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AN INTRODUCTION TO THE GLOBAL DIGITAL MUSIC MARKET

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¹ The views expressed in this study are those of the author and do not necessarily reflect those of the WIPO. Secretariat or any of the Organization's Member States.

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1. INTRODUCTION

Digital music exists today because vast numbers of mostly young adult consumers began to search for professionally recorded music over the Internet roughly 25 years ago. To respond to this desire expressed in numerous ways, business relationships had to be created or reshaped between consumers, music creators, music companies, collective rights management organizations and technology-based, as well as Internet-access, service providers.

Together these parties make up the digital music ecosystem. How these parties interact with each other and how these relationships are managed continue to evolve as the global, regional and local marketplaces continue to evolve.

Most of the parties in these relationships understand what making music available digitally means ultimately. It means fulfilling the hopes and desires of everyone who is touched by music in some way.

The promise of digital to consumers who devour music wholeheartedly is the ability to continually find music they love from anywhere in the world and to be able to hear that music anywhere at any time. The promise of digital to consumers who simply enjoy how music makes them feel is the ability to hear in an easy way a variety of music within specific genres or within other music categories.

The promises of digital to performers, songwriters (composers and authors) and their creative partners include the opportunity to reach more listeners. The creators then have an opportunity to profit from their music so they can afford to devote their time and talent to work on their music, to continually develop creatively and to offer new music that the public may want to hear.

The promises of digital to all kinds of music-related companies—whether the company produces recorded music, publishes musical compositions, collectively manages rights in recorded music or compositions, distributes recordings of compositions, delivers digitized music or performs (streams) music—include the opportunity to generate enough money from large numbers of listeners to support their contributions to music within the commercial marketplace and to invest in people and companies to continually provide the music-related goods or services that help consumers hear the music they desire.

The promises of digital to society as a whole include enabling sustainable music markets so that individuals across the globe can access culturally or politically diverse views of human experiences expressed musically, which evoke emotional or thoughtful responses in each listener, or access music simply for enjoyment.

Delivering on these promises has required, and continues to require, the building and remodeling of an extensive infrastructure of business, technology, legal and creative operations and activities within the digital music ecosystem to support a commercial digital music market. Since these operations and activities make up the "infrastructure" of the market, by definition they are mostly conducted behind the scenes.

In plain sight, however, are certain results from these activities. The results include demonstrated opportunities that the digital music ecosystem has provided to recording artists and their creative partners and the variety of digital music service offerings available to consumers ("users" of the service) and music creators alike.

This Introduction to the Digital Music Market focuses primarily on the results that are in plain sight. Note that the digital music business changes rapidly. References to information "currently" refers to information as of mid-2019.

2. THE ARTISTS

Summer is in full swing in Canada. Twelve recording artists—some bands, some solo acts—are preparing for a special video shoot of their live performances. During a single day in Toronto, the artists will perform their own songs and sit for promotional interviews. The artists bring a range of experiences in music and a variety of musical genres to the shoot. Each artist will perform the songs in a musical style that is different from the other artists.

The mission of the project, created by a company that distributes recordings to digital music services, is to showcase through digital channels around the world the diversity of Canadian artists who are achieving various levels of success and how songs are performed in many different musical styles, even within a single genre. The underlying message of the project is unity.

There are thousands of stories to tell about the performers and the songwriters whose music makes up a digital music service's available catalog of music. For these creators, there are many different definitions and measures of success, especially in a digital marketplace. One thing is certain. From access to success, there is a very hard road to travel for every music creator. Yet with access to a digital distribution channel, there is at least hope for success, however measured or defined.

This part of the report presents a mere glimpse of a relative few artists among the thousands whose music is available through digital music services, with a special emphasis on emerging digital music markets. The selected artists appeared at a particular moment in time when viewing the digital music market through four distinct lenses:

- A single project spotlighting musical diversity within a single country;
- Digital music charts of selected digital music services that rank the most-played artists;
- A single digital music service that makes the videos of artists available; and
- The road traveled in part by four artists whose music reaches fans of four different genres of music.

A. A SINGLE PROJECT

The 12 Canadian artists participating in the video shoot are part of a project produced by CD Baby, which distributes recordings for performers and some small record companies. These artists illustrate the variety of performers and songwriters in a single country who hope to reach listeners through digital music services.

Julia Haggarty performs modern country music, a style that mixes country, folk and rock genres. A classically trained performer, she sang as a lead in an award-winning a cappella group that toured across Canada, the US, Europe and South Korea. After the group split up, she released her first self-funded extended play recording ("EP") in 2015.

Three of the artists represent Canadian indigenous communities.

Julian Taylor is a singer-songwriter of West Indian and Native Canadian decent who performs alternative folk music. Taylor was a founding member of the 1990s band Staggered Crossing, which released records through a major recorded music company for a short time. Taylor recorded and performed with the band for a decade. Since then, he has been recording and performing as a solo artist, now fronting his Julian Taylor Band.

Midnight Shine members came together by chance to perform a single show in 2011. They stayed together as a group, recording several albums and performing live at music festivals and other events. Adrian Sutherland from the Attawapiskat First Nation, Stan Louttit and Zach Tomatuk from the Moose Cree First Nation, and Charnelle Menow from the Norway

House Cree Nation perform rock music. Their musical style is described as a mix of roots, classic and modern rock with a touch of Mushkegowuk Cree, a cultural sound.

Matt James is a new country singer-songwriter from a well-known musical family in the Mattagami First Nation. As an award-winning bass player and songwriter, he performed with a bluegrass band for 10 years. Deciding to pursue a career as a solo artist in 2018, he and his best friend, musician Lee D. Roy, fundraised the thousands of dollars he needed to travel to Nashville, Tennessee, to record his music, his way.

Four teenagers known as Blue Opaline from Toronto want their 'voices' to be heard through their pop rock music. Ranging in ages from 14 to 16 currently, vocalist Ariyena Sorani, bassist Wyatt Garvin, drummer Thomas Carli and guitarist Gabe Levy met through rock music camps and arts high schools. Their first EP was released in 2019.

Ken Tizzard performs political folk music. For more than 20 years, he has performed around the world for all sizes of audiences in venues ranging from huge arenas in Canada to small cabarets in northern Russia. He performed on multiple platinum-certified or gold-certified albums (awards resulting from high-sales volumes) in the 1990s and early 2000s with the alternative rock band The Watchmen.

Julie Neff is a singer-songwriter who performs folky pop music. Described as an indie pop artist with raw talent, unfaltering lyrics and a compelling voice, she released her EP in 2018.

Tribe Royal performs folk rock music that is described as alternative rock, folk and Americana with a retro '60s vibe. Songwriters Chris Kerwin and Terry O'Brien are vocalists and multi-instrumentalists, while Matt Robillard plays drums, and Bram Al-Najjar performs on bass guitar and sings. After forming the band in late 2013 and performing hundreds of shows over the following years, the group has gained an international audience with their recordings and live performances in Canada, the US and Europe.

Mary Stewart is a singer-songwriter who performs pop-driven folk music. She grew up in a musical family and recorded in-studio demos of her songs for the first time at the age of 16. Following several years of voice lessons in Canada, she traveled to France for further voice study. She released her first recordings several years ago and has since connected and collaborated with many creative artists in Nashville, Tennessee.

Bryce Clifford and Brother Superior perform post-punk rock music. Vocalist-guitarist-songwriter Clifford has been performing for over 15 years. He and bass player Geena Spigarelli, baritone saxophonist Thomas van der Brook and drummer Daniel Jones now live in Austin, Texas. Their music is described as influenced by bluegrass, classic rock, honkytonk and old-school soul, performed with a "wheels-might-come-off intensity."

Ches Anthony performs country rock music. He learned to play harmonica, guitar and piano at a young age. His father would bring him on stage with his blues band to perform for their fans. Anthony is the former lead singer for award-winning country band Cold Creek County that recorded for a major recorded music label. He is now performing as a solo act.

Johnson's Creek calls its music style "redneck rock 'n' roll." Vocalist-guitarist Glenn Code, lead guitarist-vocalist Michael Lanteigne, vocalist-bass player Mike Crombez and drummer Rick Carreiro have performed across Canada. They released their debut single recording in 2017.

As these artists demonstrate, many different musical styles can evolve from even three genres of music—rock, folk and country—as artists strive to heighten their creativity and touch a chord with listeners. Some music executives say that in Brazil alone, artists perform more than 300 different genres of music.

CD Baby plans to post the videos on YouTube and social media channels and feature one of the artists each month on the webpage of CD Baby Canada, among other activities. The recordings will also be distributed to digital music services for listening around the world.

B. DIGITAL MUSIC CHART ANALYSIS

Generally, charts listing the top recordings (often called "songs"), the top recording artists or some other distinguishing characteristic are meant to reflect the most played recordings or most viewed videos during a specific time period in a specific country or territory. How each company that compiles a chart actually calculates which recordings or performers are the most played and how to rank them are not usually available to the public. The factors used to make the calculation can be more complicated than simply counting the number of times someone streams a song, especially when some songs are streamed for only a few seconds before the listener moves to another song, for example.

Ranks, placements or appearances on charts are important indicators of achievement for music creators and for the companies that work with creators.

