Berklee

Case Study

Streaming Wars Continue[*]

"Amazon sells Prime; Apple sells telephones and iPads; Spotify, they're going to have to figure out a way to get that audience to buy something else."[1]

Jimmy Iovine, Apple Music

April 3rd - the New York Stock Exchange woke up to a unique day. Investors are about to witness the largest tech start up public debut since Snap Inc's initial public offering in the previous year - Spotify, the world's leading music streaming platform, is about to go public.

The singular event not only marks the unprecedented public offering of the biggest music streaming service in the world - it also innovates as to how the offering was undertaken. The company chose to go public via a direct listing, meaning it didn't issue any new shares nor it paid hefty sums to investment banks to pitch the stock or step in as the buyers of last resort.[2] This unconventional way of offering shares to investors also means there is no restrictions on insider selling, meaning the stock may experience aggressive shifts in valuation. Spotify's direct listing is the largest of its kind in history and the first one at the NYSE.[3]

Daniel Ek, the company's co-founder and influential leader, skipped the usual public offering rituals at the stock exchange. He didn't do the opening bell-ringing, nor did he give interviews while walking through the trading floor. And understandably so - there is little room for celebration yet. Spotify, much like many music streaming services to date, is experience user growth at the expense of increased operating losses. In 2017, revenues for the Swedish company grew 39% to just over €4 billion, while its losses more than doubled, reaching €1.24 billion.[4] At the same time, competition from music streaming services attached to deep pocketed companies such as Apple and Amazon forced Spotify to incur in aggressive, use acquisition strategies such as family and student plans, moves that had a negative impact on revenue per user, a key performance indicator for these services. Emerging players like Tencent are eager to get in the action, capitalizing on booming internal markets without losing sight of their global ambitions.

Although Spotify's first day as a public company saw its share price increase 13% to a market capitalization of over $26 billion, many analysts and investors raise concerns over the streaming business model. What can streaming companies do to reach the path of sustainable growth? What different strategies can they take? And why is it such a difficult business to be in?

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[*] *This material was prepared by Berklee graduate student Artur Melo e Castro and Associate Professor Alexandre Perrin. The case is intended as a basis for class discussion rather than to illustrate either effective or ineffective handling of management situations.*

1. Economics of the Music Industry

Formats for Recorded Music

Even though streaming is the prevailing service for music consumption today, it is only the latest in a series of formats that have led to the digital world we live in. From vinyl's and cassettes to floppy discs and CD's – these physical formats where crucial in advancing the recorded music industry. The CD, for instance, was responsible for making music sales peak at almost $24 billion in the turn of the century (see **Appendix 1**). Global sales surpassed 1bn in 1992 and 2bn in 1996, spiking as high as $2.5 billion in 2000.

The Compact Disk (CD), made possible by the technological advances made in the nighties, created a highly profitable formula - it was cheaper than its predecessor vinyl to manufacture, transport and rack in stores, and its mass production further reduced manufacturing products. The CD was also sold for twice as much compared to vinyl's, increasing the profit margins. Music labels, the main investors in production would sell the creative goods, almost always albums, at a wholesale price to retailers, who would then be in charge of selling it to consumers. They would then be in charge of marketing and promotion. This ownership model was required if consumers wanted to listen to music, thus created scarcity and increasing the perceived value of music goods to consumers.[5]

The decade long boom of music sales came to a drastic end with the introduction of the MP3 file and the digital, web era. The digitization of music meant it was now easily transferable online, while new technology, mainly Apple's portable music device iPod, was shifting the way people consumed music. The creative goods were now on the go, ready to be access all the time. The shift in music consumption was amplified over time while profits plummeted.

It took another decade for the baffled industry to realize how to shift business models to accommodate this new era of access consumption over ownership and return to economic growth, and the main responsible for this outcome was streaming.[6] The music streaming business added great value to consumers, providing on the go services and deeper engagement experiences through subscription models where most if not all of the world's catalogue was available. This innovative business model came at a high cost - while streaming subscriber numbers rose every quarter, so did streaming companies' expenses, showing evidence that the business model was hardly scalable. The hefty cost structure was mainly plagued with the high cost of music licensing - fees streaming companies had to pay to rights holders.

Music Rights[7]

Intellectual property rights are at the center of the music industry. Intellectual property law insures creators can exploit their artistic works for a period of time before "returning" them to the public domain (the idea being that no creation is uniquely original and thus all artworks are built upon a public pool of ideas to which every creative product must return). It also aims at providing incentives for the creation of art by allowing creators and their business partners to explore these rights for profit. Although the music industry deals with several kinds of intellectual property (including trademarks, audio-visual and literary works), copyright is the core right that is controlled and managed by the industry.

There is a foundational difference that needs to be made when studying the intellectual property law that governs the music industry. There are two separate copyrights that are granted when a musical product is created: the copyrights in songs (i.e. musical composition and lyrics - called primary works) and the copyrights in sound recordings (derivative works, since they embody primary works).

Artists and songwriters, the de-facto creators of musical works, frequently transfer their copyright ownership to record labels and publishers in return for money, generally via a royalty structure agreement. Hence, music publishers usually control the song, while record companies control recording rights. Artists and composers have historically sought these deals since a corporate partner is needed to make the risky investments needed to develop an artistic career, mostly through cash advances and vigorous marketing efforts. It is worth noting that although many music businesses own and manage both recording and publishing rights, they have to do so via two separate companies. Those who wish to exploit recordings of songs have to seek deals with both firms. Moreover, when a performing artist is also the composer of a song, he or she has to work with different companies.

