

INNOVATION IN MUSICAL INDUSTRY AND INNOVATION IN MUSICAL PIRACY: THE SPOTLIGHT OF SPOTIFY

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1. INTRODUCTION

Progress in history has come alongside very closely with innovation. New technologies have helped mankind and have growth exponentially every day since the invention of the wheel. Music has not been exempted from this process of improvement. From the development of new instruments, creating new sounds and melodies from ones created before... it is clear that new technologies and ways to innovate has affected it. The problem that had this business was the lack of technology to be commercialized worldwide, limiting it to live concerts. But it was in the late 19th century when this musical business started to be commercialized in a massive scale. What was before only exclusive for just very few persons of high class now could be for everyone. In this paper we will find the history of how music started to be commercialized and how different new inventions affected in the musical industry business. What at the beginning was something fruitful for companies, the more innovation they found in the music business the more income, soon became their nightmare. With the arrival of new technologies in the music sector, more ways to get that music for free were found. The illegal downloads of songs started to ruin the once successful sector but, thanks again to the new inventions a light of hope has appeared for them. The music in streaming in programs like Spotify have proved that they can be a strong warrior against the war against the piracy.

This is of vital importance due to that, with the internet and the ways people can get for free what once was paid, the income of thousands of persons and the art itself as music was in extremely danger. Music artist watched as all their work and way of life did not produce anything for them and music industry was being destroyed. This studio tries to show how there is light out of the tunnel piracy has entered music into. This studio gathers different studies and papers of the music history, the history of the musical industry and how different new inventions affected to its development, an information gathering about how piracy exists on internet due that there is no official record and an analysis of the company Spotify from different experts and data from the company itself. Then it will gather different experts 'opinions on the matter to bring light to the truth of how piracy has affected to the music and its business, and how streaming music programs fight this piracy and helps music business to recover from the harm of the illegal music downloads

This study first will review the history of the Musical Industry as a business and how new technologies have changed their strategies in the market. Then, it will take a look on how Music Piracy was born in the internet and its development after this historical gathering, it will take the Spotify company as an example of how Piracy can be beaten with original new ideas. To end with the paper, I will bring different experts in a panel of opinion to show their opinion of musical piracy and streaming music programs, Spotify in especial.

2. BRIEF HISTORY OF THE MUSICAL INDUSTRY

In its research of the history of the history of the Musical Industry, Siller (2012) states that 6 different stages could be differentiated due to the changes in the habits of the consume inside the music by its audiences and how new innovative technologies play such a key factor for the industry. We have to take into account that the music industry that we know is based around popular music, not referring to what we know of "pop music" but the music that is meant to reach the maxim number of persons as possible, which can include "heavy metal", "country music", "Latin music"... This "popularity" is measured by sales.

2.1. Stage 1: The birth of Musical Industry

Before music started to be taped into a CD or listened on a cell phone, the musical industry was totally different. The industry was only aimed to the paper music, partitures and tabs, which was the way of how one could distribute music to the consumers back in the day. The only way someone could listen to music was to buy the partiture and playing it at home with their piano or harp, which were the most popular instruments of the time. For this, originally, the Music industry promoted the song, not the artist. Live music was the only option, either you went to a concert or you played for your family gathered in the main room, both had something in common, they were just for high-med and high classes. The musical industry began in the late of the 18th century, the center of this industry was in the Tin Pan Alley, New York, in the offices of the publishing companies of this time which gathered composers that produce music in paper for the consume of their clients, mayorly musicians. When the "Player Pianos" appeared in the market, the publishing companies developed a system which now is called "promotion" to have their songs included in the rolls of the "player pianos", a mechanism which made play pianos for themselves. Nowadays these pianos still exist, but with a digital mechanism based in Linux or Windows for the auto-execution of the songs. The main point is that the so called "promotion" soon started to become an essential part of the musical industry.

Figure 1 Aristocracy playing music



The new technologies for the distribution of the music changed the focus of the industry from the song to the artist. The very first record-player, the gramophone, was introduce in 1890 and, for the very first time in the history of mankind, it could be possible to consume and enjoy of music at free will without the necessity of having someone that could play a partiture. In the 20s the radio was introduced, and the musical distribution grew rapidly making that songs and popular artists expand themselves into the consciences of their audiences very quick. In 1920 also appeared the first movies which sound, which is another way of musical distribution. In 1932 the first musical store, The George Song Shop in Johnstown, Pennsylvania. During this period, businessmen around the globe started to realize of the opportunities of the musical industry at the same time that 200 discographic houses were born in USA and every town opened a disc store. Millions of persons of just one generation lived the technological changes that in so few years brought new formats of musical distributions such the "vinyl", the disc store, radio, films... An important aspect is that, in this time, the companies dedicated to the musical industry main business were the sale of devices to play music, which made music just an incentive for the sale of the music device. Years later, these same companies change their view and started to focus in the creation of music idols and rock stars.

2.2. Stage 2: The original Musical Industry

The original industry as we know started in the period between the 50s and 80s. This industry focused in the fabrication of super stars, idols, rock legends. Basically, the concept of "Music Celebrity" or "Rockstar" did not exist before and were the companies of the industry the ones who were in charge of creating these celebrities

in the will of selling device to reproduce music. During this time, the business of music experimented unexpected grows. The artist had the minimal control of the final product, which was of the producer. The Disc House was also the responsible of the marketing and promotion of the disc, which focused in the radio. The radio promotion became so important that many Houses started to offer gifts in money, travels, prostitutes and anything that could put the song on air the most time. This was known as "Payola" and, eventually became, a crime which drove into many scandals and investigations inside the Musical Industry.



