How the Introduction of Streaming Has Changed the Financial Focal Points of the Music Industry

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Abstract

For this thesis, the gathered research will demonstrate how the introduction of music streaming has made a monumental impact on the music industry and the financial effect it has had on various aspects of the creation and distribution of recorded music. The areas of research will range from the music labels in charge of producing and providing the music to the streaming services in charge of distributing the music. Focus will be on how music streaming developed in the late 1990s and took the music media world by storm, devaluing and diluting the power of the physical music industry in the process. This thesis will also provide evidence of how the shift to music streaming has fractured the financial stability that an artist previously had in pursuing music as a full-time career, as well as the current legal troubles associated with creating and maintaining value in the digitalized industry.

How the Introduction of Streaming Has Changed the Financial Focal Points of the Music Industry

Over the past two decades, the music industry had to adapt to selling in the new digital marketplace created by the invention of online content-streaming. This thesis will address how music labels, the backbone and production of the actual music, as well as artists have learned to shift their focus to the more relevant platforms. The history of the transition from physical to digital platforms will be presented, including a brief discussion of the line of evolution from the introduction of the compact disc (CD) to the MP3 format to the streaming service platform. This progression of distribution platforms has put a new financial strain on the professionals involved in the various aspects of the music industry. The thesis will break down the recent downward trends of total global revenue since the introduction of digital revenue, and how the market has an indirect correlation between the increase of digital (mainly streaming) revenue and the shrinkage of total global revenue from all formats of music. From here, the business model of streaming companies will be discussed, including a breakdown of the top streaming services and their share of the streaming market. The researcher will present the findings of how streaming services break up their monthly subscription fees to pay the artists, record labels, and themselves through the coded information (known as metadata) embedded in the files of digital music. Each media file, or song, has its own identifiable set of metadata that helps royalty recognition companies and labels to pay the artists for their work. This thesis will present information on the analyzing of the main cost allocations associated with the recording, production, and promotion costs associated with distributing physical and digital distribution, and how it is related to the recent decade of decline of global revenue for recorded music. In particular, this thesis will examine the effect of contractual agreements between music labels and distributors known as manufacturing and distribution (M and D) deals. These arrangements help allocate costs to the direct sources in the physical distribution process. The research presented will also address the new age of digital piracy of music, and how long-established copyright laws hold their place in helping enforce that the artists will still be able to be compensated for the production and distribution of their music.

A Shift of Music Platforms

Up until the 1990s, physical distribution of music was a label's main form of revenue. Comprised primarily of tapes, CDs, or vinyl records, labels and artists were financially focused on the physical number of sales of their product. Physical forms of music still hold a small value to the older generation, as label manager Jo-Ná Williams states, "I [still] know some artists that sell to an older demographic and their audience still wants the physical product" (Robley, 2014). However, the main focus for music companies was replaced by the advent of digital music distribution. In 1999, Remote Solutions introduced the first MP3 player with the storage capability of 1,200 songs; this was followed two years later by the iconic IPod by Apple Computers (CollectionsCanada, 2015). This revolution transformed the music market, as CollectionsCanada explains, "The huge popularity of file sharing [shook] the foundations of the recording industry, whose profit for over a century depended on restricting the ability of record buyers to make and transmit high-quality, free copies of their products." The shift to digital platforms eventually paved the way for the next platform of streaming. Streaming revolutionized the way artists and labels recognize revenue, the same way digital downloading did to a physical distribution-centered market.

