personas con las que me relaciono descargan música	5,7%	94,3%	100,0%	
Total	Count	10	166	176
	% within 38-Las personas con las que me relaciono descargan música	5,7%	94,3%	100,0%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	,912	4	,923
Likelihood Ratio	1,002	4	,909
N of Valid Cases	176		

**38-Las personas que considero importantes creen que deberia descargarme música \* 22-¿Descarga música de Inet? Crosstabulation**

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9,450	4	,051
Likelihood Ratio	12,849	4	,012
N of Valid Cases	172		

		22-¿Descarga música de Inet?		Total	
		no	si		
38-Las personas que considero importantes creen que debería descargarme música	1	Count	7	57	64
		% within 38-Las personas que considero importantes ...	10,9%	89,1%	100,0%
	2	Count	0	13	13
		% within 38-Las personas que considero importantes ...	,0%	100,0%	100,0%
	3	Count	0	55	55
	% within 38-Las personas que considero importantes ...	,0%	100,0%	100,0%	
	4	Count	0	17	17
	% within 38-Las personas que considero importantes ...	,0%	100,0%	100,0%	
	5	Count	2	21	23
	% within 38-Las personas que considero importantes ...	8,7%	91,3%	100,0%	
Total		Count	9	163	172
		% within 38-Las personas que considero importantes ...	5,2%	94,8%	100,0%

## H6: Perceived Easy of Use Sweden

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,246(a)	,060	,054	25,6652

a Predictors: (Constant), REGR factor score 1 for analysis 9

### ANOVA(b,c)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6356,765	1	6356,765	9,650	,002(a)
	Residual	98805,405	150	658,703		
	Total	105162,169	151			

a Predictors: (Constant), REGR factor score 1 for analysis 9

b Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

### Coefficients(a,b)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	24,519	2,082		11,776	,000
	REGR factor score 1 for analysis 9	6,493	2,090	,246	3,107	,002

a Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

## Att lära sig fildelningsprogram är lätt \* 22. Laddar du ner musik från Internet? Crosstabulation

			22. Laddar du ner musik från Internet?		Total
			Ja	Nej	
Att lära sig fildelningsprogram är lätt	1	Count	5	22	27
		% within Att lära sig fildelningsprogram är lätt	18,5%	81,5%	100,0%
	2	Count	21	29	50
		% within Att lära sig fildelningsprogram är lätt	42,0%	58,0%	100,0%
	3	Count	66	62	128
		% within Att lära sig fildelningsprogram är lätt	51,6%	48,4%	100,0%
	4	Count	91	20	111
		% within Att lära sig fildelningsprogram är lätt	82,0%	18,0%	100,0%
	5	Count	174	25	199
		% within Att lära sig fildelningsprogram är lätt	87,4%	12,6%	100,0%
Total		Count	357	158	515
		% within Att lära sig fildelningsprogram är lätt	69,3%	30,7%	100,0%

## Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	108,372(a)	4	,000
Likelihood Ratio	108,633	4	,000
N of Valid Cases	515		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8,28.

**Att använda sig av fildelningsprogram är lätt \* 22. Laddar du ner musik från Internet? Crosstabulation**

			22. Laddar du ner musik från Internet?		Total
			Ja	Nej	
Att använda sig av fildelningsprogram är lätt	1	Count	15	23	38
		% within Att använda sig av fildelningsprogram är lätt	39,5%	60,5%	100,0%
	2	Count	23	24	47
		% within Att använda sig av fildelningsprogram är lätt	48,9%	51,1%	100,0%
	3	Count	70	64	134
	% within Att använda sig av fildelningsprogram är lätt	52,2%	47,8%	100,0%	
	4	Count	84	21	105
	% within Att använda sig av fildelningsprogram är lätt	80,0%	20,0%	100,0%	
	5	Count	164	22	186
	% within Att använda sig av fildelningsprogram är lätt	88,2%	11,8%	100,0%	
Total		Count	356	154	510
		% within Att använda sig av fildelningsprogram är lätt	69,8%	30,2%	100,0%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	80,860(a)	4	,000
Likelihood Ratio	82,855	4	,000
N of Valid Cases	510		

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 11,47.