A copyright does not provide creators with a single right. In fact, it provides them a bundle of rights[8]:

- Reproduction right - the literal "copy" right, granting the exclusive right to make copies of a work.

- Distribution right - exclusive right to issue copies of a work to the public.

- Rental right - exclusive rights to rent or lend copies of a work to the public.

- Adaptation right - exclusive right to make changes to a work.

- Performance right - exclusive right to perform or display a work in public.

- Communication right - exclusive right to share your work to the public, usually via broadcasters but also digital channels.

Copyright owners make money when third parties wish to exploit some of these rights. They need to get permission (license) from the owners, which in part ask for a payment (usually via a royalty structure deal). More often than not, licensees wish to make use of both copyrights for several of the aforementioned usages. Streaming a song, for instance, involves both the reproduction and communication rights for the master track and the song. Thus, licensees need to make sure all permissions are assured.

Revenue Distribution on the Value Chain[9]

Before the digital era, when the sale of physical copies of sound recordings was king, the distribution of revenue on the value chain as relatively simple (see **Appendix 2**). Record companies exploited the distribution rights of their sound recording copyrights, but since they don't usually don't own the composition copyrights, they procured a reproduction rights license from the publisher of this copyright - the "mechanical rights license". As the recording business is riskier and costlier than the

publishing one, due to production, marketing and distribution, record labels generally take 90% of the revenue generated, with publishers collecting the rest of the wholesale price[10].

In this physical market, there is only one party that deals with copyright licenses - record labels. They exploit their sound recording copyright and license the song copyright. They deliver the finished product to distributors and retailers "rights ready" so the latter parties don't need to take care of it. Retailers pay labels the wholesale price for each record sold, and labels in turn account to the publisher, normally via the respective publishing sector collection society. The label pays a royalty to the artist, that generally stands at around 15% of revenue generated after some costs have been deducted. Depending on the country, the songwriter is paid either through the collection society on 50/50 split deals between the two actors or by revenue-share deals paid by the society according to each contract once the latter gets paid by the label.

The digital world added complexity to revenue distribution on the value chain. New digital platforms brought about disruptive new technologies and business models and have generated new challenges regarding the way music is license and how to process royalties and data.

Streaming platforms require a very different approach to licensing. Since there are no collection societies for sound recordings in the US other than digital radio (with SoundExchange), the recording industry has opted to license digital service providers (DSP's) directly. Unlike the CD market, where labels charged wholesale prices to retailers, streaming services are licensed on a revenue share deal. Since these services hardly make money when they start, labels have put in a number of contingencies in place when they negotiate deals:

1. The revenue share component generally provides labels with approximately 60% of any revenue generated by the DSP that is assigned to their recordings.

2. A range of minima guarantees are demanded by labels in order to make sure they receive a minimum sum of money.

3. The DSP pays a cash advance to the label. Royalty payments start to flow once this advance is recouped.

4. Labels usually demand equity in the service if they are dealing with start-ups, hoping that the biggest revenue generator might come from an initial public offering or from the sale of the service to a major media or tech company.

5. Lastly, when negotiating first deals, an admin or technological fee is often incorporated in the deal by labels.

After the deal is secured, the DSP reports the following categories to the label on a monthly basis: total number of subscribers; total revenues after sales tax; total number of streams; total number of streams from the label's catalogue; proportion of streams generated by the label's catalogue.

The DSP calculates the revenue that is due to the label based on the total number of streams that came from the label's catalogue. It then pays around 60% of that sum to the label, depending on the deal that's in place. If this value is smaller than the minimum rate for the total number of streams, the DSP pays the latter sum instead. As time goes on, and streaming services grow, some of the

contingencies become irrelevant - admin fees tend to disappear after the original deal is replaced, and monthly revenues should always surpass minimum guarantees.

After being paid, the label shares the revenue with the artists based on each contract. Most labels have chosen to mimic streaming royalties with those of CD sales (approx. 15%), in a controversial move that is highly contested by artists, who feel that the streaming model does not offer labels as much risk and cost as the physical market did.

Revenue distribution gets even trickier on the publishing side of streaming. The publishing sector used to license DSP's directly, a practice that still happens in the US where collective licensing rules restrict alternatives. In other markets, such as Europe, major publishers have started to license content directly. However, publishers do not fully control the song copyrights outside of the US since their deals with songwriters are usually structured on a revenue share basis and where songwriters decide to assign some elements of their copyrights to collection societies. This means that, unlike record companies that discard CMO's out of the deal making process, publishers cannot.

Nonetheless, major publishers strongly believed that direct negotiation was crucial for higher income for both rights holders, songwriters and DSP's (that saved time and money with simpler and more effective deals). After some changes to collective licensing rules in Europe took place, brought by a series of cases on the European Court of Justice that provided publishers the power of "partial withdrawal" to license digital services directly while not doing it for other services like radio, major publishers procured unique joint ventures with CMO's since the latter parties control come of the copyright elements in songs that need to be exploited by DSP's[11]. This unusual practice took off, and all major publishers and big indies partnered with collection societies all throughout Europe.

Publishing deals are similar to recording deals. They are based on revenue share agreements and include minimum guarantees and upfront advances. The revenue share usually provides publishers 10 to 15% of all revenue generated from their catalogue.

