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# CCT College Dublin

## Assignment Cover Page

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# **An approach to the impact on the market and music consumption after the emergence of streaming technology**

## **1 Abstract**

Consumption in the music industry has been changing considerably, moving from the analogue to the digital phase and finally to the total dematerialization of music. Despite digitalization making consumption more accessible and democratic to consumers, the emergence of piracy is becoming a problem for the music industry, which faces dizzying declines in its sales. In an era that is virtually impossible to control online consumption, streaming technology is developed and launched which, in addition to curbing illegal downloading practices, creates a new business model and becomes a new consumer trend as it develops. Based on this scenario, where digital and intangible forms take control, this work seeks through descriptive research based on specialized sources and reports, an analysis on related subjects that stimulate the understanding of the impacts caused on the industry that has emerged after the period critical of piracy. The study also reveals a general overview of the positive and negative influences of streaming technology, in relation to pre-existing media, artists and consumers who had to readjust the new trend that shaped the new music industry.

## **2 Introduction**

The Internet has brought drastic changes in the way society, in general, relates to the consumption of cultural and artistic products without the need to travel and acquire physical support (Byungwan Koh, et al., 2019). Digital formats, device availability, mobility, easy storage of musical material and better Internet reach influence the relationship between consumers and industry (Helkkula, 2016), thus providing the creation of new forms of consumption, business models, technologies and propagation of musical material (Bouillot, et al., 2016).

Along with the great democratic and technological potential provided by the Internet, the free sharing of musical materials among users has also emerged (Bouillot, et al., 2016). The lack

of legislation or control over the copyright of phonographic artists in a virtual world has led to an increase in piracy (Helkkula, 2016). This practice stimulated the inevitable free consumption of the music, it became a major economic challenge for the music industry, which faced the precipitous drop in its profits and tangible media sales (IFPI, 2015).

Given this critical scenario, the creation of virtual download stores with the iTunes Store, driven by the creation of the portable MP3 player (iPod), put copyright legalization in the virtual world in progress. In parallel with the paid downloads, other technologies were being researched and developed by businessmen and music engineers. This enabled the emergence of Pandora, the first radio entitled streaming, making it possible to repress illegal practices in sharing systems. In addition to this aspect, this new technology also provided an extensive library through algorithmic technology using data related to users to customize radios at an affordable price or sometimes at no cost. (Byungwan Koh et al., 2019). In view of all these advantages, streaming has turned digital file sharing into a beneficial business model for consumers in addition to respecting legal aspects, as all content is stored and distributed by a single central server (Morris et al., 2015).

In addition to improving the legal aspects in relation to musicians and companies linked to the music industry, new consumption trends also appear, and the industry reveals a new period of growth and changes in the way users relate and consume music (Albright, 2015). The growth in world music revenue, and the increase in consumer adhesions to this service, are evidenced by increasing numbers and pointed out by recent annual reports (IFPI 2020). Despite this positive growth for the industry as a whole, some artists are still resistant, dissatisfied and even feel harmed by this business model. Mainstream and independent artists now depend on this new form of consumption, thus having to readapt themselves to survive.

In this new era of consumption, streaming platforms and their consumers, directly and indirectly, influence the way artists produce and disseminate their audios since the monetization of their content depends intrinsically on the amount of flow and the duration of the hearing reached by the artist. The music industry in tangible formats, also suffered a significant drop, decreasing sales of media such as CD, transforming a period of tangible consumption into a period of intangible and fluid consumption. The new generations no longer value property, but the experience, mobility and variety offered by streaming.

### **3 Problem statement**

Through the literary context, it presents the evolution of the music market and its development after the launch of streaming technology, analyzing in parallel its impact and changes related to the artist, consumer and musical work. Thus, this research proposes a general understanding of the following issues:

1. How have streaming platforms affected the market and consumption of musical entertainment since its creation?
2. This new form of consumption affected the universe of music production. How did this influence musical creation and the financial return for the artists?

### **4 Literature review**

#### *4.1 Digital Revolution and Introduction to Streaming in the Market*

With the same strength that the creation of radio broadcasting changed the structures of the music industry in 1930 (Bouillot et al., 2016), the digital revolution since 1990 has brought about considerable changes, which reflect today in the world music industry. During this period, music began to be produced, marketed and distributed en masse through formats accessible to everyone who had an internet connection (Byungwan Koh et al., 2019). Physical discs began to be discarded after the emergence of the company Napster in 1990 in addition to other illegal networks that made use of P2P (peer-to-peer) technology. In this model, the user, in addition to being a consumer, has also become a server, being able to distribute or download at no cost (IFPI, 2015; Helkkula, 2016).

With music being transmitted directly from computer to computer, this technology did not use a central server for distribution (Bouillot, et al., 2016). As a consequence, consumers had quick and free access to music, which led to the encouragement of piracy (IFPI, 2015; Helkkula, 2016). Even with the emergence of virtual stores for music consumers, informal distribution was still an uncontrollable problem for the industry, resulting in a huge drop in sales of physical and digital media (Lobato; Thomas, 2015 cited by Moscheta). According to data from IFPI (2015), an organization that ensures that copyright is applied in

this sector, this phenomenon significantly affected the music industry between 1999 and 2003, since sales volume dropped 23% and the sales value of industry fell 16%. With illegal downloads emerged networks that became popular at the time such as Kazaa, Limewire, Piratebay and eMule.