Therefore, one way to demonstrate how the digital music business provides opportunities for performers and whether those opportunities can help performers and their music reach listeners beyond their own national borders is to view and analyze the charts compiled by digital music services. These charts generally reveal which artists rank the highest in terms of the most listeners among all artists whose music is available on that service. The charts for digital music listening in smaller and emerging music markets can be especially enlightening in this regard.

Chartmetric, a music streaming data analytics firm that tracks placements on many digital music charts, prepared a special analysis for this report.

(1) THE PROCESS

Chartmetric examined which artists appeared on digital music charts in Latin America, Europe, Africa and Asia but focused particularly on the smaller or emerging music markets (countries).

In narrowing this focus, the company selected 145 countries within these four regions. It then aggregated chart information for those countries from all of the YouTube Top Songs charts from January 2018 to August 2019 and, separately, from all of the Apple Daily Top 100 charts from the chart's inception in mid-September 2018 to August 2019.

The company counted how many times an artist appeared on the charts in the artist's country of origin (sometimes the artists relocate but still draw fans from their birthplace) and on the charts for other countries (charts around the world, not only charts in the 145 countries).

Chartmetric compiled this chart data on recording artists and then assigned each country into one of the following 14 regions:

- Central America
- Caribbean
- South America
- Northern Africa
- Western Africa
- Eastern Africa
- Central Africa
- Middle East
- Southern Europe
- Eastern Europe
- Melanesia
- Eastern Asia
- Southern and Central Asia
- Southeast Asia

Based on the data, the company determined which regions produced the most artists with domestic chart success and with foreign chart success on the YouTube and the Apple charts during the defined time period. Artists appearing on their country's domestic charts demonstrate how well their music was received by listeners compared to the music of artists from outside that country (foreign or international artists). Artists appearing on foreign charts demonstrate that their music reached listeners across the national borders of their country of origin.

While there are distinctions to be made when an artist is born in one country and lives in another country where the music is released (especially when the latter country has a more established music market), the purpose of this analysis is more general in nature. This analysis is only meant to illustrate in a broad sense listener response to the artists' performances, the culture represented by that music or genre of music, and the digital movement of that music across national borders.

(2) THE RESULTS

Keep in mind that the YouTube charts generally represent video music, and the Apple charts represent audio music. The charts also represent the results of listening only on that particular digital music service.

Counting the number of artists appearing on the YouTube charts over this time period in the 14 regions, Eastern Europe had the most artists making it onto the domestic and foreign charts combined (67 artists), followed by the Caribbean (46 artists), Western Africa (35 artists) and Southern Europe (20 artists). South America and the Middle East followed (each with 19 artists).

Eastern Europe also had the most artists who made it onto their own domestic charts (43 artists). In other words, no other region had as many local artists versus foreign or international artists making it onto their own country's charts. Eastern Europe was followed by Western Africa (22 artists) and Eastern Africa (10 artists).

Artists in the Caribbean had the most success placing on foreign charts with YouTube (46 artists), followed by artists in Eastern Europe (37 artists), Western Africa (28 artists), Southern Europe (20 artists), then South America and the Middle East (each 19 artists).

Counting the number of times artists appeared on the Apple charts over this time period in the 14 regions, Caribbean artists appeared on the domestic and foreign charts combined most often (85,000 appearances) and appeared most often on foreign charts (82,000 appearances). The figures were rounded up to the nearest 1,000. Western African artists had the most appearances on their domestic chart (13,000 appearances).

Counting the number of artists appearing on the Apple charts over this time period in the 14 regions, the Caribbean had the most artists making it onto the domestic and foreign charts combined (178 artists), followed by Western Africa (131 artists), Eastern Europe (98 artists), the Middle East (62 artists), South America (60 artists), Northern Africa (34 artists) and Southern and Central Asia (28 artists).

Like the YouTube charts, Eastern Europe had the most artists who made it onto their own Apple domestic charts, although more artists made it onto the Apple charts (59 artists). In other words, no other region had as many local versus foreign or international artists making it onto their own country's charts. Eastern Europe was followed by South America (53 artists), Western Africa (46 artists, more than double the number on YouTube), and the Middle East and the Caribbean (each with 28 artists).

Artists in the Caribbean had the most success placing on foreign charts with Apple (172 artists), followed by Western Africa (116 artists), Eastern Europe (67 artists), Middle East (44 artists), Northern Africa (34 artists), Southern and Central Asia (23 artists) and Eastern Africa (20 artists).

Adding to these general figures, Chartmetric compiled a list of artists and their rankings on the YouTube and the Apple charts during this time period for domestic charts and foreign charts. As a reminder, appearances on foreign charts demonstrate that the artists' music not only reached across national borders but was met with positive consumer response.

The names and descriptions of the top five artists on domestic charts and foreign charts for the YouTube and the Apple charts during the time period are provided in this report. Although a region like Eastern Europe may have the most artists on domestic charts during the time period, those artists are not necessarily ranked the highest on the charts.

Note that Chartmetric data includes for many artists the number of monthly listeners on Spotify, which represents the total number of unique users who have played the artist's music at least once on Spotify during the past 28 days. Some of these figures are provided to better understand the reach of the artists' music to listeners through different digital music services. Also, some artists have their own "channel" on YouTube to which users may subscribe. Some of these figures are provided as well.

(a) THE YOUTUBE CHARTS

The five artists from the 14 regions with the most domestic YouTube chart entries during the defined time period were Harmonize, DaVido, Oliver Mtukudzi, Eddy Kenzo, and Lora.

Harmonize is a Tanzanian hip-hop musician, songwriter and dancer. He appeared on the YouTube charts 500 times. More than 260 of these instances were on foreign charts while more than 230 times were on his domestic charts. The chart success is mostly regional in Kenya, Tanzania and Uganda starting in May 2018, but his music reached the charts of Western Africa (Nigeria) as well. His YouTube channel has more than one million subscribers currently. On Spotify, he has almost 165,000 monthly Spotify listeners, numbering the highest in Paris, Amsterdam, London and Stockholm.

DaVido is a singer, songwriter and record producer born in the US to Nigerian parents. He later returned to Nigeria and began his music career after a business education. His musical style is described as afro pop. DaVido's debut single came in 2011 followed by a number of hit songs. His YouTube videos have almost 487 million views, and his YouTube channel has more than 665,000 subscribers currently. On Spotify, he has more than 2.7 million monthly listeners with the highest numbers in London, New York City, Toronto and Paris currently.

Oliver Mtukudzi is described as a musical and cultural icon in his native Zimbabwe. He was a musician and human rights activist who died in early 2019. Performing music that blends a number of South African music traditions, he released more than 60 albums during his career. Mtukudzi's YouTube videos have more than 19.6 million views, mostly in South Africa and Zimbabwe currently. His music still has more than 48,000 Spotify monthly listeners, mostly in Johannesburg. Note that when a well-known performer dies, consumers often listen to the performer's music more often for a period of time.

Eddy Kenzo is a Ugandan dancehall artist who spent much of his childhood homeless after the death of his mother. He began a solo career in music in 2010 and first gained international attention five years later with a music video. His YouTube videos have more than 107 million views currently across the US, Uganda, Brazil, Senegal, France and Kenya. In contrast, he has just over 55,000 monthly listeners on Spotify, mostly in Paris, Stockholm, Amsterdam and London.

Lora is a Romanian pop singer, model and TV personality. She was part of a popular television singing competition program. Lora was part of Romanian all-girl band Wassabi that gained success around 2006. She began a solo career in 2009. Lora has more than 180,000 subscribers to her YouTube channel and more than 42,000 Spotify monthly listeners currently, mostly in Bucharest.

The five artists from the 14 regions during the defined time period with the most YouTube entries on foreign charts were Natti Natasha, Mau y Ricky, Cutty Ranks, Sean Paul, and French Montana.

Natti Natasha is a Dominican singer-songwriter of Latin urban music who moved to the US as a teenager more than a decade ago. Initially through collaborative performances with several successful male artists before taking the lead on her own album, she counts several international hit songs since 2017. Her videos have been watched on YouTube more than 7.7 billion times. Currently Mexico, Argentina, the US and Colombia are the countries where the videos are most viewed. She currently has more than 18 million monthly listeners on Spotify.

Mau y Ricky are Venezuelan brothers Mauricio and Ricardo Montaner who moved to the US as children. They started in the music industry as musicians at the ages of 12 and 15 while touring with their father's band throughout Latin America. They have since written songs for successful Latin artists before striking out on their own as performers a few years ago. Their videos have been watched on YouTube more than 1.8 billion times, and they currently have more than 12.8 million monthly listeners on Spotify.

Cutty Ranks, a Jamaican dancehall musician, has been recording music since the 1980s. He is viewed as the first artist to pose a real challenge to Shabba Ranks, who then dominated the reggae genre. Data reveals that Cutty Ranks began appearing on the Global, US and UK digital charts during the time period measured for this report in March 2018 after his 1996 recording, "Dame Tu Cosita," was attached to a video with an animated dancing alien that "went viral." A record company then re-released the old recording, attaching it to the video with the animated alien, which has been viewed more than 1.3 billion times currently.

Artists Pitbull and Karol G released a remix recording of the Cutty Ranks music for a video that includes the animated alien dancing. That video currently has more than 80 million views. During the time period measured for this report, Cutty Ranks was listed 470 times on the charts. In contrast to the video views, he currently has approximately 173,000 monthly Spotify listeners.

