A Work Project, presented as part of the requirements for the Award of a Master's degree in Management from the Nova School of Business and Economics.

Spotify: Disrupting the Music Industry

NICOLA CASAGRANDE

Student ID: 42024

Work project carried out under the supervision of:
Professor LUÍS ALMEIDA COSTA

21 – 05 – 2021

SPOTIFY: DISRUPTING THE MUSIC INDUSTRY

Abstract

The purpose of this paper is to present a case study about Spotify's disruptive innovation. In the first section, the music industry and the impacts of the digitalization process are explored. Further, Spotify's main events, competitive landscape, and business model are analysed. In the second section, the study investigates existing literature on disruptive innovation, business model innovation, digital platforms, and taxonomy of disruptive strategies, which are further applied to Spotify's case. Results reveal that Spotify disrupted the music industry by applying a superscription-based business model innovation that affected every existing player in the market.

Acknowledgments

I would like to thank my supervisor, Professor Luís Almeida Costa, for the availability, time, and passion he dedicated to me during the process of development of my master thesis. I would also like to thank my family from the bottom of my heart for the implicit and explicit support they show me every day in the fulfilment of my dreams.

List of keywords:

Spotify, music industry, digitalization, disruptive innovation, business model innovation, platform business.

This work used infrastructure and resources funded by Fundação para a Ciência e a Tecnologia (UID/ECO/00124/2013, UID/ECO/00124/2019 and Social Sciences DataLab, Project 22209), POR Lisboa (LISBOA-01-0145-FEDER-007722 and Social Sciences DataLab, Project 22209) and POR Norte (Social Sciences DataLab, Project 22209)

PART ONE: CASE STUDY

Introduction

Spotify is a Swedish company launched in Stockholm in 2008 by its two CEOs and developers Daniel Ek and Martin Lorentzon. Spotify is described as a peer-assisted music streaming service giving access to a broad music catalogue, which gained huge consents in the first half of the 2010s. The company, which was initially introduced as a start-up, operating only in the Swedish market, has become a music distribution colossus. As a matter of fact, Spotify is the market leader in the digital music industry, with 35% global market share, and the largest streaming platform in the world ever since July 2016 [see Table 1].[1] The company has over 356 million users – 158 million of which are paying subscribers – across 178 markets. It contains over 70 billion tracks and 2.6 million podcast titles.[2] As discussed below, the business model introduced by Spotify was fundamental for record labels, like Universal, Sony, Warner Bros, EMI, etc., in the recovery of the huge revenue losses incurred at the end of the last century.

A brief history of the music industry

The history of the music industry was characterized by multiple disruptive innovations which modified the production, distribution, and consumption of the music product – the album. From Vinyl to RCA Tape, from CDs to Digital Music. This last innovation had a major impact on the structure of the industry. It began in 1999 when a software, called Napster, entered the music environment, introducing the notion of digital music. Listeners were then enabled to share peer-to-peer files for free rather than buying artists' albums.[3] Clearly, this practice was illegal, as copyrights were bypassed, originating the notion of digital piracy. In spite of not being legal, the popularity of Napster was quickly raised among music consumers, and, as a result, the

---

[1] Source: Statista. 2021. Share of music streaming subscribers worldwide in 2019, by company. Retrieved from: https://www.statista.com/statistics/653926/music-streaming-service-subscriber-share/

[2] Source: Spotify webpage. 2021. Company's info. Retrieved from: https://newsroom.spotify.com/company-info/

[3] Peer-to-peer (P2P) file-sharing: The downloading of a digital file to a user's computer, through the usage of specific software, which then allows the user to make the file available to other users, defined as "peers".

industry faced a loss in revenues of $2 billion between 1999 and 2002.[4] Record labels' "traditional business model" proved ineffective in responding to the spread of piracy. This business model was based on record companies producing artists' albums (by the end of last century, CDs) and distributing them through "bricks-and-mortar" stores, direct mail clubs, and online e-tailers, as well as artists selling their CDs at concerts. It was suppressed by the "renegade business model" in which renegades – i.e., Napster – permitted listeners unauthorized P2P file sharing, allowing people to get music for free and destroying record labels' revenue models.[5]

At that time, streaming services represented the best option for copyright holders to fight piracy and to recover losses. Streaming services are defined as "music in the cloud" since rather than being possessors of physical devices, listeners can enjoy music from digital platforms.[6] There are three different streaming service categories: the streaming radio, a normal radio channel available online, like Pandora; the locker services, which are internet platforms that permit to upload owned music to the cloud and listen to that music from multiple devices, like iTunes; and on-demand streaming services, where consumers may choose what to listen through the subscription of a platform, such as Spotify, Apple Music, Amazon Music, or Tidal.

Digitalization: new competitive landscape

Broadly speaking, the so-called "music industry" encompasses three main sub-industries: (1) the recorded music industry, corresponding to the process of production and distribution of the product; (2) the licensing music industry, corresponding to the recognition of composers' copyrights and royalties; and (3) the live music industry.[7] Spotify operates mainly in the first

---

[4] Source: Vaccaro Valerie L. and Cohn Deborah Y. 2004. The evolution of Business Models and Marketing Strategies in the Music Industry. *The International Journal on Media Management,* 6(1-2): 46-58.

[5] Renegades in the music industry are referred to be those platforms that permit the unauthorized distribution of music contents. The first renegade presented in the industry was Napster.

[6] The definition of music service as "music in the cloud" is taken from: Morris Jeremy. 2011. Sounds in the cloud: Cloud computing and the digital music commodity. *Computer Science*, 16(5): 53-64.

[7] Music royalties are the compensatory payments received by copyright holders – i.e., songwriter, composer, recording artists, and their representatives (record labels) – in exchange for the licensed use of their music.

industry. Before the digitalization of the music industry, the recorded industry had the greater importance in terms of revenues. Aspiring artists were looking for signing contracts with record labels to produce and distribute albums. In the traditional recorded music industry, artists needed to establish a relationship with record companies as it represented the unique way to be introduced in the record labels' international distribution system. Digitalization deeply affected the recorded music industry, reshaping its equilibrium. Record labels suffered not only the impact of digitalization in terms of revenues but also a rebalancing of power in the music industry. As a matter of fact, artists can now find other possibilities to produce and distribute albums, making the stipulation of contracts with record companies less essential.

Anyway, both record companies and famous artists feared the introduction of digital music – both legal and illegal – as they believed that revenues arising from physical support would be much higher. Nevertheless, legal digital platforms represented an opportunity to recover losses. As a matter of fact, in 2011 the International Federation of Phonographic Industry (IFPI) mentioned that revenues arising from digital music increased by 1000% in the period from 2004 to 2010, helping labels to recover the losses incurred after 1999.[8] At the end of 2020, the global recorded music revenues accounted for $21.6billion. Total global revenues increased by 7.4% from previous years, representing the sixth consecutive year of growth [see Table 2]. The digital distribution of music (both paid subscription and advertisement-supported streaming platforms) saw an important increase of 19.9% from the previous year ($13.4billion), accounting for 62.1% of total revenues in 2020 [see Table 3]. On the other hand, sales from physical assets decreased by 4.7% in the same year, respecting the decreasing trend of the last two decades [see Table 4].

[8] IFPI is the organization representing the interests of copyright holders in the music industry.

The main driver of the increase in total revenues was the increase in paid subscriptions of 18.5%, a clear demonstration of users' engagement with streaming music services.[9]

Digitalization: changes in consumers' preferences

Following Napster's entry into the music environment, the consumption of digital files has become a normal practice for music customers. Consumers' listening habits have changed due to legal digital music. Listeners do not need to buy an entire physical album but can listen to single songs instead. An artist's album contains on average 10 to 13 tracks, of which, usually, a maximum of 3 or 4 songs can be considered hits, while the rest remains unknown songs.[10] Before digitalization took place, consumers needed to buy an entire album even if they just wanted to listen to a particular hit. Today, as soon as a new album enters the market, customers tend to stream more a single hit than the entire album. This makes it easier to distinguish fans of a certain artist, who stream the entire album, from normal listeners who are mostly interested in commercial music.