In the years that followed, with the creation of broadband Internet, the cheaper and extensive storage of music collections, MP3 moved from computers to consumers' pockets, what we can call the beginning of the mobility of digital music. Costello (2019) reminds us when Apple launched the iPod device, accompanied by the iTunes application in 2001, which allowed it to play MP3 music in a portable way (Moscheta, 2108). In 2003, a new business model was created with the iTunes Music Store (O'Neill, 2006) that marked its entry into the digital music sales market (Costello, 2019). This business model made it possible to buy a single song or an entire album in one click, attracting consumers and trying to suppress illegal music distribution practices (O'Neill, 2006). Over the course of 7 years, the Apple application, iTunes Music, reached 10 billion downloads in 2010 alone. Despite offering higher quality, the technical difficulties in installing the application still complicate the expansion of its consumer market, since only users of iPhone had access and installation were complexes compared to smartphone download apps and illegal downloads (Dawei 2011). Even with the creation of legal forms of download, it can be said that since the beginning of the digital age, music consumers still remained interested in zero cost of accessibility, portability of various devices, mobility and variety, which still brought difficulties in controlling piracy, becoming a challenge for the industry (Madden, 2009).

In parallel to this period, technology developers and entrepreneurs have been looking for solutions to suppress piracy since 2000. The intention of these developers was to provide the consumption and expansion of musical discoveries without the need for acquisition through download. From this concept came the free online application called Pandora. It can be said that this model was the precursor of the streaming service, emerging as a free and personalized online radio that used algorithmic technology as a personalization element. In addition to all these features that are very attractive to the consumer, this model was entirely within legal guidelines (Zantal-Wiener, 2017). Pandora offered a service that ran ads between songs for those who consumed for free and another without ads for those who wanted to pay for the service. This emergence marked a new way of distributing music and promoted

business model innovation that remains the biggest trend in the music industry until today (Albright, 2015).

Despite the creation of the iPhone in 2007 that allowed the use of iTunes in a mobile version on a cell phone, consumers began to migrate to streaming services. This adhesion was further intensified by the emergence of Spotify in 2008, which despite having similarities in the model, ended up surpassing Pandora and became one of the market leaders, being still one of the most popular music platforms on-demand, with more than 240 million of active users, being 120 million paying (Zantal-Wiener, 2017; Waniata and Kennemer 2020). This considerable portion of digital consumers began to abandon the habit of downloading music illegally or legally to use the streaming platform which, when presenting an unlimited, personalized and affordable library, became much more attractive (Duwe de Lima, 2016). This adherence was so significant that it ended up driving revenue growth in the global music market, retaining 60 million paying subscribers at first (Silva Felipe, n.d.).

#### *4.2 The birth of streaming platforms*

Even in 2015, according to IFPI studies, about 20% of fixed Internet consumers still practised piracy, violating copyrights and causing the music industry's revenue to continue to fall (Helkkula, 2016). Technology analysts identify streaming services as a post-download era, being classified as the third destructive wave in the music industry, bringing significant changes to the phonographic market (Morris et al., 2105).

Throughout this period, with the emergence of streaming companies such as Pandora, Apple Music, Spotify, Deezer, Tidal and Google Play Music, music began to be commercialized digitally through this spread and streaming became more popular (Morris et al., 2015). As a result of this change, consumers begin to listen to an extensive musical catalogue in real-time through a broadband Internet connection, whether paid or free (Helkkula, 2016). Even though there are so-called freeloaders, currently most are more likely to consume paid digital streaming content (PR Newswire, 2015), which has made the virtual market increasingly competitive (Anderson, 2008). While some benefit from a free distribution with some consumption limitations, another set of customers benefit from premium content and quality through affordable monthly fees at an average cost of US \$ 9 to US \$ 20, depending on the company (Madden, 2009).

With the increase in the streaming service, this model stood out for its easy access to musical content without the consumer having to own the musical property. In this way, natural competition arises between platforms because they offer very similar plans (Howe, 2019). This caused companies to look for ways to stand out from each other to guarantee their place in the market (Meek, 2019). The platforms basically differed by the types of interface, quality attributes, integration of social media or through catalogues or exclusive lists created qualitatively differentiating (Morris et al., 2105).

Scholars and industry professionals believe that there was a substantial increase in new consumption habits after the creation of the various streaming platforms, which consequently led to a decline in media consumption and tangible downloads (Hampton-Sosa, 2019). According to Nielsen, streaming platforms accounted for 54% of music consumption in 2017. In 2019, the RIAA report, an institution that analyzes data related to music sales in the U.S., showed a growth of 60 million subscribers, which led to a 13% increase in revenue from this sector, proving massive growth year on year (The Economist, 2019; musically, 2020). It is believed that, in the future, this trend may increase due to the increase in smartphone users in the period from 2019 to 2027 (Thomas, 2020).

#### *4.3 The return of Vinyl*

With the total dematerialization of the music provided by streaming, the music loses its traditional meaning, as it loses the music or becomes immediately available (Moscheta, 2018). People started listening to music in a more individual and intimate way through the use of headphones and speakers connected to the computer (Thomas, 2019). New technologies enable consumption anytime or anywhere, usually through smartphones. (Byungwan Koh et al., 2019).

Despite the convenience of easy access to high-resolution digital music, the quality of sound propagation seems to decrease from the point of view of some more conservative consumers and specialists, and the relationship with music becomes more disposable and less profound. Streaming portrays a democracy in which all musical material has the same value and

availability promotes boredom, causing people to change from one song to another at random making the music lose its unique value, becoming disposable (Thomas, 2019).