Sean Paul is viewed as a Jamaican hip-hop and dancehall music superstar. A rapper, singer, songwriter and producer, his music spread globally in the early 2000s and found a resurgence in recent years. He has collaborated with some of the top international artists in the music industry. His YouTube videos have been viewed more than 2.3 billion times, and he has more than 22.9 million monthly Spotify listeners currently.

French Montana is a rapper, singer and songwriter born in Morocco. He immigrated to the US as a teenager. He began his career as a music entrepreneur, releasing DVDs mixing interviews with established hip-hop artists and unsigned talent. About a decade ago, he began releasing his own mixtape CDs with various DJs as his hosts. He has since released studio-recorded albums of his own music. His YouTube videos count more than 1.8 billion views, and he has more than 19.6 million monthly Spotify listeners currently.

(b) THE APPLE CHARTS

On the Apple charts, the top five artists with the most domestic chart entries during the time period were Mayra Andrade, Jah Prayzah, Elji Beatzkilla, R2Bees and Dennis Llovd.

Mayra Andrade is a singer-songwriter from Cape Verde who lives in Portugal. She began performing in her adolescence and by her early twenties became known in the Parisian world music scene. Born in Cuba, she moved to Senegal, then Angola and followed by Germany before settling on her parent's native island of Cape Verde. In addition to her high position on Apple's domestic charts, she has more than 257,000 monthly Spotify listeners, mostly in Paris, Lisbon and Sao Paulo currently.

Jah Prayzah is a Zimbabwean musician, songwriter and lead member of the band Third Generation. While the first album was released in 2007, since 2013 their albums have received multiple awards. Jah Prayzah has a special interest in the nhare mbira musical instrument and a fascination for the military. The band's signature 'look' is wearing military regalia for performances. In addition to the Apple chart positions, he

has 26,000 monthly Spotify listeners, mostly in Johannesburg, London and Cape Town currently.

Elji Beatzkilla is a rapper, singer, producer and songwriter born in Nice, France, to Cape Verdean parents. His musical career began as a hip-hop dancer. After returning to Cape Verdean for a time, he moved to the US. In addition to his Apple charts positions, he has more than 83,000 monthly Spotify listeners, mostly in Paris, Lisbon and Amsterdam.

R2Bees is a Ghanaian hip-hop and hiplife duo. They began their career by representing their school in rap competitions and inter-school music contests, which led to other competitions. Their first recording was released in 2008. In addition to their Apple domestic chart position, they have more than 218,000 monthly Spotify listeners, mostly in London, Amsterdam and Paris.

Dennis Lloyd is an Israeli singer-songwriter, multi-instrumentalist and producer from Tel Aviv. He spent time in Bangkok to focus on writing songs and producing music before returning to Israel. In addition to his high ranking on Apple domestic charts, Lloyd has more than 113 million YouTube video views, mostly in Israel and Romania, and more than 9.2 million monthly Spotify listeners currently, mostly in Paris and throughout Germany.

On the Apple charts for the 14 regions during the time period, the five artists originally from these regions with the most foreign Apple chart entries are Popcaan, Natti Natasha (the Dominican singer-songwriter), Mau y Ricky (the Venezuelan brothers), Sean Paul (the Jamaican artist-producer) and French Montana (the rapper from Morocco-US).

Popcaan is a Jamaican dancehall artist, singer and songwriter who rose to international success in the early 2010s. In addition to his Apple charts rankings, he has more than 1.6 million monthly Spotify listeners, mostly in London, Toronto and New York City, and almost 460 million YouTube video views currently, mostly in the US.

(c) OTHER ARTIST DATA HIGHLIGHTS

Chartmetric notes four additional artists in emerging digital music markets to highlight their reach across national borders. They are Severina, Buba Corelli, Jah Khalib, and Atif Aslan.

Severina Kojić is a Croatian pop singer described as popular across the entire former Yugoslavia. During the 1980s, she won numerous awards at local festivals. During the 1990s, she was reportedly a national pop icon. Chartmetric data during the defined time period reveals that she was ranked on charts 166 times for eight recordings from July 2018 until June 2019, but all instances were on foreign charts. Her "Tutorial (featuring Ljuba Stanković)" charted most diversely (Serbia, Austria, Switzerland and Luxembourg) after release in June 2018, and appears on charts most frequently in Serbia. She has more than 141,000 monthly Spotify listeners currently, mostly in Vienna, Stockholm and across Germany.

Buba Corelli, a Bosnian rapper whose hometown is Sarajevo, ranked on charts during this time period 229 times, all foreign charts. Seven of his recordings appeared on charts since May 2018, mostly in Serbia, Austria, Switzerland and Luxembourg. He has more than 222,000 monthly Spotify listeners currently, mostly in Vienna and across Germany.

Jah Khalib is a Russian-speaking rapper in Kazakhstan. He ranked in the charts 131 times during this time period for nine recordings since May 2018, all on foreign charts. He made the charts in Russia, Estonia, Austria, Germany and Ukraine. He has more

than 338,000 monthly Spotify listeners, mostly across Germany, and more than 67,000 subscribers to his YouTube channel currently. His music and musical performance on the "Medina" movie premier video on YouTube, however, have more than 102.3 million views currently.

Atif Aslan is described as the biggest superstar in the history of Pakistan. The actor, singer and musician had nine recordings during this time period on charts, listed 104 times on foreign charts, touching all regions of the world from Iceland to Zimbabwe, Turkey to New Zealand. He also ranked on the global chart 42 times. Aslan, also a playback singer (i.e., his singing is heard in movies although an actor is lip-syncing to the song as if the actor is singing), has more than 3.9 billion YouTube video views and more than 1.8 million monthly Spotify listeners currently, spread across cities including Toronto, London, Singapore, New York City and Chicago.

C. A SINGLE SERVICE

Not surprisingly, recording artists who are dancers or whose music is enhanced with dance may connect well with consumers through digital video services. YouTube reports that dance videos have played a major role in spreading Latin and African music across the world on their service.

(1) LATIN MUSIC

For the past few years, Latin artists have been dominating the YouTube charts. At the start of 2017, five Latin music videos had reached one billion views on YouTube. By the end of that year, 20 Latin music videos reached one billion or more views. Luis Fonsi's "Despacito" featuring Daddy Yankee, one of the biggest success stories in music that year, was the first video of any kind in YouTube history to count more than four billion views.

Six of the top 10 videos released on YouTube in 2017 featured Latin artists. As Latin music grew in popularity, the list of pop stars collaborating with Latin artists kept growing to include Beyoncé, Justin Bieber, French Montana, Chris Brown and others. Latin artists were building a global fanbase.

Around the world, daily view counts for top Latin artist videos skyrocketed, year-on-year from the same period in 2016 to 2017, growing by 316% in India, 268% in Indonesia, 257% in the Philippines, 206% in Egypt, 150% in Israel, 120% in the UK and 116% in Australia.

Near the end of 2018, the number of Latin music artist videos grew to 41 videos. More than half of the top 100 most-viewed music videos of 2018 were Latin music.

(2) AFRICAN MUSIC

For African music, video that enables users to see and experience the dances and the cultures are helping the sounds of Africa spread to listeners across national borders.

YouTube reports that the most-streamed afro-pop video is the 2014 "Johnny" by Yemi Alade, a Nigerian singer and songwriter. She won a popular talent contest in 2009 and released her debut single later that year. Her debut album came in 2013, which included "Johnny." YouTube reports that the fan dances helped the video go viral. The video has more than 107 million views currently. Chartmetric data shows that Alade has more than 1.8 million monthly Spotify listeners currently with the highest numbers in London, New York City, Los Angeles, Paris, Chicago and Amsterdam.

French Montana, the Moroccan rapper who immigrated to the US, reportedly saw a YouTube video with a group called the Triplet Ghetto Kids dancing to Eddy Kenzo's "Sitya Loss." French Montana flew to Uganda to find the kids. He shot his video in Uganda for "Unforgettable" featuring Swae Lee and the kids dancing. With music described as having an afrobeats feel, the video has more than 977 million views currently.

Burna Boy, a Nigerian reggae-dancehall singer and songwriter, has seen explosive growth on YouTube. The viewership for his videos also spreads outside Africa to cities including London, Paris and New York City. Chartmetric data shows Burna Boy with more than 195 million YouTube views currently and more than 4.9 million monthly Spotify listeners, with the highest Spotify numbers in London, Amsterdam, Dublin, Paris and across the UK.

YouTube reports that over 70% of the views of the top 25 most watched Sub-Saharan-Africa artist videos come from outside Africa.

(3) INDIAN MUSIC

Artists in India are also making a big impact through digital videos. YouTube reports that in early 2018, no videos featuring Indian artists had reached the milestone of 500 million views. Currently, eight Indian artists have reached the milestone with more set to cross over in the coming months.

Seven of the top 100 most-played songs of 2018 across YouTube featured Indian artists. Over the past year, artists including Guru Randhawa, Badshah, Arijit Singh and Neha Kakkar have each reached the YouTube music charts in the UK, Australia, New Zealand and Canada, along with the global charts.

Guru Randhawa is a singer-songwriter. Chartmetric data shows he has more than 2.5 million subscribers to his YouTube channel currently and more than 2.1 million Spotify monthly listeners currently in Toronto and London.