Due to the nature of publishing activities (songwriters generally work together, even if assigned to different companies) and to the fact that there is no central database that lists co-ownership and respective splits, DSP's rely on publishers and CMO's to inform them of what is due after the services send a spreadsheet with all the streams that took place in a given period. This "back reporting" represents massive challenges - firstly, CMO's and publishers need to process an ever-increasing amount of data; secondly, there are inconsistencies between different publishers' and CMO's databases especially regarding ownership splits. This means DSP's are often asked to pay more than 100% of royalties owed, in which case they delay payments until conflict situations are resolved.

2. Evolution of the Recorded Music Industry

Recent History

The downfall of physical sales and the new digital era brought about a new paradigm for the music industry. During the 2000's, the landscape was dominated by Apple, via its iTunes store and the sales of downloads. From the late 2000's to present, YouTube has been dominating the video outlook, with a pioneer User Generated Content approach. But in 2006, a new company with a disruptive business model promising to change the music industry was born - a Swedish start-up by

the name of Spotify. The Spotify App was launched two years later with a pioneer, music-exclusive streaming model that included a subscription tier and a free, ad-supported service available by invitation in order to cope with the vast growth.[12] The launch was made possible due to the achievement of the much-needed licensing deals with major labels, providing Spotify with a wide range of catalogue available to its users.

In 2011, Spotify hit the 1 million paid subscribers milestone across Europe, out of over 6 million users[13] (see **Appendix 3**). At the same time, the company was in the midst of raising $100 million, valuing the service at $1 billion. One year later, the number of paid subscribers had risen to 4 million, out of a total of 15 million users.[14] The strong growth of the user base has continued ever since (see figure below). From 2012 to 2017, total number of users has grown at an annual growth rate of 41%, while paid subscriptions had risen by more than 50%.

Spotify's revenues have grown consistent with the increase in usage (see **Appendix 4**). Over the period of six years, the service increased its income by an annual growth rate of 55%. Due to the nature of Spotify's business model, losses followed the same path - the downwards trend increased by roughly the same proportion, illustrating perfectly the scope of the challenges of music streaming economics.

Streaming Wars Begin

Apple started its own music streaming service in June 2015, and quickly the streaming race seemed like it'd became a two-horse race - six months after launching, the service had reached 10 million paying subscribers (see **Appendix 5**), having reached the same amount of subscriptions that took Spotify six years to accomplish.[15]

From 2014 to mid 2017, Spotify managed to keep a relatively strong market share position (see **Appendix 6**). By the end of the second quarter of 2017, Spotify's market share stood at 37%, challenged only by a distant second placed Apple Music with 18%. The latter service grew faster in percentage terms, but Spotify added more net subscribers. Apple Music's impressive start, as highlighted in the graphic, failed to keep up with the growth rate of its debut year. Often called the "dark horse", Amazon's growth in recent years has been nothing short of remarkable. Its market share more than doubled from 2015 to 2017, reporting 16 million paying subscribers by June 2017. This represented a notable increase of 14 million customers in just 3 years.

Spotify

In 2017, Spotify relaunched its "Spotify for Artists" analytics platform, a service that provides comprehensive data to artists and managers alike and sets one of the main differentiators between the Swedish company and their competitors. Spotify also started investing in non-musical content such as podcasts and video.[16] The company has experimented integrating short videos onto its most prolific playlists and is looking to invest in original video. The service has also entered partnerships with ticketing companies such as Ticketmaster and Eventbrite in order to display concerts in its platform and redirect fans access to purchasing services. Spotify has also presented a new system for labels to pitch their music via a new section of their website, making the process easier and more transparent.[17]

Perhaps the most interesting and intriguing actions taken by the company were its acquisitions. Spotify made a number of strategic acquisitions in order to enhance the quality of the platform and user experience. One of them was Sonalytic, a company that develops an audio detection technology that tracks copyrighted material, aids in music discovery and identifies songs, audio clips and mixed content.[18] Spotify also acquired Niland, makers of an artificial intelligence technology that enhances music search and recommendation capabilities.[19] In order to extend such efforts to video recommendation tools, the company also bought MightyTV.[20] Cloud base, collaborative online music studio startup Soundtrap was incorporated as well, a move that positions the company in the realm of music creation, besides distribution.[21] Spotify further acquired startup Mediachain Labs, whose blockchain technology aims at correctly linking artists and songwriters to songs available on the service,[22] an issue that has costed Spotify $20 million in a law suit settlement with music publishers who repeatedly fail to get paid due to the lack of clear, trustworthy data.[23]

Apple Music

Streaming's second largest player, Apple Music, followed suit with a high-profile acquisition of Shazam.[24] This move creates synergies in the realms of music identification and recognition, as well as a deeper integration of Shazam into products such as Siri with the final aim to boosting Apple Music's penetration.

Apple, that had been focusing on exclusives in previous years, shifted its focus into original video content. Investments were made in exclusive documentaries featuring artists by the likes of Pink, Harry Styles and Sam Smith, as well as video shows such as Planet of The Apps. It is believed that the company's ultimate goal is to produce original, hit TV shows like Netflix's Game of Thrones, and eventually create a video streaming subscription model, with Apple Music driving some of the conversion rate.