To compensate for this scenario of a devaluation of musical works, the platforms sought to develop personalized playlists as a way of organizing and categorizing the repertoire, trying to recover the value of existence, archiving, organizing or telling more about the consumer's personality, as the old mix tapes did on cassette tape (Hagen, 2015 cited by Moscheta, 2018). Despite greater fluidity and accessibility, for some, collecting is still important in music consumption, as it creates a sense of belonging for certain groups, in addition to reflecting personality within the social and cultural context. The return of media such as vinyl demonstrates that although we are in a technological age, a portion of consumers still prefer the collectively tangible relationship and the high quality of the sound provided by Vinyl seems to rescue these feelings (Goslin, 2018).

According to musician Jack White and founder of Third Man Records during his talk at the inaugural Making Vinyl conference in 2017, the return of vinyl consumption brings a more intimate feeling to the consumer, putting music back in the spotlight. The listener has to connect and pay attention to the music, which differs from consumption by streaming, where the consumer is in charge (Thomas, 2019). He further states that it is not about nostalgia, but the return of reverence to the beauty of music in a digitalized and shallow world (Graff, 2019).

Vinyl still has numbers around it that indicate its strength in the music business in an era of hyper-connectivity. Data from the Nielsen Music 2017 US Music-End Report presented in an article published by Graff (2019) in a Billboard report, state that more than 14 million pieces of vinyl were sold in the United States, figures that only appeared in mid-1991. Other figures presented by the RIAA report an increase of nearly \$ 420 million in vinyl consumption in 2018, almost the same number of album's purchases through iTunes downloads in 2017 (Meek, 2019). More recent data presented in September 2019 by the RIAA revealed that vinyl releases in the first half reached US \$ 224.1 million, with the sale of 8.6 million units (Graff, 2019). This panorama of numbers through these reports reinforces the relevance of the gradual return of this consumption.

Despite the antagonistic relationship between digital and analogue, Streaming shows to be helping to increase the growth of consumption and quality in the production of the Vinyl industry. Since 2015, there has been a substantial increase in the consumption of this media and streaming comes as an adjunct to this issue. Caren Kelleher, founder and president of Gold Rush Vinyl and former head of music application partnerships at Google, proposes that streaming and vinyl consumption are complementary. Musician Jack White also believes that they are mutually beneficial with streaming being a way for consumers to discover and establish a previous connection with the artist before purchasing physical media, as it is an expensive investment in relation to purchasing a subscription on any platform streaming (Seppala, 2018).

#### *4.4 Influence on artists*

After the streaming wave, it can be said that there was a decrease in sales and profits of the current artist if compared to the past (Howe, 2019). Artists linked to this model, now depend on the amount paid for the performance flow that varies according to the scope of its propagation and the agreements made between copyright owners and companies (O'Brien, 2013). According to the report by ADAMI, a French organization that supervises the copyrights of artists and musicians, royalties received by artists are still considered to be well below the revenue generated by the songs transmitted (Bouillot et al., 2016).

In 2018 report issued by the RIAA, it is pointed out that there was double-digit growth for the third consecutive year in the revenue of the music industry, leveraged substantially by the increase in revenue from paid subscription services such as Apple Music, Spotify, Deezer among others. In addition to this report, the IFPI (International Federation of the Phonographic Industry) also discloses this growth in the USA, reporting in a report the constant increase of 33.5% of the revenues generated by streaming in 2018. These reports tell us that despite a significant increase in revenue in the music industry, this profit is still being maintained by streaming platforms, not being passed on precisely to the artists involved (Ingham, 2109)

While streaming platforms earn millions of dollars from subscriptions and sales of advertising space, artists receive a sum still well below expectations This payment flow

varies widely, depending on the agreement between the artist and the company, whether it is independent or has a large contract with a renowned record label (Albright, 2015; O'Brien, 2013).

As an example of this dissatisfaction, we can mention the problems related to copyright monetization suffered by singer Taylor Swift, who removed her catalogue from the Spotify platform in 2015, as a protest against the way this platform monetized artists (Lima, 2016). Despite his departure, Swift saw no way out and returned in June 2017 to release his album "Reputation" in order to maximize physical sales and paid downloads. This episode demonstrated that despite being averse to this unfair relationship and even being a high-reaching artist, today it is almost impossible for an artist to let go of this business model if he wants to reach his fans and survive in the music industry (Nusca et al., 2019). Katie Garcia, the owner of Bayonet Records, explains that even though the artist has an established career like Swift's, in terms of marketing and campaigning, launching himself on a streaming platform is the guarantee that people will get to know about the artist. Regardless of any sphere, it is in and this is an interdependence relationship that is difficult to disconnect (Mejia, 2019).

This business model, unlike traditional ones, has a long-term financial return and depends on the amount of flow of how many times the music is played, that is, the artist needs the maximum reach of his audience (Nusca et al., 2019). Although royalty rates are lower than physical sales (The Economist, 2019), this format can still generate huge revenue for pop artists of Taylor Swift's stature, which has a long reach among his followers (Duwe de Lima, 2016). This reinforces the difficulty of artists in abstaining from this means of distribution, considering that the artist seeks to achieve the greatest possible number of disclosures to increase sales of physical media and shows (The Economist, 2019).

To understand this disproportion of profits, we can mention the examples that cover the most popular streaming models. The leader of this model, Spotify, maintains about 30% of the fee paid by the subscriber, while copyright holders, including record companies and producers, share around 55 to 60%. Musicians, arrangers and composers are left with only 10 to 15% of this fee if the artist signed with a major label. (Mejia, 2019). The Irish Union of Musicians fears that this low monetization and disproportionate division and profits may discourage

musicians in beginning their careers, as this model harms even more medium and small artists (O'Brien, 2013).

