THE CHALLENGE OF THE DISRUPTIVE SPOTIFY

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Starting from the history of music industry the article compares the traditional service of Cds and the innovative and new service offered by Spotify. Relying on the limitations of the use of the CDs, Spotify has revolutionized the existentt market introdu

Palavras-chave: disruptive music, spotify, innovation in music

1.Introduction

The music industry went through a period of profound changes in the last decades before the 2000s. Until the 90s, the prevalent way to listen to music was through physical means (CDs and Vinyls). Afterwards, in 1999, Napster was born, uncorking a new course in the history of music: the digital music era. Thanks to Sean Parker, its founder, Napster gradually made all the physical music obsolete but spread a new phenomenon, the illegal download, which became a serious problem for the whole music industry. Services like iTunes tried to contain the spread of illegal download by offering users the possibility of purchasing and owning a single track for 0.99$, However, legal download was soon replaced by streaming music services thanks to the birth of Spotify.

Launched by Daniel Ek in 2008, Spotify was the first on-demand streaming service and it seemed to be a very good alternative for customers since it offered a large catalogue of music accessible in an instant whilst most illegal downloading services require users to download each file separately. Moreover, a Spotify subscriber could put music in playlists, share it with friends, download for offline listening, while the machine was learning his or her behaviour and making playlists of songs that he or she might like.

The Swedish firm became the leader of the music streaming segment in a short while and established a new paradigm in the industry, soon to be the new dominant design. Spotify is transforming the music industry by allowing users from a "transaction based" experience of owning music to an "access-based" model which allow users to stream music on demand. Nevertheless, it cannot rest on its laurels, facing a harsh competition and influential suppliers in the struggle to be profitable.

2.Key developments of the digital music

The digital music's creation and diffusion has been possible thanks to the development of new technologies, it is possible to identify three main key development:MP3 compression technology which reduced the size of a music file, the rise of the internet and last the diffusion of new devices with greater capabilities than CD player technologies.

2.1Limitations of the traditional solution: CDs

The main limitations given by the use of CDs are:

-Recorded music was published in albums of 10 tracks,

-Easiness of damage by use and by direct exposure to sunlight and heat, warped by fast-changing temperatures, gravity, scratches, fingerprints and smudges.

-Limitation in distribution.

2.2Relevant features of the available innovative solution

"*EASY, ANYWHERE, ANYTIME ACESS MODEL*"

Dimensions of the quality of the service which make Spotify unique and loved by the consumers are:

- Convenience, in factthe price is a major advantage considering that the monthly cost of a subscription to Spotify Premium is a similar cost to one CD;
- Users could browse and play any song easily and they could store and display information such as song title, band name or genre;
- They could create playlists of their favourite tracks and easily move music between the player and their computers this create induces a lock-in effect, where for a customer the cost of switching to another service is higher due to the value given by the personalised playlists;
- Spotify playlist drive the discoveryof new artistsand songs, in fact thanks to the use of artificial intelligence, data management and machine learning provide the customer with a personalized experience. Spotify's core competence is in managing and matching contents to users, specifically music;
- Large music database;
- Large user base, which imply in network effect;
- Ease of useproviding a user-friendly experience. User interface, compatibility with mobile phones, PCs, tablets and other devices are fundamental to offer a well-rounded experience to customers;
- Space-saving solution.

2.4 Disadvantage of the new innovation

Sound quality is a concern because Spotify has a bit rate of 160 Kpbs which is less than the standard of mp3 files, while Spotify Premium comes in at 360 Kpbs which makes it just equal to mp3.

3.Business model and core competencies

Spotify's innovative business model is based on a today's common standard among internet-based companies: the *freemium*. Customers can choose between the free account, with advertisement and limited functionalities but the same music catalogue, and the premium account, with no ads and additional features. This model serves several purposes: first, the free version aims at attracting more and more users, creating a network to be exploited as a valuable resource; second, it works as a funnel to the premium version, as the 27% free-to-premium conversion rate confirms- it is one of the highest in the online service sector; third, it grants revenues both from advertisement and subscriptions. As a consequence, Spotify faces different actors in the market and has two separate types of clients: users and advertisers. To serve them, the company has developed capabilities that are aimed at maximizing the value of each of the two sides of its business.