Digitalization has reshaped consumers' benefits too. Historically, every innovation in the industry had the main objective of lowering products' physical presence, allowing easier storage to consumers. In this perspective, streaming platforms represent the perfect solution, as listeners can store their entire library online. However, platforms reduced the pleasure of music purchases arising from tangible packaging and eliminate the emotion of shelving pieces of pure art. Another important element of customer benefit associated with digital music is convenience and the immediate disposability of contents. Thanks to digital platforms fans do not need to buy albums from music shops as they just need to stream the album from their digital device.

[9]Source: IFPI. 2021. 2020's Annual Global Music Record. Retrieved from: https://www.billboard.com/articles/business/9544722/ifpi-global-report-2021-music-streaming-sales-revenue-pandemic/

[10] A hit is a popular song, which usually tends to be reproduced many times on radios. Hits usually represent the entire artist's album in the consumers' minds. On average, the decision of which songs to promote as the albums' hits depends on artists and record companies. As a matter of fact, the commercialization of hits usually happens before the distribution of the album.

Furthermore, platforms make it possible to share music easily through various social media, therefore increasing the connectivity among listeners.

Spotify entering the market

Spotify was launched on October 7, 2008. The two developers of the service were interested in the replication of Napster's success, with the fundamental difference that they wanted to create a legal business model able to give a response to the continuous widening of music piracy. At that time, iTunes, the first music streaming platform launched by Apple, was the most important legal streaming music service. It offered consumers the possibility to buy either an entire digital album for an average price of $10 or single songs for $1.99 each. As a matter of fact, Ek and Lorentzon wanted to succeed in the market space between the two extremes of the existing offers in the music industry: Napster's illegality and iTunes' pay-per-song model.

Spotify was primarily put on the market as a small start-up company operating only in the Swedish music market. At the very beginning, the company limited the free version of the app to people having an invitation from current users. On the other hand, the subscription free-ad version – i.e., the premium version, where users pay a monthly fee and are not constrained with advertisements – was available from the very first moment.

When Spotify entered the market, the music industry's global revenues had fallen to $16.9 billion, with a decreasing trend that seemed unstoppable. The major record labels had difficulties in finding a way to combat piracy. Thus, for this reason, the "Big Four" and other independent labels decided to concede Spotify their entire catalogues for use.[11] In return, the Big Four were grated with quotes in Spotify's stock.

[11] "Big Four" is a term that indicates the four biggest firms in the music market. Those companies were the ones that stipulated contracts with most artists. Groups, singers, and songwriters that did not stipulate contracts with the Big Four used to have contracts with minor or independent labels. At that time, the "Big Four" were represented by Universal Music Group, Sony Music, Warner Music Group, and EMI.

The company took an important step ahead in 2009. Spotify decided to start offering the free account to people without invitation. In addition, in February 2009 the company chose to expand its business, therefore entering the UK market and, after that, other European markets. At that time, the company developed the application for Apple devices.

In 2011, Spotify was searching for new users to empower its business model, finding them in the US. To enter the US market, Spotify engaged in major partnerships with important brands (like Coca-Cola, Chevrolet, Motorola, and many others), in which the Swedish company granted advertisement of the partner company in the platform, and in return, the American companies gave Spotify exclusive invitation to their social audiences. Spotify was then introduced in the US market on July 14, 2011.

One year later, an app version for Android devices was created. In the following years, Spotify continued its global expansion and started to enter different markets in both Latin America, Africa, and Asia.

In 2015, Spotify introduced its first algorithmically-curated playlist, the "Discovery Weekly". These playlists were based on the collection of listening data from each platform's user, and automatically grouped a set of songs strictly related to the user's music taste. Ek described such playlists as fundamental for Spotify, as they permit the company to take control of the demand for music and offer customers a tailored product.

On April 3, 2018, Spotify completed its direct listing on the New York Stock Exchange.[12] The company's market pre-trading price was $132 per share, while the opening price per share was $165.9. On that day Spotify's shares closed at a price of $149.01 per share (12.9% above the market pre-trading reference price). As of January 4, 2021 – year opening of the NYSE – Spotify's price per share was $311 [see Table 5]. The company, in its life, never presented a

[12] A direct listing is a method companies have to raise capital by listing shares on a public exchange. Different from traditional IPOs companies engaging in this process sell directly shares to the public without recurring to the help of intermediaries.

positive net income at yearend. Spotify closed 2020 with a net loss of €581 million while showing total revenue of €7,88 billion [see Table 6].

Competition

The digitalization process we are experiencing changed not only people's lives but also the way companies compete. With the rising of the internet and digitalization, every media content industry – like the digital music industry, the digital movie industry, or the digital news industry – has experienced an important boom in the last 20 years, becoming more and more attractive and competitive. Some of the world's largest companies, like Apple, Amazon, Spotify, or Facebook, which serve hundreds of millions of consumers around the globe, compete in those industries. In this competitive environment, firms operating in such industries compete often implementing completely different business models.

The digital music industry is dominated by Spotify, with a global market share of 35%. Nevertheless, the Swedish company faces harsh competition, with a wide range of companies operating in the same market. The main competitors of Spotify are the streaming platforms developed by two of the largest tech companies in the world, Apple, and Amazon.

Apple Music is the evolution of iTunes. iTunes was launched before Spotify, on April 28, 2003, with the introduction of the first generation of iPods. It revolutionized the music world. Since at that time the only existing platform, Napster, was illegal, Apple was able to sign good agreements with major record companies to distribute songs and albums, paying royalties to copyright holders.

Unlike Apple Music subscription business model, iTunes' pay-per-song business model represented the first legal introduction of the unbundling strategy in the music distribution environment. However, the advent of the cheaper subscription business model proved iTunes' inefficiency in competing in the market. Apple's response was to suppress iTunes in favour of Apple Music. Recognizing the power of Spotify, Apple Music was introduced in 2015 as a subscription platform. When introduced, the platform was offered at a three-month trial, and, after that period, subscribers' monthly cost was – and still is – $9.99, exactly like Spotify. Unlike the Swedish platform, however, Apple Music only offers the premium version and not the free one. Apple Music's competitive advantage relies on the strong compatibility with Apple devices. It is preinstalled in every Apple device, allowing the company to face important savings in terms of marketing costs. Thanks to this feature, Apple Music reached 10 million subscribers in just six months, an astonishing result compared to Spotify which reached the same amount only 6 years from its launch.[13] Today, Apple Music is the main rival of Spotify, with a market share of 19% and 72 million subscribers all over the world.[14]

The second-largest rival of Spotify is Amazon Music. The first Amazon Music platform was launched in 2007 in the US market, but, initially, it did not attract consumers. The American company was able to strongly increase its appeal and improve its position in the market only in 2016 when it launched the Amazon Music Unlimited platform. At that time, Amazon presented two different offerings: (1) Amazon Prime Music, an ad-free platform for Amazon Prime members with limited availability of songs; and (2) Amazon Music Unlimited, which, similarly to Spotify and Apple Music, follows the subscription business model. The former service targets price-sensitive consumers – as no additional fees are charged to Prime members –and offers a limited catalogue. The latter instead offers a wider songs library. To differentiate from its competitors, Amazon offers the Amazon Music Unlimited service at a lower price to Amazon Prime members. Indeed, customers with Prime membership have the possibility to pay $7.99 per month (or $79 per year) for the service. While non-Prime members are charged with a $9.99 monthly fee – the same as Spotify and Apple Music. Moreover, owners of Amazon Echo have the service only for $3.99 per month. To complete its offerings, in 2019, Amazon

[13] Source: Iovine Jimmy. 2018. Streaming Wars Continue. *Berklee*.
[14] Source: Statista. 2021. Number of Apple Music subscribers worldwide from October 2015 to June 2020. Retrieved from: https://www.statista.com/statistics/604959/number-of-apple-music-subscribers/

launched Amazon Music HD. With such an offering, customers have the possibility to listen to the same music library of Amazon Music Unlimited service, but in a high-definition standard, for a monthly fee of $14.99 (or $12.99 if prime members). All these services are available for any device – Apple, Samsung, Huawei, etc. Finally, today, Amazon also presents a free version of its music service, in which consumers have low availability of songs and are constrained with advertisement interruptions. Today, Amazon Music ranks third in the digital music industry, with a global market share of 15% and nearly 55 million paying subscribers at the end of 2020.[15]

Even though there are differences in the business models of the three top players in the industry, they basically offer the same product – a wide music library – for the same price. Spotify's large number of subscribers reflects its 15 years of existence. Anyway, competition has intensified in the last five years. Apple Music and Amazon Music have great potential to further strengthen their market position in the future, representing a threat for the Swedish company.