Figure 2 The Beatles

Source: Univision (2017)

2.3. Stage 3: Corporate era

In this stage of the musical business, there was an amazing upraise of gains never seen before which we will likely not see again. The arrived of the CD in 1982, made the companies experience a growth in their sales in several ways. Due to the expensiveness of the creation of a CD at the beginning, discographies rose the price for every disc at the same time that lowed the artist's part, with the argument of a "technology expense". While the price for a CD never lowed the technology became cheaper, which artist did not like. A new market appeared, composed of persons who wanted to change their collection of "vinyl" for CDs, even knowing they had it already. This rose the gains of companies amazingly due to the minimum cost of production that were putting the music in a CD, without the expenses of the

promotion. This saved companies around the 60% and 70% of their costs. These sales and gains inside the industry call the attention of Wall Street, which saw the music industry not worth of their interest, and started the time of the great fusions (Columbia records bought by Sony and becoming Sony Music), (Warner Bros Records bought by Time Inc. becoming Time Warner) ... With this business now was ruled by people with not very knowledge of music. Before, the artist stayed with the same discographic for 5 or 6 albums, developing itself. Now, these businessmen wanted instant results becoming Musical Industry more of an Industry than Musical

.

Another event helped the industry to rise during this time, a new televised musical distribution format called MTV. From a day to another, music was on tv, another way to increase sales was created. MTV had the power of creating a "hit", same as the radio before, by just putting the song on air repeatedly. Now that people could see the artist the music started to be in second place and the image of the artist started to be more important. If you did not have attractive, you did not go on air therefore your music career in the musical industry vanished.

2.4. Stage 4: Digital Music Age

The very same day that the first mp3 file was shared, that was the day of the new stage of the musical industry (around 1994). Before the arrived of the mp3, a music file of the digital quality of the CD was too heavy (around 5mb per song minute in stereo sound) and it was unthinkable to play it online due to the technology of the time. The same music file in mp3 format took a tenth of space which made it easy to store and to download in the first modems of the time. Although the quality of the mp3 was not as good as the CD's one, consumers had shown previously with the introduction of the cassette, that the quality was not the biggest of their concerns at the time of buying and listening to new artists.

The nets Peer-to-peer(P2P) were the second technology that changed the musical industry during the time. In a net P2P, each computer connected to the system can provide and receive files without the necessity of a central server, with the bandwidth and processing distributed around all members of the net. In other words, the files live in multiple computers interconnected, with each user with the ability of downloading a file. Napster was the first massive system of file distributions aby P2P. This one was lately taken to court and shot down by numerous musical

bands and the RIAA (Recording Industry Association of America) arguing for legal rights over intellectual property.

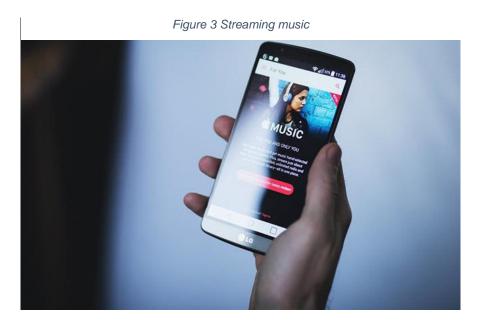
Another disruption in the musical industry came as a result of the lunch to the market of the CD burner, something that was underestimated. In the days of the vinyl, the non-authorized copy of discs was not of the knowledge of the public due to the high costs of operation that this activity required. Copying vinyl required a big equip, specialized and highly expensive, which made the activity out of the reach of the common people. When the CD arrived in the market, the first CD burners only were in professional studios of mastering due to the high costs (the equip cost around \$250 thousands US Dollars, and each virgin CD around the \$200 US Dollars). Clearly, the economy of the process made possible to keep the pirates out of the business. But the cassette was other history. Since its launch in 1964 it was a spine in the musical industry. Everyone could buy a \$1-dollar empty cassette and press "rec" at the time of listening a hit in the radio. Generally, the quality was very mediocre, but it was a gift compared to the price of the song in the market. When the CD burners appeared in every computer, and the price of the empty CDs dropped, the practice among users of sharing digital music become unstoppable, and for that time, musical industry could not do anything.¹

2.5. Stage 5: The Digital Music is Monetized

It came to be obvious that, unless the musical industry did adapt to the new times, it will disappear very soon. Ironically, was the computer industry the one that save the music. While the different services of digital music presented alternatives to the discographic houses to do business with the paid downloads, it was iTunes of Apple the one who finally made possible a new model of business that worked, although it was basically a close system, due to the fact that iTunes required of an iPod to operate (later it was adapted for more platforms). iTunes was a win among consumers for their easy use (a characteristic by which Apple is known) and for the iPod as a new trendy accessory and personal distinction. Now, the industry could monetize their digital offers. But for the price of \$0.99 US Dollars per track, so there were not many attractive gains. While iTunes is the indisputable monster of the

¹ Piracy in music will be explained in detail in the next point

digital music industry, other competitors have emerged. Form Amazon mp3 to a new Napster, there are numerous places to purchase digital music. But if there is a type of digital music service which discographic do support, it is the subscription service or streaming, that means that you pay monthly a price for the access of listening as many music available as you want during that month and with no limitations. The music is transmitted online in real time, so you are not the owner, but the music is available immediately anytime, so there is not real reason to have it stored in your computer, phone... gathering space.