First and foremost, Spotify's core competence is in managing and matching contents to users, specifically music. Indeed, much of the company's potential is in the processing of big data and the 10 continuous enhancement of the service, all with the goal of giving each individual user a personalized and unique experience. This is achieved both through the constant releases of new features of the app/website and through the systems of music recommendations, namely playlists such as Discover Weekly, Release Radar, Daily Mix. These, in fact, constitute what is most appreciated about Spotify's service, because they allow users to discover music that will meet their preferences.

The same concept is applied to advertisement, which is made of three different types of content: audio, video and display ads. The audio ads are 15 or 30 seconds long and are played in between songs during active sessions. Videos are either "Sponsored Sessions", where the user can choose to watch a video ad in exchange for 30 minutes of ad-free listening, or "Video Takeover".

Display ads, instead, can appear when the user returns on the app ("Overlay"), inserted at the top of the Browse section ("Homepage Takeover") or as banners at the bottom of the page for the desktop app or the web page ("Leaderboard").
The value of Spotify's offer to advertisers is in the targetization: they can select the prospective customers they want to attract using the data Spotify has on them, reaching them in many different ways. For example, if a user is listening to a playlist for running or sports, he/she is likely to hear an add about sportswear or sports gear. Moreover, Spotify offers an additional service through Ad Studio, a platform that allows advertisers to create their own ad with Spotify's help and reach their target users based on age, gender, location, activity and music tastes, selecting mobile or desktop users- or both.
However, having a twofold business could also entail the lack of focus, since the service is addressed at clients with different needs and satisfaction criteria. And the picture is even more complex if we consider also artists as clients. In fact, artists can independently upload their music on Spotify (through aggregator websites) and with them the company could exploit the potential of data management and processing, knowing exactly what, when and how users listen to their music, or what is the profile of their typical fan. For example, Spotify can easily localize geographically the listeners of a particular artist or find out the main trends of a particular region and such valuable information can be shared with music labels or artists directly to plan concerts or even define setlists, but, of course, not for free.