Spotify's business model

Spotify's business model relies upon a peer-to-peer (P2P) network, thanks to which users are enabled to reproduce millions of songs. Spotify purchases the license of such songs from record companies, artists, or any other copyright holder. The platform has sophisticated algorithms to calculate the royalty per stream to pay to each copyright holder.

Companies competing in the digital music industry present a wide variety of business models. For example, Apple Music provides only a paying subscription while YouTube follows an ad-based business model. In contrast, Spotify follows a freemium pricing strategy where users can either decide to have a free account, presenting some limitations, or a premium account. In the former case, Spotify collects revenues from advertisements, which interrupt the listening

[15] Source: Amazon Webpage. 2020. Amazon Music has more than 55 million customers worldwide. Retrieved from: https://www.aboutamazon.com/news/entertainment/amazon-music-has-more-than-55-million-customers-worldwide

activity of the user; in the latter case, the subscriber pays a monthly fee. Currently, the premium version presents four different alternatives: (1) the Individual Account; (2) the Spotify Premium Duo; (3) the Family Promotion; and (4) the Student Promotion [see Table 7]. For the free version, instead, users are not asked to pay a monthly fee, but they are constrained with some limitations. First, every thirty minutes of listening, free users are interrupted by advertisements, while premium ones are never interrupted by an advertisement. Secondly, free users cannot decide the song to listen to, they can only select an artist, an album, or a playlist and they can only listen to music in a shuffle way.[16] In addition, they cannot skip more than six songs at a time. Both limitations are not present in the premium version of Spotify, as the consumer is able to select whatever track he wants to listen to and skip as many times as he wants. Moreover, the premium version allows the subscriber to download music for offline listening, while the free version does not. Finally, the two versions differ also in terms of quality. The free version is based on a maximum streaming quality of 160kbps, while the premium one’s maximum streaming quality is 320kbps [see Table 8].[17]

To sustain its competitive position and success in the digital music industry, Spotify is continuously engaging in two intensive growth strategies, market development, and market penetration. The aim of the former strategy is to expand the streaming service to new markets and countries, giving the company the ability to continuously increase the number of global subscribers. In this respect, Spotify is far ahead of competition. In the last few years, the Swedish company aggressively expanded its service in Latin American, African, and South-East Asian markets, being now present in 178 countries all over the world [see Table 9]. Only at the beginning of 2021, the company expanded its business to more than 80 new markets around the world adding 36 new languages to the 62 already existing languages of the platform.

[16] Shuffle play is the reproduction mode of music in which tracks are randomly selected by the digital support.
[17] In the digital world, kbps (KiloBits or KiloBytes Per Second) is a measurement of peripheral data transfer or network transmission speed.

The objective of the market penetration strategy is to strengthen the position of the company in the markets where it already operates. To strengthen its position in existing markets, and expand its exposure to the public, Spotify engaged in several partnerships. Among the various examples of partnerships created by Spotify, the most important one is represented by the partnership with the Facebook group. Thanks to such a move, Spotify enabled its users to send songs or playlists via Facebook or Messenger or to share those songs and playlists on users' Instagram stories. By providing such functionalities, Spotify augmented the customers' engagement with the platform.

Through the subscription business model, Spotify offers a pure bundle of its products. Indeed, with a single monthly payment, Spotify's subscribers have the right to listen to the entire music library owned by the company – i.e., the records for which the Swedish company bought the right of distribution. Simultaneously, thanks to the subscription business model, Spotify presents to its customers the opportunity to listen to single songs rather than purchasing the entire album. Through this system, Spotify is unbundling the artists' albums, which now have earnings arising from the number of streams of every single song.

Through the usage of artificial intelligence, the platform created a discovery function. In a shuffle play mode, depending on the listening activity of each user, Spotify suggests congenial songs to the user's first research. Moreover, Spotify created conglomerates of songs – the so-called playlists (the 6 Daily Mix playlists, the Discovery Weekly, or the Release Radar) – entirely based on the taste of each consumer. These two functions are considered key values for the company, as it constantly improves and tailors the service provided to each customer, increasing, therefore, the users' engagement with the platform, and consequently the level of usage of the latter. In addition, the process of creation of tailored playlists can be considered as a "re-bundling strategy". As a matter of fact, in the 2018 shareholders' meeting, Daniel Ek explained that thanks to the creation of personalized playlists, Spotify is gaining control of the way music is consumed adding that playlists are used more and more by Spotify users, defining it as “massive transformation that puts Spotify in control of the demand curve”.

As seen above, Spotify never presented a positive net income at year-end in its entire life. Indeed, the company has always declared that the number of subscribers growth – and consequently the market share growth – takes precedence over the growth in net income. To that extent, Spotify’s platform serves exactly as a connector between music providers (supply side) and music consumers, and its value increases as more individuals join the service. Along these lines, Spotify constantly publishes the number of subscribers of the platform. In that way, Spotify engages in a strategy to move along the adoption curve, incentivizing more players to join the platform. The more users decide to subscribe to Spotify, the greater the visibility for copyright holders, which consequently have more incentives to distribute their works via the platform. The more artists distribute their contents in the platform, the larger the supply for consumers, which consequently have more incentives to subscribe to the service. As a result, the more consumers, the higher the revenue stream also for Spotify.

PART TWO: ANALYSIS

In the following section we analyse the case study on Spotify related to the wide literature available on disruptive innovation. First, we start by delineating the definition of disruptive innovation. Secondly, we will present the theory related to business model innovation and the strong correlation between digitalization and disruptive strategy. Then, we will present digital platforms, how they work and how they differ from the traditional pipeline business model. Finally, we will present a taxonomy of disruptive strategies adopted by several companies in their innovation process. For each chapter described in this analysis, we will apply the related theory to the case of Spotify in order to give the reader a concrete demonstration of the disruptiveness of Spotify in entering the music environment.

Definition of disruptive innovation

There are different definitions of disruptive innovation in the literature. For example, Bower and Christensen (1995) define disruptive innovation as a process in which smaller firms, usually relying on fewer resources, challenge established incumbents in an industry by entering at the bottom of the market and continuing to move upward. They also distinguish between sustaining innovations – i.e., technologies that support current manufacturing practices and technological capabilities required in an industry – and disruptive innovations – i.e., technologies that do not sustain current manufacturing practices and technological capabilities in an industry. According to Walsh, Kirchhoff, and Newbert (2002), an innovation is disruptive if it generates a product or service with different performance attributes than those mostly valued by existing customers. Danneels (2004) defines a disruptive innovation as a technology that changes the performance metrics based on which companies compete in an industry, therefore changing the bases of competition. Finally, Tushman and Rosenkopf (1992) view disruptive technologies as scientific discoveries changing patterns of existing products/technologies into a more competitive one.

In this paper, we define disruptive innovation as the introduction of a new product, service, or business model (BM) that makes the previous generations obsolete, throwing them out of the market or at least making them irrelevant.

Does the definition of disruptive innovation apply to the case of Spotify? When Spotify entered the market, the music industry was still largely dominated by non-digital providers. At the same time, the industry was experiencing a great increase in digital distribution, where the dominant provider of digital music was iTunes. Spotify presented in the environment a new product, its platform, relying on an innovative BM. Spotify's subscription BM offered a cheaper alternative to consumers than both the physical sale of albums and the iTunes pay-per-song BM. Indeed, with only $9.99 per month customers had the possibility to listen to a deep music library, whereas in other cases, at the same price, people could only either buy a single physical CD in a physical store or a maximum of 10 songs on iTunes' platform. Spotify was clearly a disruptive innovation; it completely reshaped the music industry equilibrium, making both distributors of physical supports and iTunes' BM becoming obsolete. As a matter of fact, Apple recognized the superiority of Spotify's subscription BM, and in order not to be thrown out of the market, the company launched Apple Music in 2015 based on a similar subscription BM.