The streaming wars took on a new stand when Apple Music and music industry mogul Jimmy Iovine said at an event in November 2017 that music streaming business is "not a great business"[25] and that Spotify would have to "figure out a way to get that audience to buy something else" since big corporations such as Apple and Amazon mainly utilize their streaming services as an ancillary revenue driver. During Apple's November 2017 earnings calls, CFO Luca Maestri stated that "a few years ago, we were actually declining in music; now with the streaming service in addition to the download business, the business is growing again".[26] He had also added that Apple's services department was the size of a Fortune 100 company, with growth expected to double in coming years.[27]

Amazon

Often called the dark horse of the streaming landscape, Amazon's streaming growth had been anything but remarkable. Coming third after Spotify and Apple Music, the service saw a stunning growth of net 13 million subscribers in the space of two years (from 3 million in mid 2015 to 16 million), representing a market share gain of nearly 100% in that period (from around 5% to 10%).

Amazon's business strategy towards streaming differs greatly from "pure play" platforms such as Spotify. The company offered two services: Amazon Prime Music, a fully bundled streaming model with a limited catalogue, and Amazon Music Unlimited, with a wholly licensed music offer that mimics that of Spotify and Apple Music. The former model offers a unique value proposition, targeting lower spending, casual fans with a curated experience rather than higher spending music fans who want

access to a full catalog. Amazon also offers the Unlimited model for $3.99 with the Echo, a move that's inspired by Apple's bundle approach towards streaming and that opens up new, older customers who seek in home experiences rather than music on the go. After free shipping, that retains the highest number of prime subscriptions, streaming video and music are the main acquisition drivers for Amazon, which priority is to convert its massive online retail customers into Prime members.

The two main factors that drove Amazon to a strong growth in an already established and highly competitive market place were making Prime Music free for Prime users and the use of music as an early use context for Alexa and the Echo.[28] These two differentiators gave Amazon a competitive advantage as they have opened up untapped audiences that other competitors had failed to reach.

Amazon's Prime strategy with its triad of services (free shipping, video and music) had two main effects on the streaming market - it expanded the market and it positioned Amazon as a leading force for the following phase in streaming. The first phase was built around the desktop, with the second being delivering personal, mobile experiences with offline music. This stage was tailored to younger customers who valued accessing music on the go. Streaming demographics reflected that – 16 to 24-year-olds were the largest single group (25% of total users), while under 40's made just under 70% of the market. Amazon's in house, curated experience addresses the over 40's market, who value music in their homes. This age group is also more likely to buy smart speakers (in the UK, consumers over 30 are twice as likely to have a speaker compared to 16-24). This means the battleground for home speakers, and Amazon's music strategy along with it, will take place for age groups over 30 and begin a third stage in the streaming market led by older, lean back audiences with music at point of access.

Google

In May 2018, Google introduced its latest music subscription service – YouTube Music[29]. After several failed attempts at persuading customers to opt for the company's service (such as Google Play and YouTube Red), the company is confident that this time around, YouTube users will be more likely to convert to paid members. The service is casted in the same mold as Spotify's and Apple's, offering a free, ad-supported tier along with a $10 a month subscription, but if Google is able to convert even a small percentage of YouTube users, the market will see yet another successful music streaming platform come to fruition, constituting a major threat to Spotify, Apple and Amazon.

Spotify and Deezer are the only "stand alone" global streaming players. This means the rest of competitors, such as Apple and Amazon, have very different priorities for their streaming offers - they need not to turn a profit in the near future, as long as they drive ancillary revenue. This lack of incentive results in a low pressure on labels to drive down their high rates. What's more, such tactic might drive the stand-alone competitors to their ground, a move that is surely welcomed by these players.

Streaming Wars Go Global

Besides western companies who fight for global supremacy, a series of regional players with great potential have been on the rise (see **Appendix 7**). From QQ Music in China and MelON in South Korea to Gaana and Saavn in India - these services rely mostly on regional catalogue and have been experiencing important growth in their own markets. For western companies to win in these

emerging markets, investments in local catalogue and operations have to be made. The same reversely applies to these services' aims of going global.

Tencent

Tencent Music, a division of Chinese tech giant Tencent, operated not only the most popular streaming service in China (QQ Music) but also the second and third (Kugou and Kuwo, respectively). Like Apple and Amazon, Tencent's main streaming service has been a driver for ancillary revenue - this time on the popular messenger app QQ Messenger. The company's three streaming services had 15 million paid subscribers and accounted for 77% of the Chinese music market. QQ Music alone had 200 monthly active users.[30]

Among the factors explaining the considerable shift in the Chinese music market from plagued privacy to an early adoption of freemium streaming services are the government's crackdown on piracy, the increased willingness to pay from Chinese consumers through low cost pricing policy (more on this point in 4.2) and region-specific engaging features such as in-app karaoke, and the company's ability to strike highly positive deals with labels through a huge clout mainly built upon the majority of local catalogue consumption.

Tencent's global media ambitions where marked by several high-profile deals, including with Spotify and Gaana. The former one saw Tencent and Spotify agree on acquiring minority stakes in each other businesses.[31] The Chinese company further diversified its streaming portfolio by leading a $115 million funding round in Indian streaming service Gaana, along with other minority stakes in companies such as Snap, Inc.[32][33] that aim at position the company as a global digital media player. Its strategic portfolio of minority investments may be conditioned by government policies - the Chinese government, in 2017, announced restrictions on the amount of overseas spending of national companies[34] - but it gives the company influence and benefits of a global expansion without the risks and resources required by majority ownerships.

In December 2017, Tencent announced it was seeking a new funding at a $10 billion valuation ahead of an initial public offering revealed earlier in April of that year.[35]

Melon

In South Korea, music streaming service Melon has been experiencing a notable growth since its parent company Loen Entertainment was acquired by Kakao Corp, a Korean internet company makers of a popular messenger app, in 2016.[36] The service's main focus was its home market, and as of mid 2017 counted 5.6 million subscribers, a 27% growth compared to the previous year's numbers.