To obtain an acceptable payment amount, these artists use that they are heard thousands of times. This disproportion shows a worrying scenario for the art class that is entering the world of the current music industry. As quoted by Henderson Cole, a New York entertainment lawyer, in an interview with Mejia (2019), it used to be a song played on the radio, 100% of royalties are usually for artists, there is no streaming model that drops to 20% and it becomes more critical for musicians who are not part of the mainstream and have few performances on the platforms (INGHAM, 2109). Independent musicians also often rely on the support of fans who include their LPs and CDs, will show and include their sales, sometimes being the only way to receive more through streaming platforms (Schofield, 2019).

#### *4.5 How this consumption model influenced the market and music production*

The form of monetization related to the reach on streaming platforms generated a new concern for producers and artists involved in music production since for the artist to receive royalties on each performance, it is necessary for the listener to listen to the first 30 seconds (Hogan, 2017). This reinforces the need for streaming companies to make use of mathematical algorithms to guarantee this initial connection and ensure that the music has the necessary reach and impacts in a more accurate and instantaneous way (Hassan, 2018).

Algorithms are perfected and used to manage and recommend large volumes of music, thus being able to determine how music reaches consumers in a more targeted way (Vox Creative, 2019). Expanding access to content and making it more abundant, turned it difficult or even formatted the consumer experience. For this reason, the creation of this virtual curatorship has become essential as an aid tool for the expansion of new discoveries provided by the platforms (Moschetta and Vieira, 2018). Around 2010, mathematically accurate hits begin to reign on the music scene because of this new artificial intelligence. All aspects of music composition, production and release are directed directly to promote increased consumption according to consumer tastes and preferences (Hogan, 2017).

The characteristic that appears to arise because of specific recommendations is the dehumanization of music production by artists, reinforcing tastes instead of expanding them, creating a kind of pattern and "virtual bubble" (Vox Creative, 2019). For artists and those involved in music production, playlists recommended by algorithms help to obtain information about how their content is consumed, showing real reach numbers that can help in the process of future creation and dissemination (Howe, 2019).

It is observed throughout history that since the recording industry emerged, formats have dictated and inspired the making of music. Limitations that existed in traditional formats such as LPs became obsolete with the creation of streaming (Awal, 2018) and in the face of these changes in the behaviour of creation, consumption and propagation, many artists adapted their musical structures, as the consumer and platforms started to dictate the rules, with profit being intrinsically linked to the flow of consumption (Hassan, 2018).

Thus, a new concern that arises for producers is monetization on streaming platforms, since for royalty payments to artists it is necessary for the listener to listen to the first 30 seconds (Hogan, 2017). This reinforces the need to make use of algorithms to understand which format best adapts to the consumer's taste to guarantee this initial impact on the listener (Hassan, 2018). For a better understanding in terms of musical techniques, below is the current formula of what is called pop opening and a comparison of what it was like in the past, when the music was more organic. According to Matla (2015) in this structure the intention of the chorus appears in the first 5 to 10 seconds, so that the hook is in the listener's ear, thus making the listener interested in the development of the song until it reaches the main chorus around the 30 seconds.

Organic Music	A.B.A.B.C.B.
Result driven by the use of algorithms	B.A.B.A.B.C.B.

Being:

A: It can mean verse, alternative section, common break or accumulation;

B: It can mean fall or chorus - main section;

C: Bridge, major breakdown, or section of music that differs musically;

Pop host Nate Sloan in an interview for The Verge says that despite the music being directed to the first 30 seconds, there is still an incentive for people to listen to the track in full, because when heard in full, the artist would have a higher payment, in addition to being more likely to be placed on a playlist, which consequently will make the artist get more possibilities for clicks. For this reason, the duration of the songs is also reduced (Mach 2019).

As noted on the Billboard Hot 100, songs that previously averaged four minutes dropped to three minutes and thirty seconds in 2008 (Goodrich 2019). As early as 2017, the BBC reported results collected by an Ohio State University study indicating that the average time of introduction to the songs fell by around 70%. Between 1986, the duration of an introduction was on average 20 seconds, dropping to 5 seconds in 2015 (Awal, 2018). In 2015, less than 1% of the songs produced lasted less than two minutes, in 2018 that number rose to more than 6% (Iqbal, 2019).

The reach, relationship and diversity of consumption were also affected in this scenario. For the generation of Boomers, the habit of listening to music was deeper and there was greater interaction behaviour (Howe, 2019). Unlimited access meant that the number of new songs that reach an adult's ears today, on average 40 songs a day, already a teenager in the 1990s knew an average of 8 to 10 new songs a week via radio traditional (Goodrich, 2019). The new generations facing so many options, tend to be less concerned with the artist's ideology, virtuosity and vision, so they tend not to deeply consume the content making it increasingly disposable (Howe, 2019).

#### *4.6 The streaming consumer profile*

Most consumers of music streaming were born or reached adulthood during the height of the global economic recession, which ended up shaping political, ideological choices (Dimock, 2019). This environment directly developed values, attitudes that reflect current consumption (S.W. Ng et al., 2015), giving companies a different understanding of the decisions and behaviours of current consumers (Woo, 2018). Even in the face of political and economic difficulties of that period, the generations that consume music today have reached greater

purchasing power when they reach adulthood, which ends up influencing the general consumer market, causing some characteristics to emerge.

While the generation above 50, called Baby Boomers, grew influenced by media such as television and radio, the Millennial, X and Z generations grew or were born as the computer revolution and the creation of digital mobility were taking place (Dimock, 2019). Technology and the rapid evolution in the way people interact and communicate created the behavioural characteristics that reverberate until today (Dimock, 2019). According to the Pew Research Center, the main agents of behavioural change and increased consumption of digital music are the growth of social media, connectivity, communication and consumption of entertainment on demand. Mobility and access are fundamental in the propagation of this scenario and make music occupy more and more prominence in people's lives.