But these new systems brought something back, the singles. Before, companies milk cow were the albums and they could charge high sums of money for an album even if you just wanted a specific song from that one. Now, you could buy that song exclusively and companies have gone from earning a lot from albums to 0.99\$ for a song. With this, their financial structures were shaken from their bottom. To compensate these loses, companies must have more income than just selling songs, and the better place to find these incomes were the artist itself. 90% of the incomes of an artist come from giving live shows and tours, and companies saw this as a potential income, so they came out with an idea of how taking part in this, the 360° contract. This contract meant that you share with the discographic a percentage of your income as an artist from more than just selling discs, which include live shows, merchandising and publishing (money receive for having songs in commercials, movies and TV shows).

2.6. Stage 6: The Dawn of the Communication Artist/Fan

In this current stage we are seeing a mayor change in the structure of the musical industry. In this stage, we are seeing that the middleman can be removed from the equation leaving the artist and the fan in direct communication and in the level they both desire, from creation, promotion, marketing and sales. This New Musical Industry allows artist to promote themselves directly to the fans. Other factor of success in this NIM is that audience has become very much focused in market niches. If an artist searches for it enough, he can find his audience. Although, if it is true that there are now millions of audiences that may grant more opportunities to the artist, it means that the possibility of selling millions of hits decrease, due to the people that is less exposed to just one or two music genres. The days of success by just appearing on MTV are gone now. It is truth that some of the old structures still exists (discographic houses, music stores, radio...) and in some sort of way they can benefit the independent artist but, this structure will never be a key factor in the success of the artist again. Siller ends up concluding that this structure really never was the key factor for the artist's success, that music itself and shows are really the key factors.

3. PIRACY IN MUSIC

We must have two concepts clear. The first one is the Infraction of the copyright or violation of the copyright. According to UPV (2011) the infraction of the copyright is a use not authorized by the laws of copyright in a way that violate some of the exclusive rights of the author, as the right of the reproduction or the right of making derivate works. The second one is Internet Piracy. Is define as a new way of crime done by people daily around the world. The term piracy associated with the internet is the download, the purchases or the sale of software, audio files or video in a non-legal way. The purchase of copied games illegally is considered piracy, as well as downloading music, films and tv shows freely without the express allowance of the author. According to the expert on intellectual property, Eduardo Samán (UPV.2011), the term "Piracy" to refer to the non-authorized copies is an exaggeration that pretend to equate the act of sharing with the violence of the pirate ships, criminalizing the users. The free Software Foundation includes this term in its words to be avoid in matter of author rights.

3.1. Kinds of piracy

There are 4 kinds of Piracy:

- Piracy of end user: It takes place when the only copy with license is installed in different computers. Other common way of piracy of the end user is when a cracked version of the software is used. Being this user the one that insert the registration key access that illegally unlock the limited version.
- Piracy of the reseller: It takes place when the reseller distributes copies of one unique software to different clients; this is principally with operative systems and pre-charged software in new computers. The user do not receive the discs, manuals or software registration The piracy of reseller is also when a false versions of a software are sold, imitating packages, stamps and original software's documents. The signs that indicate reseller piracy are when several users have the same series number, lack of original documentation, an incomplete configuration and the absence or inefficiency of original documentation. This piracy is focused directly in the gains and its market target are sub developed countries to make these copies and the distribute them illegally through mobs.

- Violation of a registered brand: This infraction occurs when a company non-accredited presents itself and an authorized negotiator, technician, support assistant, retailer or uses inadequately the name of a registered brand.
- Piracy on the internet: As mentioned before, occurs when an electronic transfer of files with author's right is put at the disposal of different users. System operators and/or users put materials on internet with author's right so other can copy them and use them without the correspondent license. The creator does not receive any sum of money for its software distribute it this way, meaning that it's a violation of the author's right. Nowadays it's the most popular practice due to the access to internet and its contents is unlimited with the only impediment of no having a connection to the internet and a device to surf through it.

3.2. <u>History of Piracy</u>

Internet piracy as a world concern started in 1999 with the mentioned before P2P service that let you download songs for free by the hands of Shawn Fanning, Napster. Tired of hearing complaints from his friends of how impossibility of finding mp3 files, he came out with the idea of creating a new system that allowed to find music without recurring to complex systems that were the focus of the RIAA. The most part of their users were younglings under 25 that had just to click the name of the song that they were looking for and then receive the digital version of the song in mp3 format. In the year 2000 Napster became an authentic fever, achieving in just a year the cipher of 20 million users. That very same year, the music Band "Metallica" legally suit them, and in an immediate response Napster blocked 300.000 user that downloaded music from that group with them. The legal suits just kept coming, and by the beginning of 2001, the Court of Appeals only Napster to put an end of the interchange of songs with author's rights. Finally, Napster stops carrying out with their activities and accord to pay \$26 million dollars to the discographic companies once they want to the relaunch the service as a payment portal. In 2002 the company enters in bankrupt and by November of that same year Roxio buys the brand and announce the creation of a new service of payment. But the idea was already implemented inside the heads of millions of internet users that wanted to enjoy music freely. (CAD)

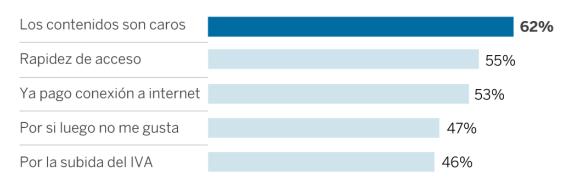
Figure 4 Napster Logo



Source: Napster.com. 2018

3.3. Piracy in Spain nowadays

Figure 5 Reasons to downloaded illegally



Source: GFK. 2018.