Saavn

Launched in 2007, Indian service Saavn initiated the transition from download piracy to online music streaming. Reigning alone until 2015, the service saw the entry of several competitors to the Indian market including Gaana and Apple Music. The company reported 18 million active users in 2015 and had 2.4 million paid subscribers as of mid 2017.[37]

3. Adapting to Times

Evolving Structures and Strategies

Pricing strategy is one of the most pivotal decisions within the music streaming market. The traditional $9.99 pricing model did a good job establishing the market with a simple pricing proposition and educating consumers for an appropriate price for music (see **Appendix 8**). However, it seems this price is higher than most consumers are willing to pay for music and lower than what higher spending fans could pay. This is why streaming platforms have resorted to telco bundles and aggressive discounts, as they convert free users into subscribers at a higher pace, though the resulting loss of revenue may not be totally worth it, with average revenue per user steadily decreasing as time goes by. Now that streaming adoption is growing and moving away from early adopters, pricing innovation is more important than ever, but several hurdles arise.

Midia consumer research data shows that almost 70% of the 9.99 price opportunity in mature markets has already been tapped (see **Appendix 9**). Within these countries, some are saturated - Sweden has 94% subscriber penetration - while others, for instance Australia, sit at 53%. Big markets that are still attached to physical sales (Germany and Japan) represent some of the highest potential for growth in established markets for streaming penetration.

Research also shows that demand for fully licensed streaming services (known as "All You Can Eat" or AYCE") is relatively inelastic. Of the consumers surveyed by Midia, just under 17% stated they were willing to pay 9.99 while 21.5% said they would pay 6.99. While this is a notable difference, that shows the 6.99 model is the one with highest potential to grow customer base, it is not enough to open a broad new market opportunity. Aggressive discounts of AYCE subscriptions practiced by streaming services, and platforms like YouTube are to blame for the lack of mid-tier audiences' willingness to pay. This was evident when Apple Music unsuccessfully tried to push for a 7.99 model.

There is also a considerable opportunity for a super-premium, 19.99 model to better tap higher spending fans that were used to spend much more than 9.99 during the physical era. However, solely creating new pricing models without investing in better user experiences, thus giving consumers proper reasons for a higher spending in music, will not do the job. Almost 20% of surveyed subscribers said they were interested in an unlimited, on demand service with offline playback, high definition audio, artist exclusives and live streamed concerts. This means significant investment is needed for streaming platforms to increase their value proposition. Higher audio quality alone is not enough, as Tidal's poor subscriber growth over the years has proved.

A comparison between music and video streaming pricing strategies shows that music streaming pricing is considerably less varied and segmented. As of February 2017, there were 17 different video streaming services in the US, compared to only 8 for music streaming. Video streaming subscriptions had prices ranging from 1.99 to $40 a month, with 4.99 being the most common price point. These pricing strategies reflect a more diverse product offering, with several features such as original content and 4k movie quality successfully creating a differentiation between services and price tags. The music streaming pricing landscape is dominated by 9.99 model, with pricing ranging from 3.99 for the bundled Amazon Prime Music service to the 24.99 platform Rokmobile, a bundled service that includes a mobile tariff.

Regarding emerging markets, the current pricing strategies are more varied (see **Appendix 10**). Prices are generally lower in USD terms, but a GDP Purchasing Power Parity analysis reveals surprisingly different outcomes depending on each country. Using US GDP PPP as a reference point, QQ Music, the leading Chinese streaming service, charges the equivalent price of 6.69; Lebanon's Anghami's price of 4.99 is equivalent of $20 and Spinlet, a Nigerian service, charges the equivalent of almost $100. This creates both a great opportunity as well as challenge for streaming services: on the one hand, emerging markets are crucial for the next stage of development of streaming companies, but in order to lower these real prices they need to be able to secure better deals with rights holders with lower payments. Failing to do so and the streaming services are left to telco bundles and ad supported models to reach sufficiently high penetration rates.

In sum, there is a clear opportunity to create a more dynamic pricing strategy, one that reflects the more mature phase of streaming growth, through both premium offers and pricing innovation in the mid-tier range. After having conquered the early adopters, streaming platforms have been investing in technology such as better recommendation tools as the audience shifts to early majority. This shift in focus, however, has left the former group with a value proposition that is relatively unchanged. There is, then, a clear case for premium offers, adding a new range of product offerings such as interactive artist videos and stories that appeal to super fans. The sum of these new services creates a compelling case for these fans to spend the extra amount, hence streaming services can better capitalize on this loyal, first audience.

Effects on Usage – B2C

Streaming has brought about deep changes to music consumption in recent years, a consequence that technology has had throughout the history of the music industry. Prior to 1968, singles were king. This format was disrupted with the introduction of LP's, that shifted the music consumption habits from single songs to compilations of them. Such trend continued in time and peak with the golden CD era, only to be disrupted once again this time with downloads and the .99$ per-song iTunes model. The rise of streaming and playlisting, and consequent decline in downloads, is perpetuating this shift, while creating an ever-bigger increase in differences between consumption from younger, digital audiences and older, physical ones.

Much like the customer audiences of streaming services in general, playlist consumption is driven by younger audiences, peaking in the age group 25-34 (see **Appendix 11**). In stark contrast, older audiences' consumption of playlists ranks below the weighted average of 7%, falling to as much as 1% in customers with 55+ years old.