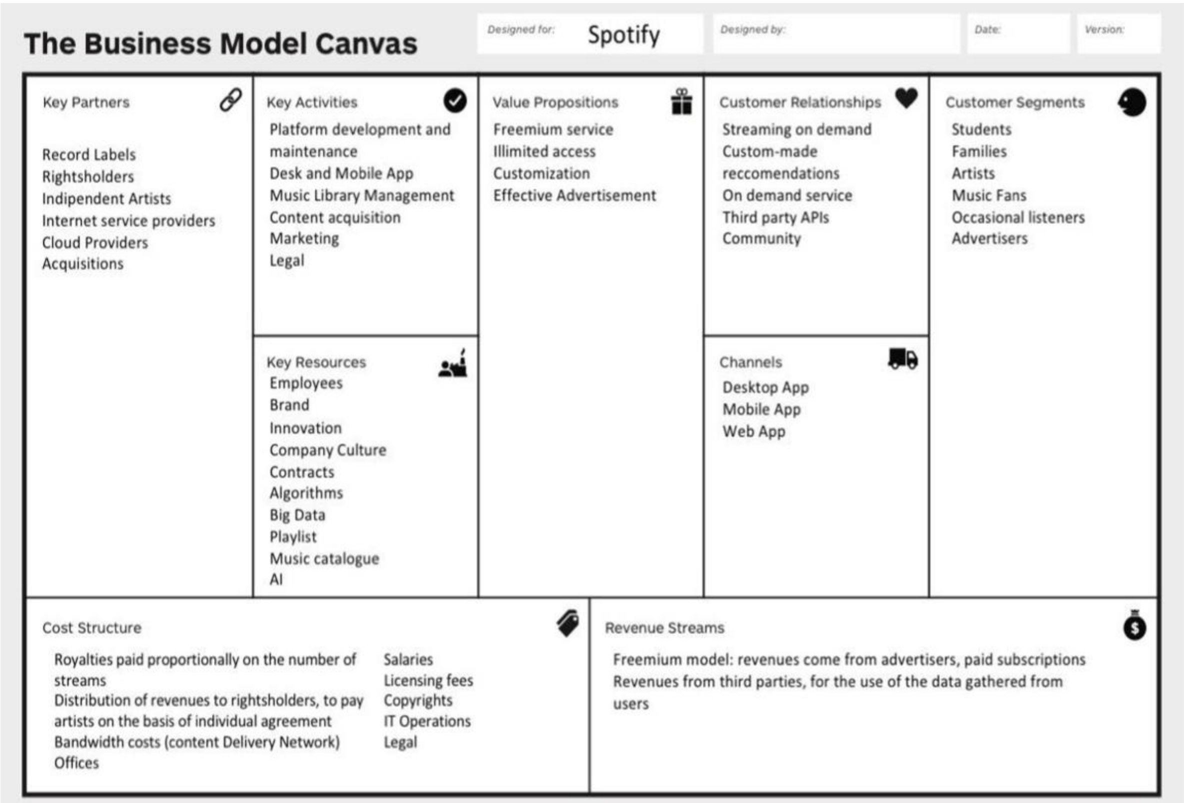
3.1 Disruption of the Business problem

In the early days, Spotify's vision was to tackle down the illegal download and to give back to music the value - and the revenues - it deserves: "*The value of music is not $15 billion* [2011 international digital music sales]; *it's worth much, much more than that*." (Daniel Ek, CEO).
The aim was to create a deeper and richer environment with respect to what the music industry became, giving birth to a platform that was more like an ecosystem for artists and their fans.
In practice, Spotify completely changed the technological paradigm of the music industry, going from transaction to access, and in just a few years streaming has reached such a relevant position in the market that it will probably be universally accepted as the dominant design in the near future.
What Spotify radically changed in the industry is the business model, i.e. how revenues are gained from consumers and redistributed to artists. Also, it should not be forgotten that a

consistent share of said revenues was gained back from illegal download, from which no one except the consumer could profit.

In order to provide a clear overview of Spotify's business model, the business model canvas was used, and it is shown in the following exhibit.

Exhibit 1: Business Model Canvas of Spotify



Source: "Spotify in 2016:Facing Increased Competitiom" - IESE Business School University of Navarra

4. Survey

For understanding and try to find a valid result for the project, ithas been created a survey on a test samples of 90 people who have assessed the relevance of the main key elements of the innovative service offered by Spotify. The measures that it has used is a scale grade from 0 to 5 (in which, 0 = not important; 5 = very important)

The question and the result obtainedis represented below, as follow:

1. Assuming that Spotify sells at a cheap price its service of music, how much do you assess important the cost of the service?

   The majority, 39,6 % of the respondents have answered giving a grade of 5.

2. How much is important the possibility to listen the songs through your smartphone, iPad and laptop?

   The majority,84,6% of the respondents have answered giving a grade of 5
3. How do you assess the possibility to create a personal playlist in order to share it with your friends?

   The majority, 30,8% of the respondents have answered giving a grade of 5
4. How do you assess the possibility to figure out new hits customizing your experience?

   The majority,31,8% of the respondents have answered giving a grade of 4

5. How much do you believe that is important the wide range of choices in selection of the music?

   The majority, 60,4% of the respondents have answered giving a grade of 5
6. How much is important the numbers of the users that the platform (Spotify) has?

   The majority, 29,7% of the respondents have answered giving a grade of 2
7. How do you assess the possibility to use the Spotify in different devices?

   The majority, 50,5% of the respondents have answered giving a grade of5
8. Assuming that the quality of sound offered by Spotify is below of the sound quality of a normal CD, how much this could influence your choice?