According to GFK in its Observatory of piracy and consume habits of digital contents (2016), Spain has experimented a decrease in digital piracy but the percentage of citizens that access to pirate contents still the same. In 2016 there were 4.128 million of illegal access to content on the web, a 4.2% less than in 2015 for a value of 23.294 million of euros. The studio shows that 62% of the consumers that access to illegal contents justify themselves arguing that "the original contents are too expensive", also that it is "quicker and easier to access" (55%), "already pays a internet connection" (53%), not going to pay for something that "may not like later" (47%), for the rise of the IVA (46%).

During 2016 there were 1.661 million of illicit accesses to musical contents with a value in the market of 5.767 million of euros. The number of consumers that went to these contents rose from the 21% in 2015 to a 26% in 2016. The 48% of the accesses were to contents with less than a year of antiquity from their commercial launch (51% in 2015).

3.4. How the government fights piracy

Until not very far away, the procedure to pursuit these crimes related with intellectual property consisted in reporting a website to the judge and wait to the magister to proclaim a condemnatory sentence fitted to the case. This represent the usual and desired procedure in every state of right ruled by law. Nonetheless, judges have sentenced many times that link webs are not illegal and that do not violate any legal command referring to the author's rights. Its links are mere data that indicate where to find a file but they themselves do not host it and do not suppose a public diffusion of this file.

After many failed reports the pro-author's right associations pressed the government to sort the judge and design a new strategy to close these webs. The law creates the Intellectual Propriety Commission dependent of the Ministry of Culture and will be the one that receives the report of the author or particular against a web that content pirate files. It will be formed by a representant from the Ministry, a representant of the users and for a judge of known prestige. Later, a warning is sent to the owner of the web site reported and commanded to retire the files or contents that, under the criteria of the commission, violate intellectual property. If the webpage does not retire the content considered illegal the Commission will go to the National Audience that will have to decide what to do in a maxim of 4 days.

The law highlights this paragraph "The section could adopt the measurement to the prestation of a service or to retire the content that violate the intellectual property with the aim of gain direct or indirectly, or whomever pretend to cause patrimonial damage". Once the page is closed, the owner can appeal the report, so the judge can decide if the close up of the page is worth it or it was, in the or a reckless decision of the Commission.

4. SPOTIFY

María Valera (2018), publisher and columnist of the Marketing 4 ecommerce, writes about how Spotify is that streaming music app that must be in your smartphone, a classic in the digital sector. Spotify counts with more than 157 million of active users, presence in 65 countries and in December 2017 counted with more than 71 million of paying user. This company is now in the stock exchange to improve their competitiveness against companies as Apple with their iTunes, Pandora or Amazon Music.

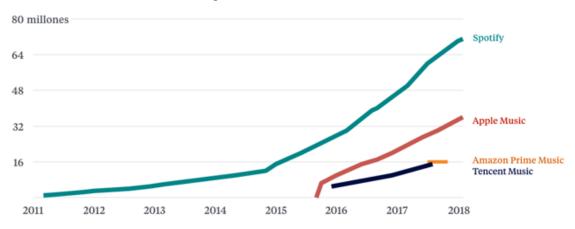


Figure 6 Paid Users in Platforms

Source: La Vanguardia. (2018)

4.1. How Spotify was born

Spotify origin is Swedish and is born from the two passions of its creator, Daniel Ek: the informatic and the music. Daniel was an early starter, with only 14 years: he employed with high school friends to work in the creation and design of web sites. With 16 years, Ek try to enter in Google to work with them, but he was rejected for not having any degree, so he founded Advertigo, a successful company of online marketing in which he developed a very fruitful career. That much, that at the age of 23, in 2006, sold Advertigo to the international giant Tradedoubler. That was a crucial step in the born of his star project due to that he convinced one of the founders of Tradedoubler, Martin Lorentzon, also Swedish, to make the necessary invest to make Spotify see the light. Once they came out with the name, the engineers started to develop the app first for computers only, and like that the model of Spotify as a place of music in streaming was born. As a curiosity, among the developers was the creation of the uTorrent, a place where download music for free illegally. But, although the creation of Spotify was in 2006, their beginning was not an easy one. Their

negotiations with the discographic companies for the obtain of the license for the songs delayed more than 2 years the entrance of the company to the public market. Its launch was the 7th of October of 2008, it was first conceived as an application to listening to music only by computer, and it was only available, in the beginning, in some European countries as Sweden, Finland, Norway, France, United Kingdom and Spain. Users could access to millions of songs with no need of downloading any megabyte. But, to get access to it freely you had to get an invitation from someone that already had the application, of not, you had to make a payment subscription. But then again, with the rise of the iPhone and the Android phones, from Spotify it was clear that if they wanted to be someone they would have to be in the terminals of their users, because of this they created in 2009 the phone app version for their users to take their music in their smartphone. Simultaneously, they created the Premium service.