This creates a wide generational gap that is visible in sales charts provided by the industry - in 2016, for instance, Elvis Presley's "The Wonder of You" compilation album ranked number one in the UK and sold 1.6 million copies throughout the world. At the same time, the artist amassed over 300 million streams on Spotify, far from that year's most streamed artist, Drake, that gathered 4.7 billion. Following the same pattern, younger users are also more likely to create playlists, a key performance indicator for streaming platforms to gauge whether or not their users are engaged with the platform.

At the same time, playlist user growth has slowed compared to total streaming user growth. Using Spotify as an example, the platform saw a growth of 67% in subscriptions in 2017 while only six of the most followed playlists grew their following at a higher pace (see **Appendix 12**). What is more, playlist consumption growth rates slowed considerably towards the end of 2017 - RapCaviar's

monthly growth rate went from 10% in May of 2017 to 4.1% in October and 2.6% by January 2018. Among the outperformers, Beast Mode, a work out playlist, scored the highest growth rate, illustrating the curious fact that for many users, music consumption is not an end experience but one that complements another activity. This is also visible in the growth of playlists such as Verano Forever and Peaceful Piano, the latter often used to sleep or study. Pop, Latin and Rock were the music genres that outperformed the subscriber growth of Spotify.

The rise of paid subscribers on streaming platforms and slowed playlist consumption growth suggests that streaming is entering a more mature stage of its life cycle, moving away from early adopters to new users. Streaming's early adopters had to build playlists because the alternative they faced was a search bar. Now, after hefty investments and improvements in curation and recommendation systems, they don't need this lean-in effort in order to have a great listening experience. Interestingly, voice activation systems that are at an early adoption stage will also shape the future of streaming and drive another era of growth to playlist consumption since users will most likely request for genres instead of specific artists.

Platforms and Artists – B2B

Due to the nature of streaming platforms, the relationship between creators and services has often been unstable. One of the ways streaming companies can differentiate themselves from competitors is to create new, powerful B2B tools that help artists and managers. This is especially true for Spotify, that has invested heavily on such services since early on, both through in-house development and acquisitions.

The main tool Spotify offers to content creators is "Spotify for Artists", a platform where artists and their managers can keep track of a sizable amount of streaming data on their music over time - from playlist rankings, streams and followers to their gender and location.[38] Via a desktop or an app version, artists can update their profile, pictures and biography. They can learn about their listeners, keeping track of the number of streams and followers over time. The tool also allows for artists to know in real time what songs are performing better and where they are placed. Spotify for Artists also allow artists to promote concerts, linking their profile with ticketing platforms such as Ticketmaster and Songkick. Furthermore, the platform lets artists sell merchandise through a partnership with Merchbar.[39]

Acquiring innovative technology companies has also been a way for Spotify to bring in artist friendly platforms. The most famous of them, Echo Nest, has brought the company a series of tools that help playlist creators manage their playlists efficiently. One of these services is "Smarter Playlists",[40] an automated playlist creation program that allows users to set rules and create programmed playlists via a simple graphic user interface. Another playlist managing service is "Sort Your Music",[41] a platform that shows users how Spotify analyses music through eight different attributes such as energy or danceability. Users can then sort their playlists using filters to better manage these different characteristics.

Recently, in order to celebrate International Women's Day, and since top tier artists are male, Spotify released a tool that shows the gender breakdown of artists users listen to.[42] This tool also creates "equalized" playlists, recommending new, female artists with the aim of balancing listening and supporting underrepresented creators.

Apple Music first resisted creating a similar analytics platform for their artists but, due to the success of their rival, they announced in January 2018 a beta version of "Apple Music for Artists".[43] The platform is similar to Spotify's, breaking down data such as audience gender and streams location. Apple Music for Artists comes with the plus of linking to the artist iTunes profile, thus showing song and album purchases in comparison with streaming analytics.

4. Future of Streaming Wars

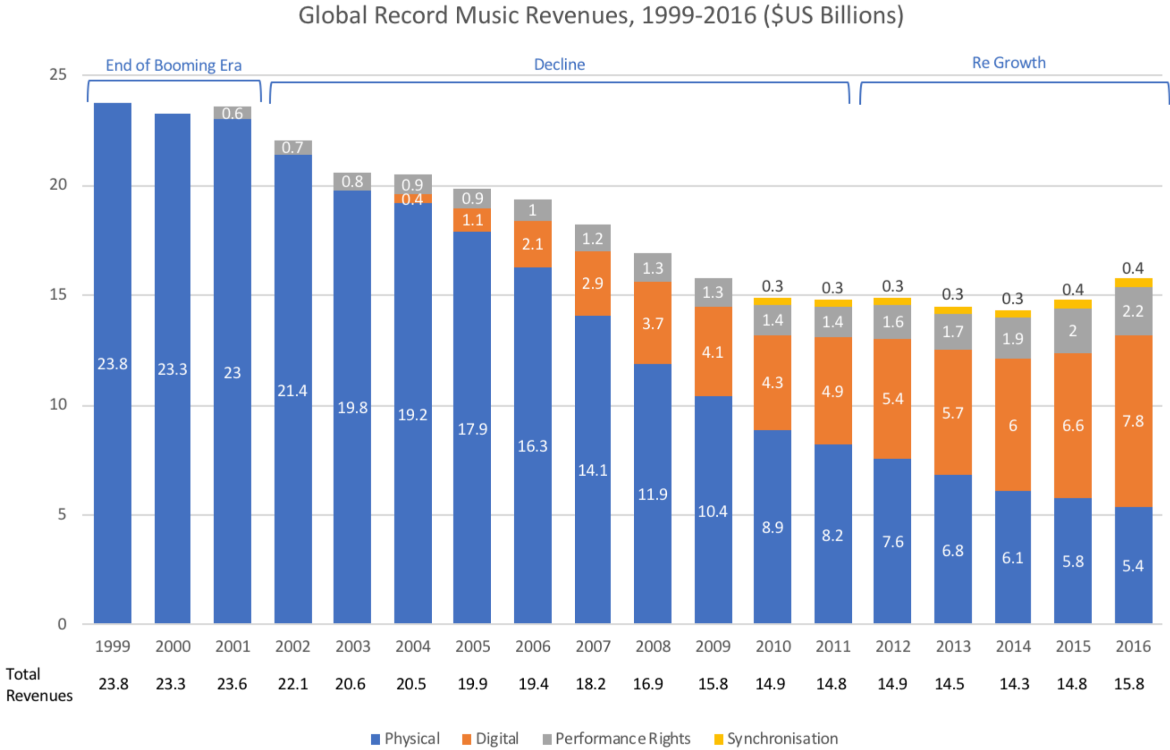
The music streaming run has been nothing short of remarkable - it arguably turned a whole industry away from a long period of recession into a new era of growth, only due to the effective use of technology and innovative value propositions that would not have been possible in any other time in the business's history.