   The majority, 28,6% of the respondents have answered giving a grade of2
9. How much is important for you the space saving that you get using the service?

   The majority, 35,2% of the respondents have answered giving a grade of 4

As a result, the survey is been in line with the expectations.

5. Value proposition

Spotify's vision is to tackle down the illegal download and to give back to music the value.
"The value of music is not $15 billion; it's worth much, much more than that." (Daniel Ek, CEO). The aim was to create a deeper and richer environment with respect to what the music industry became, giving birth to a platform that was more like an ecosystem for artists and their fans.

5.1Mission

Music is a global means of communication, but as every language, it has its shades and particularities, peculiar of every culture. From its origins, Spotify is handling its local audience interpreting culture and heritage, localizing its content and giving attention to shifting musical tastes. In other words, Spotify is connecting music fans directly to artists, granting a music interactive experience.

6. Organizational structure

This enterprise has more than 3000 employees, but it is in constant growing.
The engineering culture of Spotify is surely one of its more valuable resources. At the basis there is the focus on autonomy, that motivates employees and allows them to be more productive, avoiding lots of steps in the decision-making process. Employees are grouped in cross-functional and self-organized squads of 8 people maximum, each squad has a long-term mission, but it is let completely free to decide what to build, how to build it, and how to work together. No standards exist, each squad has his own tested methodologies. Also, the collaboration has a great consideration in Spotify, in fact whenever a squad needs something that is owned by others they are free to take and modify them with the help of the owners. Spotify also work with such a high degree of autonomy. Two main ideas allow this modus operandi to work: the alignment and the decoupled release. Alignment means that the efforts are addressed toward a common purpose and enables autonomy to work properly: the leader explains the problem and tries to figure out the solution with employees. The decoupled release, instead, is a releasing methodology that allows each squad to deliver their product when they are done, avoiding the need to wait for others to be ready since each squad is responsible of an independent system.
Spotify's human resource culture is also based on a "fail fast - learn fast" strategy, that accepts mistakes as a valuable learning opportunity, so that every fail is analysed with the purpose of continuous improvement. However, to minimize the impact of a fail, the

decoupled software architecture is vital to ensure one mistake does not negatively affect the whole system. For the same purpose, new features are released gradually, starting from a small number of users, and monitored to reduce risks. In fact, the approach used for product development inside Spotify is based on Lean Start-up principles, summarized by the motto "Think it, build it, ship it, tweak it".

Innovation is also the core of Spotify's culture, encouraging employees to experiment and be creative and then take decisions based on the analysis of data rather than on authority or opinions. The same approach is used for designing the organization, in the sense that coordination tools or techniques are tried out and then kept only if they remain helpful to employees, in the attempt to reduce wasteful activities as much as possible.

7. Financial section

Spotify reports 75 million subscribers, with more than 170 million active listeners, generating €4 billions in revenues as of December 31th 2017 .

Exhibit 2: Consolidation statement of Operation Data, Cash Flow Data and Balance Sheet Data from 2013 to 2017

	Year ended December 31, 2013	2014	2015	2016	2017
	(in € millions, except share and per share data)				
Consolidated Statement of Operations Data:					
Revenue	746	1,085	1,940	2,952	4,090
Cost of revenue	618	911	1,714	2,551	3,241
Gross profit	128	174	226	401	849
Research and development	73	114	136	207	396
Sales and marketing	111	184	219	368	567
General and administrative	42	67	106	175	264
	226	365	461	750	1,227
Operating loss	(98)	(191)	(235)	(349)	(378)
Finance income	39	28	36	152	118
Finance costs	(2)	(19)	(26)	(336)	(974)
Share in (losses)/earnings of associates and joint ventures	—	—	—	(2)	1
Finance income/(costs)—net	37	9	10	(186)	(855)
Loss before tax	(61)	(182)	(225)	(535)	(1,233)
Income tax expense	2	6	5	4	2
Net loss attributable to owners the parent	(63)	(188)	(230)	(539)	(1,235)
Net loss per share attributable to owners of the parent(1)					
Basic and diluted	€ (0.51)	€ (1.40)	€ (1.62)	€ (3.63)	€ (8.14)
Weighted-average ordinary shares outstanding(1)					
Basic and diluted	123,860,920	134,408,240	141,946,600	148,368,720	151,668,769