Streaming – A Description of Today's Main Music Industry

Media streaming involves the act of sending and receiving compressed media over the internet, in real time. The revolutionary concept behind streaming is that an internet user does not have to download the file to play it; the music is sent through a continuous stream of data and plays live as the data arrives, hence the name "streaming" (Rouse, 2017). The issue of making money and recognizing revenue for a song has become an issue for artists and music labels, since a paid subscription to a streaming service potentially unlocks millions of songs to the user, making the idea of a digital downloaded library seem simply irrelevant. The debate that has come to light with digital distribution, streaming in particular, has been the question of ownership of a song, in this sense a digital recording of any type of music, with or without vocals.. In the era of pre-CD physical copies, ownership was clear-cut and evident; obtaining a physical copy of music meant the listener had ownership of the copy (but not the musical work itself) and could listen to the music (Ganz, 2015). The introduction of the CD blurred the sharp lines of ownership; the copying of CD's made the spread of content and ownership easily applicable to anyone who had a copy of the music, whether it was original or not. The music industry fought to take a stand on this issue through legal actions, advertising campaigns, and copyright controls (Ganz, 2015). The introduction of the MP3 magnified this problem of ownership recognition, as there was no universal understanding of ownership regulations; however, streaming clarified the issue of content ownership. Streaming's application of ownership is simple: "Every time you click play on a streaming service, you are licensing the right to listen to the song in that particular moment…Ownership is never an option. You listen, you license. If you want to listen again, you license again" (Ganz, 2015, para. 11). With this network of brief licensing, a potential area of conflict for how revenue is recognized by music labels and artists is presented. There is an answer however; the solution to this dilemma is known as royalties. But this does not solve the new-age piracy problem, which will be addressed in a later section of the thesis.

Royalties, Metadata, and the RIAA

Royalties are the means by which an artist is compensated for their work played or enjoyed by outside listeners; they are tracked by a specific identification system for each song called metadata. A recording royalty is the simplest form of royalty that an artist and their label receive when their recording is downloaded digitally or streamed through a streaming site such as Apple Music, Spotify, Rhapsody, etc. The royalty chain works when an artist and their label register their content to an independent music distributor; that distributor has the responsibility to collect royalties directly from digital stores and streaming platforms on behalf of the labels registered with them (Raterman, 2014). The labels take the collected royalties and distribute them to the artist correlating the traffic of their content.

The type of royalties that recording and streaming royalties are classified under are known as mechanical royalties. These royalties, which are copyright enforced, are recognized when music is licensed or streamed. Based on the streaming platform, a certain amount of the royalty is kept by the streaming site as their form of revenue (Feister, 2014). The other type of royalty is recognized when an artist's music is played or performed publicly; these are known as performance royalties. These royalties are recognized when music is played over the radio, in a restaurant or bar, or being played publicly through a streaming radio station such as Spotify (free version) or Pandora (Feister, 2014). Performance Rights Organizations, known as PROs, are in charge of collecting songwriting performance royalties from these public showcasings and delivering them to the appropriate songwriters and/or publishers (Feister, 2014).

Through digital public performances, such as internet radio or online concerts, a PRO known as SoundExchange collects the performance royalties due for the artists and publishers. Royalties are the modern equivalent of CD or record sales; these are the numbers that artists and their labels focus on (Feister, 2014). Through the combination of mechanical and performance royalties, artists and their labels are able to be properly compensated through a system where there is not revenue being recognized through physical sales, but instead can be recognized through the exposure of their music to others through the system of royalties.

Royalties have become a major source of concern for the revenue of artists, since their portion of revenue from streaming sites has been reduced to a small percent of a penny for each play it receives. It is imperative to look into the marketing activity of royalty groups and their contribution to the revenues of artists, as royalties are becoming an increasingly large portion of an artist's income. The method of revenue recognition through royalties utilizes an electronic identification method known as metadata. Metadata is any secondary data, other than the primary audio data, including traits such as the song title, album name, artist name, album cover, etc., that is built into and transferred with the music being produced and distributed.

By keeping a song permanently embedded with identifiable information, artists are able to obtain rights to the song as the information travels with the song wherever it is downloaded (Schlette, 2012). It also makes it possible to track songs for royalty purposes. In the time where physical music and digital downloading were prominent, revenue recognition was quite simple, as artists and labels were compensated on the number of records sold or downloaded. However, with the incorporation of streaming, revenue recognition is not as clear anymore; that is where royalties powered by metadata have become useful for the tracking of plays through the streaming sites. The amount of recognized royalties has been increasing in direct correlation with the increase in popularity of music streaming traffic. As an example, the two main performing rights organizations, known as BPI and ASCAP, reached revenue goals of 1 billion dollars in the year 2015, and have established plans to continue growing (Sisario, 2017).