Badshah is a singer, songwriter and performer described as a pop star in India. Chartmetric data shows that he has more than 3.7 billion YouTube video views mostly in India and more than 2.8 million monthly Spotify listeners in Toronto, London, Singapore, New York City, Chicago and Kuala Lumpur.

Arijit Singh is a musician, singer and producer with more than 10.1 billion YouTube video views mostly in India and more than 3.7 million monthly Spotify listeners in the same cities as Badshah.

Neha Kakkar is described below under global artists.

YouTube reports that T-Series, the channel for the Indian T-Series music label and movie studio, is currently the No. 1 most-subscribed channel on YouTube with more than 74 billion views across its channel.

(4) OTHER REGIONAL MUSIC

YouTube data reveals that the music of artists in other regions also crosses national borders, sometimes with extraordinary reach. Two artists are currently notable examples.

Son Tùng M-TP is a Vietnamese singer, songwriter and actor. YouTube reports that his collaboration with Snoop Dogg, one of the most successful American rap music artists, released as a video in 2019 was the third biggest premiering music video of all time. The video generated more than 25.5 million views within the first 24 hours,

which was also among the top 20 videos with the most views in that time frame of all time. It also placed on the YouTube global charts.

Reynmen in Turkey has been a YouTube creator/video blogger. Although he is called a creator-turned-rapper, he writes with his 2017 music video featuring Lil Bege: "To avoid misunderstanding, we are not rappers. But we chose rap to express ourselves perfectly." That music video has more than 68 million views currently. His 2019 "Derdim Olsun" video earned more than 17.6 million views within the first 24 hours, which made the global charts, and currently counts more than 236 million views.

(5) YOUTUBE TOP GLOBAL ARTISTS

If Latin America and India are considered to be emerging digital music markets, then it is quite notable that Latin and Indian music artists make up the current YouTube Top 10 Global Artists chart (August 11, 2019). The top 10 artists are the following.

J Balvin, a Colombian reggaeton singer, is described as a chart-topping recording artist whose polished urban singles, "Yo Te Lo Dije" and "Mi Gente," and multiplatinum-selling albums have not only made him a top-tier Latin crossover act, which means finding an audience in more than one genre of music, but someone capable of breaking the American music industry's language barrier. He is one of the most recognizable members of the second generation of reggaeton artists. Over the past year, his YouTube music has more than 8.9 billion plays with the most views in Mexico, the US, Colombia, Argentina, Spain and Brazil.

Alka Yagnik is an Indian singer whose career spans three decades. She is a well-known playback singer, which means that her singing is pre-recorded for use in movies. The actresses lip-sync the songs for the camera, but the playback singer's voice is heard in the movie. Over the past year, her YouTube music has more than 9.1 billion plays, mostly in India, Pakistan, Bangladesh, Indonesia and Saudi Arabia.

Bad Bunny is a young urban music singer, rapper and producer originally from Puerto Rico. He has reportedly performed at sold-out concerts throughout Europe, Latin America and the US. His YouTube music has counted more than 7.6 billion plays over the past year, mostly in the US, Mexico, Colombia, Argentina and Spain.

Daddy Yankee, the Puerto Rican singer, songwriter, rapper, actor and record producer, coined the word reggaeton in the 1990s to describe the new music genre emerging in his country. Known as the King of Reggaeton, his success is described as so phenomenal in the wake of his 2004 hit "Barrio Fino" and "Gasolina" that he transcended cultural boundaries and genre trappings. Daddy Yankee has helped launch countless music careers for other artists. His YouTube music has counted more than 6.4 billion views over the past year, mostly in Mexico, Argentina, the US, Colombia and Spain. Chartmetric data shows that his total video views exceed 11.3 billion, and his Spotify monthly listeners are currently more than 49.3 million.

Anuel AA is a Puerto Rican rapper who is credited as among those who spearheaded the Latin music musical style called trap. His music is described as a blend of reggaeton and trap. His song lyrics are described as too risqué to be played on the radio, so he gained millions of followers by posting videos and creating an "intensely active" social media presence, mostly while serving time in prison. His YouTube music counted more than 7.6 billion plays over the past year, mostly in Mexico, Colombia, the US, Argentina and Peru.

Ozuna is a reggaeton singer and songwriter from Puerto Rico. He writes songs described as positive and uplifting, encouraging people to work toward their dreams, and avoiding the use of profanity. He made his breakthrough in 2016. His YouTube

music has more than 8.9 billion plays over the past year, mostly in Mexico, the US, Colombia, Argentina and Spain, but also in Italy (315 million views).

Udit Narayan is one of India's most popular playback singers. His YouTube music over the past year earned more than 7.1 billion views, mostly in India, Pakistan, Bangladesh, Indonesia and Saudi Arabia, but also in the US (53.5 million views).

Karol G is a reggaeton singer and songwriter born in Colombia who moved to the US. Through collaborations with other Latin music artists, she made her mark in music over the past several years. Her YouTube videos over the past year have been viewed more than 5.2 billion plays, mostly in Peru, Chili, Colombia, Mexico and Ecuador.

Farruko is a Puerto Rican singer-songwriter. He gained recognition by collaborating with well-known artists. He credits the social media platform Myspace for helping him create a fan base that would eventually help him become a popular singer. His YouTube music over the past year has over 6 billion views, mostly in Latin American, the US and Spain.

Neha Kakkar is an Indian singer who was a contestant in the television music competition "Indian Idol" in 2006. Her first album was released in 2008. Her YouTube music over the past year had over 8.7 billion views, mostly in India, Bangladesh, Pakistan, the US and Nepal.

D. THE ROAD TRAVELED

For music creators, merely having talent, access to digital music services or placements of songs on playlists are not enough to achieve success. Many digital music services currently receive tens of thousands of new recordings each month. There is extraordinary competition in the world among music creators to catch a few minutes of a listener's attention.

Most importantly, the music must strike a chord with music listeners at a particular moment in time. Even the biggest music stars do not hit that chord every time with every listener with every new song.

In addition to developing one's talent and working hard for long hours to gain experience and exposure, using all of the digital promotional tools available from digital music and social media platforms plus collaborating with other creators and with a variety of business-minded individuals can help make a difference.

The experiences of four artists illustrate some of the ways in which they collaborated with other people.

Alan Walker was very young when he began teaching himself to produce music in Norway by watching tutorials on YouTube. When he was about 15-years-old, he heard a song by an Italian DJ online and reached out to him, asking how he produced his music. The online community gave him that opportunity to connect.

He began producing music and posting it to YouTube and SoundCloud in 2012. Continuing to connect with people online who only used nicknames, he received feedback and advice to advance the way he produced music. He released his first official single in 2014, described as a melodic electro-house recording. With the help of an electronic dance music company, his music got noticed by listeners online.

The following year at the age of 18, Walker began working with a manager with a record deal and released an album in late 2015. Shortly afterward, Walker made his live performance debut at the Winter X Games in Oslo. Gamers especially responded to his music. By the beginning of 2017, his YouTube channel became the most subscribed channel registered in Norway with millions of subscribers.

After more producing, live performances and collaborations with other DJs and record producers, Walker released his first album recorded in a professional studio in 2018. Currently as an

electronic dance music (EDM) producer at the age of 21, Walker has more than 22.9 million monthly Spotify listeners, more than 8.9 billion YouTube views and more than 28.7 million subscribers to his YouTube channel.

In an annual report published by recorded music companies' international trade group IFPI, the companies provided a few peeks behind the scenes of their work with three artists to help develop their careers. The following three examples were published in the IFPI Global Music Report 2019.

Trailblazing, Medellín-born, Colombian artist J Balvin has pioneered Latin music's explosion onto the global stage.

Working in partnership with his record label and manager, Balvin has captured a global audience with his unique sound, both through his solo releases and a string of high-profile collaborations with artists such as Cardi B, Beyoncé and Justin Bieber—all whilst staying true to his Latin roots.

Angel Kaminsky, Executive Vice President, Latin America & Iberian Peninsula, Universal Music, explains how the relationship began: "I first met J Balvin in 2012. I travelled to Bogotá to meet this artist who was big in Colombia and was also starting to create a big buzz in the rest of the region.

"I was immediately struck by his creativity, his artistic ability and his impeccable work ethic. He's such a genuine person and this translates to his music and even to the vibes he passes on to other artists and, of course, to his fans."

Working closely as co-managers in partnership with Balvin's manager, Rebeca León, Kaminsky describes the strategic process behind Balvin's shift from local favourite to global star: "At first, there was a focus on breaking him in Latin America, Iberia and the US Latin market. We accomplished this with his hit singles Ay Vamos and 6 AM in 2014 and 2015.

"The next step was to push the project on a global scale. This started with lead single Ginza (from Balvin's fourth album, Energía, released in 2016), and materialized with Mi Gente (released in 2017 and appearing on 2018 album Vibras)."

It was an approach that proved massively successful, pushing Balvin to new heights and huge international success. In June 2018, Balvin became the most listened to artist globally on Spotify, and in September he became the first Latin artist to reach one billion streams on Apple Music. This accolade was followed two months later by a Latin GRAMMY in the Best Urban Album category for Vibras.

Kaminsky points to Balvin's work ethic and strong sense of self as an artist as key factors in his success: "He sets his own rules, he knows what he wants. He always says, 'Believe me. I know where I'm going.' and I say, 'Okay, we'll follow you.'