Figure 7 Daniel Ek and Martin Lorentzon

Source: David Gonzalez. (2013)

Overpassing all the troubles that American discographic put to Spotify to enter in the United States for the legal rights of the songs, finally the majority understood that Spotify had to be there, and in 2011 the company landed in The United States of America, competing very close to iTunes. Very soon after arriving to the States, the creator of Spotify announced in November of 2011 the reconversion of Spotify in a platform that could host app of thirds, Spotify Platform. As it was explained by Daniel Ek, music goes beyond music, and therefore, they integrate to the platform paper news and magazines as the Rolling Stone in their own channel or apps to see the lyrics of the songs such as TuneWiki. The idea was to take the user to go through the music from the inside and the outside, and to Spotify to be not just a song player.

Simultaneously, they launched the possibility for other users to see what someone was listening to and share it with them.

With the pass of the years, the platform has had to adapt to the great impulse of social media, therefore, a very social Spotify could be seen. In 2016 Spotify allied with Facebook so their users could share music through Facebook Messenger, and in May, the platform of music in streaming reached a deal with Twitter so their user could play songs with Spotify without leaving the social net. At the same time, Spotify entered in the photography world, with the buy of the platform CrowdAlbum so their users could share photos and videos of their favorite artists. One of the latest successes of Spotify was the "Discover Weekly" currently with more than 5.000 million of reproductions and that is based in new music discoveries refreshed each week adapted for each user based on their music preference, with a very personalized system. (Maria V. 2018).

4.2. Spotify Against Piracy

David Valero (2018), journalist in the page ADSL Zone talks about a study carried out by the European Commission by Luis Aguilar and Joel Waldfogel in which it states that the musical industry has founded a strong ally in Spotify against the Piracy in songs and albums. The once criticized Spotify now is presented as the perfect legal alternative to the pirate downloads helping to reduce the torrent portals where to find the majority of the songs. However, Spotify is also responsible of the great change in the musical market, where physical sales are drowning.

There are artists, like Taylor Swift, that argue that Spotify is ending with the musical industry, but the European Union is not in accord with this idea. In the investigation more than 8.000 artists were analyzed both songs in streaming and the downloads in P2P in the most popular webs. The result is very clear, for every 47 listens in Spotify the number of illegal songs downloaded is reduced in one. The reasons for this can be principally in the block of users that wanted promptness to the time of listening to music. Now they can do it through the digital market, not like in past times that if you wanted to buy music you have to order it from the internet and wait or move to the disc store or great malls to buy the disc of your favorite artist. Spotify has helped to eliminate this time wait through a very reasonable price that offer to their users, so they can enjoy their music in a legal way. Nevertheless, the

market must keep evolving due to the complaints of the industry that this business model is still very low paid. Each streaming online reports an income of 0.007 US Dollars, against the 0.82\$ US Dollars from the iTunes or physical sales.

5. ANALYSIS OF THE MUSIC CONSUME IN THE MUSIC ENVIRONMENT. PANEL OF OPINION.

This research has helped us to understand better how the innovation affected the musical industry, how it has helped it to rise in a massive business producing millions all over the world. But how, this innovation, was its greatest enemy through piracy and how it has been recovering thanks to the online streaming music. Now, I am taking this paper to the next step, analyzing how piracy has affected not only great and rich artists (seen before) but to the people that try to make music their lifestyle. And, what is their opinion about the new streaming music services and if they found them useful or, as some people think, the end of the musical industry. This people are directly related to the music industry and music environment. I am not talking only about big musicians and employees of big discographic companies, I am talking about not known musicians that play own made songs and other band songs, staff from music stores, DJs that use commercial songs on their shows... and more.

To investigate this, I will be using a panel of opinion. I will interview with different people of the musical environment (musicians, music sale's department staff, music consumers, etc.,) to analyze how piracy has affected them and the music business.

5.1. Panel of opinion

As mentioned before, to analyze how piracy has affected people directly related with the music environment, their opinions about the online streaming music services and if they find them useful, I will use for this paper a panel of opinion. According to Cifras y Conceptos, a panel of opinion is a study of a subject (political, academic, economic, social, etc.,) that aims to know the perception of different expert of that subject. For this, I tried to sum up experts of different environments, the owner of a music store, a music sales manager of a big firm, a musician who is also the founder of the biggest musical summer camp in Spain, a DJ and a typical music consumer.

Their opinion varies hugely between them seeing, some, streaming music programs as a tool to fight piracy and others as another way to destroy the music business. I will analyze their answer after their personal interviews. In those interviews, I tried to personalize the four questions I asked them without divert them of the main topic I wanted to review about. Some of these persons wanted to remain anonymous due to commercial reasons and to not relate the company to any personal opinion. Full interview can be found in the annexes.

5.1.1. Music shop owner's opinion.

As it could be expected, the owner of this music store is completely against of the illegal downloads of music in the internet, mentioning the years in which the discographic companies were at its highs (I have reviewed them in the second point of this paper). He takes these problems to a political scheme for not taking more responsibility and actions against these practices. Although, he considers that the music streaming programs are the solution against piracy, he accuses them of using disloyal competence having monopolized the music business leaving the traditional stores obsolete and creating unemployment. Although his is something that can be truth, it is not the first time we see a company, or a commerce get obsolete and surpassed by newer and cheaper new technologies. It is almost impossible to fight progress, you either must adapt or get ran over.