**Spain****Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,054(a)	,003	-,004	26,4287

a. Predictors: (Constant), REGR factor score 1 for analysis 10

**ANOVA(b,c)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	279,399	1	279,399	,400	,528(a)
	Residual	97088,261	139	698,477		
	Total	97367,660	140			

a. Predictors: (Constant), REGR factor score 1 for analysis 10

b. Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

c. Selecting only cases for which Espanya = 1

## Coefficients(a,b)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	29,425	2,230		13,197	,000
	REGR factor score 1 for analysis 10	1,397	2,209	,054	,632	,528

a Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

b Selecting only cases for which Espanya = 1

**38-Los programas de comparticion de música son faciles de aprender a utilizar \* 22-¿Descarga música de Inet? Crosstabulation**

			22-¿Descarga música de Inet?		Total
			no	si	
38-Los programas de comparticion de música son faciles de aprender a utilizar	1	Count	0	1	1
		% within 38-Los programas de ...	,0%	100,0%	100,0%
	2	Count	0	3	3
		% within 38-Los programas de ...	,0%	100,0%	100,0%
	3	Count	3	17	20
	% within 38-Los programas de ...	15,0%	85,0%	100,0%	
	4	Count	2	57	59
	% within 38-Los programas de ...	3,4%	96,6%	100,0%	
	5	Count	4	88	92
	% within 38-Los programas de ...	4,3%	95,7%	100,0%	
Total		Count	9	166	175
		% within 38-Los programas de ...	5,1%	94,9%	100,0%

## Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4,691	4	,320
Likelihood Ratio	3,660	4	,454
N of Valid Cases	175		

**38-Usar los programas de comparticion de archivos es facil \* 22-¿Descarga música de Inet?****Crosstabulation**

			22-¿Descarga música de Inet?		
			no	si	Total
38-Usar los programas de comparticion de archivos es facil	1	Count	0	3	3
		% within 38-Usar los programas ...	,0%	100,0%	100,0%
	2	Count	0	4	4
		% within 38-Usar los programas ...	,0%	100,0%	100,0%
	3	Count	4	38	42
	% within 38-Usar los programas ...	9,5%	90,5%	100,0%	
	4	Count	2	51	53
	% within 38-Usar los programas ...	3,8%	96,2%	100,0%	
	5	Count	4	70	74
	% within 38-Usar los programas ...	5,4%	94,6%	100,0%	
Total		Count	10	166	176
		% within 38-Usar los programas ...	5,7%	94,3%	100,0%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1,949	4	,745
Likelihood Ratio	2,207	4	,698
N of Valid Cases	176		

**H7: Attitude Sweden****Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,172(a)	,030	,017	26,1702

a Predictors: (Constant), REGR factor score 2 for analysis 11, REGR factor score 1 for analysis 11

**ANOVA(b,c)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3115,466	2	1557,733	2,274	,106(a)
	Residual	102046,703	149	684,877		
	Total	105162,169	151			

a Predictors: (Constant), REGR factor score 2 for analysis 11, REGR factor score 1 for analysis 11

b Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

**Coefficients(a,b)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	24,596	2,125		11,572	,000
	REGR factor score 1 for analysis 11	3,596	2,081	,139	1,728	,086
	REGR factor score 2 for analysis 11	-2,633	2,070	-,103	-1,272	,205

a Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

b Selecting only cases for which Espanya = 0

## Spain

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,044(a)	,002	-,013	26,5365

a Predictors: (Constant), REGR factor score 2 for analysis 12, REGR factor score 1 for analysis 12

**ANOVA(b,c)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	190,080	2	95,040	,135	,874(a)
	Residual	97177,579	138	704,185		
	Total	97367,660	140			

a Predictors: (Constant), REGR factor score 2 for analysis 12, REGR factor score 1 for analysis 12

b Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

c Selecting only cases for which Espanya = 1

**Coefficients(a,b)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	29,400	2,238		13,138	,000
	REGR factor score 1 for analysis 12	,901	2,271	,034	,397	,692
	REGR factor score 2 for analysis 12	,746	2,225	,029	,335	,738

a Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

b Selecting only cases for which Espanya = 1

## H8: Performance expectancy

### Sweden

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,190(a)	,036	,010	27,4752

a Predictors: (Constant), REGR factor score 2 for analysis 13, REGR factor score 1 for analysis 13

**ANOVA(b,c)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2125,276	2	1062,638	1,408	,251(a)
	Residual	56616,560	75	754,887		
	Total	58741,837	77			

a Predictors: (Constant), REGR factor score 2 for analysis 13, REGR factor score 1 for analysis 13

b Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

c Selecting only cases for which Espanya = 0

**Coefficients(a,b)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	25,168	3,127		8,048	,000
	REGR factor score 1 for analysis 13	5,594	3,335	,190	1,678	,098
	REGR factor score 2 for analysis 13	,102	3,001	,004	,034	,973

a Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

b Selecting only cases for which Espanya = 0

**Spain****Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,267(a)	,071	,058	25,7624

a Predictors: (Constant), REGR factor score 2 for analysis 14, REGR factor score 1 for analysis 14