For this reason, music has been consumed in a variety of ways and for a longer time. According to an IFPI report, 2019, listeners around the world spend an average of 18 hours a week consuming music. This is equivalent to about 2.6 hours or 52 three-minute songs daily, with 54% saying "loving music" increasing to 63% among 16 to 24-year-olds (IFPI2020). For this reason, competing streaming companies constantly reinvent themselves and always seek a greater connection with the consumer (Bouillot et al., 2016). In this scenario, personalization and relevance are essential to attract new consumers (Woo, 2018).

According to Ciampa, 2019, the main generations that consume streaming services today are Y (60%) to Z (58%) and X (47%). These generations have adapted or were born in a world of interactivity and controlled by the cultural and social hyper-connectivity provided by the Internet (Dimock, 2019). Based on observations by Lyon and Kuron (2014) cited in the publication by Eddy SW Ng and Jasmine McGinnis Johnson (2015), the emergence of social media provided by the internet boom, despite bringing more connectivity in the interaction and spread of information, also contributed to negative personality traits such as narcissism, neuroticism, self-confidence and individualism. Such behaviour was stimulated by access to all types of information in an unlimited and often freeway, which ended up reflecting on the relationship between consumer and service/product (S.W. Ng et al., 2015).

An online survey of 1,628 millennials and 906 Baby Boomers, conducted by Angela Woo (2018) through the Forbes website, seeks to understand the habits and differences between

current and past consumption habits. This survey showed that 60% of Millennials make their purchases based on their well-being as a way of expressing their personality. Half of the respondents prefer to spend their money on an experience rather than material goods. New generations are also more interested in the experience that accompanies the music, how to listen to it and share it on social networks with friends and family, thus allowing them to express their experiences and opinions, whether positive or negative (Bouillot et al., 2016).

Still analysing this research, it was observed that almost half of the interviewees value it when ads and social media are personalized, creating a stronger connection between them and the companies. This shows that today consumers are more attracted to influencers than to traditional advertising, seeking greater psychological identification (Woo, 2018). Although the numbers of streaming consumption are higher among the younger age groups of 16 to 24 (83%), 25 to 34 (75%) when compared to the more advanced age groups, it was found that in 2019 the streaming service also had a substantial increase among consumers aged 35 to 64 years. Data reveal that the generation of Boomers, although less related to connectivity compared to younger people, are reaching 54% in the use of the streaming service (IFPI, 2019). Despite the growing number in the use of streaming, older consumers still tend to seek their first contact with the most accessible free sources, including conventional radios and the Youtube platform, which serve as a reference for introduction to streaming services (PR Newswire, 2015).

Artists and companies involved strive more and more to interact with listeners, making listening to music a social and cultural experience, not just for consumption. Through this interactive relationship, data is collected through a direct connection to interrelated social media and analyzed through algorithmic technology (Grant, 2019). Developers use this data to strengthen their catalogues and resources, making the platform/user relationship increasingly accurate and personalized (Bouillot et al., 2016).

Polish sociologist, philosopher and thinker Zygmunt Bauman, quoted by Palese (2013) in his article "Zygmunt Bauman", individual and society in liquid modernity, call this behavioural change as "liquid modernity". Simplifying this concept to understand the scenario presented, tangible assets become a disadvantage and access to the intangible is more interesting than the property. The lasting gives way to the transitory, fluid and flexible (Wikström 2012

quoted in Helkkula, 2016). This phenomenon explains why music distribution channels based on unlimited access are overcoming channels based on properties (Datta, 2018).

To reinforce the concept of this trend, data presented by the IFPI report on the consumption of streaming in 2019, points out that 62% use the streaming service due to unlimited and instant access to millions of songs, 61% for listening to what they want and when they want and 47% for being a more convenient and fluid way. In this new scenario of more fluid consumption, mobility has made music more present and increasingly part of people's daily lives. Reconciling daily activities and music has become essential, that is, music has become a soundtrack for everyday life and no longer a tangible and specific consumption item. The IFPI 2019 report points out the activities that best match streaming consumption, 70% of respondents consume music while on the road, 64% while relaxing at home and 51% while cooking or doing household chores.

## **5 Research Methodology and Methods**

The methodology used in this research is descriptive with a qualitative approach, making it possible to deepen the pre-existing scientific and cultural knowledge. The construction of meaning happens in the deepening of content. Literary review related to the subject helps the general understanding of the development of the music industry until the creation of the business model based on streaming technology and adjacent aspects (McCombes, 2019).

Through deductive and critical analysis of the data collected, this research intends to understand how this new business model affected the market and consumption of musical entertainment, musical creation and the return for artists. The study in its essence describes several aspects and characteristics, explaining, analyzing and validating the results through related sources (Research Methodology, n.d.)

This study was based on consumers in general. Schwartz (2012) believes that, by measuring universal values, it is possible to highlight different values and the dynamic relationship that exists between them. This research aims to shed light on current issues and allows to describe the situation in a more complete way, aiming to connect related subjects and open the field for discussions about the future of the industry, new technologies and consumer behaviour.

References collected from bibliographic sources, published articles and press focused on the musical environment, seek to describe in a precise and systematic way the changes in the music industry after the emergence of streaming technology (McCombes, 2019). The information was collected online through websites related to the subject and annual reports containing information and data on the performance of streaming, bringing a more quantitative character. However, there is a predominance of related subjects conducted by professionals involved in the journalistic or musical industry together with related academic material, which brings greater foundation with a more qualitative character.

