THE BEAT GOES ON: APPLE MUSIC

A SNAPSHOT

ANALYSIS BY MITCH OSCAR

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THE FRAME

At its June 8th annual developers conference (WWDC), Apple unveiled Apple Music, which will offer music streaming across the entire Apple Music Library as well as 24-hour live radio and special connectivity between musicians and fans. The Apple Music service will be downloadable in over 100 countries commencing June 30th and be available as a free trial for the first 3 months, converting thereafter to a paid service for a fee of \$9.99 per month.

This snapshot offers a pre-launch description of Apple Music and a broad view of streaming music services: the opportunities and challenges they bring to the radio ecosystem i.e., the landscape, advertising models, audience measurement and digital music licensing.

Highlights:

- Radio advertising revenue has hit a plateau over the last several years.
- Development of new audience engagement metrics for streaming music services and all digital audio platforms need to evolve beyond traditional display ad click-through and time spent.
- Streaming music services are proliferating, introducing both ad supported and subscription modeled platforms.
- Integration of streaming audio services into ad agency workflow systems, such as MediaOcean and Strata, are helping media buyers and planners understand the ad supported audio distribution landscape, which will improve marketing plans.
- Streaming music services continue to introduce and experiment with new advertising value propositions.
- Programmatic radio buying platforms have been introduced into the traditional radio arena.
- Revenue derived from sales of music related product has been reduced to less than half compared to a decade ago: \$15 billion (2003) vs. \$7 billion (2013). Music labels are scrambling for answers. Streaming music services may provide a solution.

THE EXPOSURE

Slightly over a year ago (May 28, 2014), audio communications pioneer Apple, who introduced the universe to the downloadable iTunes music store in 2003 – to become the largest music vendor in the United States since 2008 and in the world since 2010 – purchased Beats, the maker of hip headphones and parent of the streaming music service, for the sizeable investment of \$3 billion.

On June 8, 2015, at the company's annual developers conference (WWDC), Apple unveiled Apple Music, which will offer music streaming across the entire Apple Music Library as well as 24-hour live radio and special connectivity between musicians and fans. . The Apple Music service will be downloadable in over 100 countries commencing June 30th and be available as a free trial for the first 3 months, converting thereafter to a paid service for a fee of \$9.99 per month. Also, a family plan may be purchased for \$14.99 per month, offering service for up to 6 family members, each with their own profile.

The basic Apple Music experience will combine a user's existing music library – whether purchased from iTunes or others – with the Apple Music catalog, which consists of over 30 million songs. User will have the ability to search for and stream any song or playlist, or browse curated music on the platform. Apple's voice commander Siri can also be utilized with Apple Music.

In addition to music streaming, Apple Music will launch Beats 1, a 24-hour live radio station led by DJs in New York, Los Angeles, and London, offering music, interviews, guests, and exclusive content. Aside from Beats 1, genre-specific Apple Music Radio stations have been designed with the help of human curation – an element that Apple claims separates it from the many competitors in the streaming music realm which generate playlists using algorithms and technology. While app membership is required for ad free listening and unlimited song skipping on these radio stations – as well as access to the Apple Music library – nonmembers will have access to ad supported radio as well as Beats 1 and Connect, a new service that allows artists to connect with fans by posting things like lyrics, photos, videos, or songs to the platform.

The following chart is a comparison of the top players in the streaming music market, as reported by *The Wall Street Journal*:

	APPLE MUSIC	<u>SPOTIFY</u>	PANDORA	GOOGLE MUSIC PLAY	TIDAL
\$:Month	\$10	Free/\$10	Free/\$5	\$10	\$10/\$20
Tracks	37,000,000	30,000,000	1,500,000	30,000,000	25,000,000
Users	N/A	60 million free	79,200,000	N/A	770,000
		15 million paid			

Media pundits are questioning whether the lumping together of so many familiar elements of existing services by Apple into one convenient offering will be attractive to consumers and if so, to what extent. Apple reports that 110 million members on iTunes spend on average \$30 a month – the new basic service will escalate outlay to \$120 annually. Persuading a significant share of those buyers to switch to a product that costs \$120 a year will be a challenge. However, the company already has the credit card details of around 800 million account holders, three-quarters of a billion iPhone users, and a fan base whose ardor knows no bounds.

THE EXPOSURE (cont'd)

Shortly after the Apple Music unveiling, attorneys generals of New York and Connecticut — both of whom were involved in the e-book price fixing investigation of in 2013 involving Apple, Amazon and book publishers, pre-emptively began looking into the terms of Apple's new music service for any signs of industry collusion. The question on the table is whether Apple pressured the music labels — or whether the labels conspired with Apple and one another — to withdraw support from popular "freemium" services, offered by companies like the streaming music platform leader Spotify, in favor of Apple's paid music subscription. The European Commission is also looking into Apple's negotiations with the music labels.

In terms of licensing arrangements with artists and labels, Apple claimed that it will pay music rights owners about 71.5% of revenue in the U.S., which is largely in line with the payments by other music streaming services. However, Apple also claimed that it would not pay royalty fees to artists and labels during the first three months of free trial.

On June 21, pop star Taylor Swift informed Apple that she would not allow her songs to be accessed by the service. Within 24 hours, Apple repented and announced that "#AppleMusic will pay artist for streaming, even during customer's free trial period." On the flip side of the record, Taylor Swift's tweet to her legion of ardent fans – estimated at 60 million – should further augment awareness of the new service building to launch. As a side note, Taylor Swift in turn rewarded Apple for its decision to begin paying royalties during the free three-month trial and said that she would allow the service to stream her albums.

Also, rumors are circulating that when Apple premieres its new Beats 1 global radio station this week, it will have a sponsorship only model for advertisers, which translates into audio mentions that will be interspersed throughout songs and segments instead of traditional audio and video ads. The audio mentions will be similar to the DJ or host-spoken ads heard on traditional AM/FM radio stations.

Other audio news around the dial, as this snapshot heads to press:

Jay Z's Music Service Tidal

Jay Z, a rap star and entrepreneur, took control of music service Tidal's Swedish parent company, Aspiro, in March for the tune of \$56 million. He re-established the service as an artist-led endeavor, bringing on more than a dozen compatriots, including Kanye West, Madonna, and wife Beyoncé, as stakeholders. Tidal arrived with much fanfare, promising of high quality audio and video, as well as exclusive content from its various celebrity partners.

Unfortunately, the unveiling of the new Tidal was mocked by bloggers and even other artists as grandiose and vague. Since that time, there have been two CEO departures and a sense in the community that the service is scrambling to sign licensing deals. None have been disclosed.

THE EXPOSURE (cont'd)

Google Play Music: The Free Service

Google Play Music began as a subscription service priced at \$9.99 a month in 2013, allowing users to stream 30+ million songs, create their own playlists, and store up to 50,000 purchased tracks free of charge. The company claims 1+ million subscribers. Its main rival is Spotify and possibly Apple Music. Last week, Google launched a free, ad supported version of the service. Users cannot pick any song they want. Instead, the service offers curated digital radio stations organized by genre, mood, decade or activity. According to Google, users can also search a favorite artist, album or song and the service will stream a digital station of related music.

In terms of advertising opportunities, the free streaming service will allow marketers to use ad serving systems and ad formats that Google already offers, including its DoubleClick display ad network and YouTube's TrueView skippable video pre-roll ads. Google claims that the inception of the free service is to entice more people to sign up for the paid monthly subscription service. Main rivals in the ad supported category: Pandora, Apple, Spotify, and Rdio.

Stay tuned.

A BROADER AUDIO VIEW

Radio listening is consistently the second most popular form of media engagement in the U.S. – following television, the perennial champion. According to Nielsen Media Research's latest Total Audience Report" (2015), Adults 18+ spend on average 2 hours and 44 minutes daily listening to their favorite AM/FM stations. *Multichannel News* reported that Adults 18+ spent approximately 91 hours a week utilizing media in 2014, of which radio garnered 14%:

Media	Weekly Usage (2014)
Weekly hours	90.7
Television (live/on demand)	41%
Radio	14%
Internet (via PC)	9%
Magazines/Newspapers	5%
Digital Audio	6%
Reading books	4%
DVD/Video	1%
Console games	2%
Mobile	18%

Audio content is a staple of the American consumer.

And given its vibrant connection to the community, radio has consistently proven to be a powerful advertising medium, especially for certain categories of marketers. However, despite the bridge with its loyal and committed audience, the radio industry has not grown its ad revenues meaningfully for many years — roughly hovering at less than \$17 billion annually. The Radio Advertising Bureau (RAB), the industry's trade association, reports that network radio ad revenue continues to decline at a noticeable rate (under 5% annually); spot radio at a more miniscule diminution of less than 1%; and national spot showing some small gain. The only promising revenue growth has occurred in the digital realm, with annual augmentations in the double digits.

Advertising revenue stats:

CATEGORY	AD EXPENDITURE (BILLION)
Local Radio	\$14.00
Network Radio	\$1.10
Digital Radio	\$0.89
Local Online Advertising	\$0.43
Off-air	\$1.60

Most importantly, as Pivotal Research Group senior research analyst Brian Wieser points out, the RAB's digital figures include only related banner ads, streaming services from terrestrial stations, text/email ads and HD stations but not streaming audio services, such as Pandora, Spotify and satellite radio's SiriusXM, each of which would contribute meaningfully to reported growth results if they were included in the figures and spark advertising interest in these new forms of distribution that attract hard to find millennials, as well as adults, in relevant and engaging environments.

THE FOCUS

When internet or streaming radio burst on the scene in the early-2000s, it changed the way people consumed music. The days of fumbling around with a giant book of CD sleeves and a Discman were over. The new era consisted of simply tuning into internet radio and accessing vast libraries of music on the web.

There are three distinct types of streaming music services:

1. Music Library

Services that offer unlimited access for a flat rate or are ad supported and free. Generally, these will have a library of millions of song titles, which one can browse and listen to anytime and anywhere one likes. All services offer access via a web browser or a desktop application and on different mobile devices. Oftentimes, they are ad supported or, for an additional fee, commercial free. These services are the subject of this snapshot.

Cloud Storage

Services that offer cloud storage for songs and the possibility to stream those songs anytime, anywhere.

3. Theme Radio Stations

Services that offer radio stations dedicated to a specific theme, which one can stream to one's PC, home audio or many mobile devices.

Source: WeRockYourWeb

Although each streaming service aims to do something the others don't, they all have a great deal in common and wrestle with the same value proposition: how well it allows for music discovery while continuing to provide the listener with the enjoyable music they crave. Each grants users a limited amount of control over their selections. Most services simply let one thumbs up, thumbs down, or skip a song to tweak each station to a specific listener's liking. Each service limits the number of devices to which a user can stream music—generally two or three, however only one device may be used at a time. Also, given the popularity of social media such as Facebook and Twitter, all services have social functionality whereby one can share playlists and songs with friends.

T H E F O C U S (cont'd)

The following is an alphabetical listing of the most prominent streaming music services - live, beta'd and planned. Pages 14-22 provide descriptions of each.

			MODEL
COMPANY	U.S. LAUNCH	FREE*	SUBSCRIPTION**
Amazon Prime Music	2014	-	✓
Apple Music	2015	-	✓
Beats Music	2014	-	✓
Deezer	2013	~	✓
Google Play Music	2011	✓	✓
iHeartRadio	2008	~	-
iTunes Radio	2013	-	✓
Pandora	2000	~	✓
Rdio	2010	~	✓
Rhapsody	2010	-	✓
Samsung's Milk Music	2014	~	✓
Slacker	2004	~	✓
Sony Music Unlimited	2011	-	✓
SoundCloud	2015 (TBD)	~	✓
Spotify	2011	~	✓
Tidal	2015	-	✓
YouTube Music Key	2015 (TBD)	~	✓

^{*}Advertiser supported

In terms of popularity, the following were the most popular U.S. streaming music platforms utilized for music listening via the web at the close of 2014, according to FindTheBest.com:

<u>PLATFORMS</u>	<u>USERS</u>
YouTube	1 billion
SoundCloud	250 million
Vevo	240 million
Pandora	81 million
PlayStation Music	77 million
Spotify	60 million
TuneIn Radio	50 million
iHeart Radio	48 million
SiriusXM Satellite	25 million
Beats Music	24 million

^{**}Commercial free

THE VIEW

Apple Music is the latest entry (June 30, 2015) in an escalating battle for hegemony over streaming music platforms, which have become the music industry's fastest growing revenue source. The streaming music category is full of conflicting formats, pricing, strategies, and features. A dominant business strategy has yet to emerge.

The following are the most salient challenges and opportunities for future development and growth in the burgeoning and consistently competitive streaming music services realm:

- 1. Audience Engagement & Measurement
- 2. Advertising Agency Workflow
- 3. Programmatic Radio Platforms
- 4. Advertising Models
- 5. Distribution Partnerships
- 6. Commerce
- 7. Video Distribution
- 8. Music Streamers: Friend or Foe

1. Audience Engagement & Measurement

There are 143 million monthly online radio listeners in the country. Currently, listenership is measured by pretty standard digital interactions, which are primarily display ad click-through rates and length of engagement. Sometimes campaigns peppered with text and email ads are added and measured into the mix. The challenge for the radio industry is to evolve metrics beyond the basic click-through and seek a better understanding of how an ad engages a listener.

Some of the streaming music services are in the throes of developing new, smarter metrics to entice advertiser support. Pandora is working with some of the same data scientists that developed its music genome algorithms to create similar models that will allow the service to determine what kind of ad will be more engaging for individual listeners, including timing and frequency.

2. Advertising Agency Workflow

In response to ad agency and streaming music service queries of how to better integrate audio platforms into their campaigns, the two largest media community workflow companies, MediaOcean and Strata – which provide planning, buying, maintenance, trafficking and billing services, have developed partnerships designed to allow agencies to compare audience data between streaming music services, broadcast radio stations, and other audio platforms such as digital satellite, to better target and customize traditional digital campaigns. Streaming service Spotify announced a cooperative agreement with MediaOcean on March 9, 2015 and Pandora has been working with MediaOcean and Strata for further integration in its systems as well.

Ultimately, these partnerships will provide ad buyers with easier access to inventory across multiple audio platforms in a perpetually fragmented universe.

3. Programmatic Radio Platforms

Over the last couple of years, programmatic audience buying has received lots of ink. First in the digital realm, where it has become pervasive in display, and most recently, in the television marketplace. Programmatic platforms offer the promise of utilizing automation with data infusion to create effective, cost efficient campaigns, which essentially translate into implementation time saving, enhanced targeting and greater efficiency to accomplish a marketer's messaging goals. Streaming music services glean data from users when they sign up for a service i.e., gender, age, zip code and listening habits. Programmatic radio platforms can utilize this registration data through impression based buying and targeted or addressable commercial delivery. Two companies are building out these programmatic exchange capabilities today: Jelli and Triton.

♦ Jelli/RadioSpot

Jelli is a programmatic ad service for the radio industry that launched its platform for broadcast advertisers called RadioSpot. It works with 350 radio stations with representation across 128 cities.

Triton Digital

Triton Digital is a streaming audio programmatic ad exchange (a2x) recently acquired by Vector Capital, a tech focused private equity firm. The platform claims 100's of individual radio station partners.

iHeart Media

iHeart Media announced plans to launch a programmatic ad platform for its broadcast radio stations (850+) that will be powered by Jelli.

◆ Pandora

Streaming audio service Pandora unveiled plans to make its entire smartphone and tablet display inventory available for programmatic buying.

◆ Katz Media

Katz Media launched "Expressway from Katz", a programmatic ad platform for its 275+ radio stations, powered by Jelli.

4. Advertising Models

Marketers see digital radio – whether terrestrial, satellite or streaming – as a platform that reaches an engaged user who can be targeted by geography, demographics, social connections, listening behavior, and other critical metrics. The following is a sampling of recently introduced advertising models that exploit streaming radio's attributes and connectivity to listeners:

◆ Sponsored Listening

Sponsored Listening is a model deployed by Pandora that lets users skip streaming ads for an hour at a time if they first watch a video ad from a specific marketer. Both Sony and Fox Television have utilized this format. Rival Spotify introduced "branded video ads" from advertisers, including Ford, McDonald's, Coca-Cola, Target, Wells Fargo and NBCUniversal, which users could view in exchange for 30 minutes of ad free play.

4. Advertising Models (cont'd)

◆ Traditional Sponsorships

Free concert series sponsorship utilizes listener behavior to select acts that would resonate most with target and location. Lexus utilized this Pandora offering in Southern California.

◆ Social Media Integrations

Spotify allows a user to integrate his/her account with existing Facebook and Twitter accounts and thereafter, be able to access friends' and followers' favorite music and playlists. An opportunity for exploitation by marketers through their current digital and broadcast media mix.

◆ Customizable Playlists

Creation of playlists to compliment specific environmental activities, such as road trips, workouts, and social gatherings.

Spotify launched a new form of ad targeting for brands which will allow them to use the context of what the user is doing while listening to music in order to target with tailored ads. To date, the company has unveiled 15 categories of activities and moods.

Search Extensions

Google is testing a new music ad unit called Listen Now with Spotify, Rhapsody and Beats Music, whereby consumers who search for music are shown an ad allowing them to preview a song(s). Eventually, this feature will be amortized through utilization by marketer verticals not affiliated with music related products.

♦ In car

Pandora began rolling out in car advertising in the form of 15 and 30-second commercials that are available in roughly 130 models from 23 major auto brands. Apple and Google have apps integrated into dashboards of newer automotive models. Sophisticated targeting software will enable advertisers to engage listeners in the comfort of their own mobile environment.

Audience Targeting

Pandora can cater to consumers with greater precision than radio, such as pinpoint listeners by age and sex, zip code and even musical taste. In other words, behavioral targeting. Even English vs. Spanish listeners.

Also, by utilizing first, second and third party data, a marketer can create and target customized audience verticals. As an example, Pandora launched an advertising vertical that enabled politicians (candidates and political organizations) to target the majority of its active listeners based on its sense of their political leanings. The company matched election results with subscriber musical preferences by zip code. Then, it labeled individual users based on their musical tastes and whether those artists are more frequently listened to in Democratic or Republican areas.

5. Distribution Partnerships

The streaming music services are closing distribution agreements with a wide array of communication platforms i.e., mobile carriers and connected TV devices. A sampling:

♦ Mobile Carriers

Mobile carriers, such as Sprint, AT&T and T-Mobile, offer their mobile customers free trials, discounted family plans, and the ability to pay for the service using a carrier's billing system. As part of the deal, subscribers receive a discount provided by a sponsor or a sponsor covering streaming data-usage fees. Also, depending upon the relationship between the carrier and the music service, listeners could be given additional sponsored bonuses, such as a higher threshold of skippable songs per hour or an augmented number of downloadable songs that are kept on their devices.

◆ Devices

Connected TV devices – such as Amazon Fire, Roku, Chromecast, Roku, Xbox, Apple – are searching for ways to differentiate themselves from competitors. Music streaming is of interest. Recently, Sony replaced its own music service, Sony Music Unlimited, with rival Spotify to complement its PlayStation Music endeavor. Also, Pandora launched a personalized radio service on Google Glass. Unique sponsorship opportunities abound that will benefit all parties involved (content, distribution and advertising).

6. Commerce

The promise of providing a mechanism for an impulse purchase by a consumer is becoming more pervasive in the music streaming arena. Spotify has added a buy button to its offering, enabling its nearly 40 million music fans to purchase direct from musicians utilizing the feature. BrandPage makes this commerce option possible. The direct to fan service allows musicians to link to an existing online store or build a new one in Spotify. Aside from traditional merchandise, the feature aims to create fan experiences like private online concerts, Skype chat, meet and greets, and song collaborations. BrandPage also has similar partnerships with Shazam, LyricFind and Rhapsody.

7. Video Distribution

Some of the streaming music services, including Google's music services and Tidal, are exploring the possibility of licensing short video clips from TV networks and other partners, expanding from pure audio to include video content in both ads and programming. Spotify is rumored to be in discussion with ESPN, ABC, NBC, Comedy Central, Vice Media, BBC, TED, and Turner Broadcasting. Others will follow.

8. Music Streamers: Friend or Foe

In a recent article, *The Wall Street Journal* reported that "only a decade ago, virtually 100% of music industry revenue came from something consumers could hold in their hands — compact discs, primarily. Today, 21% of revenue comes from streaming models and almost two thirds of total revenue comes from digitally distributed formats."

8. Music Streamers: Friend or Foe (cont'd)

CATEGORY	2003	2013
Revenue	\$15 billion	\$7 billion
Compact Discs/Other Physical Copies	94.8%	35.0%
Cassettes	0.9%	-
Music Videos	3.4%	-
Other	1.0%	-
Digital Downloads	-	40.0%
Subscription/Streaming	-	21.0%
Synchronization (Licensing)	-	3.0%
Ringtones/Ring Backs	-	1.0%

Streaming music was supposed to be the savior of the record industry, eliminating piracy while mining new turf for exploitation. Algorithms utilized by the streaming audio services promise to facilitate the discovery of new artists – a method of sampling that the record labels would rely on in marketing their acts – as well as provide encouragement for catalog sales.

Although streaming music services are expected to generate \$1+ billion a year, labels are becoming more concerned as streaming music services make music ubiquitously available for consumption at little relative cost. As delineated in the chart above, music sales have plummeted over the last decade: \$15 billion in 2003 vs. \$7 billion in 2013. Music labels are fearful that the availability of its product through streaming services is leading to the cannibalization of their profits. The results of a recent study fielded by research entity Midia, quizzing consumers on their attitudes towards purchasing music, added fuel to their fears:

CATEGORY	<u>%</u>
Won't pay because get music for free from YouTube	34%
Spend less on music downloads than used to	25%
Stopped buying more than an album a month	23%
Would pay all-you-can-eat \$9.99 subscription	22%
Tried a streaming subscription trial	15%

Interestingly, Apple's foray into the music streaming services realm by its \$3+ billion acquisition of Beats Music is a case in point. Apple's turn toward streaming is a matter of necessity, as listeners increasingly shift from music downloads to streaming. Last year, digital music sales at iTunes shrunk by 11%, according to Nielsen SoundScan. Total U.S. digital track sales fell by 6% to 1.3 billion, while digital album sales were flat at 118 million. Apple is the biggest retailer of music in the U.S. and globally.

On another front, music streaming sites are facing a protracted battle as artists, labels, publishers, and industry groups speak out against the unfairness of their payment models. Pandora is at the center of this maelstrom. The company has come to dominate internet radio with more than 76 million people streaming about 1.7 billion hours of music every month. Pandora is hoping to reduce royalties as a matter of trying to even the odds against terrestrial radio broadcasters, its biggest competitors for listeners and advertising dollars. Legally, AM and FM stations do not have to pay record companies or performing artists for music but streaming music services like Pandora do. Last year, Pandora paid \$446 million in music licensing costs, representing 48.5% of the company's revenue.

The Copyright Royalty Board, whose purview includes the establishment of royalty payments set for all webcasters, will decide fees for 2016 to 2020 by year's end.

In closing, digital audio's distinct capabilities as ad targeting and ad delivery vehicles offer to expand the overall market for radio. Toward this end, including digital audio in definitions of radio spending only helps to more accurately define the market for radio. Also, industry level collaboration between digital radio pure-play companies, terrestrial incumbents, and advertising agencies and their marketers will facilitate the development of new opportunities that will benefit all sectors, allowing the industry to grow once again. If radio can actually help brands drive business results, which this analysis supports, then a stronger medium will only help everyone in today's music industry – distribution platforms (traditional and new), content creators, and marketers.

AMAZON PRIME MUSIC

DESCRIPTION A music streaming service that is only available to members of Amazon

Prime, which costs \$99 annually and provides free two-day shipping of Amazon purchased products as well as access to the company's Prime

Instant Video service.

LAUNCH (U.S.) 2014

OWNERSHIP Amazon.com SONGS/LIBRARY 1,000,000+

MODELS Subscription (commercial free)

SUBSCRIPTION FEES The cost is covered as part of Amazon Prime membership.

MEMBERS/LISTENERS 20,000,000

Note: Amazon does not share any of its Prime membership or services information. The industry projects that there are 20+ million Prime $\frac{1}{2}$

memberships.

TOUTED FEATURES ♦ Unlimited usage

Access without wireless connection

Plethora of curated playlists

Simultaneous lyrics availability

Unlimited song skipping

APPLE MUSIC STREAMING SERVICE

DESCRIPTION A newly christened Apple Music subscription music service birthed out of

Apple's acquisition of Beats Music nearly a year ago.

LAUNCH (U.S.) 2015 OWNERSHIP Apple

SONGS/LIBRARY 37,000,000

MODELS Subscription

SUBSCRIPTION FEES ♦ \$9.99 per month

 Rumors indicate that Apple has been trying to get the music industry to charge lower licensing costs so it in turn could charge a lower fee for its streaming service. Industry mandarins doubtful that Apple will succeed

with major labels.

MEMBERS/LISTENERS TBD

SPECIAL FEATURES • Access to new material/prominent album releases prior to other services

• "For you" – curated suggestions based on listening habits

 Vivid visual appeal, while conforming to Apple's sleek and minimal design aesthetic

Offers more hooks to encourage people to buy Apple products

♦ A live, DJ-helmed radio station

"Connect" – a forum for musicians to reach out to fans

Streams all of iTunes

Voice commands (Siri)

BEATS MUSIC

DESCRIPTION A subscription based online music streaming service owned by the Beats

Electronic division, which was founded by Dr. Dre in 2008, and built upon the acquisition of online music service MOG in 2012. In May 2014, Apple

acquired both Beats Electronics and Beats Music for \$3+ billion.

LAUNCH (U.S.) 2014

OWNERS Apple

SONGS/LIBRARY 20,000,000

MODELS Subscription (commercial free)

SUBSCRIPTION FEES \$9.99 per month

MEMBERS/LISTENERS 250,000

TOUTED FEATURES
◆ Hipness

Unlimited access

Curated playlists

• Emphasis on discovery from artists that are not currently popular but

were in their day

• Access to the service on three devices through its subscription service

DEEZER

DESCRIPTION A web based music streaming service launched in Europe in 2007 that offers

high quality audio streaming.

LAUNCH (U.S.) 2013

OWNERSHIP Blogmusik SAS

SONGS/LIBRARY 30,000,000+

MODELS ◆ Free (ad supported)

Subscription (commercial free)

SUBSCRIPTION FEES \$9.99 per month

MEMBERS/LISTENERS Not disclosed

SPECIAL FEATURES

.......

 Smart caching feature allows identification and memory of a user's most played tracks

• Flow feature takes an existing music library and combines it with past streams for non stop music tailored just for that user

• Users to can stream music from their phones over to their televisions

 Hear This allows users to discover music they love with a music feed that's powered by their listening habits, favorite tracks, and Deezer's own editors

• Live Bar lets users discover music by following their friends in real time

• Social media integration with Facebook and Twitter accounts

GOOGLE PLAY MUSIC

DESCRIPTION A music streaming service and online music locker operated by Google.

LAUNCH (U.S.) 2011

OWNERSHIP Google

SONGS/LIBRARY 30,000,000

MODELS ◆ Free (commercial free)

Subscription

SUBSCRIPTION FEES \$9.99 per month

MEMBERS/LISTENERS 1,000,000+

TOUTED FEATURES

- Listen Now feature provides contextual and curated recommendations and playlists, which was adapted from technology by Songza, which Google acquired in 2014
- Playlist creation using a feature known as Instant Mix
- Song Matching, a feature that scans a user's computer music library and adds to his/her online library any songs present on Google's servers without the need to upload them
- ◆ Can store up to 20,000 songs in one's online locker

IHEARTRADIO

DESCRIPTION An internet radio platform owned by iHeartMedia, formerly known as Clear

Channel Communications, one of the largest owner and operator of radio

stations across the country.

iHeartRadio functions as both a music recommender system and a radio network that aggregates audio content from over 800 local iHeartMedia radio stations across the U.S., as well as hundreds of other stations and

various other media.

LAUNCH (U.S.) 2008

OWNERSHIP iHeartMedia

SONGS/LIBRARY TBD

MODELS Free (ad supported)

SUBSCRIPTION FEES None
MEMBERS/LISTENERS TBD

TOUTED FEATURES Like/dislike (thumbs up/thumbs down) rating tool used on songs playing on

live and customized radio stations

ITUNES RADIO

DESCRIPTION An internet radio service by Apple offered for free to iTunes users, which

amount to 800 million globally.

LAUNCH (U.S.) 2013 OWNERSHIP Apple

SONGS 27,000,000

MODELS

◆ Free (ad supported)

◆ Subscription (iTunes Match)

SUBSCRIPTION FEES \$24.99 annually

MEMBERS/LISTENERS 20,000,000

TOUTED FEATURES

◆ Track skipping

◆ Station Customization

♦ Voice control Siri integration

Purchase the station's songs from the iTunes Store

Archived history of song selection

PANDORA

DESCRIPTION A music streaming service and automated music recommendation service

that serves as "custodian" of the Music Genome Project.

LAUNCH (U.S.) 2000

OWNERSHIP Privately held

SONGS/LIBRARY ♦ 1,500,000

125,000 artists6+ billion stations

MODELS ♦ Free (ad supported)

Subscription (commercial free)

SUBSCRIPTION FEES \$4.99 per month

MEMBERS/LISTENERS ♦ 76,000,000 users

♦ 3,500,000 subscribers

TOUTED FEATURES

• Subscription model offers higher quality audio

Skippable songs

• Radio stations built around an artist, song, album or genre

Shows lyrics to songs

RDIO

DESCRIPTION Online music service Rdio was founded by the creators of Skype. One of its

majority investors is Cumulus, the second largest owner and operator of AM

and FM radio stations in the U.S.

2010 LAUNCH (U.S.)

OWNERSHIP Privately held; Cumulus (majority investor)

SONGS/LIBRARY 25,000,000+

MODELS Free (ad supported)

Subscription (commercial free)

SUBSCRIPTION FEES ♦ \$4.99 per month: Rdio Web

♦ \$9.99 per month: Rdio Unlimited

◆ \$14.99 per month: Rdio Unlimited Family

Not disclosed MEMBERS/LISTENERS

TOUTED FEATURES ♦ Listening options including expanded playlists, albums, songs, and

updated feeds of personalized music "stories" based on the listener's

music preferences

◆ The ability to choose 25 songs to listen to each day on demand

RHAPSODY

DESCRIPTION An online music store subscription service that was founded in 2001, re-

launched as a standalone company, separate from former parent

RealNetworks, in 2010.

2014 LAUNCH

SONGS/LIBRARY

OWNERSHIP Privately held 30,000,000

MODELS Subscription (commercial free)

SUBSCRIPTION FEES ◆ \$4.99 per month: Rhapsody UnRadio

♦ \$9.99 per month: Rhapsody Premier

MEMBERS/LISTENERS **TBD**

TOUTED FEATURES ♦ Listeners can skip as many songs as they want

Download upwards of 25 songs to keep on devices

• TrackMatch feature helps identify songs you don't know or pinpoint the

ones you can't put your finger on

SAMSUNG'S MILK MUSIC

DESCRIPTION A streaming music service to promote electronic manufacturer Samsung's

products. Subscribers need a Samsung device to access content. Samsung offered a U.S. subscription streaming music service as early as July 2012, which allowed users to purchase and download from a catalog of 19 million

tracks. It was shut down in January 2014.

LAUNCH (U.S.) 2014

OWNERSHIP Samsung

SONGS/LIBRARY 13,000,000+

MODELS ♦ Free

◆ Subscription (TBD)

SUBSCRIPTION FEES \$3.99 per month

MEMBERS/LISTENERS TBD

TOUTED FEATURES • Eight-second caching feature that starts songs instantly as a user scrolls an

onscreen dial

◆ Skipping of up to six songs per hour

SLACKER

DESCRIPTION An internet radio service available in the U.S. and Canada.

LAUNCH (U.S.) 2004

OWNERSHIP Privately held SONGS/LIBRARY 13,000,000

MODELS Free (ad supported)

Subscription (commercial free)

SUBSCRIPTION FEES \$4.99 per month

MEMBERS/LISTENERS 26,000,000

TOUTED FEATURES
◆ Listen on any device

Unlimited song skips

Includes artist biographies and lyrics

SONY MUSIC UNLIMITED

DESCRIPTION Sony music service Qriocity formed the backbone of Music Unlimited. In

March 2015, Sony announced that Spotify would power its new music service called PlayStation Music and that Music Unlimited would close at

the end of March 2015.

LAUNCH (U.S.) 2011

OWNERSHIP Sony

SONGS/LIBRARY 22,000,000

MODELS Subscription (commercial free)

SUBSCRIPTION FEES ♦ \$4.99 a month: Sony Music Unlimited

♦ \$9.99 a month: Sony Music Premium

MEMBERS/LISTENERS Not available

TOUTED FEATURES ◆ Compatible with Sony devices

◆ International access on any device

SOUNDCLOUD

DESCRIPTION Founded in Europe in 2007, SoundCloud is an online distribution platform

that enables users to upload, record, promote, and share their originally created sounds without paying artists or record companies for the content.

LAUNCH (U.S.) 2015 (TBD)

OWNERSHIP Privately held; Warner Music Group, a minority stake holder

SONGS/LIBRARY Not disclosed

MODELS ♦ Free

◆ Subscription

SUBSCRIPTION FEES \$12.00 per month

MEMBERS/LISTENERS 175,000,000

TOUTED FEATURES

Allow artists to upload their music with a distinct URL

◆ Share button allows promotion of content

• Users can create and join groups that provide a common space for

content to be collected and shared

• Depicts audio tracks graphically as waveforms and allows users to post

"timed comments" on specific parts of any track

SPOTIFY

DESCRIPTION A streaming music launched in Europe in 2006.

LAUNCH (U.S.) 2011

OWNERSHIP Privately held

SONGS/LIBRARY 30,000,000+

MODELS ♦ Free (ad supported)

Subscription (commercial free)

SUBSCRIPTION FEES \$9.99 per month

MEMBERS/LISTENERS ◆ 37,500,000 (free)

◆ 15,000,000 (paid)

TOUTED FEATURES
◆ Unlimited access

Customizable radio stations

• Tablet and computer can play any song at any time

Subscription version allows listening offline

• Integration with social media's Facebook and Twitter

 Touch Preview: ability to preview songs and albums for 30 seconds before clicking through to listen

Family usage plans, including four accounts and one bill

 Rewind allows listeners to explore tunes on repeat based on their musical taste

 Joint promotion with AT&T that includes free trial period and discounted plan

TIDAL

DESCRIPTION The streaming music service is owned by a bevy of musicians including Jay Z,

Beyoncé, Kanye West, Madonna, Drake, Coldplay, Rihanna, and Draft Punk. It is self described as "the first ever artist owned global music and entertainment platform." The company's platform is built upon high-resolution streaming music service Tidal, which was launched in 2014 and

acquired by Jay Z and friends for \$56 million in 2015.

LAUNCH 2015

OWNERSHIP Jay Z and a gaggle of other musicians

SONGS/LIBRARY 25,000,000 MODELS Subscription

SUBSCRIPTION FEES ♦ \$9.99 per month

◆ \$19.99 per month – access to high fidelity tracks

MEMBERS/LISTENERS 770,000 (paid)

TOUTED FEATURES

◆ High quality audio

◆ Exclusive content

High definition videos

YOUTUBE MUSIC KEY

DESCRIPTION A subscription music streaming service that has rolled out in beta form and

offers access to Google Play Music's entire library as well as providing adsfree music videos, background playback capabilities, and offline caching for

viewing without a connection.

LAUNCH (U.S.) 2015 (beta)

OWNERSHIP Google

SONGS/LIBRARY 30,000,000

MODELS ♦ Free

Subscription (commercial free)

SUBSCRIPTION FEES \$9.99 per month

MEMBERS/LISTENERS 1 billion unique visits per month

TOUTED FEATURES ♦ Ad free music videos

◆ Save and play songs via offline viewing

♦ Access to Google Play Music

 Run YouTube as a background app on mobile devices while playing a game or locking the home screen

Artist discography

• Option to play full albums – depending on licensing deals