The Recording Industry Association of America (RIAA) serves as the foundational organization that promotes the creative and financial vitality of the most successful major music companies (RIAA, 2018). According to RIAA's data, nearly 85% of certified recorded music produced and sold in the US is either created, manufactured, or distributed by RIAA members. RIAA members consist of U.S. record companies that pay dues directly to the RIAA in order to obtain the benefits of membership of a centralized organization that, "works to protect the intellectual property and First Amendment rights of artists and music labels" (RIAA, 2018).

Comparing Physical versus Digital Production and Distribution

In the declining realm of physical music production and distribution, vinyl records have actually gained popularity due to their original, "antique" aesthetics. CD's still hold a small degree of popularity to the older generation or bands that perform live and want tangible access to their product at the show. Since the advent of streaming bigger labels tend to focus on the digital distribution aspect; however, smaller independent labels, known as Indie labels still favor physical products for artists that are not as well-known. Taking this into consideration, there are expenses that are shared through all types of production and distribution, whether it be physical or digital. The three main costs associated with releasing material are recording costs, manufacturing costs, and most importantly, promotional fees (McDonald, 2017).

Recording costs consist of expenses related to studio time used to track songs onto a file format. By the end of all stages including preliminary recording, mixing, mastering, and exporting, the time commitment for one song can reach 50 hours. Studios will typically charge a rate of 40 to 50 dollars per hour for studio time, but many studios will increase the hourly rate for post-production mastering, which involves preparing the track to be exported for distribution purposes (Thumbtack, 2017). For example, Shine on Studios in California will increase mastering costs to around 100 dollars per hour of mastering (Thumbtack, 2017).

Manufacturing costs for physical distribution is the highest cost allocation, even though it is not usually taken into consideration when dealing with digital distribution. Digital releasing will cut most, if not all, of the manufacturing costs; therefore, manufacturing costs will come from independent or distribution-centered physical releasing. If an artist has a deal with a distribution company, the distributor may pay for manufacturing costs and then be compensated from the sales revenue. Working with a distributor will usually mean lower unit costs, as distribution companies tend to have working relationships with the manufacturing companies (McDonald, 2017). This type of working agreement between a label and distributor is known as a manufacturing and distribution (M and D) deal. These agreements can be beneficial for small or independent labels in terms of cost reduction, since M.D. deals can mean, "less disruption to the cash flow situation of the company" (McDonald, 2017). The unit cost for the label is less since large quantities are produced and the distributor is motivated to get the products into the store and sold since it is invested in the release.

Promotion costs are the productive costs in distributing music. Promotion expenses are "campaigns to earn radio/press coverage of the release and advertising costs" (McDonald, 2017). Promotions can be handled by the individual artist or through the hiring of a promotion company, with a goal of radio airtime or stream playlists. Promotion costs are imperative, as the work and expenses incurred beforehand will be irrelevant to the end goal if the music is not put on the market and enjoyed by the target audience.

Transition from Physical to Digital – the Numbers

The transition from physical forms of music to physical and digital since the early twenty-first century has been marked by an inverse relation between statistics pertaining to total global recorded music revenue and the percentage of that revenue being comprised of streaming. Global revenue was at an all-time high around 1999, bringing $25.2 billion to the industry, as it was comprised solely on physical sales. The first appearance of digital sales (excluding streaming) in the total global music revenue emerged in 2004, making up just 2% of global revenue at $400 million. Streaming revenue made its way onto the global revenue sector in 2005, making up 0.5% of the total share with a mere $100 million (IFPI, 2018).