Business model innovation

A disruptive innovation often implies the development of a new BM. Following Amit and Zott (2016), we define BM as the collection of activities undertaken by the firm to generate value satisfying consumers' needs, and how these activities are linked to each other. To that extent, business model innovation (BMI) occurs when several elements of the BM are changed, reinvented, or modified to deliver value to customers in a different way (Lindgardt et al. 2009). Rolls Royce is an example emphasizing the definition of BMI mentioned above. Initially, the company was operating in a classic product business in which Rolls Royce was producing airplane engines and selling their ownership to aircraft manufacturers. Airline companies acquired then those engines from aircraft manufacturers. The BMI happened when Rolls Royce introduced the new "power-by-the-hour" BM. With such BM the British company was not selling turbine engines anymore, it was instead providing a "thrust hours" service to airlines, which started paying only for the operating hours of the engines. Ultimately, engines remained property of Rolls Royce, which was also in charge of repair and maintenance. Therefore, after the BMI, customers paid Rolls Royce for the flight performance hours of the engines rather than buying engines from aircraft manufacturers. Such BMI introduced advantages for both customers, that had a more reliable and less expensive service, and Rolls Royce, since better engines mean more flight hours and consequently more revenues for the company.

BMI is particularly important because it often allows companies to develop dual advantages, i.e., to achieve simultaneously costs and differentiation advantages. This is the case of Netflix.

Its streaming BMI provided the company both advantages compared to Blockbuster's online-offline BM. In fact, Netflix's streaming BM allowed the company to reach several costs savings with respect to Blockbuster, as no physical store is needed, the company does not have to produce physical products (DVDs), and it does not have to deliver the product to the final customer, which resulted into no logistical costs. On the other hand, the differentiation advantage stands on customers' convenience. Through the platform, Netflix's users have a large selection of movies which they can immediately watch at any time. They have higher comfortability since they have everything they need at home, meaning that they do not have to drive to a movie shop to buy the DVD or to return it after several days.

Furthermore, by involving the complementarities and interdependences of several value-enhancing activities, BMIs are often hard to imitate or replicate, leading to sustainable competitive advantage (Amit and Zott 2010). Considering the example of Netflix once again, although the company has been challenged by Apple with the development of the Apple TV, and subsequently by Amazon Prime Video, its BM proved to be hard to replicate. Indeed, Netflix relies on advanced technological infrastructure, on strong agreements with movies' copyright owners, and strong engagement of movies' and TV series' fans with the platform (enabled also through the internal production of TV series like Stranger Things, House of Cards, Black Mirror, etc.).

The advent and rise of the Internet and digital technologies offered greater opportunities for companies to be disruptive. Skog, Wimelius, and Sandberg (2018) define digital innovation as the process of integrating digital components into physical ones with the intent of generating novel devices, services, or BMs, and take advantage of the innovation in the industry. To that extent, digital innovations have usually three characteristics: (1) they diminish the physical presence of the product; (2) they continuously collect information from customers through artificial intelligence, which they can constantly use to improve their performances; and (3) due to the digital platform format, they take advantage of economies of scale, rendering easier and cheaper to companies to enter additional markets (Moeller, Hodson, and Sangin 2017).

Matzler et al. (2018) noted that many digital innovations can be considered disruptive since they can radically shake the core of every industry. As such, the evolution of digital technologies offered companies a broader range of possibilities to disrupt industries. Moreover, the usage of artificial intelligence can give companies the ability to directly stay in contact with customers, understand their needs and learn their behaviours, and even make choices on their behalf. Augmented and virtual reality can play a fundamental role in customers' experience, creating a completely different interaction within the digital environment. With the internet of things, companies can converge the physical world into a digital one, having continuous insights on their own products, operations, and customers. Also, wireless technologies create opportunities to be disruptive by facilitating the connectivity among technological items.

Digitalization increased the opportunities to be disruptive in the market, presenting new products, services, and mostly new BMs. In many cases, digital innovation requires competitors to change entire BMs in order not to be thrown out of the market. To that extent, Chesbrough (2010) states that to remain successful in the digital world, companies need to present superior BMI than competitors, affirming that BMI and digitalization are today complementary.

Is Spotify a case of BMI? Has Spotify relied on a digital BM? Spotify clearly introduced a BMI in the music industry, the subscription freemium BM. Specifically, Spotify was a revenue's BMI. The Swedish company revolutionized the way companies in the industry collected revenues. At Spotify's launch, the alternatives in the music industry were either music stores in which consumers needed to buy albums in physical support format (CDs, vinyl, etc.) or iTunes, which allowed consumers to buy individual songs. Through its subscription BM the company found a way to exploit consumers' lower willingness to pay. Indeed, through the freemium strategy, subscribers have the possibility to open a Spotify account either for free or paying a monthly fee. In both cases, Spotify provided a much cheaper price to both alternatives available in the market. In the free subscription, the company collects revenues from advertisements, while in the premium one it collects revenues directly from the users. Similarly to Netflix, Spotify's BMI provided the company both costs advantages (no need for physical stores or to produce physical products) and differentiation advantages (consumers have an unlimited music selection directly on their smartphone or PC, and unlike iTunes, they do not have to buy music they might not like). However, unlike Netflix, Spotify's BMI proved less effective in preventing imitation. Both Apple Music and Amazon Music had been able to successfully implement a similar BM. Indeed, all the top artists are paid on the different platforms depending on the number of streams of their songs, which gives them the incentive to present their works on both Spotify, Apple Music, and Amazon Music to increase their economic returns.

Obviously, Spotify relies on a digital BM. Being Spotify a digital service, it presented the three basic characteristics of every digital innovation: (1) users simply have to download the app on their smartphone or PC to have music, eliminating the high physical presence of CDs; (2) through the exploitation of strong artificial intelligence, the platform constantly collects information on the listening activity of customers, which are later used to give them a more valuable service; and (3) the company creates demand-side economies of scale through its network effect and network orchestrator BM, easing the process of growing and expanding in both existing and new markets.

Digital platforms

Hagel (2015) defines platform businesses as BMs which aim is to facilitate interactions and connections among a large number of users. Van Alstyne, Parker, and Choudary (2016) add that platform BMs' final purpose is to facilitate interaction between two or more groups, usually producers and consumers. They are thus marketplaces that support transactions among both the demand and supply side, with the final aim of co-creating value (Täuscher and Laudien 2018).

Platform businesses have always existed, but the digitalization process has increased their importance and adoption in various industries. Certainly, digital platforms represent a huge opportunity for companies to be disruptive. Platforms' ecosystem always comprehends four players: (1) owner(s) of the platform – who is/are in control of the intellectual property and governance; (2) providers – which serve as a platforms' interface with users: (3) producers – those that create contents presented in the platform: and (4) consumers – those using the platform to have access to producers' contents. For instance, Android is a digital platform business. Its owner is Google, providers are smartphones manufacturers like Samsung or Huawei, producers are app developers and finally, consumers are people utilizing the platform with their smartphone.

The BM of traditional industrial businesses is typically characterized by a sequence of linear activities – the classic value-chain – as in a pipeline (Van Alstyne and Parker 2017). As a result, such BMs are often referred to as pipeline BMs. For example, automobile manufacturers represent the classic pipeline BM. Those companies are characterized by a classic linear set of activities aimed at transforming inputs (raw materials) into final outputs (cars) to be delivered to the end consumer. In contrast with pipelines BMs, digital platforms can better be represented by a network in which the platform (e.g., Android) depicts the gravitational centre of it.