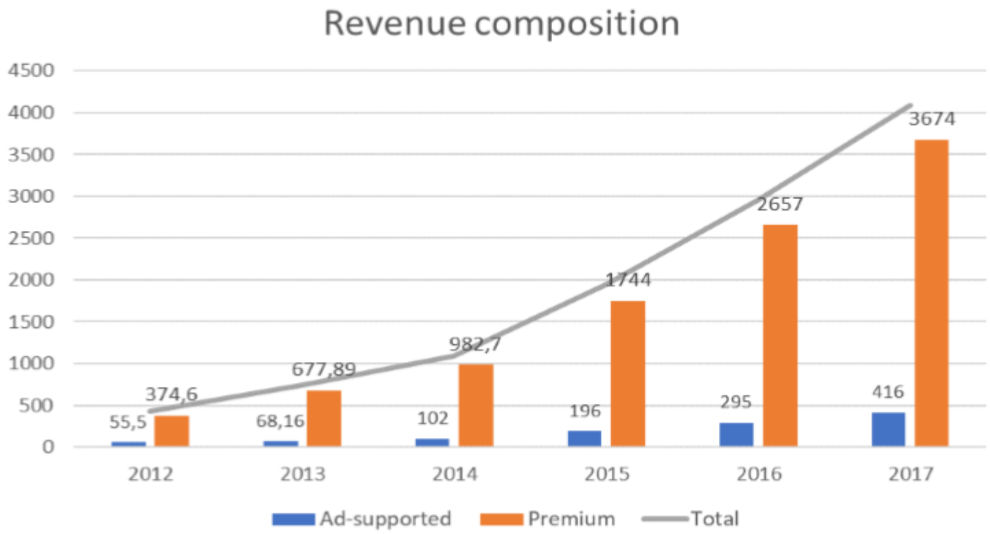
	Year ended December 31, 2013	2014	2015	2016	2017
	(in € millions, except share and per share data)				
Pro Forma net loss per share attributable to owners of the parent(1)					
Basic and diluted					€ (4.28)
Pro Forma weighted-average ordinary shares outstanding(1)					
Basic and diluted					166,146,849
Consolidated Statement of Cash Flows Data:					
Net cash flows (used in)/from operating activities	(25)	(74)	(38)	101	179
Net cash flows used in investing activities	(41)	(21)	(67)	(827)	(435)
Net cash flow from financing activities	123	65	476	916	34
Net increase/(decrease) in cash and cash equivalents	57	(30)	371	190	(222)
Selected Other Data (unaudited):					
EBITDA(2)	(88)	(172)	(205)	(311)	(324)
Free Cash Flow(2)	(59)	(94)	(92)	73	109

	As of December 31, 2013	2014	2015	2016	2017
	(in € millions)				
Balance Sheet Data:					
Cash and cash equivalents	218	206	597	755	477
Short term investments	—	—	—	830	1,032
Working capital	47	73	73	689	38
Total assets	373	474	1,051	2,100	3,107
Convertible Notes	—	—	—	1,106	944
Total equity/(deficit) attributable to owners of the parent	94	36	229	(240)	238

Source: https://ycharts.com/companies/SPOT/free_cash_flow

Spotify's revenues have seen a trend of continuous growth since its birth, with a 46% growth rate year on year. Their composition and trend throughout 2012-2017 are represented in.