## **6 Results and analysis**

Through descriptive research based on bibliographic review, data and information were collected on various aspects involving the issues raised through annual reports, reports related to the world of music and research carried out by other academics. Thus, the intention is to understand what the emergence of streaming technology has caused in the music market as a whole, seeking to answer about the impact in relation to pre-existing media, influencing consumer behaviour, the impact on the satisfaction and monetization of artists and how these all these aspects ended up affecting music production. Understanding the connection between these issues not only leads to an understanding of the current scenario, but it can also be the basis for future research related to the market, consumption, the emergence of new trends in the business model and technological innovations.

### *6.1 The impact of streaming technology since its inception*

Initially, it was clear and confirmed that the spread of digital consumption by mp3 in the early 90s was a determining agent of unrestricted and illegal music consumption, through piracy in illegal music distribution networks using the P2P network (Bouillot, et al., 2016). This negative impact can be seen in the IFPI reports (2005) that indicate a 23% drop in sales volume between the years 1999 and 2003. At the same time that consumers had more access to more music, the music industry it was negatively affected financially, as the virtual world made it difficult to control downloads and monetize them. According to IFPI studies in 2015, even with the existence of streaming technology, piracy continued to damage the music

industry's revenue. This study showed that about 20% of consumers of fixed Internet still practised piracy, violating copyright (Helkkula, 2016).

To suppress piracy, the technology company Apple was a pioneer in developing ways to store and market mp3, creating a new business model that allowed consumers to pay for their downloads in order to store them on their mobile device known as the iPod. During this period, it can be observed that the new trend was characterized by consumers who were interested in having access to a large music collection in a portable way at an affordable or even zero cost (Moscheta, 2108). This scenario demonstrates that in a globalized digital world that is increasingly difficult to control and with more demanding consumers, there was already a need for changes in the way music was marketed and consumed. Thus, it can be said that the difficult scenario stimulated the emergence of new forms of commercialization and business models and technologies.

Subsequently, with the development of broadband internet and the creation of the iPhone, the technology company Apple launched in 2003 another new business model, the iTunes Music Store (O'Neill, 2006) which, by enabling the purchase of digital music, attracted many consumers and in 2010 it reached 10 billion downloads of its application alone (Dawei 2011). It was observed through this number, that this new business model had a considerable impact on the reduction of illegal consumption, attracting many consumers, but it was still not 100% effective in combating piracy. Despite the superior quality of the files compared to the pirated files, it was found that only those who owned the iPhone had access to the iTunes Music Store application. Another factor that shows the decrease in the chances of growth of fans of paid downloads, was the complexity in installing the Apple application compared to applications designed for smartphones and illegal download applications that were competing at the time (Dawei 2011).

At the same time, companies developing new technologies were still looking for solutions to control piracy, but in a way that still met the needs of consumers. The emergence of Pandora in 2000 created a more democratic solution, being a precursor of streaming, emerging at first as a free online radio that used algorithmic technology to personalize playlists, marking a new era of consumption, allowing for further evolution and bringing innovation in the business model that involved music distribution (Zantal-Wiener, 2017; Albright, 2015).

Although the creation of this technology is extremely relevant, we can see that this concept of a business model only became stronger and more popular years later. Only after the emergence of Spotify in 2008, this model strengthens and popularizes streaming technology, combining ease and practicality, automating various processes, such as music downloads, creation of playlists, file organization and ends up attracting 240 million users, being 120 million paying (Waniata and Kennemer 2020). This demonstrates the strength of the adherence to streaming technology that, by providing all the facilities, mobility, unlimited collection and with an affordable price, proved to be more effective in suppressing illegal practices of music downloads, in addition to suppressing the needs of consumers, being more democratic and fully accessible, leading to a decline in consumption of tangible media and downloads (Hampton-Sosa, 2019).

The expressive and gradual growth of this consumption is presented through research such as Nielsen's that confirm that in 2017 streaming platforms already represented 54% of music consumption (The Economist, 2019). Data provided by the RIAA report at the end of 2018 also point to double-digit growth for the third consecutive year in revenue from the music industry which was leveraged by the increase in revenue from paid subscription services such as Apple Music, Spotify, Deezer and Tidal (Ingham, 2109). In more recent reports provided by RIAA, they show that in 2019, there was a growth in 60 million subscribers which led to a 13% increase in revenue from the music industry, only in the USA (Musically, 2020).

Through the presentation of these data, it can be seen that this new business model brought positive financial changes, which ended up driving the growth of the revenue of the music industry in the global market. Such positive impacts can be reaffirmed with the increasing number of subscribers around the world and those expected for the period from 2019 to 2027, as people have more access to new technologies such as more modern smartphones (Thomas, 2020). It can be said that the tendency is for growth and prosperity and is in a growing trend that accompanies technological evolution.

## 6.2 *The influence of streaming platforms on the return of Vinyl*

Even though streaming and vinyl are of two divergent strands, it is observed that the streaming platforms have become supporting and influencing the first contact of listeners

with artists, helping to boost sales of pieces of vinyl for those more interested in deepening their knowledge and relationship with musician and his work (Greenwald, 2014).

To see how vinyl is still one of the media that survived the emergence of streaming, data from reports such as the Nielsen Music US Music-End Report are presented, stating that more than 14 million pieces of vinyl were sold in the USA alone in 2017. The 2018 RIAA report, presented the number of sales that reach the \$ 420 million in relation to vinyl consumption (Meek, 2019). The growth of this consumption is still growing every year, as pointed out by data in the most recent reports provided by the RIAA, which states that only in the first half of 2019, vinyl releases reached revenues of US \$ 224.1 million, with the sale of 8.6 million units (Graff, 2019). Such numbers reflect that despite the strong trend of consumption through musical streaming, there are still groups that value the relationship with the tangible musical product and the significant increase in the consumption of this media, proves the relevance of its permanence and its return in the current music industry.