An important feature of digital platform businesses is network effect. Network effect is defined by Johnson (2021) as the "incremental benefit gained by an existing user for each new user that joins the network". Stobierski (2020) argues that there are two types of network effect: (1) the direct network effect – as participants in the network increase, the value of the latter increases (applied by companies such as Facebook and Twitter); and (2) the indirect network effect – the more consumers join the network, the higher the value for producers and vice-versa (applied by Netflix). The power of network effects on platforms stands on the ability to create engagement with the ecosystem of the latter. As an example, every time a new app is developed and presented within the Google Play platform, the value of the platform increases, which makes staying in Google Play more valuable for every player.

Is Spotify a digital platform? Spotify is a digital platform since it facilitates the interaction between artists – or any copyright owner – and consumers. In its ecosystem we can recognize: (1) Spotify Inc. as the owner of the platform; (2) smartphones/PC producers as providers; (3) artists, podcasts' announcers, record labels as producers of contents; and (4) Spotify's subscribers as consumers. The company's success depends on both the creation of a direct network effect – the more users join the platform, the more people to share music with for each user – but mostly indirect network effect. In fact, the more consumers enter the network, the higher the incentives for copyrights holders to present their own works on the platform. The higher number of Spotify's subscribers directly increases both visibility and revenues of artists. Conversely, the more artists decide to provide their songs on the platform, the more consumers would have incentives to enter the platform, since they could have a larger pool of artists to listen to. To put in simple words, a mutual "give and get" loop emerges.

Taxonomy of disruptive strategies

In the following section. we are going to analyse different categories of disruptive strategies. This taxonomy is not exhaustive but encompasses most disruptive strategies presented in the literature. Moreover, it may also happen that a given innovation falls into different strategies at the same time.

Targeting non-consumers. With this strategy companies aim to develop new technology with features unconsidered by existing technologies and present it in new-market footholds, and only subsequently moving upwards in the market once existing customers approve the new features as sufficiently valuable. In the '50s, most US mid-class families had one radio console, usually fashionably shaped and with good sound quality, but also extremely expensive and bulky. In that context, Sony presented the Transistor Radio, a portable, small, and cheap radio. The quality of sound was scarce, but it did not represent a problem for teenagers, who, thanks to the easy transportability and cheap price, could listen to music everywhere and anytime. Initially, transistor radios were not a threat for high-end radio companies. However, once Sony improved the quality of transistor radios, high-end customers started replacing traditional radios with transistor ones.

Eliminate industry boundaries. The elimination of industry boundaries strategy aims to open a new market and capture new demand. Disruption happens by creating a hybrid marketplace that combines more industries. The purpose of such a move is to make competition rather irrelevant, differentiating own products from competitors. During a period of crisis for the circus industry, Le Cirque du Soleil reinvented its business, with the novel combination of circus, street performances, and theatre. With this strategy, Le Cirque du Soleil created an uncontested market space, which made competition of other circuses rather irrelevant. Through the elimination of industry boundaries, Le Cirque du Soleil disrupted the circus industry, achieving strong financial results.

Offer an acceptable quality at a very competitive price. With this strategy companies need to capitalize on their operational excellence to provide an acceptable quality at a very competitive price with respect to competitors. To undertake such a strategy, companies must adopt a very efficient BM, eliminating activities that are not highly relevant. Low-cost airlines like Ryanair exemplify such a strategy. The Irish company aggressively implemented a subtraction of irrelevant activities (the ticket price does not comprehend luggage, nor food and drinks, etc.) from its BM. Even though the quality was reduced from traditional airlines – but still maintained an acceptable level for customers – the cost reduction was superior, enabling Ryanair to offer a much competitive price to its customers.

Customer satisfaction through customization, bundling and unbundling. Customer satisfaction can be reached through the product's customization process. Customization can be accomplished in several ways. One strategy is to allow consumers to create their own products by assembling different elements. For example, Nike launched NIKEiD, an online service that enabled consumers to create their own product, by deciding colour, shape, design, or performance, getting exactly what they prefer. Other customization strategies are bundling and unbundling. With the former strategy companies sell a bundle of products for a lower price than it would charge for selling them individually – Netflix bundles several movies and offer them at a single price (the monthly subscription). Conversely, with the unbundling strategy companies split the product's components and sell them individually – iTunes' pay-per-song BM allowed consumers to buy single songs instead of entire albums.

Servitization strategy. Disruption with servitization strategy happens when a company decides to present its own products selling a service rather than a one-off sale. Typically, companies adopting subscription BMs are engaging in servitization processes. Through the subscription BM, Netflix delivers its movie catalogue as a service rather than offering customers single DVDs. Netflix was able to disrupt Blockbuster also through the servitization process. Indeed, Netflix offered a wider variety of products, at the same time, at a lower price compared to Blockbuster's rent of single movies.

Dual advantages through digital transformation. With this strategy companies relying on digital technologies may come up with new BMs that allow them to simultaneously achieve lower costs and provide higher perceived benefits to consumers. This is, once again, the case of Netflix. Netflix's streaming BM achieved cost advantages since the company did not need to keep physical stores open, nor to produce and deliver DVDs. It also provides consumers with higher perceived benefits mainly due to greater convenience (users have a long list of movies in their app, they do not have to buy DVDs in physical stores or return them after several days).

Market maker strategies. Companies that are undertaking such strategies aim to create their own marketplace to put together different suppliers and consumers. Based on their vision, those companies create a new marketplace, anticipating competition. Usually, the marketplace created eases the transaction between supply and demand by lowering the level of expertise and wealth required. eBay is the classic example. The platform does not sell anything itself, it instead allows sellers and buyers to get easier in contact with one another. In this marketplace the former present owned stuff that they want to sell while the latter can buy such an item by winning an online auction. eBay facilitated the interaction between users since anyone could sell anything via the platform.

Collaborative consumption strategies. With a collaborative consumption strategy, a company enables peer-to-peer sharing of assets, facilitating the transaction among buyers and sellers. Usually, companies relying on collaborative consumption strategies permit users to make money from assets that are not fully utilized. The rise of the Internet and the advent of digitalization increased the number of firms disrupting different industries with such a strategy. Airbnb disrupted the hotel industry by creating a marketplace in which the owners of the asset (apartments/rooms) are directly connected with people wishing to find a place to sleep at a lower cost than hotels' rooms. Through the platform the buyer has direct access to different apartments in a specific area. Moreover, the consumer directly pays the host through the platform, and Airbnb holds a small percentage per transaction.

Hyperscale platform: relying on network effect and strong databases. Hyperscale platforms are used by companies working in big data and cloud computing environments. Hyperscale companies achieve massive operating leverage with the use of algorithms. With digitalization, companies can sustain rapid growth based on network effects and vanish marginal costs. Hyperscale companies need to invest ahead of the critical point of the adoption curve in people, technology, and processes, to create platforms that can quickly gain massive scale. Amazon disrupted the retailing environment with a hyperscale platform strategy by providing customers an online marketplace in which they could buy anything they want. Due to the strong artificial intelligence lying beyond Amazon's databases, the company strengthened its competitive advantage in the retail world by giving a more accurate selection of products, products evaluation, products suggestions, and so on.

Which disruptive strategy/strategies did Spotify use to enter the music environment? As mentioned above, companies can implement different disruptive strategies at the same time. This is the case of Spotify, since, from the previous categorization of disruptive strategies, Spotify seems to have embraced several of them when entering the music industry.

Spotify can be described also as a customized service combining both bundling and unbundling strategies. In fact, the subscription service bundles all Spotify's products (songs, podcasts' titles, or albums) selling them together at a much lower price than both physical supports and iTunes. Contrastingly, considering the artists' album as the final product, Spotify permits unbundling them as users can listen to single songs without purchasing the entire album.

Similar to Netflix, Spotify engaged in the servitization process. With the subscription BM, the company is providing a service – the disposition of its entire music library – rather than offering its product in a one-off sale. The servitization strategy disrupted iTunes, since, at a comparatively lower price – i.e., the monthly fee – Spotify offered a broader pool of products at the same time.

As already mentioned, Spotify's digital platform enables the company to achieve dual advantages as a result of digital transformation. Compared to physical support stores, the platform permitted to decrease costs since no physical store needs to be kept open and it does not need to produce or deliver physical products. Moreover, Spotify was able to create a different advantage by enhancing the convenience they provide to customers. Customers do not have to drive to a music shop to buy an album and can listen to a large selection of songs with their smartphone or PC. In addition, compared to iTunes, consumers are not asked to buy an album before knowing whether they would like it or not, since they can enjoy the listening of every album on the platform with their subscription.