5.1.2. Music consumer's opinion

Here I have interviewed a person from the common folk musically talking. Just a regular person that enjoys music and has an opinion to say. As the study stated before, most of teenagers one decade ago performed the illegal practice of downloading music illegally, and we can find here a person that sincere himself and admit having download music illegally as stated before. In this case, it is clearly stated that the appearance of music streaming platforms has affected positively in the average music consumer by reducing almost entirely his consumptions of illegal music, replacing them by the Spotify services to a point that is one of the most used apps, for its easy way to use it, its many features and how comfortable it is. I want to highlight one statement said by this consumer, that if it was not of the downloads that did at its young age, he would not develop their music tastes and not developed a conscience of not damaging the culture he was enjoying. So, it can be said that, the illegal consumption of music, had a positive future effect on the protection of music by his part.

5.1.3. Manu Rubio. DJ's opinion.

In Manu's case (a DJ that has been performing through different pubs around the Mediterranean coast), we find here a person that for the moment lives thanks to the music and its life circles around it. Although he does not purchase directly the songs that he uses for his sessions, he purchases them for other artists that use these songs. Spotify again is mentioned as a key element to fight piracy. He seems more pessimist about how the music piracy still easily reachable but points how people has become more conscience about helping artist develop. The DJ case is a complicate one, in this case he does get its music to perform legally, but in my personal experience I have seen many that do not. So, should be a follow up of how DJs get its music? In the case of the big names it would be no problem, they use mostly music made for them. The problem comes when a DJ play a song in a birthday party, in a pub... and gets paid for it.

5.1.4. Javier Miralles' opinion. Musician and founder of the biggest music summer camp in Spain.

There is a lot to analyze from Javier's opinion. As the music lover he claims to be, he has a vast collection of physic music and has a very good and optimistic opinion about the streaming music platforms. As a musician, he sees these music platforms as a tool to help new groups to be connected to potential fans, something that as he explains was very difficult before due to the limitation technology had back then. He seems very positive about the decrease of the illegal downloads in the last decade but believe that music piracy is something impossible to be eradicated. During his words, he claims that use iTunes music or YouTube just if he cannot find the disc he is looking for in Spotify, something that confirms, as this paper stated before, that shows clearly how Spotify is ahead of its closest competitors as shown in Figure no 6. In my opinion Javier is a person that enjoys music so much that rejects the idea of privatizing it. Of course, every artist should be recognized and rewarded for their work but, he understands music as an art that should not be monopolized and limited. There are thousands of great artists that throw their music freely just to get listened and these programs are indeed a help for them.

6. CONCLUSIONS

Throughout the pages of this paper I had explained how innovation has been very present and has supposed a key factor to the development for the musical industry inside their business and their markets and how these new innovations have opened new threats that had almost killed this industry and the artist within. From the days before the electricity was useful to the present day there has been business in music and people trying to get this music for free. Having now this background knowledge, the paper shows how the application Spotify has played a major role in the development of the new musical industry by reducing the musical piracy.

Although this is a light of sun through the dark clouds of the internet piracy, many artists consider that this new model of business carried out by Spotify, Apple Music and more streaming music companies is dangerous for the music business due to the low remuneration artist receive from them. The study brings to the light the dark place is internet and how is hard to measure the reach of the damage it has done to the music in general. Not only focusing on the benefits but looking on how quality of the music has been affected, due to the fact that lately the only ones that can permit to stay in the musical business are the artist that gain the most. Leaving many potential artists outside of the music world because of the difficulties they find to live of what they love.

The panel of opinion has shown some different perspectives about how illegal piracy has affected these experts and how they feel about music streaming programs and more concrete, Spotify. All of them agree that musical piracy is a direct attack to the art of music. They consider it just as bad as stealing something of a regular store, and it is what it is stealing directly from an artist. Some of them are more optimist about how this piracy has decreased during these recent past years and others blame higher authorities and its passiveness against these acts. Regarding their opinion about Spotify and other music streaming programs, all of them agree as well that Spotify surely has helped the music industry to fight against piracy and create a chance for people enjoy a hugely library of music and rewarding the artist at the same time (something that with the technology of 20 years ago was impossible), except for one of them, the owner of a music store that depends directly of the music sales he make. He believes that these programs act as disloyal competence being impossible for regular companies to compete with these online programs. This opinion is understandable for a person that had make music sales its way of life but, shows how

some people and some industries are reluctance to change and improve with the new innovative technologies of the market. The perfect example of this is found in the history of the ice commercialization. During the 19th century the companies that sold natural ice were the ones that extracted it from countries like Norway transporting it by boat to the desired market winning millions, but with the arrival of refrigerators and artificial ice now everybody could create ice in their homes. Instead of creating machines to produce artificial ice they blamed these new companies and falsely claimed that their ice was bad for health. They had invested so much in their producing technics (boats, perforators, special warehouses...) that they could not afford these new technologies (Acciona.2019). It is easy to see how these big and small companies that were dedicated to the selling of physical music format are now against these new streaming programs and its cheaper way to bring music in the ears of consumers.