The introduction of digital and streaming revenues is when a noticeable decline in total revenue for the recorded music industry became evident. The downward trend continued until 2014, when the industry hit a century-low $14.2 billion, which made up only 56.3% of the $25.2 billion in total revenue in 1999 (IFPI, 2018). Looking forward to the 2017 statistics, revenues have grown consecutively since 2014, reaching a total global revenue of $17.3 billion, which is 68.4% of the revenue of 1999. This figure is largely due to the increased revenue from streaming services, reaching an all-time high of 38%, or $6.6 billion, of total global recorded music revenue (IFPI, 2018). As an indirect correlation, total physical sales have declined proportionately with the incline of streaming revenue. In 2017, global revenue from physical sales hit an all-time low of just $5.2 billion, making up, for the first time in history, less of a share of the total global revenue than streaming, segmenting only 30% of the total market. The United States makes up the biggest share of the global music sector, representing almost 75% of total global revenue for the 2017 year (IFPI, 2018). The US is followed by Japan, Germany, the UK, France, South Korea, Canada, Australia, Brazil, and China to make the top ten consumer countries of music for 2017. The most notable boost of streaming revenue was undeniably the United States, recording a 59.6% increase in paid subscription revenue. This jump of digital revenue accounted for about 47.0% of the total global increase in digital revenue between 2016 and 2017 (IFPI, 2018).

According to IFPI's year-end report for 2017, there are now 176 million global users of paid subscription services. Paid subscription streaming has grown 45.5% from the previous year, accounting for 38.4% of 2017's total global revenue from recorded music. Global digital revenue grew 19.1%, bringing in $9.4 billion and making 2017 the first year that digital revenue (including streaming services) has made up over half the global revenue market share, with over 54% of the total revenue (IFPI, 2018). According to FPI, "In 32 markets, digital revenues now account for more than half the recorded music market with six further countries crossing the threshold than last year [2016]" (IFPI, 2018). The major submergence of paid subscription streaming revenues has turned a previously falling global industry back towards positive growth, as the total revenue for global recorded music totaled $17.3 billion. The total revenue was an 8.1% growth on 2016's total revenue figures, which is one of the highest growth rates seen by IFPI, the major organization responsible for the collection of global music revenue data, since they began tracking industry sales in 1997 (IFPI, 2018).

An Analysis of the Global Streaming Market

The market of streaming is made up of a few different high-revenue earning companies that are constantly seeking a way to find their specific niche in an ever-growing competitive market. Key players that are in the conversation loop are usually linked to some of the world's largest technology and communication organizations who are branching out to make their statement in the global music sector. Google currently has two services on the market known as YouTube Music and Google Play Music, which according to Consumer Report reflects the YouTube Music application, but without the access to video (Deleon, 2018). Amazon's services are known as Amazon Music Unlimited and Prime music, and they are of best use and value for Amazon customers (Deleon, 2018). Tech superstar Apple has claim of one of the more infamous streaming services known as Apple Music. Apple Music is enjoyed mostly by consumers already using or are used to Apple products and are looking for an easy way to have access to unlimited amounts of music with a monthly fee (Deleon, 2018). Lastly, there is the largest member of the music streaming community known as Spotify. Not linked with any specific tech-industry company, it has a unique structure that sets it apart from its competitors. Simply put, Nicholas Deleon from Consumer Report writes as its biggest 'pro' – "[it's best for] consumers that want to hear plenty of music that can be accessed on a variety of devices". While a lot of other top streaming services cater better or worse towards a certain brand of customers, Spotify's corporate independence keep it an industry favorite for any kind of consumer.

These services, as well as a few lesser-known companies, all run off a business strategy known as the subscription business, or subscription commerce model. Richard KestenBaum of Forbes describes a subscription business as a company that will send the consumer some sort of monthly package in exchange for a premium paid in the same month (KestenBaum, 2017). The major listed streaming services, for a premium ranging from $5 to $15 dollars depending on the company, will provide the consumer with unlimited access to their database of MP4 music files that are officially released by artists and their record labels. Between the monthly subscription charges, varying availabilities of artists' music, and ease of use and organizations between different types of devices, the streaming sector is highly competitive, driving companies to create the next big competitive advantage for their service.