As of 2018, however, music streaming business models are yet to be robust - built upon the valuable new consumption proposition and continuous reinvestment in platform growth while failing to effectively address the expensive cost structure, they are still to find a sustainable path to profitability. While most global services ride on the back of hefty tech corporations that see streaming as a way to drive profitable ancillary revenue, the world's leading music streaming platform is one of the few stand-alone platforms with increased pressure to turn the corner on its yet unprofitable business model. What is more, Asian companies are, for the first time, keen on joining the battleground for streaming domination, as their services experience extraordinary growth on the back of flourishing economies.

Questions then arise on how to move forward for an industry that has as much challenges as opportunities for growth. How can Spotify turn a profit? What strategies can Apple and Amazon's music streaming companies take to win the streaming war? What will the role of Asian giants such as Tencent be in the future streaming landscape?

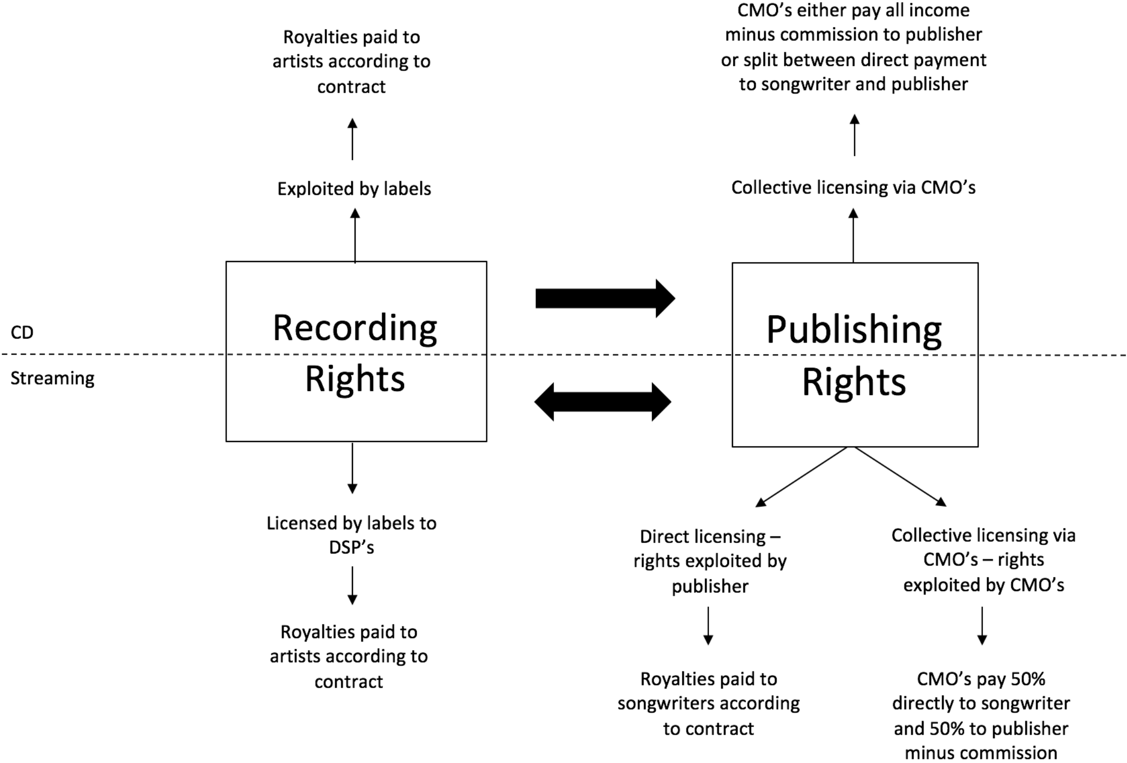
Appendices

Appendix 1. Global Record Music Revenues, 1999-2016 ($US billions)



Source: Compiled from IFPI Global Music Report.

Appendix 2. Licensing Models, CD and Streaming



Source: Compiled by authors.