"He leads with artistic and creative direction and we help him to realise both his short term and long-term objectives; we provide him with an array of information from data and analytics to collaboration opportunities, but at the end of the day it's his vision and his instincts that drive us."

This attitude is reflected in Balvin's decision to fly the flag for his mother-tongue by continuing to sing in Spanish, despite offers of high-profile English language-based collaborations.

"There's so much that makes J Balvin special", says Kaminsky. "He really has a vision to take the genre global without the need to sing in English. He's committed to be a global artist while staying close to his roots. I believe he has accomplished this and much, much more."

One example of an artist blowing up in her home territory, while also starting her international journey, is Warner France-signed Aya Nakamura.

Born in Mali, Nakamura moved to a suburb of Paris as a baby and grew up immersed in—and influenced by—both cultures. She started making music as French urban music was finding its voice and moving into the mainstream.

Thierry Chassagne, President, Warner Music France, says: "The popularity of French rap was driven in part by streaming, but also by demographics. We have strong Caribbean and African communities here that have been the driving force behind much rap music.

"At the beginning of the (Aya Nakamura) project, especially on the digital aspects, we focused on these communities, before expanding into the wider market.

"It was important to have this community, her community, behind her. She is a very empowered woman, and the idea that somehow the record company could lead the way without tapping into her roots and her fanbase, that she'd built herself, would have been wrong—and would not have worked."

Nakamura's first album, Journal intime, was released in 2017, reaching number six in the French charts and achieving Gold certification.

Things moved up a gear for her second, self-titled album, Nakamura – and especially its lead single, Djadja.

Chassagne explains: "It was the perfect situation of the set-up being created by the first album, and then the second album being preceded by such a big hit. Djadja went to number one here in its first week and is the most audio-streamed track by a woman in France so far in 2019."

Nakamura's appeal was such that Warner Music drew on its global network and began to look for opportunities for the artist outside of her home country.

Alain Veille, Managing Director of Digital, Warner Music France, explains how Warner was quick to see the wider appeal of her music: "It resonated outside of France very quickly. Our colleagues in neighbouring countries were asking us about her story; they could feel there was something happening."

Veille describes how his team had early discussions with surrounding territories, helping them kick-start their own campaigns: "The spread of awareness dovetailed with our strategy of establishing a core fanbase in Aya's community, taking her mainstream throughout France, and then, working with offices on the ground, targeting territories where the buzz was building."

Recognising each market's inherent differences, campaigns were tailored to build on Nakamura's already strong roots, whilst adding a local flavour. Veille describes one example: "In Germany, we recorded a version of Djadja with a female hip-hop artist called Loredana, who shares similar values, and is a strong, independent woman. That version got accepted by the streaming platforms and was added to influential German rap playlists."

The work paid off. German radio picked up the track, eventually choosing to play the original over the newer, German version.

Djadja has now achieved over 190 million audio streams and 315 million video streams worldwide, and in three territories—Netherlands, Germany and Belgium—the numbers are matching what's been achieved in France.

Ultimately, Nakamura's music and ability to connect with her fans, coupled with the support and backing from her label, is allowing her to reach an increasing number of people around the world, as Chassagne explains: "It's a true collaboration within a global structure. We know the artist very well, so we can contribute that insight and understanding, we bring the artist's story. And, of course, our colleagues know their territories — their tastemakers, their media, they can recommend collaborations and so the project is amplified globally."

George Ezra is undoubtedly one of the biggest breakout UK artists of the last five years. With his distinctive baritone voice and varied musical influences, together with his authentic, honest approach to sharing his music, the Columbia-signed artist has won fans around the world.

Columbia's Head of Marketing, Alex Eden-Smith, explains how, when first working with Ezra, his musical talent and authenticity formed a key strand of the label's initial strategy: "It was very important that he wasn't seen as just another singer-songwriter. He's an incredibly talented guy with a really distinctive voice; the sole aim had to be to bring that out."

Ezra's first single, Budapest, reached No. 3 in the UK charts, and made the Top 40 in the US. The single was followed by Ezra's first album, Wanted on Voyage, which topped the charts in the

UK, broke the Top 20 in the US and went Top 10 in multiple countries. Global sales stood at just over two million in March 2019.

With one album under his belt, and a steadily growing fanbase, Columbia, together with Ezra, began to plan for the follow-up. Staying at Tamara's was released in March 2018. It reached No. 1 in the UK where it was also the biggest-selling artist album of 2018.

Eden-Smith describes the approach to the second campaign: "We continued to highlight his personality, his natural wit and irreverence, something that comes across effortlessly in his relationship with his fans."

It was this desire to allow Ezra's personality to shine through that led to the idea of developing content that went beyond his music.

"George is a big podcast fan and came up with the idea of producing a series of podcasts where he holds conversations with a range of different musicians (guests included Elton John, Nile Rogers and Ed Sheeran). We were really keen to support him and made it a centrepiece of the campaign. It allowed him to not only get his personality across but also to bring in the fans of other artists and bring them back to his music. It's an engagement loop, if you like."

Podcasts are just one of the tools in a kit that has had to expand exponentially to meet the demands of a new kind of audience, explains Eden-Smith:

"You have to constantly think about the brand-new George Ezra fan who heard their first song yesterday; what's their experience going to be? For them it's a discovery, and you have to give them ways of finding out who George is.

"Ultimately, the most important thing for us was to trust George's instincts—to enable him to create the music he wants to, whilst finding the tools to help him reach a bigger audience. The conversation was never about making him something he's not, but about celebrating and promoting all the best sides of George."

E. COLLABORATIONS AND SONGWRITERS

Often the most successful music, as measured by chart placements or revenues, results from creative collaborations. New or relatively unknown performers collaborate with well-known performers or electronic-dance DJs to record a single song. Performers connect with the makers of movies, games or other audiovisual programs and often co-create music videos featuring the performer and clips from the movie or program. Most of the hit compositions are co-written by two or more songwriters. The availability of digital music platforms and the appearance of these collaborations on digital music services have demonstrated that digital music promotes people working together to create new musical artistic expressions.

While many performers are also songwriters, composers or authors, there are thousands of songwriters who are not recording artists. Yet their songs are being recorded and often become the title of the recording. Many of the digital music services are not yet fully supporting these songwriters by either including songwriter credits with the recorded songs, publishing information about the songwriters on their services or providing tools to help songwriters promote their own works. There are several reasons for this situation, and all stakeholders have some responsibility for it. Many in the music industry are trying to change this state of the industry, which will be explored for a future report. It is only due to these challenges in obtaining this information that songwriters are not separately highlighted in this report with recording artists.

3. DIGITAL MUSIC SERVICES

When consumers want to actively explore recorded music offerings or hear the music of their choice, they are searching for music "on demand." The access points to hear digital music on demand are digital music services.

The digital music service providers ("DSPs") distinguish their services from other competing services through their business models. The complete business model of a digital music service includes what the service offers to consumers, which anyone who accesses the service can discover; the DSP's strategies and plans on how the service can become successful and profitable as well as the related results from their operations; and the terms of business agreements reached between the DSP and other parties.

The specific strategies, plans, contractual terms and many of the results of operations are nearly always confidential in order to ensure a competitive marketplace. Therefore, a service's offerings to consumers and the figures released to the public by the DSP are the primary focus of this part of the report.

A. THE BASICS

Nearly 300 digital music services around the world are licensed currently (authorized by music rights holders) to offer on-demand full-length recorded compositions to consumers.

In addition, thousands of companies, educational institutions and non-profit organizations around the world are licensed to offer recorded music digitally. These entities are not typically included in the count of digital music services. They either provide services that are not on-demand, essentially mimicking traditional radio play except they deliver the music to listeners digitally ("webcasts"); license only portions of recorded music rather than the full-length recordings; or do not make large numbers of recorded compositions available to the public as a service.

Generally, digital music services offer consumers audio-only, music-related video or both audio and audiovisual versions of music. Various formats of each version may be "downloaded" from the service to hear on the user's computer or portable device, or the formats may be accessed from the service for users to hear or see as "streams" of music.

The digital music industry categorizes generally the types of digital music services as:

- Download services (audio-only music and music videos);
- Advertisement-supported ("ad-supported") audio streaming services;
- Paid-subscription audio streaming services; and
- Video streaming services (both ad-supported and paid-subscription).

Some download services offer digital files of recorded music that a user may download and keep forever to play on the user's compatible devices ("permanent downloads") for a price per recording or group of recordings. Other download services offer a subscription for a monthly price to a user who wants to download much more music than he/she may want to buy individually and to hear that music anywhere at any time on the user's compatible devices; however, the downloads will no longer play on any device when the user stops subscribing to that service ("temporary downloads").

Paid-subscription streaming services typically offer a subscription for a monthly price to a user who wants to stream (simply hear the music play) an unlimited amount of the music on demand that is available on that service. Subscription prices often include an individual price, a student price and a family-plan price. Sometimes subscription prices vary based on the music that is available to stream, such as a lower price for access to a limited number of recordings, or based

on the quality of the audio sound, such as a higher price for access to music streamed in high-fidelity sound.

Paid-subscription streaming services are the most significantly growing type of digital music service in most countries currently. The recorded music industry's international trade group IFPI reports 255 million users of paid-subscription audio services worldwide at the end of 2018. This represents an increase of 44.9% compared to 176 million users at the end of 2017, based on figures from IFPI-member record companies and DSPs.