### *6.3 The impact of streaming consumption on artists*

Despite the positive impacts of the growth of streaming technology related to the Music Industry previously presented, another issue emerged when it comes to the satisfaction of the artists involved in this new business model. It was observed through reports and facts linked to artists like Taylor Swift that this model still causes dissatisfaction and resistance in a good part of the musicians, both from the mainstream, and musicians from a more alternative scenario. In a first analysis, it can be seen that adherence to streaming technology decreased sales of physical media (Albright, 2015; Howe, 2019) which consequently also decreased the profits of artists.

In addition to the drop in the sale of physical media, according to a report by ADAMI, a French organization that supervises the copyrights of artists and musicians, the amount paid for the flow of music performance is still much lower than expected in relation to the profit obtained and revenue generated by the platforms (Bouillot et al., 2016). As was presented in the previous topics through reports from the RIAA (2018) and IFPI (2018), there was substantial growth in the revenues of the music industry related to the growth of the streaming industry. The same reports also indicate that this profit, was maintained by the

companies and that the artists involved were not passed on in a fair manner (Ingham, 2109). To understand this disproportionate division, figures from the market leader Spotify were presented, which maintain about 30% of the fee paid by the subscriber, while record companies and producers share around 55 to 60%. Musicians, arrangers and composers are left with only 10 to 15% of this fee if the artist signed with a major label (Mejia, 2019). These data prove this disparity and support the reason why artists feel wronged in relation to profit sharing.

However, in this study, it can be seen that even if they are resistant and feeling exploited, artists depend on streaming to guarantee their existence in the market and the minds of consumers. This dependence makes it difficult for artists to disconnect from this practice and business model because according to Katie Garcia, owner of Bayonet Records, in terms of campaign marketing, making the work available on a streaming platform can be the guarantee of reaching the maximum of a possible audience and is the guarantee that people reach knowledge about the artist (Nusca et al., 2019). In this way, it can be understood that it is essential for the artist's projection, to be exposed to music streaming platforms. As previously analyzed, although vinyl still has its relevance, tangible media has been losing its strength as the streaming market expands and is no longer the artist's main source of profit.

Dissatisfaction only increases with difficulty found by the artist in relation to returns that only occur in the long term beyond the dependence on the amount of flow they need to monetize within the platforms (Nusca et al., 2019). to understand the difference between the current scenario and the reality in the past, Henderson Cole, a New York entertainment lawyer, who in an interview with Mejia (2019), tells us the fact that in the past, if a song played on the radio, 100 % of royalties usually went to the artist, whereas in the streaming model this drops to 20%. The royalty rates are substantially lower than the physical selling rates and if the artist is not of a proportion like Taylor Swift, he will have to work hard in his promotion to increase the sale of his physical media and shows (Duwe de Lima, 2016; The Economist, 2019) This only reinforces the fact that in order to reach an acceptable value, artists would have to be heard thousands of times, which worries and discourages the youngest and most independent artists in their musical careers.

Such changes ended up impacting the way and songs are built to reach their increasingly fluid and dispersed audience because as reported, artists only start monetizing on platforms if the

listener hears the first 30 seconds (Hogan, 2017) and quantity and duration of its flow is directly linked to the artist's profit. It was presented that the algorithmic technology and artificial intelligence used by the platforms act to guarantee the reach and impact on consumers (Hassan, 2018) which, in addition to managing recommendations, determines the artist's reach, increasing consumption and shaping the pre-existing consumer tastes, creating a kind of pattern and "virtual bubble" (Hogan, 2017).

In order to understand this change, the structure of a pop song from a few decades ago was compared to current songs and a much more mechanical structure was perceived that seeks its impact in a faster and more targeted way. In this new formatting of the song, the intention of the chorus appears in the first 5 to 10 seconds (Matla, 2015), as the intention is to hold the listener's attention so that he reaches the 30 seconds necessary for monetization.

It was also highlighted that another factor that changes to adjust to the reach and spread of the songs is the duration. It is observed that each year the songs become shorter. The songs that previously had an average of four minutes, dropped to three minutes and thirty in 2008 (Goodrich 2019). In 2017, it was observed that the duration of introductions fell by around 70% (Awal, 2018). Songs made in 1986 that had 20-second intros, dropped to 5 seconds in 2015. In that same period, it was noted that less than 1% of the songs produced lasted less than two minutes, in 2018 that number rose to more than 6% (Iqbal, 2019).

This is because, according to pop host Nate Sloan (Mach 2019), if the track accessed by the artist has its full reproduction, the artist will be more likely to fit into playlists with greater chances of clicking, which would consequently bring greater return financial support to the artist. All of these interconnected facts reaffirm the influence of streaming technology on consumer behaviour that consequently dictates the construction of musical structures today. It can be seen through these facts, that these influences are standardizing the way that the creative material has been developing, and by standardizing the music within a prism focused on consumption, one can raise the hypothesis that over time and the As the market becomes more fluid and disposable, the possibility that music will lose its unique and artistic value as the platform becomes more present.

#### 6.4 *A new consumer emerges*

Digital abundance has also brought new habits, causing the number of new music consumption to increase by an average of 40 songs per day compared to a consumer in the 90s who knew an average of 8 to 10 new songs a week through traditional radios. This unlimited access reflects the consumer's relationship with the artist. In this scenario, the consumer tends to go deeper into the content, making it more and more disposable, forcing the artist to reinvent himself more and more. On the other hand, as pointed out by the MSI report, the adoption of streaming in 2016 also expanded the discovery of new songs and artists that were previously only in the underground scene, attracting attention to related artists and products and shows sold by more independent artists.

It was observed that the type of music consumption through streaming reflects the profile of a generation that grew or was born during the computer revolution and the creation of digital mobility (Dimock, 2019). As they are generations with traces of narcissism, neuroticism, self-confidence and individualism, unlimited access has brought freedom in a form of individualistic consumption, fastmoving, abundant and less ideological. Easy access at any time and place influenced the quantity and duration of consumption, which has become increasingly present in the daily activities of consumers. Data reinforce and prove this hypothesis, revealing that currently, a person consumes an average of 18 hours of music per week, this is equivalent to about 2.6 hours or 52 three-minute songs daily (IFPI, 2020).

In this fickle and disposable scenario, for companies to stand out and attract more fans, personalization is essential in the streaming market. For this reason, it was observed through this research that companies are investing more and more in artificial intelligence and algorithmic technology for building playlists, seeking to turn music audition into a cultural and social experience, which in the future will be shared on social networks or among friends (Grant, 2019).

To reinforce how the streaming platform became the main means of consuming music, it was also worth noting that music has become increasingly present in all age groups. Convenience, mobility and a vast catalogue in just one click using any smartphone attract the most varied types of consumers and, despite being more popular and poignant among young people from 15 to 45 years old, it is also growing between generations between 35 to 65 years old as

presented in IFPI report in 2019. This data reinforces the hypothesis that the streaming market only tends to grow every year as its audience varies.

In a general overview, including all generations, this report points out that 62% use the streaming service due to unlimited and instant access to millions of songs, 61% for listening to what they want and when they want and 47% for being a more convenient way and fluid. Daily activities are connected with consumption, where 70% of respondents consume music while they are in the means of transport, 64% while they are relaxing at home and 51% while they are cooking or doing housework. In other words, music has become a backdrop and a soundtrack for the daily life of consumers. This reaffirms the change in the character of psychological and emotional involvement that was previously deeper and more focused, raising the hypothesis that there was a change in the level of importance that music has in relation to the ritual of the consumer when listening to music. Perhaps the abundance and random reproduction make the music more and more in the background, losing the attention of consumers.

## **7 Final considerations**

The research presented here aimed to describe and observe in a critical and fluid way, how industry, artists and consumers still change and behave in the face of the phenomenon caused by the emergence of streaming platforms. The experience of consumption in a digital age not only presents transformations in the business model but also in the form of consumption that directly affects music production. The abundant and non-linear consumption of easy access, mobility and low cost, not only presented the repression of illegal practices such as piracy but also seems to favour the increase in diversified consumption and musical discoveries for consumers, attracting thousands of new users to date. These indicators bring optimistic perspectives to the music market when it comes to financial growth in the industry that previously faced a crisis due to piracy.

Thus, the research aimed to verify, through analysis based on younger generations, the understanding of impacts on the industry, artists and music product after the emergence of streaming technology, relating characteristics of technological and market evolution with current consumption habits. Schwartz (2012) believes that, by measuring universal values, it

is possible to highlight different values and the dynamic relationship that exists between them.

It was interesting to note that despite technological changes, physical media is still present in the industry and vinyl continues to influence a portion of consumers throughout history. Its return is somewhat connected to the growth in consumption through streaming, showing that some aspects can influence and interrelate. In this way, it was possible to generate indications for the future use of this material by the recording industry or for research related to new trends in industry and consumption, even if it is not Virtual.

At the same time, it was noticed through this research that consumption becomes more and more individualized, bringing the need of companies to become more and more personalized service and adjusted based on the tastes and preferences of consumers who are now in direct contact with those who makes and distributes music. This suggests that the consumption of music in its evolution is directly influenced by market changes, new technologies and behavioural changes. It was discovered that the connection between these aspects, bring changes in the interaction and control over musical reproduction directly affecting profits and satisfaction of the artists who had to adapt to the new scenario to survive.

This adaptation had a major impact on the way music is created and propagated, and the direct influence caused by the way music is consumed today is evident. It was observed that the musical abundance provided by streaming platforms brought a more democratic consumption character. Despite having the intention of expanding musical tastes and making music more present in the daily lives of consumers, the easy access to unlimited music at anytime and anywhere has made this relationship more superficial and fleeting, putting music in the background of importance and thus losing its main and unique character. Although this research offers an overview of current consumption and behaviour, helping to understand the topic investigated, the answers to the questions raised are not completely conclusive, based on the understanding that the media, the market and technology continue to evolve constantly.

When using descriptive research, several sources were sought that often had personal points of view, so some information proved to be conflicting. For this reason, a more subjective and personal analysis was necessary at times, which may influence the more realistic point of

view of the issues raised. For a more accurate analysis of the subject, research is suggested later, crossing updated quantitative information with qualitative research through questionnaires, aimed at a less generic group in order to obtain a better understanding of more specific aspects. The intention of this work is to stimulate an understanding of factors related to new market and consumption trends, in addition to suggesting future research related to new technologies, services and behavioural changes that may emerge in the future.

It is interesting to remember that music was the cause of revolutions and social transformations in the past and it is not yet known whether this technology has created a generation of uncritical listeners and musicians guided by unlimited consumption. Regardless, it is still clear that the music market has undergone a major transformation after streaming technology and to remain profitable and its evolution is unstoppable and inevitable.

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