Appendix 3. Spotify Users, 2011-2017 (millions)

	Free Users	Change	**Paid Users**	Change	**Total Users**
Mar-11	6		1		**7**
Sep-11	8	33%	2	100%	**10**
Sep-12	11	38%	4	100%	**15**
Dec-12	15	36%	5	25%	**20**
Mar-13	18	20%	6	20%	**24**
May-14	30	67%	10	67%	**40**
Dec-14	45	50%	15	50%	**60**
Jun-15	55	22%	20	33%	**75**
Dec-16	78	42%	48	140%	**126**
Jun-17	80	3%	60	25%	**140**
Dec-17	88	10%	71	18%	**159**

Source: Spotify

Appendix 4. Spotify Revenue vs Losses, 2011-2017 (€ millions)

	Revenues	Change	**Losses**	Change
2011	188		-45.4	
2012	430	129%	-86.7	91%
2013	747	74%	-57.8	-33%
2014	1085	45%	-188.1	225%
2015	1929	78%	-231.4	23%
2016	2934	52%	-539.2	133%
2017	4090	39%	-1240	130%

Source: Spotify

Appendix 5. Premium subscribers, Main Global Players (millions)

	Dec-14	Jun-15	Dec-15	Jun-16	Dec-16	Jun-17
Amazon	2.0	3.0	4.1	7.4	13.8	16.0
Apple Music			10.0	15.7	20.9	28.2
Deezer	6.9	6.3	5.9	6.0	4.7	6.3
Spotify	15.0	21.5	28.0	37.0	46.0	58.0

Source: Midia Research. "Reports". Accessed March 13, 2018. https://data.midiaresearch.com/reports/

Appendix 6. Market Shares, Main Global Players (%)

	Dec-14	Jun-15	Dec-15	Jun-16	Dec-16	Jun-17
Amazon	4%	5%	5%	7%	10%	10%
Apple Music	0%	0%	13%	16%	15.7%	18%
Deezer	14%	11%	8%	6%	4%	4%
Spotify	31%	38%	36%	37%	35%	37%

Source: Midia Research. "Reports". Accessed March 13, 2018. https://data.midiaresearch.com/reports/

Appendix 7. Premium subscribers, Emerging Players (millions)

	Dec-14	Jun-15	Dec-15	Jun-16	Dec-16	Jun-17
Claro Musica					1.0	2.5
KKBOX Music	1.1	1.6	1.8	2.0	2.2	2.3
Kugou		0.1	0.4	1.7	2.9	3.2
Kuwo		0.1	0.3	1.2	1.9	2.2
MelON	2.8	3.4	3.8	4.4	5.4	5.6
QQ Music	2.8	3.0	3.2	3.7	9.9	10.4
Saavn	0.5	0.6	0.7	0.8	0.9	2.4

Source: Midia Research. "Reports". Accessed March 13, 2018. https://data.midiaresearch.com/reports/

Appendix 8. Existing $9.99 Streaming Music Subscribers and Remaining Bases

	Subscriber Penetration	Additional 9.99 Opportunity	**9.99 Penetration**
France	10%	4%	**71%**
Australia	9%	8%	**53%**
UK	12%	7%	**63%**
Brazil	15%	6%	**71%**
Sweden	26%	2%	**93%**
US	20%	9%	**69%**
Average	**16%**	**7%**	**70%**

Source: Midia Research. “Reports”. Accessed April 12, 2018. https://data.midiaresearch.com/reports/

Appendix 9. Demand for Music Streaming by Price Point

	Consumer Interest in Price Point	Non-music subscribers likely to adopt
6.99 Demand	22%	10%
9.99 Demand	17%	7%
19.99 Demand	8%	5%
Existing Penetration	**16%**	

Source: Midia Research. "Reports". Accessed April 12, 2018. https://data.midiaresearch.com/reports/

Appendix 10. Purchasing Power Parity Analysis

	GDP PPP	Equivalent 9.99 pricing	Actual pricing	PPP Pricing	Population	Subscribers	Subscriber penetration	Subscriber per capita spend
US	56,116	9.99	9.99	9.99	320	26	8.0%	0.08
China	15,424	2.75	1.84	6.69	1,357	15	1.1%	0.01
Philippines	7,387	1.32	0.90	6.84	103			
Nigeria	1,114	0.20	1.96	98.73	186			
Lebanon	13,963	2.49	4.99	20.05	6			

Source: Midia Research. "Reports". Accessed April 12, 2018. https://data.midiaresearch.com/reports/

Appendix 11. Penetration of User and Curated Playlists

Age	User Playlists	Curated Playlists
16-19	32%	10%
20-24	27%	12%
25-34	24%	13%
35-44	14%	5%
45-54	14%	2%
55+	3%	1%
Weighted Average	**19%**	**7%**

Source: Midia Research. "Reports". Accessed April 17, 2018. https://data.midiaresearch.com/reports/

Appendix 12. Growth in Followers, Spotify Playlists (2017)

Playlists	YoY % Growth
Peaceful Piano	43.0%
Are & Be	47.3%
Today's Top Hits	47.7%
Verano Forever	54.2%
RapCaviar	57.2%
Rock Classics	59.3%
Get Turnt	66.6%
Baila Reggaeton	75.4%
Rock This	83.8%
Â¡Viva Latino!	103.5%
Global Top 50	145.0%
Beast Mode	184.6%
Spotify Paid Subscriber Growth	**62.8%**

Source: Midia Research. "Reports". Accessed April 17, 2018. https://data.midiaresearch.com/reports/

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