**ANOVA(b,c)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6894,607	2	3447,303	5,194	,007(a)
	Residual	89599,364	135	663,699		
	Total	96493,971	137			

a Predictors: (Constant), REGR factor score 2 for analysis 14, REGR factor score 1 for analysis 14

b Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

c Selecting only cases for which Espanya = 1

**Coefficients(a,b)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	30,435	2,206		13,799	,000
	REGR factor score 1 for analysis 14	6,771	2,169	,259	3,123	,002
	REGR factor score 2 for analysis 14	-1,643	2,228	-,061	-,737	,462

a Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

b Selecting only cases for which Espanya = 1

## H9: Legal issues

## Sweden

## Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,051(a)	,003	-,004	26,4429

a Predictors: (Constant), REGR factor score 1 for analysis 5

## ANOVA(b,c)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	277,813	1	277,813	,397	,529(a)
	Residual	104884,356	150	699,229		
	Total	105162,169	151			

a Predictors: (Constant), REGR factor score 1 for analysis 5

b Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

## Coefficients(a,b)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	24,437	2,146		11,389	,000
	REGR factor score 1 for analysis 5	-1,359	2,157	-,051	-,630	,529

a Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

b Selecting only cases for which Espanya = 0

## Det är olagligt att ladda ner musik \* 22. Laddar du ner musik från Internet? Crosstabulation

			22. Laddar du ner musik från Internet?		Total
			Ja	Nej	
Det är olagligt att ladda ner musik	1	Count	140	50	190
		% within Det är olagligt att ladda ner musik	73,7%	26,3%	100,0%
	2	Count	74	26	100
		% within Det är olagligt att ladda ner musik	74,0%	26,0%	100,0%
	3	Count	64	49	113
		% within Det är olagligt att ladda ner musik	56,6%	43,4%	100,0%
	4	Count	55	39	94
		% within Det är olagligt att ladda ner musik	58,5%	41,5%	100,0%
	5	Count	56	64	120
		% within Det är olagligt att ladda ner musik	46,7%	53,3%	100,0%
Total		Count	389	228	617
		% within Det är olagligt att ladda ner musik	63,0%	37,0%	100,0%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	31,020	4	,000
Likelihood Ratio	31,173	4	,000
N of Valid Cases	617		

**Det är risk för fängelsestraff \* 22. Laddar du ner musik från Internet? Crosstabulation**

		22. Laddar du ner musik från Internet?		Total	
		Ja	Nej		
Det är risk för fängelsestraff	1	Count	140	61	201
	2	Count	77	27	104
	3	Count	65	42	107
	4	Count	48	46	94
	5	Count	59	49	108
Total	Count	389	225	614	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18,517	4	,001
Likelihood Ratio	18,577	4	,001
N of Valid Cases	614		

## Spain

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,279(a)	,078	,071	25,4166

a Predictors: (Constant), REGR factor score 1 for analysis 6

**ANOVA(b,c)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7573,122	1	7573,122	11,723	,001(a)
	Residual	89794,538	139	646,004		
	Total	97367,660	140			

a Predictors: (Constant), REGR factor score 1 for analysis 6

b Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

c Selecting only cases for which Espanya = 1

## Coefficients(a,b)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	29,506	2,141		13,781	,000
	REGR factor score 1 for analysis 6	-7,400	2,161	-,279	-3,424	,001

a Dependent Variable: 24. Hur många låtar laddar du ner i genomsnitt per månad (uppskattningsvis)?

b Selecting only cases for which Espanya = 1

## 20-Descargar música es ilegal \* 22-¿Descarga música de Inet? Crosstabulation

			22-¿Descarga música de Inet?		Total
			no	si	
20-Descargar música es ilegal	1	Count	8	126	134
		% within 20-Descargar música es ilegal	6,0%	94,0%	100,0%
	2	Count	3	26	29
		% within 20-Descargar música es ilegal	10,3%	89,7%	100,0%
	3	Count	1	10	11
	% within 20-Descargar música es ilegal	9,1%	90,9%	100,0%	
	4	Count	0	2	2
	% within 20-Descargar música es ilegal	,0%	100,0%	100,0%	
	5	Count	2	3	5
	% within 20-Descargar música es ilegal	40,0%	60,0%	100,0%	
Total		Count	14	167	181
	% within 20-Descargar música es ilegal		7,7%	92,3%	100,0%

## Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8,351	4	,080
Likelihood Ratio	5,223	4	,265
N of Valid Cases	181		

**20Existe riesgo de ser penado \* 22-¿Descarga música de Inet? Crosstabulation**

			22-¿Descarga música de Inet?		Total
			no	si	
20Existe riesgo de ser penado	1	Count	7	104	111
	2	Count	3	33	36
	3	Count	1	19	20
	4	Count	0	9	9
	5	Count	2	2	4
Total	Count	13	167	180	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11,977	4	,018
Likelihood Ratio	6,988	4	,137
N of Valid Cases	180		