Daniel Ek says, "The value of a company is the sum of the value of the problems that it solves" and one thing is clear, Spotify has known have to handle all the problems presented successfully.

7. LIMITATIONS AND FUTURE RESEARCH

One cannot avoid question himself, why the ones complaining about something that is not remunerative enough and that it would be bad for their industry are the ones that have or had in the past the most? This and how music business has favored just a couple artists, shows the evidence that is not the quality of the music but the quality of the person playing which produce more money and could be an interesting topic of future researches.

Talking about Spotify you either like it or not. You either think it contributes music industry or you think it its helping to destroy it. This could be an impediment for a future study, of course you will find some rich arguments against or with music streaming programs, but very often you could stereotype the profile of who would love them or hate them. As we have found on the opinions during the study the ones that are against these programs are the ones related with the selling of music, not the ones responsible of creating it, at least in a small and a humble level (they were not big artist). Because of that limitation, not being able to reach big discographic firms or big artist, I find it very interesting for a future study to gather information and opinions of this big names and if they whether like or not music streaming programs as Spotify.

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9. ANNEXES

- 5.1.5. Music shop owner's opinion.
- As an owner of a music store, which is your opinion about illegal downloads or, as others call it, music piracy?

As a store of musical sales, and we can reach a wide range of sectors inside the music. Our activity is specialization in the sale of physical discs or most commonly known as CD's, LP's and, before that, vinyl.

As the question says, its "illegal". About the illegal downloading and music piracy, our opinion is that, in this society exists a scour that is the ones that copy everything not paying taxes neither author's rights, benefiting from the labor exploitation mobs that fabricate everything, from music to an endless catalogue of products. And, without the governments doing anything to resolve these problems. We should punish this politics, guilty of this situation and guilty of not supporting the culture (music, movies, theatres etc.,). They don't see how this whole situation generate the great numbers of unemployment due to the break of numerous sectors such as video and rental video, music and music stores, discographic business, etc.,

 Over the years in which music piracy was most common amongst the internet users, did you, professionally, notice this situation?

The users of the trend "I don't pay" have been one the causers of the break of this sector, in which we indeed are affected, and has contributed to the ending of the golden and talented age in which many artists and national and international bands emerged. This occurred during the 1970s and the 2000s this bands composed, record, made tours... creating jobs positions direct and indirectly, and thanks to all of that mentioned before will not happen again.

 Which is your opinion, both professional personal, of the streaming music programs like Spotify?

Is the alternative to the physical music store that internet and globalization have created. And, that in an unjust, disloyal way and with monopolized advantage competes with the traditional store, making people consume more music than ever before but, creating at the same time more unemployment than ever.

- To end, do you consider that this music streaming programs are the solution to end with the musical piracy?

Of course it is the solution, there is no need now for downloading music illegally if they offer music for free, and as I have explained before, (the more technology/internet equals to more unemployment). Not only unemployment in our sector, unemployment in the rest of them such as the bank, general commerce, industry etc.,

5.1.6. Music consumer's opinion

- As an average music consumer living in Spain, which is your opinion about downloading music illegally or, music piracy? During the years that music piracy was most common among the internet users, did you realize any illegal download?

Sincerely, it is a very difficult question to answer. If I look back, I discovered that music could be downloaded illegally when our parents brought our first computer home. It would be around 14 years ago, when I was 10 if I recall right. At that age, if I wanted to listen to music, I had to ask my parents to buy me a music CD. Something that I could not ask each week and could not buy them on my own. This limited my music library extremely. I had to recur to the computer downloads with programs such as Ares and Emule and, sincerely, I liked to have at my disposal of the music I wanted at every moment and with the easiness that supposed. There is also point to mention, before starting to download music illegally, my music knowledge was very short and scarce. But once I started to download music, my knowledge of this one started to grow and so did my conscience about trying to protect this kind of culture. But, at that time I could not afford to buy everything I wanted to listen to.

Nowadays, there are even more facilities to consume music via internet, throughout diverse platforms such as YouTube, Spotify or SoundCloud, without recurring to the illegal downloads. At the end, I did not feel bad downloading music, but it is true that much easier to use these platforms that exists now. And, I myself, I left the illegal downloads for these.

- What is your personal opinion of the streaming music platform such as Spotiy?

Under my point of view, platforms such as Spotify and YouTube are the best apps one can have nowadays in its personal phone. I am a great consumer of music via streaming and I spend my day with Spotify app open, either with my phone, my computer or my tablet.

Since these new "free" options to listen to music exist, have you downloaded music illegally again?

Since I use Spotify I have, practically, stopped to download music illegally. There have been maybe a couple of times that, out of the necessity, I have to download some songs to make a CD for a road trip. But, in the last 3 years I can say that I have not download any song illegally thanks to the aux cord of the car.

 To end, do you believe that these platforms are the solution to end with music piracy?

Certainly, I do believe that these platforms are the solution to eliminate the illegal music downloads. These platforms, among the evolution of smartphones and music players such as portable Bluetooth speakers, the possibility to connect your phone to the speakers of your cars... All of that is now getting done to play music throughout those apps, which make everything much simpler and more comfortable.

10.1.3. Manu Rubio. DJ's opinion.

- As a professional DJ, having played in festivals and numerous events receiving a monetary compensation, what is your professional and personal opinion about downloading music illegally or, the so-called, piracy?