Ad-supported streaming services are free for consumers to use, but they must see or hear advertisements for goods or services to hear the music.

Less than 10% of all licensed on-demand services globally currently offer only ad-supported streaming. The amount of revenue generated only from advertisers has rarely proven to be sufficient to solely support operating a digital music service. Therefore, most of the companies operating ad-supported services have other forms of revenue streams, whether the services also offer paid-subscription streaming and encourage the users to pay for a subscription for additional benefits or offer other types of goods or services to generate revenue.

B. THE STREAMING MODELS

The goals of all digital music services include reaching consumers to let them know about the service, providing the kind of offerings to consumers that will attract them to the service, and actively engaging users with the offerings so they will not only continue to use that service but will use it so often that the users will encourage their friends, family and others to use the service as well.

Offering only downloads provides a digital music service with limited opportunity to distinguish itself from other download services. Music downloads generally only differ in the catalog of music available, their audio quality and their compatibility to work on various devices.

In contrast, music streaming services have many ways in which each service can distinguish itself from other streaming services.

One category of distinction involves what users hear and see. A digital music service may offer:

- Huge numbers or a limited number of recordings to hear under the subscription;
- Music videos in addition to audio music;
- Specific recordings by a performer exclusively available on that service for some period of time, such as a famous performer's new release or long-lost recordings recently discovered:
- Specific genres of music or music recorded by performers mostly from specific geographical regions;
- Live performances or recorded concerts by specific performers;
- News-like interviews with performers or songwriters in audio or audiovisual formats;
- News items and blogs related to music or not related to music;
- Lyrics to the recorded compositions;
- High-fidelity audio recordings;
- Smaller digital files of recordings to consume less mobile phone data when played on mobile phones;
- More information about specific recordings than is usually provided, such as the names of all musicians, vocalists and songwriters.

A second category of distinction covers how and where the music may be heard or seen. For example, a digital service may offer the capability of all of the music catalog or only some portion of the music catalog to play:

- Only while connected to the Internet or a wireless network;
- When the user is not connected to the Internet or a wireless network;
- On the operating systems of one or multiple mobile phone operating systems, such as the operating systems for Apple (iOS) and Google (Android);
- On a computer using software downloaded from the service or through a web browser;
- On a portable or mobile device through a software application ("app") pre-installed or downloaded by the user to that device;
- Through home or portable smart speakers that can be controlled by using a handheld remote control, a smartphone app or by voice command to a virtual assistant such as Amazon's Alexa, Apple's Siri or Google's Google Assistant;
- On television sets that include the app of the music service; and
- In automobiles through software pre-installed in the autos or through a smartphone app that connects to the auto's software.

A third category of distinction focuses on how users discover specific types of music. Each streaming service may have:

- Hundreds, thousands or, in rare cases, millions or billions of playlists, with each playlist
 comprised of a compilation of specific recordings for a user to hear consecutively on that
 service, created by automation, by individuals manually or a combination of both;
- Playlists compiled by the editorial teams for the service or also by specific performers, trendsetters and users of the service:
- Many different channels or stations that play select recordings categorized in different ways such as genre, new music, a user's favorite music, moods and so on;
- The capability for a user to skip a song in a playlist, or to move forward or backward through a playlist to other recordings, or not to be able to skip a recording;
- The capability for users to indicate which recordings they like and dislike or, in some cases, only those that they like;
- Restricted or specific ways in which users may share for free recordings or playlists with, for example, friends or family who also use the service, people connected on certain social media platforms or in other specific ways;
- Recommendations of music for each user, group of users or all users to hear, which are created by the service using technical algorithms, artificial intelligence or hired professional tastemakers;
- Recommendations of music for each user based on data from either technology the service provider developed ("proprietary technology"), technology the service uses from a company or assets bought by the service provider or some combination of the two; and
- Charts listing consecutively the most streamed recordings or performers or some other factor on that particular service, during a particular time period and sometimes in specific countries, made available to users.

A fourth category of distinction aims to keep users engaged with the service by offering activities in addition to listening to music or watching music videos. Whether part of the music service or on a separate but connected service, the offerings may include ways for users to:

- Perform karaoke with recordings;
- Record videos of themselves lip syncing their voices with music recordings;
- · Play games;
- Shop for merchandise whether or not that merchandise is related to music; and
- Watch or listen to other forms of entertainment, such as movies, video programs, audio books, podcasts and more.

A fifth category of distinction revolves around digital tools that a service provides to performers and sometimes to songwriters to connect with their current and future fans on the service. These tools may include:

- Marketing tools to help the creators connect with fans through social media, fan clubs or other digital communities;
- The opportunity to sell tickets to the performers' live shows;
- The opportunity to sell the performers' merchandise;
- Ways for performers to connect directly with fans through blogs or other informationsharing platforms;
- Obtaining data gathered by the service about the performers/songwriters and provided to these creators to help them better understand when, and in which general geographic regions, their music is being streamed and is, therefore, popular; and
- Ways to collaborate with other creators.

A sixth category of distinction involves the partnerships and other business relationships that a DSP forms with companies that provide goods or services that help promote music or the service, help with the delivery of music, or manage consumers' payments for digital music. A DSP may connect or integrate its service with:

- Consumer electronics devices;
- Online retail;
- Telecommunication ("telecoms") or mobile phone operators;
- Online search engines;
- Social networks; and
- Other entertainment experiences.

Each of these factors is essentially an "offering" by a digital music service. Which combination of offerings a DSP chooses to provide, or can provide, to consumers in any particular country is a very important part of a DSP's competitive business strategy.

When a DSP combines the music service with its own goods and services or with those of other business partners, it is offering consumers a "bundle" of goods or services, which include the music service. When the price for the music service is included in the price for all of the goods and services in the bundle, the music is part of a "hard bundle." When the music service is offered as an option to obtain with the other goods and services but for an additional price, the music service is part of a "soft bundle."

C. DIGITAL MUSIC SERVICE DISTINCTIONS

Many of the largest multinational digital music services provide similar types of offerings, such as millions of recordings, large numbers of playlists, special ways to recommend more music to users, benefits from strategic partnerships with various companies such as telecoms or mobile phone operators, and tools for performers to promote their music. They all aim to provide good consumer experiences.

By integrating digital music services with other goods or services, however, some music services have created their own distinctive characteristics.

Some of the ways in which digital music services integrate their music offerings with other goods and services can be seen among some of the largest services in the world, their size measured by the number of countries in which they operate and the number of paying subscribers.

Not all of the offerings from the digital music services named in this report are described, and each service does not necessarily provide the same offerings in every country in which the service is available. Only the notable distinctions of the services are highlighted in this report.

(1) APPLE

Apple Inc., the multinational technology company headquartered in the US that designs, develops and sells consumer electronics, computer software and online services, offers the iTunes Store for users to buy permanent downloads, Apple Music as a paid-subscription streaming service and a variety of music-related software apps.

The iTunes Store with music is available in 119 countries, and Apple Music is available in 115 countries currently. Apple Music offerings include audio, video, a live-streamed radio-like station, creators' tools, and communities to connect performers with fans. Apple Music reports that the service has over 60 million subscribers worldwide and offers more than 50 million recordings currently.

The most distinctive characteristic for Apple is the availability of Apple Music across all Apple owned operating systems and devices. The music is completely integrated with all of Apple's consumer electronics so music can be played from any device almost anywhere. The devices include Apple smartphones (iPhone), computers (Mac), tablets (iPad), smart speakers (HomePod), Internet-only mobile device (iPod Touch), Watch and headphones (AirPods and Beats). They all aim to play high-quality audio especially for the formats of its audio offerings. The Apple TV app brings music and other entertainment to television sets as well. Apple Music is also available on certain third-party devices.

In addition to providing a community for performers to connect with fans through Apple Music, the company continues to provide software developed for music creators to write and record their music.

(2) AMAZON

Amazon.com, the multinational technology company headquartered in the US that began by selling online books and music CDs, offers Amazon Music with three "tiers" of streaming services plus downloads. The company does not publish the number of its subscribers or users, but the IFPI includes those numbers in the total subscription figures published each year.

One of the distinctive characteristics of Amazon Music is one of the streaming tiers, Prime Music. An Amazon Prime Membership offers users in certain countries a bundle of services for an annual fee. The bundle includes free shipping on certain merchandise purchased online from Amazon.com, unlimited streaming of certain movies and other video programs, unlimited reading of certain books and Prime Music. In this way, Prime Music is hard-

bundled with an Amazon Prime Membership. Prime Music has a more limited number of music recordings available for unlimited streaming, such as 1.5 million to 2 million recordings, the number depending on the country, and few new releases.

In contrast, another streaming tier is Amazon Music Unlimited, a paid-subscription service providing users with unlimited streaming of music selected on-demand from more than 50 million recordings, including new releases. This service is available in over 40 countries currently, while Prime Music is available in about one-third of those countries.

A third tier of Amazon Music is a new ad-supported streaming service launched in mid-2019 in a few countries. This service does not have as many on-demand options available for users to select which recordings they want to hear; it offers more pre-set playlists.

Amazon's other distinctive characteristic is its early development of the smart speaker Echo with virtual assistant Alexa, which integrates the music service. Voice requests to Alexa for general or specific music available from Amazon music streaming services are streamed through the Echo speaker. Alexa and Echo help promote the music services, and the music services help promote Alexa and Echo.

(3) DEEZER

Deezer, the digital music service headquartered in France, offers paid-subscription and adsupported streaming services around the world. The services include many of the offerings of other multinational services, including tools for performers to help market and promote their music and a high-quality audio option. The company reports 14 million active monthly users, more than 56 million recordings available and more than 100 million playlists currently.

The distinctive characteristic of Deezer is its reach around the world. The service is available in some form in more than 180 countries. Notably, Deezer is the only digital music service licensed to offer full-track recordings of compositions in approximately 25 of the African-Middle Eastern countries and in more than 20 Asian countries currently.

Part of the reason for Deezer's broad availability to consumers is its relationship with Orange S.A. First as an early partner, Orange then became part owner of Deezer. Orange is one of the largest operators of mobile and Internet services in Europe and Africa and reportedly the 10th largest multinational mobile phone operator in the world currently, based on the number of subscribers. The music service is hard-bundled with mobile service offerings to consumers in some territories, especially where a standalone digital music service may be more difficult to launch or maintain successfully.

Not only are the Deezer music services integrated with Orange and Orange-partner mobile offerings, the services are also integrated with other entertainment-related bundles offered by Orange and its partners.

(4) SPOTIFY

The distinctive characteristic of Spotify is less about integration than brand building and user experiences. When it comes to integration, Spotify's approach is to be ubiquitous—to have the service available everywhere with every possible device.

In the early days of digital music streaming services, Spotify launched in Sweden as the only service available anywhere that consumers could stream licensed music for free. Since then, Spotify, offering the ad-supported service with the aim of converting users to its paid-subscription streaming service, has built an incredibly strong brand as an international digital media company.

Spotify offers audio with different levels of sound quality, videos, podcasts, a variety of tools to engage users and for performers to promote their music, and other forms of entertainment. The company is also currently testing tools for music publishers to gather data about the compositions they own or represent.

Spotify is available across 79 territories, offers more than 50 million recordings to stream, and reports 232 million monthly "active users" and 108 million subscribers currently.

Aside from the service's international brand, the most distinctive characteristic of Spotify is the service's ability to not only attract users to the free, ad-supported service, but to engage users on the free and the paid-subscription services with its easy-to-use apps. Through its own proprietary technology and technology acquired from other companies, it also provides highly touted music discovery and recommended music results for users, including a wide variety of playlists and other music discovery tools. Spotify reports offering more than 3 billion playlists currently created by users, trendsetters, performers and Spotify's editorial team.

(5) YOUTUBE

YouTube is the most-viewed video platform in the world. This Google subsidiary reports that over two billion users log in and visit YouTube every month. Every day they watch over one billion hours of videos that generate billions of views in over 100 countries currently. More than 70% of YouTube watch time comes from mobile devices.

Not surprisingly, then, the most distinctive characteristic of YouTube is the prevalence of video, which is presented in many forms.

For music, YouTube offers an ad-supported streaming model for professionally recorded music videos and user-generated content that includes music. There are localized versions of YouTube in over 100 countries across approximately 80 languages. The company also offers YouTube Music as a paid-subscription streaming service in 63 countries currently. For both of these services, the user can turn off the video to hear only the audio. Like Amazon and Apple, the music services integrate with a virtual assistant and smart speakers. Google's versions are Google Assistant and Google Home.

Although YouTube does not report publicly the number of users, the company reports that YouTube Music and YouTube Music Premium paid subscribers grew by 60% from March 2018 to March 2019. IFPI includes YouTube paid subscription figures in its annual report.

(6) TENCENT

Tencent Music Entertainment Group aims to be the leading online music entertainment platform in China and other territories. The company owns four of the most popular music-related apps in China. QQ Music, Kugou Music and Kuwo Music each offer ad-supported streaming, paid-subscription streaming and downloads. WeSing offers karaoke-style singing games.

Tencent also owns Joox, which offers paid-subscription streaming in Hong Kong, Indonesia, Malaysia, Thailand and South Africa, with ad-supported streaming in a few of those territories currently.

The most distinctive characteristics of this service, aside from its leading position in China, are that Tencent Music reports more than 650 million monthly active users of online music through mobile devices and more than 28 million paying subscribers to online music currently. The company achieves this reach in part by providing not only recorded music but engaging users through social platforms, professional video content streamed live and recorded, and other Internet-related services and products offered by Tencent Holdings' companies such as Tencent Games.

(7) ADDITIONAL DISTINCTIVE SERVICES OR NICHE OFFERINGS

Several digital music services that have a more limited reach internationally, are smaller in size as measured by the number of subscriptions, or provide more niche offerings also have distinctive characteristics.

TIDAL, headquartered in the US, is known for the high-quality sound of its professionally recorded music videos and music recordings, especially by many superstar performers. The service is owned by over 20 well-known recording artists. The paid-subscription streaming service offers over 60 million recordings and over 250,000 videos in either high fidelity ("HiFi") or premium sound quality as well as original video programs and podcasts in 53 countries currently.

SoundCloud, headquartered in Germany, began as a service for artists to share sounds among themselves. SoundCloud then launched ad-supported and paid-subscription streaming services. With a combination of premium content, supplied by recorded music companies and distributors, and especially creator-uploaded content, the service attracts artists (especially EDM and hip-hop producers and artists) to connect with each other and users searching for the latest or cutting-edge music. While SoundCloud reports over 200 million combined premium and user-generated-content recordings available in more than 190 countries, the premium-content services are available in 14 countries currently.

In South Korea, MelOn Music is distinctive as a download and paid-subscription service offered by a large corporate conglomerate. MelOn is the leading digital music service in the territory currently. Its majority owner is Kakao, a corporation that owns more than a dozen different types of businesses with a variety of offerings, including mobile messaging apps, games, webtoons (online animations), build-to-order products, investment services, transportation-related services, artificial intelligence research and much more. MelOn is part of Kakao M, which also develops, owns and distributes music, video content and media content. MelOn is also licensed as a digital music service for Indonesia.

In the US, Pandora began as a webcaster but evolved into an ad-supported and a paid-subscription streaming service. The company was acquired in 2019 by a broadcaster, Sirius XM Radio (Sirius XM Holdings Inc.). This combination is uniquely North American in that Sirius XM is the only satellite radio provider in the world currently.

Also, Pandora has been distinctive in its use of proprietary technology developed originally for its webcasts from what it claims was the most comprehensive analysis of music ever undertaken. The result is a highly personalized listening experience for the user. Pandora reports approximately 70 million users each month currently with integrations of its service with more than 2,000 connected products. Sirius XM reports that together, their audio products reach more than 100 million people with nearly 40 million paying subscribers currently.

In Africa, Boomplay evolved after Chinese mobile phone maker TECNO Mobile began selling relatively inexpensive mobile phone devices with a built-in music player called Boom Play in Nigeria. The group began collecting local catalogs of music for the music player then separated the app from that device. Within a few years, the Boomplay app was downloaded and installed onto mobile devices more than 10 million times. Boomplay, now owned by Chinese consortium Transsnet Music Ltd., focuses on offering local and regional African artists' audio recordings and concert videos through ad-supported and paid-subscription streaming services. The company reports more than 46 million users currently.

In India, Gaana.com offers music with lyrics in more than 15 languages. Owned by the country's largest media conglomerate, Times Group, with investment by China's Tencent, Gaana has become the largest digital music service among the more than 12 services available in the country. Mostly used through a mobile phone app, Gaana offers adsupported and paid-subscription streaming services plus downloads. Users can select

which languages they prefer to hear on the service. More recently, Gaana began offering music-related videos. The company reports more than 100 million monthly active users currently.

There appear to be very few genre-specific digital music services. Beatport, a download service available in 14 countries currently, offers electronic dance music. The other genre-specific services offer classical music. They include Classical Archives in North America (download or paid-subscription streaming), Classical.com in Austria (paid-subscription streaming), eClassical in Sweden (downloads), Presto Classical in the US and a few countries in Europe (downloads) and Fidelio in Austria (audiovisual paid-subscription streaming of operas, concerts, ballets and documentaries).

While not offering full-length recordings, TikTok is notable because the app is viewed by many in the music industry as taking the world by storm. TikTok is an app that allows users to create and share short-form mobile videos. They may use short clips of recorded music that include videos of themselves lip syncing, performing karaoke and performing to the music. However, the videos are not limited to lip-synching or performance. The content that can be created and shared is described as incredibly diverse.

The current version of TikTok combines the technology of the original TikTok app with musical.ly, an app acquired by ByteDance, which developed TikTok. While the company does not provide specific user numbers, musical.ly in 2017 reported over 200 million registered users worldwide. ByteDance reports that in 2018, TikTok was one of the most downloaded apps in the world.

4. THE FOUNDATION OF THE DIGITAL MUSIC MARKET

While digital music exists today as a result of consumer desires and demands, music is most effectively available digitally in those territories where there is a foundation on which to build and expand a digital music business.

The music business was built to support the creative art of music. The foundation of the music business as well as the digital music market is made up of copyright laws, contractual agreements, commercial opportunities and competition. The business would not work well enough to support the creative art of music without all four of these pillars in place.

Copyright laws create the incentive to create music in part because they enable creators an opportunity to earn a living through the commercial consumption of music. By essentially providing copyright owners with the right to say "no" to most uses of copyrighted music, copyright laws create potential value in that music. The value creates the incentive to create music that could become desirable for use or consumption (such as listening) by others who are willing to exchange something of value for that music, such as money.

Contractual agreements create the essential and elaborate international network of working relationships that support the music business and the digital music market. This network is based on agreements between and among performers; songwriters (composers of music and authors of lyrics); record producers; the team of creators and experts who work with, and on behalf of, performers or songwriters; recorded music companies (including their individual "labels"); music publishers and publishing administrators; distributors or aggregators of recorded music from labels or individual performers to provide recorded music to digital music services; companies that digitize recorded music for use by digital music services; collective rights management organizations that represent publishers and/or songwriters; collective rights management organizations or music licensing companies that represent performers and/or producers/recorded music companies; webcasters; digital music service providers and all of their strategic partners including telecoms, mobile phone operators and other companies and individuals.

Commercial opportunities arise from the very nature of quality music. No other form of copyrighted work creates the kind of demand that recorded music creates. It is not unusual for people to listen

to recorded compositions over and over again, year after year. Music evokes emotional responses among the largest of audiences.

As a result of consumer desire for music, an enormous number of individuals and businesses want to use that music for their own commercial or financial opportunities, whether the music would be used to enhance, or attract potential customers to, their own goods or services or be sold or licensed directly or indirectly to others.

Competition helps support the digital music business, although pure competition at every level in every sector of the business may not support the activities necessary to deliver the kind of music that consumers desire in the ways, and in the places where, they desire to hear it. With all of the parties necessary to support the digital music infrastructure as well as the intricate network of relationships for the benefit of music creators and consumers alike, a delicate balance must be struck among the interests of all essential stakeholders.

Attaining and retaining this delicate balancing of interests require one to understand and acknowledge the needs of the most essential parties.

Performers and songwriters need to find support to create music that consumers embrace. They need support to distribute their music domestically and internationally to reach those consumers.

Music companies, whether recorded music companies or music publishers, need to discover, support and compensate talent. They need to generate a profit in order to reinvest in talent and to provide the necessary support services for performers and songwriters.

Digital music service providers need to acquire rights from record companies, publishers, collective rights organizations and distributors or creators through cost-effective processes. They need to make music discoverable, accessible and affordable.

Consumers need tools to easily discover music they might love. They need access to recorded music and affordable digital music, taking into consideration the fair value for quality music.

When these needs can be met through a delicate balancing of interests, the ingredients to achieve success throughout the digital music ecosystem, among consumers and throughout society can be met.

With an aim to meet these needs and to build or keep all four pillars strong enough to support the foundation for the digital music industry, there has been a complex system of domestic and international creative and business operations set up over decades, which is continually being adjusted. Many of these nuanced operations will be the subject of a future report.

As an ecosystem, the digital music market requires balance and support. When and where this occurs, it will continue to evolve and flourish.

NOTES AND SOURCES

A NOTE ABOUT THE ARTISTS SECTION:

As stated in the report, the artists highlighted appeared at a particular moment in time when viewing the digital music market through four distinct lenses: a single project spotlighting musical diversity within a single country; digital music charts of selected digital music services that rank the most-played artists; a single digital music service that makes the videos of artists available; and the road traveled in part by four artists whose music reaches fans of four different genres of music.

Information for a single project highlights the efforts of the digital distributor CD Baby, which especially focuses its services on artists who release their own recorded music. This is a single example of the kind of work and the kind of artists represented by similar companies.

Not all digital music services compile charts to reflect the most-streamed music on their services. Apple, Spotify and YouTube are the most notable services that compile charts. They are also three of the four multinational services that have the broadest reach into emerging music and emerging digital music markets. Chartmetric tracks the music and the performers who appear on these digital streaming charts. The data from Chartmetric therefore provides a lens through which a person may glimpse the kinds of artists who are the most popular with consumers who use those services at a particular moment in time.

The combination of YouTube offering music videos (not only audio music) and the wide global availability of YouTube provides a unique lens through which a person may glimpse the kinds of artists whose performances are generating massive numbers of viewers in emerging music markets.

The artists highlighted in The Road Travelled were selected based on data from Chartmetric and the published recorded music report of the IFPI, the interntional trade group representing recorded music companies.

A NOTE ABOUT WORDS AND NUMBERS:

The music industry is a world of creative and business nuances. Words, numbers and omissions should not be taken at face value.

Generally, recorded compositions consist of the copyrightable recording of the sounds of musical performances and the copyrightable arrangement of notes composed and the words (text or lyrics), if any, authored or written. In some traditional genres of music such as classical, a composition is created by a composer and an author. In more modern, popular music, a composition is created by one or more songwriters. Note that the term "songs" is often used loosely. This term may refer to the whole recorded work (recording and composition together) or it may refer only to the composition, depending on who is using that term.

When a digital music service reports on the number of recordings, tracks or other term that is available to users of the service, the recordings are not necessarily all recorded compositions. The recordings may include instrumental 'mood music,' sounds of nature and other types of recordings. Also, there are often multiple recordings that are simply duplicates of other recordings in the catalog. Such numbers should be considered generally rather than specifically.

Likewise, there are differences between users, registered users, active users, subscribers, paying subscribers and similar terms as they relate to digital music services. A total number of users of a service who are not registered with the service are typically estimates. It is challenging to count unique humans (as opposed to their number identifiers) using a website, for example.

A number of registered users with a service does not mean they are all actively using the service. Active users are actually using the service, but an active-user figure may mean that a number of people used a service only once in a month, for example, while others may have used a service every week or every day.

A count of subscribers and paid subscribers does not necessarily mean that there are that same number of users. For example, a family subscription plan may cover up to a certain number of individual, such as five family members. The digital service does not necessarily track or make available figures on how many individuals under a family plan actually used the service. A number of subscriptions rather than subscribers, however, counts the number of individual and family plan subscriptions/accounts rather than the number of individuals.

Finally, a number of paid subscribers does not necessarily mean that those individuals are paying the price charged by the digital service to those using the service online or through its mobile app. Some of those paid subscribers could have a subscription plan through a telecom and be paying less for the service as part of a bundle than they would pay if paying for the standalone service.

For the charts published by digital music services, the ranking of artists or recordings/songs does not necessarily mean that these artists are the most popular or the most listened-to artists in that country or region. The charts reflect use on the particular music service. That service may or may not be the most popular or the most used service by consumers in that particular country or region. Note that music videos may cost much more money to produce than an audio-only version of a recorded composition, so many artists may opt to released audio-only music.

To date there is no failproof way to know which artist is living and working in his or her country of origin and releasing recorded music from that country or has moved to another country. The infrastructure of the digital music industry does not have this full capability yet. The companies that track such information tend to rely on the original nationality of an artist, if known, but it can get especially complicated for artists who move from country to country or who have dual citizenships. A similar challenge exists for genres of music since categorizing the sound of an artist's music is often purely subjective.

When tracking the music of artists, the popularity of artists outside of their country of origin, especially in specific cities, is often attributable to the presence of a large community of expats in those cities. For example, music by Indian artists may be especially popular in the cities around the world where large communities of people originally from India now live. The most successful multinational artists may initially be supported by expats, but their music is then heard and supported by consumers in those countries who are not expats.

THE SOURCES:

The information in this report was obtained either directly from, or from publicly available information from, the following.

*Information included from Susan Butler, the author of this report, based on 30 years' experience working in the music industry internationally, including 20 years as a practicing music industry attorney (during the latter years of that practice, the legal experience includes negotiating contractual agreements with DSPs).

Mayra Adrade

Amazon.com

Ches Anthony

Anuel AA

Apple Inc.

Atif Aslan

Aspiro AB (TIDAL)

Bad Bunny

Badshah

J Balvin

Beatport LLC

Bennett Coleman and Co. Ltd. (The Times Group)

Boomplay

Buba Corelli

Burna Boy

Susan Butler*

ByteDance Inc.

CD Baby

Chartmetric

Classical Archives LLC

Bryce Clifford

Collective rights organizations for songwriters and for performers (multiple executive-level individuals with organizations in this category who wish not to be named)

Cutty Ranks

CWL Classical.com

Daddy Yankee

Deezer

Elji Beatzkilla

Farruko

French Montana

Gamma Gaana Ltd.

Julia Haggarty

IFPI Jah Prayzah James Music Johnson's Creek Band Kakao Corp. Neha Kakkar Karol G KDV Klassik Digital Vertriebs GmbH (Fidelio) Eddy Kenzo Jah Khalib Dennis Lloyd Mau y Ricky Midnight Shine Music publishing companies (multiple executive-level individuals with companies in this category who wish not to be named) **Udit Narayan** Natti Natasha Orange S.A. Ozuna Pandora Media LLC Sean Paul Popcaan Presto Classical Ltd. R2Bees Guru Randhawa Recorded music companies (multiple executive-level individuals with companies in this sector who wish not to be named) Reynmen Severina Arijit Singh Sirius XM Radio Inc. Sirius XM Holdings Inc. Sơn Tùng M-TP

SoundCloud Ltd.

Spotify AB

Mary Stewart Music
Julian Taylor Band
Tencent Music Entertainment Group

TikTok Inc.

Ken Tizzard

Tribe Royal

Alan Walker

Alka Yagnik

YouTube

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