Statista is a global online Statistics portal consisting of more than 22,500 sources of fact-checked and proofed data to date (Statista, 2018). From Statista, it is possible to compare the subscriber counts between the three big members of the streaming music community, which are Spotify, Apple Music, and Amazon Music (due largely to the customer base of Amazon Prime), respectively. Spotify is responsible for the largest share of the music streaming market, accounting for more than 70 million subscription accounts as of January 2018. Their subscription figures in March 2017 came in around 50 million, giving Spotify nearly a 40.0% growth rate for 2017 (Statista, 2018). Right behind Spotify comes Apple Music, with a March 2018 report of 40 million global subscription accounts. Compared to 27 million subscriptions in March of 2017, Apple had a roughly 48.1% growth for the 2017 fiscal year (Statista, 2018).

In total, Spotify, Apple Music, and Amazon Prime make up about 71% of the total global market in regards to streaming subscription accounts (Goodwater, 2018). While Spotify holds the lead with 40% of the global market, Apple Music and Amazon Music follow with a 19% and 12% market shares respectively, giving the other smaller streaming services only 29% of the market space to claim (Goodwater, 2018).

Streaming Sites and the Splitting of Revenue

One scope of competition between streaming services is the split of revenue, in terms of how much goes back to the streaming company and to the artist or their record label. Measuring the breakdown of specific streaming services' revenues isn't completely accurate, as according to Hugh McIntyre of Forbes, "the discussion of how much each service pays per stream is a tricky one for a number of reasons. Many companies won't release exact numbers and several artists have come forward to share their payouts" (McIntyre, 2017). According to Information is Beautiful, an online data collection agency that has performed statistical analysis on the subject at hand, the top streaming services pay small parts of a penny to the artist for each play, or stream, through their site (McCandless, 2018). Out of the big three current streaming services of Spotify, Apple Music, and Amazon Music, Apple Music pays the artist the highest rate with an average $0.0074 per play on the service. Spotify places next with an average payout of $0.0047 per play, and Amazon follows closely behind with an average of $0.0040 per play.

Looking at this microscopic payout per stream, it is evident that the modern-day music artist must build up a serious fan following in order to make a decent living wage off music. Granted, many artists that license their music to streaming service do so with more than just one service, they must still accumulate hundreds of thousands of streams in order to earn the equivalent of a ‘minimum wage’ (McCandless, 2018). By taking into account the total amount of users for each of the main streaming services, as well as how many of those users are using free versions, Information is Beautiful calculates about how many streams an artist would have to hit a month in order to earn a monthly wage equivalent to the minimum wage factor of $1,400 a month. Since Apple Music is a subscription-only service (no free versions), the artist will make the ‘fastest’ minimum wage equivalent through Apple with an estimate of 200,000 streams. Since Spotify and Amazon have a free user base in their total users’ figures, they both require an estimate of 366,000 streams of a song for an artist to make the monthly minimum wage equivalent through those sites (McCandless, 2018).

The Adapting Artist – Moving from Albums to Singles

As the realm of streaming has adapted to be the more popular form of music distribution over the past decade, a new emergence of focus from artists and record labels has also come to light. Young artists, as well as established veterans of the business, are attempting to keep up with the increasing pace of the streamlined music industry by passing through the traditional album route, and are instead releasing single after single in order to supply their fan base with a constant flow of new content (Leight, 2018). Following the single focus route offers a few benefits, one of which includes artists being able to incrementally release different types of music and gauging which styles sell better and become more profitable. Most noticeable with this strategy is the apparent shift from the earlier parts of the century of earning the consumer's money through physical sales to competing for the consumer's attention and time through fan base loyalty. Larry Mattera, GM and EVP of Commerce and Marketing for Warner Bros., validates this observation, stating that, "In the past, it was about vying for the fans' dollars. Now it's about vying for fans' time – time spent consuming our repertoire, rather than our competitors' repertoire" (Leight, 2018).

The numbers released in Nielsen Music Group's 2017 Year-End Music Report (for the United States) further solidify the trend of looking away from complete album sales and more towards crafting streaming singles. Total album sales in the US for 2017 totaled just over 169 million, creating a nearly 18% decrease from the 205 million albums sold in the year 2016. Of the total album sales, both physical and digital album sales saw a decrease in total sales for the year, with physical sales decreasing 16% from 123 million to 103 million, and the digital sales decreasing almost 20% from 82 million to 63 million total albums sold (Nielson, 2018).