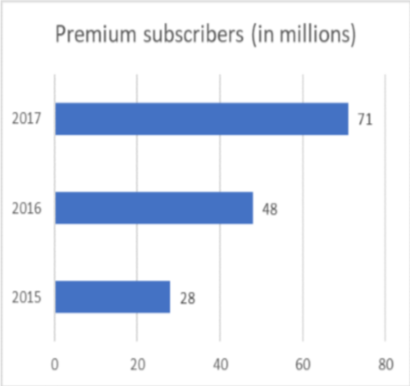
Exhibit 3: Revenue composition

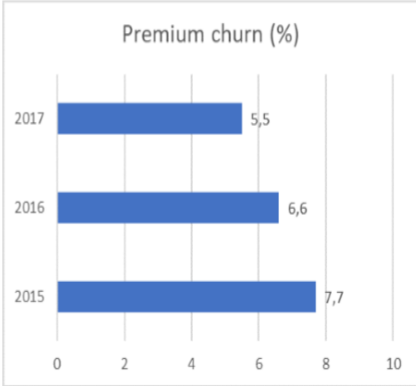


Source: https://investors.spotify.com/financials/press-release-details/2019/Spotify-Technology-SA-Announces-Financial-Results-for-Fourth-Quarter-2018/default.aspx

For 2017, premium subscriptions account for €3,674 million revenues, 89.8% of the total, versus €416 millions from ad-supported accounts. From this data, it is immediately evident that revenues do come from two different actors - users and advertisers -, but the advertisement business is not comparable in size to the one of subscriptions, at least for the time being. Therefore, the real purpose of the free account seems to be channelling users to the premium one, much more lucrative; it could be argued, though, that scale could be a crucial ingredient for a better monetization of advertisement, along with an increasing targetization of ads. Alongside with revenues, premium users have increased as well, from 28 million in 2015 to 71 million at the end of 2017 and at the same time the churn rate - the share of cancellations over total subscribers - has decreased from 7.7% to 5.5% .

Exhibit 4 and 5: Premium subscribers in millions and premium churn (%)





Source: https://investors.spotify.com/financials/press-release-details/2019/Spotify-Technology-SA-Announces-Financial-Results-for-Fourth-Quarter-2018/default.aspx

This was probably due to the launch of student and family plans, which allow, respectively, to have a discounted premium account for half the regular price (i.e. 4.99€ instead of 9.99€), and to have only one account for up to 6 profiles for a price of 14.99€.

However, looking at the whole financial situation, Spotify's primary issue is evidently related to its cost of revenue.Spotify pays royalties which are, for the 87%, owed to the big three music labels - Sony Entertainment, Universal Music Group and Warner Music Group- and Merlin, the largest aggregator of independent labels.

Other smaller costs of revenue include credit card fees, customer service, cloud computing, facility, equipment costs and so on. Up to 2016, the cost of revenue accounted for 83-88% of the revenues, leaving a very narrow window for sustaining the internal activities - R&D, Sales and marketing, General and administrative -, resulting in an inevitable Operating loss. In 2017, however, new and more favourable licensing agreements were negotiated with the rights holders, leading to a higher gross margin of 21%. Even though the effects are not substantial yet, this renegotiation could signal the fact that achieving a greater size would mean having a higher bargaining power and thus reduce these costs.

7.1 Last quarter of 2018

Total Q4 revenue was €1,495 million, up 30% Y/Y. Premium revenue was €1,320 million in Q4, up 30% Y/Y. Average revenue per user was €4.89 in Q4. This represents a 7% Y/Y decline. Revenue from North America continued to accelerate, growing 41% Y/Y.Gross Margin was 26.7% in Q4, above the high end of our guidance range of 24-26%.Premium Gross Margin was 27.3% in Q4, up from 26.1% in Q3, and up 200 bps Y/Y. Ad-Supported Gross Margin was 22.1% in Q4, up from 18.6% in Q3, and up 350 bps Y/Y.