Finally, Spotify embraced the market maker strategy, creating a marketplace that facilitated the presentation of music to fans. Together with digital distribution services – i.e., services that permit musicians to distribute music on digital platforms – like TuneCore, Spotify enabled independent artists to present their own works in the platform without stipulating contracts with record companies, rendering, therefore, the process easier and cheaper for artists.

Conclusion

Spotify is an on-demand streaming service offering millions of music tracks and podcast titles. With a 35% global market share, the company is today the global market leader in the distribution of digital music. We analysed the BM developed by Spotify in light of the literature on disruptive innovation. The streaming service based on the freemium strategy brought a BMI to the music context and renewed the distribution of music, making existing BMs in the industry obsolete. The streaming service is the centre of a platform BM that constantly empowers itself through the exploitation of the direct and indirect network effect. Based on the categorization of disruptive strategies presented in this paper, we can affirm that Spotify embraced several of them in the process of entering the music industry, such as the customization through bundling/unbundling strategy, the servitization process, dual advantage through digital transformation, and the market maker strategy. Spotify's success, relying on the subscription BM, affected every player in the industry – artists, record labels, and existing music distributors. In most cases, in order to survive, competitors needed to reinvent themselves, following the flow of the disruption. Finally, Spotify depicts the perfect example of succeeding within the exploitation of the digitalization wave experienced over the last decade. Starting from the Swedish market, Spotify was able to become the world's largest distributor of music.

References:

- Amit, Raphael, and Zott, Christoph. 2010. Business model innovation: creating value in times of change. *IESE Business School, Working Paper No*. 870: 1-17.
- Amit, Raphael, and Zott, Christoph. 2016. Business Model, the. *The Palgrave Encyclopedia of Strategic Management*, 1: 1-5.
- Bower, Joseph L., and Christensen, Clayton M. 1995. "Disruptive Technologies: Catching the Wave". *Harvard Business Review*, 73(1): 43-53.
- Chesbrough, Henry W. 2010. "Business Model Innovation: Opportunities and Barriers". *Long Range Planning*, 43(2): 354-363.
- Danneels, Erwin. 2004. "Disruptive Technology Reconsidered: A Critique and Research Agenda". *Journal of Product Management Innovation*, 21: 246-258.
- Hagel, John. 2015. The power of platform. *Deloitte University Press*, 1: 1-15.
- Johnson, Nicholas L. 2021. What are Network Effects?. *Applico*. Retrieved from: https://www.applicoinc.com/blog/network-effects/#:~:text=Network%20effects%20are%20the%20incremental,do%20anything%20with%20the%20network.
- Lindgardt, Zhenya, Revees, Martin, Stalk, George, and Deimler, Michael S. 2009. Business Model Innovation: When the Game Gets Tough, Change the Game. *The Boston Consulting Group* 1: 1-8.
- Matzler, Kurt, von den Eichen, Stephan Friedrich, Anschober, Markus, and Kohler, Thomas. 2018. "The crusade of digital disruption". *Journal of Business Strategy*, 39(6): 13-20.
- Moeller, Leslie H., Hodson, Nick, and Sangin, Martina. 2017. The Coming Wave of Digital Disruption. *Strategy + Business.* Retrieved from: https://www.strategy-business.com/article/The-Coming-Wave-of-Digital-Disruption?gko=b9726

- Skog, Daniel A., Wimelius, Henrik, and Sandberg, Johan. 2018. Digital Disruption. *Business Information System Engineering*, 60(5): 431-437.
- Stobierski, Tim. (2020). What are Network Effects?. *Harvard Business School Online*. Retrieved from: https://online.hbs.edu/blog/post/what-are-network-effects
- Täuscher, Karl, and Laudien, Sven. 2018. Understanding platform business models: A mixed methods study of marketplaces. *European Management Journal*, 36(3): 319–329.
- Tushman, Michael, and Rosenkopf, Lori. 1992. "Organizational determinants of technological change: toward a sociology of technological evolution". *Research in Organization Behaviour*, 14:311-347.
- Van Alstyne, Marshall W., Parker, Geoffrey, and Choudary, Sangeet Paul. 2016. "Pipelines, Platforms, and the New Rules of Strategy". *Harvard Business Review*, 94: 1-16.
- Van Alstyne, Marshall, and Parker, Geoffrey. 2017. Platform Businesses: From Resources to Relationships. *GfK Marketing Intelligence Review*, 9(1): 24-29.
- Walsh, Steven T., Kirchhoff, Bruce A., and Newbert, Scott. 2002. "Differentiating Market Strategy for Disruptive Technologies". *IEEE Transaction on Engineering Management*, 49(4): 341-351

Annexes:

Table 1: Digital Music Global Market Share

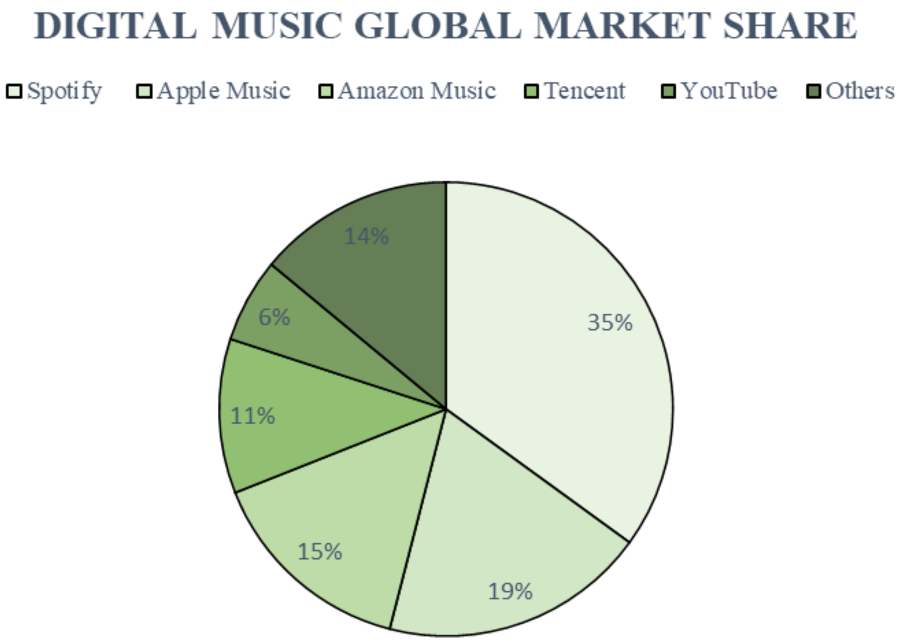
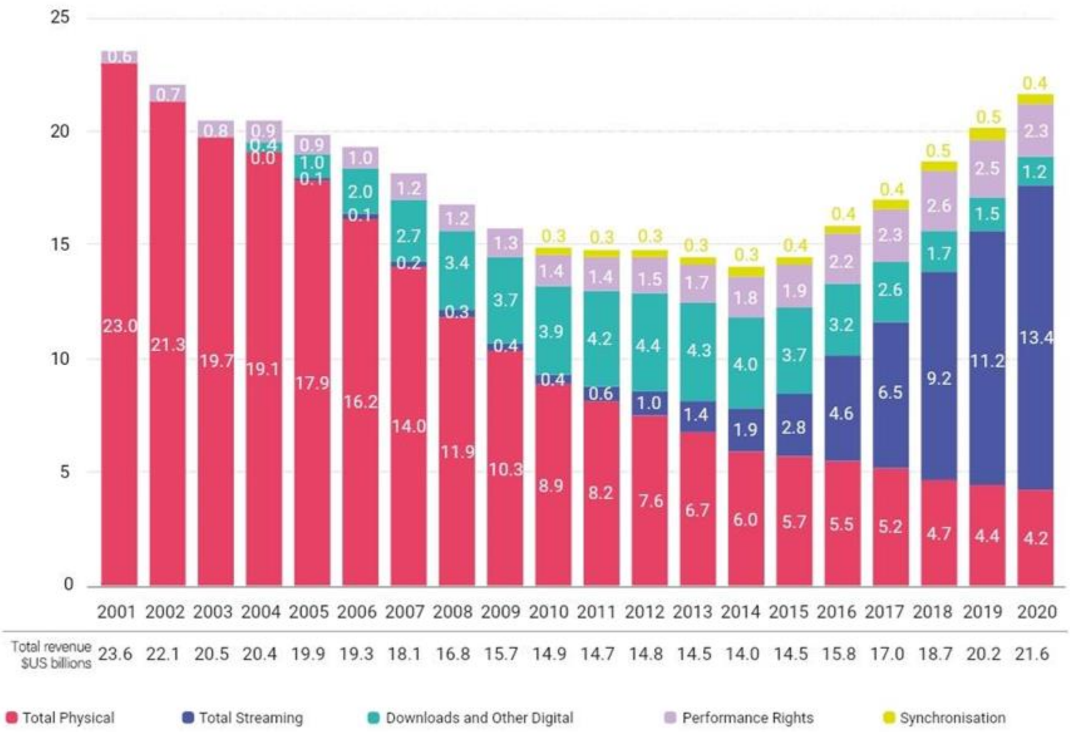