On the contrary, the decrease of album sales in 2017 was offset by the sturdy boost of on-demand streams, or streaming singles. On-demand audio streaming had the highest growth rate, responsible for most of the 12.5% U.S. industry growth last year, reporting a 59% increase from 252 billion streams in 2016 to over 400 billion streams in 2017. The boost in streaming popularity dwarfed the decreasing revenue collected by digital sales, as the digital revenue sector (excluding streaming) dropped 23% from $724 million in sales in 2016 to $555 million in 2017 (Nielson, 2018). Through analyzing Nielsen Music's mid-year report for 2018, the trend for increasing on-demand audio streaming and the decrease of album sales continue in a similar manner as observed in 2017. With an 18% decrease in total physical and digital album sales and a 45% increase in streaming audio revenue, it's apparent that the move away from full albums and more towards the quick-release content of singles is what is selling for artists in the marketplace.

Due to the introduction of streaming, the industry is seeing an influx of more unique artists each year, bringing forward a more saturated and competitive market. Spotify Insights, an internal database network, gives internal reporting data from Spotify sources about how the average Spotify music listener has grown in listing diversity, or listening to unique artists, has increased drastically in the past few years. Per David Erlandsson of Spotify Insights, this a simple cause-and-effect due to a growing base of artists on the site; more artists equal more listening diversity (Erlandsson, 2018). From 2014 to 2017, the amount of unique artists that an average Spotify user listened to increased around 37% from just under 30 to over 40 artists per week (Erlandsson, 2018). In fact, the growing pace of unique artists played is higher than the pace of the increase in music played from 2014 to 2017, meaning more artists are emerging into the spotlight on the streaming site (Erlandsson, 2018). This drive is attributed, along with the general increase in music consumption, to the streaming site itself. Spotify's own programmed playlists (which are graphed out algorithmically as well as on an editorial basis) are the main drive for this influx of new artists; Discover Weekly and Fresh Finds launched in 2015, Daily Mix of 2016, and Summer Rewind and Time Capsule of 2017 are the large playlists responsible for introducing listeners to artists that they probably wouldn’t have ventured out to find on their own (Erlandsson, 2018). In an ever-increasingly saturated industry of competition, artists are being forced to adapt their methods in order to produce frequent content in an industry of tight competition. With the aid of streaming sites’ playlists options, artists can reach a wider array of listeners through streaming than previously before.

Legalities of the Digital Age

The primary current copyright law associated with registering musical composition is known as the Circular 56 Copyright Registration of Musical Compositions and Sound Recordings. This circular clarifies the copyright differences between compositions and recordings, and informs the artist on the correct method to register their works for copyright protection. The Copyright Act of 1976 serves as the basis for the current U.S. Copyright law, and it was enacted on October 19, 1976. The law gives the basic rights of copyright holders, as well as expands on the doctrine of “fair use”, which allows limited use of copyright material without having to receive permission from the copyright holder.

Over the years of introducing the digital age of music distribution, there have been several landmark cases that have helped establish legal security for musicians and their products. In April of 2000, the band Metallica sued a California file-sharing startup company known as Napster in the legal battle Metallica v. Napster. This case was significant in the turn of the century as far as showing that music industry was ill-prepared for the introduction of digital distribution (McGuire, 2017). The band sued the company after discovering that their entire compilation of work was available on the world's first peer-to-peer file-sharing website for free. Compiling user information from the website, Metallica sued for $10 million (USD) in damages, along with a list of over 330,000 users they believed illegally downloaded their music for free. According to Amy Doan of Forbes, 99% of the files that were on the Napster site were indeed pirated songs by well-known artists. Napster's CEO at the time, Eileen Richardson, claimed that the program is only meant to help struggling musicians gain a platform and wasn't meant for illegal piracy of music of any kind (Doan, 2000). At this time, the RIAA was also suing Napster, "on behalf of record labels for enabling piracy on an 'unprecedented scale'" (Doan, 2000). Even though Metallica didn't end up winning the $10 million in damages, the court case ultimately caused the demise of Napster and encouraged other major artists at the time to take the initiative to work towards protecting their music from the threat of digital-age piracy.

Legal battles and difficulties in the new digital age of selling have continued through the birth and implementation of streaming sites to today. In January of 2018, Spotify was faced with a $1.6 billion lawsuit from Music publishing company Wixen for improperly licensing song compositions (Fabio, 2018). This suit is part of a growing list against the streaming site, adding on to the 2017 case for $43 million, Ferrick vs. Spotify, in which a group of songwriters took legal action against the site for not licensing mechanical rights to their composition (Fabio, 2018). In 2016, Spotify had to pay out a $30 million settlement agreement with the National Music Publishers Association for failing to identify publishers of the members of the group, causing the members to go without pay. These cases shed light on an industry that is lacking stability of reporting and revenue recording, and publishing companies are taking on an initiative to create a Copyright Data Sharing Committee to include some of the top mainstream music industry groups, such as the RIAA, Apple, Amazon Digital Services, Google, and Pandora (Fabio, 2018). This committee will serve to further enforce sound record keeping in the digital industry in order to compensate the artists more accurately.

The New Age of Streaming Malpractice and Piracy

With the introduction of the digital revolution, there are new forms of piracy forming as a result of the standardization of music that can be easily shared across the internet. According to a survey published by Digital Music News, 20% of Americans admit to actively pirating music; even more so, 35% of Americans who buy music legally have acquired music illegally at some point in their life (Sanchez, 2017). In comparing global statistics for 2017, music access through copyright infringement is drastically higher. Statista ran a worldwide survey of internet users from ages 16 through 64 to see how many respondents claimed to illegally obtain music in the six-month period prior to the survey (Statista, 2018). From ages 16-24, 53% of respondents admitted to illegally obtaining music. The other notably high group was ages 25-34, where 45% of respondents worldwide admitted to obtainment through piracy (Statista, 2018).

The form of piracy that has come with the introduction of streaming is known as stream ripping. There are dozens of new websites and applications that are accessible by anyone with internet access that allow the user to turn a file being played on any streaming platform into an MP4 format that can be downloaded and kept permanently

(McIntyre, 2017). Stream ripping appears to be the most-used form of piracy in the music world that is centered on the streaming industry; in a global study conducted by IFPI, out of the total amount of internet users obtaining music through piracy methods, about 86% claimed they committed piracy through stream ripping. While the most popular forms of stream ripping are disclosed in order to prevent the spreading of negative attention in favor of the malicious programs, the IFPI noted, "YouTube is the most used music service [for stream ripping]: 82% of all YouTube visitors use it for music. More people use YouTube to consume music they already know than to discover new content" (Sanchez, 2017). In 2016, three of the major record labels in the industry – Sony, Warner Brothers, and Universal – joined together and filed a lawsuit against a few of the more well-known stream ripping programs (McIntyre, 2017). Per the situation analysis of music industry analysis Hugh McIntyre, the fight against this new-age form of piracy will require a massive education effort about the harms of stream ripping, as well as some sort of shift from the music industry (McIntyre, 2017). Stream ripping is a form of piracy that will continue to plague the music industry until another system of music distribution is developed in the future. In one sense, it keeps internet users clear of malware-infected websites that were once in fashion, but at the end of the analysis it is just as illegal (Sanchez, 2017).