7.2 Direct listing on the stock exchange

On 3rd March Spotify entered the New York Stock Exchange; its Direct Public Offering was a success and its shares closed the first day at 149.6 $ giving a market evaluation of about 26.6 billion $. Spotify’s approach was actually unusual for a big tech company, since it opted for a direct listing instead of a more conventional IPO. This approach is typical of small companies and consists in selling shares directly to the public without an intermediary, typically a bank or a financial expert. This intermediary, called underwriter, would have financed the emission of new shares and would have set the initial price but Spotify’s policy was clear: it entered the stock market simply relying on the popularity it has reached so far to avoid paying million dollars of commissions to banks. This method was very risky but successful in the end, in fact, the initial price at quotation was very high for standards and substantially grew during the next month. However, investors are putting a lot of pressure to be profitable on Spotify, which is trying to reassure them, asserting that the firm can (and will) continue to grow. In the long run, if Spotify does not figure out how to reduce cost or gain additional revenue (for example turning its free users into paid subscribers), its financial future will not be so bright.

8. Market Segmentation

Spotify has positioned itself uniquely in the expansive market in order to target two major segments: students and young business professionals, even if it is expanding its market quickly. These two segments possess specific characteristics that make them desirable, lucrative targets for Spotify’s service.

Students

The students that Spotify targets are at the high school and college. Being entirely computer-based, younger generationsare able to use the service with the appropriate technical competency.Spotify targets these students by offering itsbasic service for free and offering its premium services at half-price for college students. Personalization is key for young people. For what concern geographic, Spotify believes that if you have an Internet connection, their service is for you.

Young Business Professionals

Young business professionals can be classified as those individuals who have recently graduated college and are now working with relatively sizeable salaries.The biggest difference between students and young business professionals, is income. Young business professionals are almost certainly on their own economically, consequently that they are much more likely to purchase the paid service for its increased benefits. They idea of mass customization and personalization and the mobility and interconnectivity of Spotify's service is certainly a significant appeal for this segment, particularly given the busy lifestyle. About geographic, young business professionals have an Internet connection which it means that they are reachable.

8.1Market

Spotify is currently in 78 countries and territories and is growing in each of our four geographic regions. Europe is our largest region with 76 million MAUs(Monthly Active Users), accounting for 37% of our total MAUs as of December 31, 2018, an increase of 29% from the prior year. In our North America region, MAUs increased by 19% from December 31, 2017 to December 31, 2018 and now account for 30% of our MAUs. The company's two fastest growing regions are Latin America, with 22% of our MAUs, an increase of 35% from December 31, 2017 to December 31, 2018, and the rest of the world, with 12% of our MAUs, an increase of 50% from December 31, 2017 to December 31, 2018. Nowadays, Spotify counts 170 million active users, of which 37% comes from Europe and 32% from North America and the last third part is from Latin America and the rest of the world.

Exhibit 6: Revenue distribution

Source: https://www.statista.com/statistics/245125/revenue-distribution-of-spotify-by-segment/

9. Conclusions:

Keeping it in mind and looking at the big picture, Spotify's experience cannot be seen and evaluated without a glance at the high-tech internet giants of these modern times and how they are changing the world: a world without the modern means of communication and connection among people across the world is becoming increasingly hard to imagine. As Google seeks to provide all the internet's knowledge,Amazon all the products and Facebook all the people,people are becoming more and more accustomed to having everything want within smartphones’ reach. These companies are thriving because they have recognized how the value of today’s businesses is shifting from money to data: the new currency is, indeed, information. The lesson taught is that the absence of profitability in the beginning actually has little significance in the face of the opportunities of this new currency: Google, Amazon and Facebook were not profitable for years, LinkedIn, Uber, Twitter and Tesla still are not.Spotify is nothing but consistent with this trend, being on the front line of this big data revolution.This is the reason why the company does not worry, at the moment, about profitability, but looks at the potential growth of the streaming market, sustained by smartphones spreading like wild fire and by the education of customers, which is not slow but still takes time. Even competition, on this regard, actually helps in starting the conversation about streaming and introducing it to more and more people. This is the edge Spotify is living in: staying ahead of the others and pushing the limits of this music revolution, still with the risk of falling down the cliff.

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