Table 2: Revenue Evolution of the Music Industry*



*Source: IFPI 2020's Annual Global Music Record

Table 3: Global Sales of Digital Supports

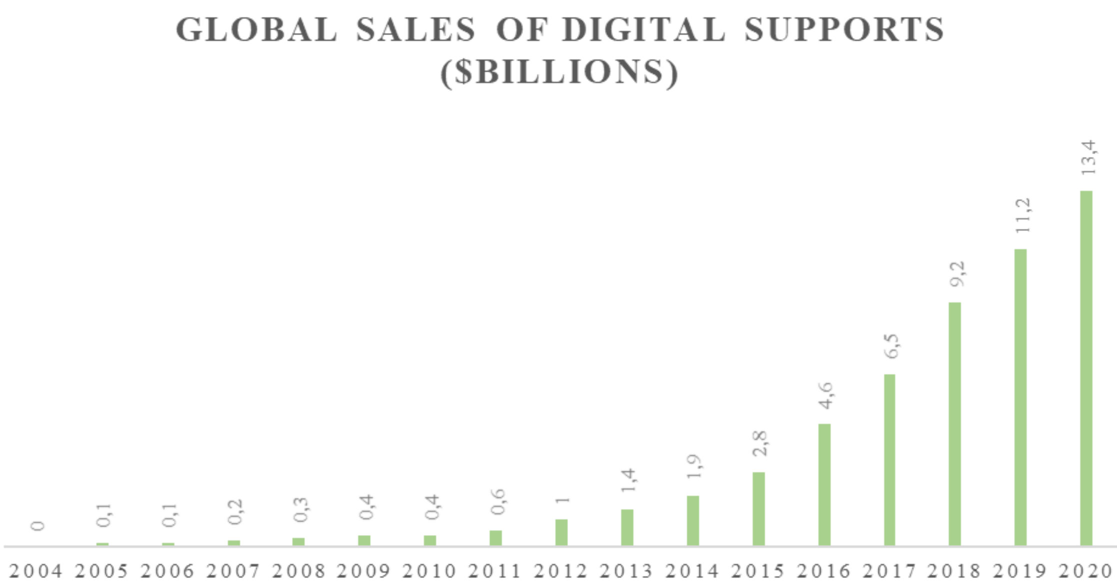


Table 4: Evolution in Sales of Physical Support

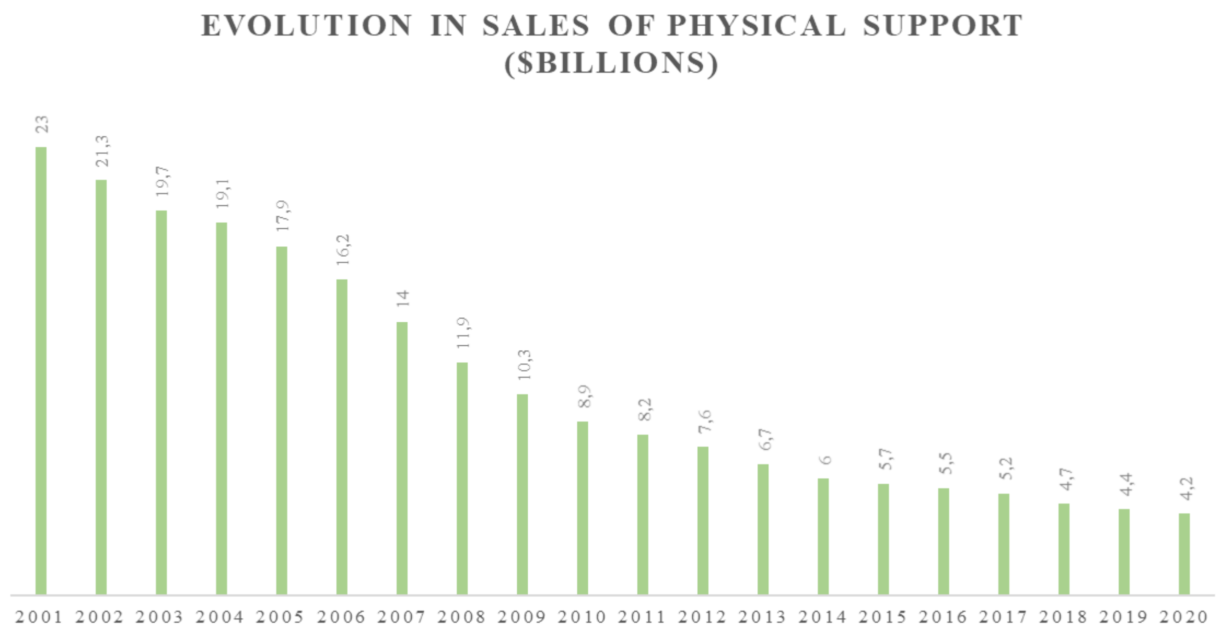


Table 5: Spotify's Share Price Evolution

Table 6: Spotify's Revenues and Net Income

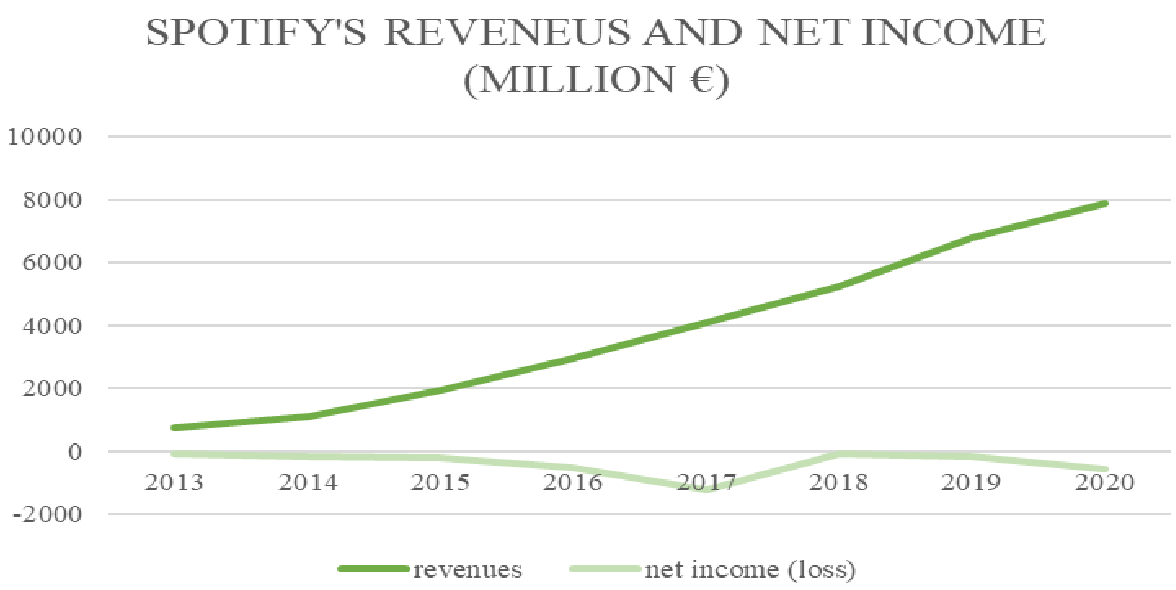
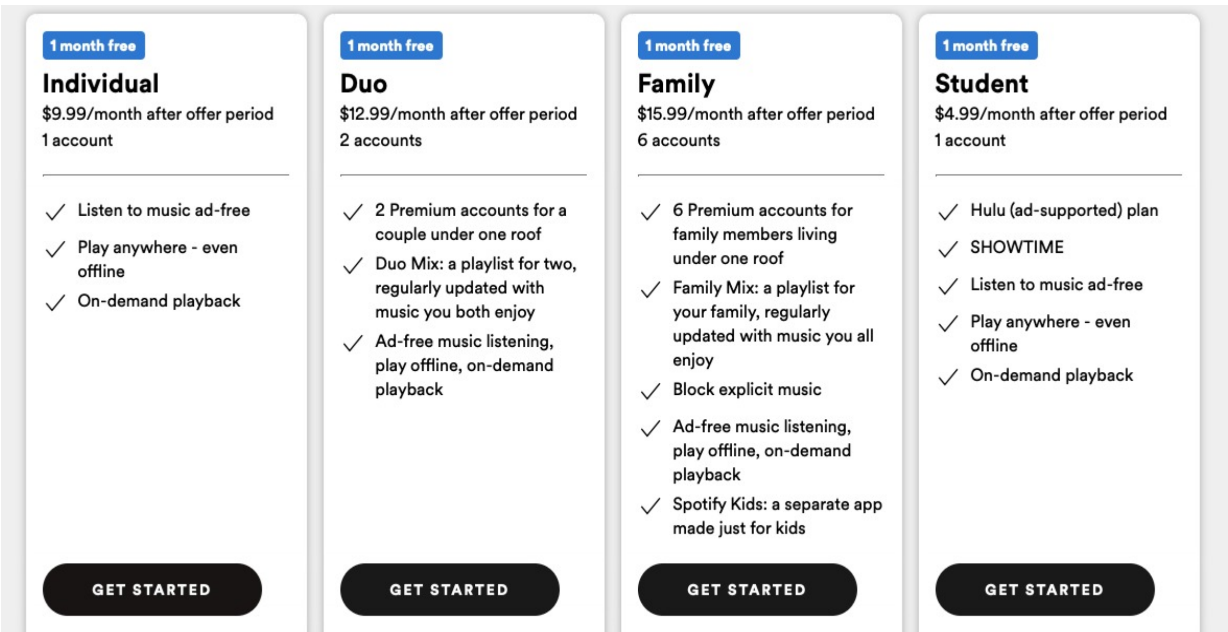
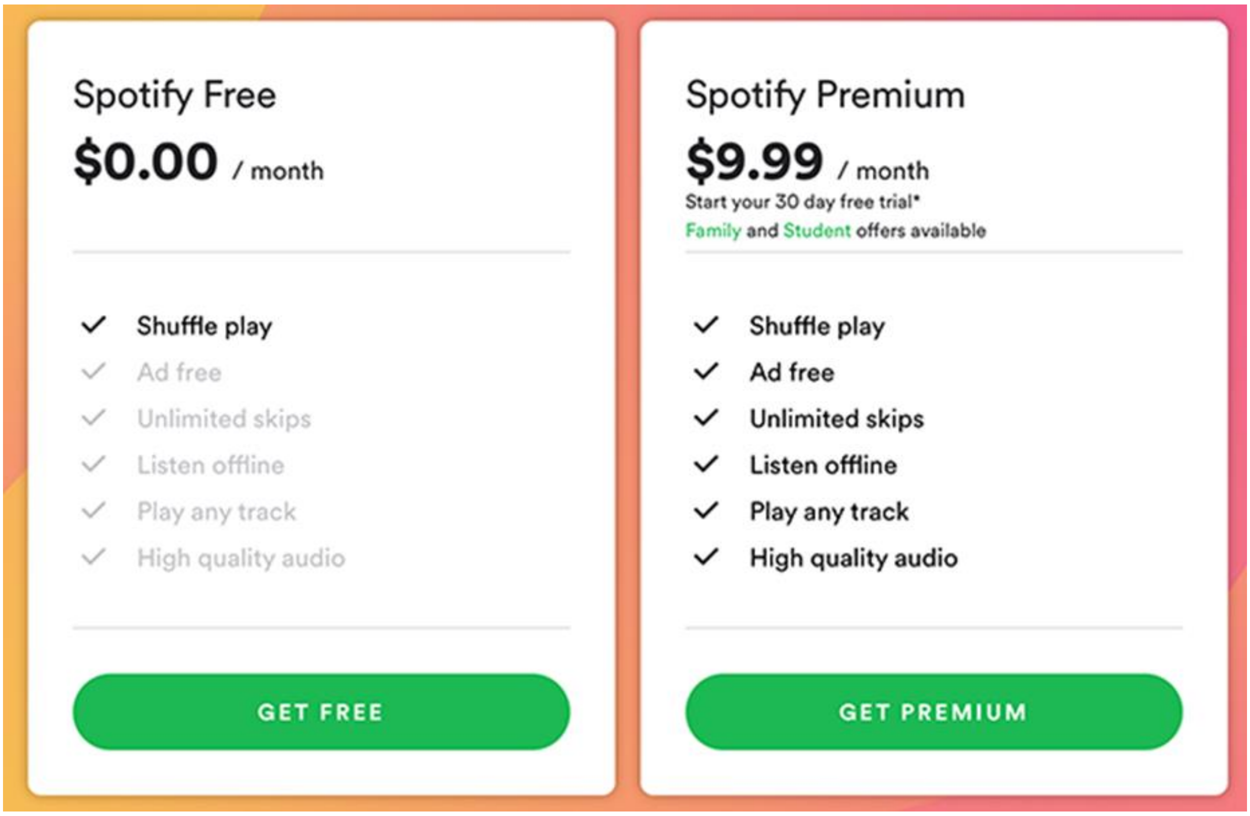


Table 7: Spotify's Promotions*



*Source: Spotify's Official Webpage

Table 8: Spotify Free VS Spotify Premium



*Source: Spotify's Official Webpage

Table 9: Spotify's presence in the World

Continent	Countries
Africa	Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Chad, Comoros, Côte d'Ivoire, Djibouti, Egypt, Equatorial Guinea, Eswatini, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, São Tomé and Príncipe, Senegal, Seychelles, Sierra Leone, South Africa, Tanzania, Togo, Tunisia, Uganda, Zambia, Zimbabwe.