Another form of piracy that isn't necessarily as obvious as stream ripping is referred to as the value gap. Francis Moore, the CEO of IFPI, describes the music industry value gap as, "the gross mismatch between music being enjoyed by consumers and the revenues being returned to the music community" (IFPI, 2018). The value gap has slowly formed as a result of inconsistent enforcement of online liability laws, allowing certain streaming sites to make music available without feeling liable to properly allocate information to compensate record labels and artists (IFPI, 2018), as described above with Spotify's legal disputes. User upload-streaming services, such as YouTube, have used these discrepancies to their advantage, claiming they are not held legally responsible for the content held on their site. The real contrast is noticed when comparing audio streaming user to revenue ratios against user upload services' user-to-revenue numbers. For the 212 million users of paid and ad-supported audio streaming services, around $3.9 billion was collected as revenue by the music industry. As for the user upload services, their total 900 million users for 2017 (over four times the amount of audio streaming users) resulted in a mere $553 million in revenue back to the music industry (IFPI, 2018). IFPI, using this as well as other sets of public data, estimated that in 2015 audio streaming services, such as Apple and Spotify, paid record companies $20 in revenue for every user. Contrasting this information, it was estimated that user upload services of YouTube and the like paid record companies less than $1 per user, creating a value gap of $19 per user between the two means of music streaming distribution (IFPI, 2018). The substantial contrast between the different distribution means has created a seemingly unfair competition ground for the audio streaming sites that are working to properly compensate the music industry. With the industry being constantly undercompensated, it is slowly becoming more unsustainable as time goes on (IFPI, 2018).

As with the industry-wide dilemma of stream ripping, the IFPI states that proper legislative action is needed in order to ensure that liability laws are enforced correctly and consistently across all platforms, so certain services cannot claim to be exempt from the requirement of licensure to distribute music. Members from different areas of the music community, from artists, performers, song writers, record companies, managers and publishers are working to overcome the value gap in the music industry. In 2016, over 1,000 well-established and reputable members of the music community drafted a letter asking the European Union to address the issue of the value gap (IFPI, 2018). Similar efforts have been mirrored in the United States, as many reputable members of the American music industry have addressed Congress on the issue, demanding attention on the subject matter as well as the reformation of outdated safe harbor laws (the laws keeping user upload streaming services out of the revenue loop).

Conclusion

The mainline streaming platform is the culmination of evolving music distribution from physical to digital form. With the invention of the MP3, a marketplace that was once focused on physical CD, tape, and vinyl sales migrated to the internet and planted a digital market industry, where digital song sales became the new focus of labels and artists. This lasted for about a decade, before the current platform took hold in the early 2000's, catalyzing a new formulation of profitability in the industry. With the introduction of the digital age and quicker, more streamlined access to music, focus has been taken off the physical 'sales number' of a song, and instead pointed to compensation of music through royalties, the method for which artists are paid for the streaming and radio broadcasting of their music. The artist must be willing to be highly efficient and productive in terms of putting out high-quality content as often as possible to keep a loyal fan base within close reach. Streaming has given the music industry the ability to nurture the talent of writers and performers as more artists are able to connect with potential fans through playlists developed by the streaming companies, thus giving new artists an expanded base with which they can find their core group of fans. With the upgraded diversity and availability to new kinds of music, the competitive grounds of artists in the industry has never been higher. While this does make for a tighter market as far as job security for the modern musician, it also ensures the concentrated talent will force better music to be continually evolving. Given the decrease in physical sales and increase in streaming revenue across the globe, record labels and distributors in the music industry will increasingly be concerned with how their digital presence will be more profitable. As the costs of physical and digital music production and distribution were compared, labels and artists will now be able to look towards allocating more of their budget towards digital marketing strategies in order to make a stronger impact on the constantly-growing internet music market. As streaming became the major source of global music revenue in 2017 over physical revenue for the first time ever, it is imperative that members of the industry focus on keeping their competitive advantage in the digital marketplace.

The researcher concluded that the value gap in the music industry is a considerable issue that needs much legal care and attention in order to tame the further future effects of non-centralized liability recognition laws. Without new regulations to abolish the safe harboring laws keeping user upload services clear of content liability contentions, they will continue to hold an advantage from a cost standpoint that traditional streaming services will simply not be able to keep up with. Along with the wage gap is the need to further enforce the ban on software and applications that allow the public to practice stream ripping from the most popular streaming sites. As seen with the failed experiment Napster at the turn of the 21st century, illegal obtaining and pirating of music degrades the value of the music distributed and obtaining through legal manners. It is imperative that the passionate members of the music production and distribution sectors of the industry stay invested in pushing for legal change as the industry continues to adapt and evolve towards the future markets of music distribution.

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