My opinion is that music piracy is just the same as going to any store, grabbing anything you like and leaving without paying. At the end we are taking all the effort, work and love artist put in their work.

- From where do you usually get the music that you use for you actuations?

The 99% of the music I use for my sessions I download it from SounCloud (SounCloud is mentioned before in this paper as other of the streaming music platforms) These songs are not original songs but edits², mashups³, remixes⁴, etc.,

² Edit: When an artist fix something of an existing song in purpose of improving it.

³ Mashups: Is the mix of two or more different songs in one, with the base of the original.

⁴ Remix: Taking an existing song and adding new effects and changing it essence a bit.

that other DJs or artists usually make adding a different touch and therefore my sessions are able to sound different and no that monotone like others do. Also, many of these downloads are either paid or you are able to donate money to the artist if you feel to. Either way, SoundCloud pays to the artist by the number of the downloads they produce.

 Which is your opinion, both personal and professional, about the streaming music platforms such as Spotify?

I believe that these steaming music platforms are a very good idea due to that they fight this piracy, the artist receives compensation for each play their songs receives. And, there is also one factor, the artist is in a much closer contact with their consumers and fans. For my personal use is one of my favorites, whenever I am just hanging out with my friends or to check new possible hits to include in my sessions.

 To end, do you believe that these kinds of platforms are the solution to end music piracy?

I think these are a fabulous idea to fight against musical pirates, but unfortunately, illegal music is at the reach of a hand of anyone and it can be downloaded very easily. There is a long way yet to walk and feel free of these illegal acts, but at least, we have started to walk it. People is much conscience about the importance of rewarding an artist for their jobs now than 10 years ago. They just wanted to have an easier access to a wide library of music and not getting rob in the way.

- 5.1.8. Javier Miralles' opinion. Musician and founder of the biggest music summer camp in Spain.
- As musician and founder of the biggest music summer camp in Spain, ¿which is your opinion about illegal downloads or the so called, music piracy?

Illegal downloads are something that is going to be there, always. But I feel that nowadays is something that has been overcome. More obviously if we think about the last decade of the 21st century, in which the access of any kind of music is much more affordable for everyone and has degraded massively that kind of illegal downloads. If you are also able to pay a monthly subscription and save the commercial adds, the advantages are limitless.

- During the years in which music piracy was more common amongst the internet users, did you notice this situation personally and professionally?

To be honest, at a musical level, in those years the music groups I had move first through MySpace and lately through Bandcamp, therefore the songs that we uploaded were for everyone to listen, freely. At our level we had clear that the most people that listened to our songs the more we were known. I believe, in fact, that is something mostly common amongst novice groups.

Other things are the big artist and groups consecrated and linked to great producers. There was, logically, a war but clearly in another level.

Which is your opinion, both personal and professional, about the streaming music platforms, such as spotify?

I think it is a pleasure to be able to have all the music you would like freely, but as an inveterate music lover that I am, I still miss the fault of physic format. It is more than clear that, streaming music platforms, have facilitated vastly the global access to music. Before we had to hand over cassettes, vinyl discs or CDs, to make home made copies and be able to exchange music and know other discs or musicians thanks to your friends. Nowadays you have everything, the platforms themselves recommend you groups while you listen to music and you can get lost between all these possibilities.

As I were saying, I am a collector of vinyl discs and CDs, therefore I clearly prefer the physical format. But many times the streaming gives me life, or just discovers for me new groups which after listen to them I go then and buy the cd, vinyl and sometimes both things. And, in the other hand, the sound of a vinyl disc, having a decent music equipment, is way better than the streaming plays. That is just how it is.

An artistic problem than comes with the streaming music is the lack of patience of the listener. The ones that have grow up listening to complete discs keep that way to listen to music. There are, in fact, music styles such as Progressive Rock that has no meaning if you don't listen to the complete work. Nowadays we live in a new peak of the single, something seen before in the 50s and that the Beatles and so many other artists changed in the 60s; so, there is nothing new under the sun. What it does concern me is something I have seen many times is that people do not listen to their songs until the end of them and jump to the next in question. That, to me, is just excessive. A song is a piece of art and it has to be listened until the end.

As a curiosity, since 01/01/2019 I have made a table in which I take account of the discs I listen to and in which format. In this way I can analyze many data. From which groups or styles I listen to more frequently to the format in which they are. To make you an idea, today 03/04/2019 I have listened to 154 discs, of these 72 have been in Spotify, 71 in cd, 32 in vinyl, 4 in iTunes and 5 in YouTube. In iTunes and YouTube I listen to the discs that are not in Spotify for any reason.

To end, do you believe that these platforms are the solution to end with the music piracy?

I have no real data, but I am mostly sure that the musical piracy has decreased vastly in the last decade. It is very possible that these platforms are being the solution against the piracy, but that does not mean that is going to be eradicated. As I commented at the beginning, it is something that is going to be there always.

I believe new generations of musicians have very clear that these streaming platforms are a help for their projects and does not see them as something bad but as a useful tool. Other thing is that these platforms reach to agreements more or less economically interesting for the bands. That is probably the subject that still needs improvement. How much money the artist sees of their plays and if it is fair or not. The world keeps moving forwards and technology goes on the highest speed. No one can know how the world of the music is going to evolve.