Asia	Armenia, Azerbaijan, Bahrain, Bangladesh, Bhutan, Brunei Darussalam, Cambodia, Georgia, Hong Kong, India, Indonesia, Israel, Japan, Jordan, Kuwait, Kyrgyzstan, Lao People's Democratic Republic, Lebanon, Macao, Malaysia, Maldives, Mongolia, Nepal, Oman, Pakistan, Palestine, Philippines, Qatar, Saudi Arabia, Singapore, South Korea, Sri Lanka, Taiwan, Thailand, Timor-Leste, United Arab Emirates, Uzbekistan, Vietnam.
Europe	Andorra, Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Monaco, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Spain, Sweden, Switzerland, Turkey, United Kingdom, Russia, Belarus, Kazakhstan, Moldova, Ukraine, Albania, Bosnia, Croatia, Montenegro, North Macedonia, San Marino, Serbia, Slovenia, Kosovo.
North America	Antigua and Barbuda, Bahamas, Barbados, Belize, Canada, Costa Rica, Curaçao, Dominica, Dominican Republic, El Salvador, Grenada, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Trinidad and Tobago, United States.
South America	Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guyana, Paraguay, Peru, Suriname, Uruguay.
Oceania	Australia, Fiji, Kiribati, Marshall Islands, Micronesia, Nauru, New Zealand, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu.