

**Sector Update**

**December 2010**

Digital Media – Music

**NO HOLDS BARRED IN THE DIGITAL MUSIC BATTLEGROUND**



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Music is now increasingly being fed into our lives through an array of digital channels. But, how do we really want to consume this media going forward? What model makes the most sense?

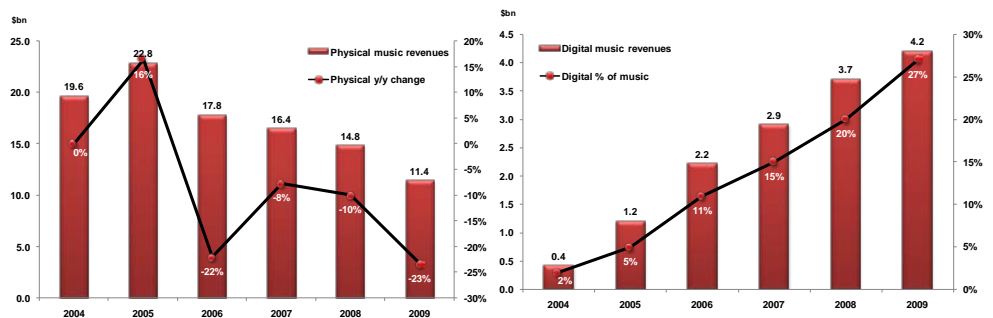
**New Business Models Sought**

The music industry has been burned by examples of companies and pirates that took advantage of the digitalization of music at the expense of content owners and retailers. The music industry has since reacted, and is actively licensing a variety of online music services, along with also using their monetary muscle to take direct ownership stakes in online music companies. The industry is trying to plug the huge CD sales gap that has come from the digitalization of music tracks.

**Legal Online Music is now Widely Available**

There are now around 12 million songs available from over 400 legal music services globally. These range from audio and video streaming services such as YouTube and Spotify, to download services such as iTunes. Certain Internet service providers like TDC and mobile operators such as Telia have combined with either record labels or existing music services in order to provide consumers with yet more alternative legitimate channels to access music.

**Exhibit 1 – Global Music Market Historic Development: 2004-2009**



Source: IFPI reports, GP Bullhound

**Digital Rapidly Replacing Physical Product**

Due to its global / continuous consumption, music needs to be ubiquitous. Moving into a model where “music is like email” (7digital CEO, Ben Drury) will satisfy modern day users who require access from multiple devices, multiple locations and on the move. IFPI reported a decline in global music sales in 2009 by 16% to \$16 billion. Digital sales however, grew by 14% to \$4.2 billion in 2009, representing ten times the value of the digital market in 2004. **The battle has begun between the different models (download / streaming, advertising / subscription / purchase, etc.), with Apple, Google/YouTube, Spotify and Rdio as the main combatants.**

*Important disclosures appear at the back of this report.*

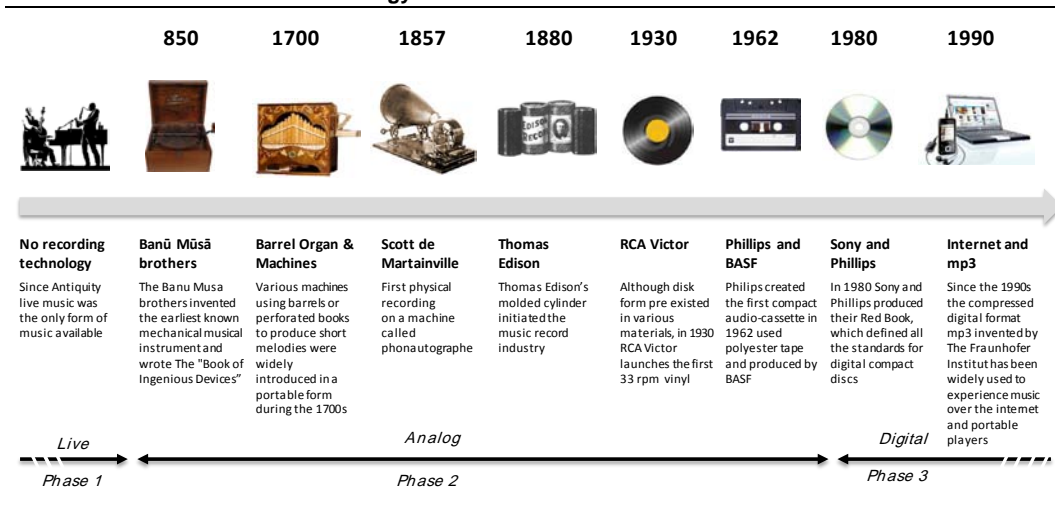
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## INDUSTRY BACKGROUND

### Impact of Technology on the Music Industry

As we can see on the historic timeline below (Exhibit 2), the music industry has always been closely tied to the state of the available technology to record and playback sounds. In fact the first mass distribution form of recorded music was Edison's phonograph cylinder. Until the launch of the audio cassette in the sixties, replication of music was an industrial process and very difficult to deploy by individuals. Although the copy of music was possible with cassettes, the revolution came when the format switched from analog to digital for the transcoding of music. This enabled the replication by anyone on a large scale and without any loss of quality. The second major event was the dematerialization of the distribution of music made possible by the Internet, along with the increase in PC and broadband penetration. This allowed the delivery of music to reach a global scale, with the first form factor being illegal peer to peer MP3 file sharing. The remaining story of digital music to date is well known and the most tangible evidence that technology is decisive is that today the industry is dominated by Apple, a hardware company, not a publishing house, record label or retailer.

Exhibit 2 – Recorded Music Technology Timeline



Source: GP Bullhound

**Phase 1** - The “live only” music consumption’s phase was dominated by technological improvements on musical instruments and acoustic optimisation of venues. Today this segment of the industry is subject to consumer purchasing power, although globally revenues from concerts and large music events are growing supported by the increasing demand driven by the fundamental trend of a continuously increasing global population.

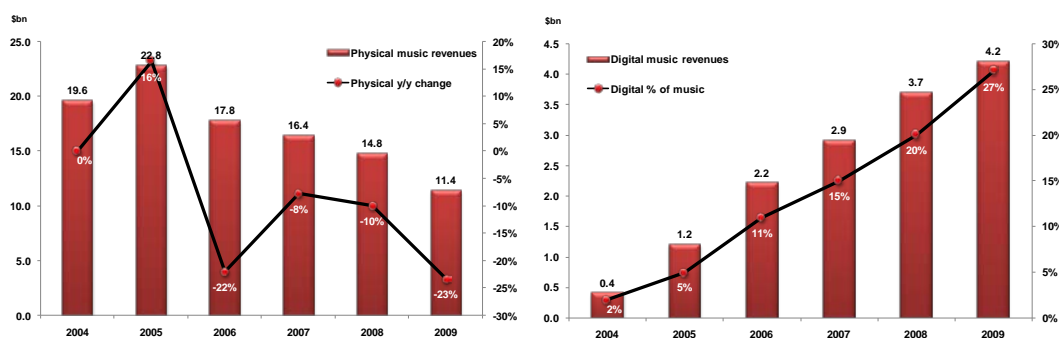
**Phase 2** - The technology improvements limited the offering to “play only” capabilities for the mass market and recording remains a complicated process or is limited by output capacity.

**Phase 3** - Since the launch of small form factor storage devices such as cassettes and compact disks, the ease of replication and the scale of distribution is improving all the time with no quality loss due to the digital format.

## Digital Revolution Already Worth \$4.2 billion

The digital revolution has fundamentally changed the structure of the global music industry. In particular, the Internet has massively affected distribution channels by easing the transfer of all digital information, including music content. Consequently, global traditional music sales have fallen to \$15.6bn in 2009 from its peak of \$42.5bn in 1999<sup>(1)</sup>. As consumers lean more and more towards virtual digital downloads or streaming services, recording music companies need digital music sales to replace core revenue streams. Whether the industry likes it or not the digital format is continuously gaining market share (see Exhibit 2) reaching 27% in 2009, representing a \$4.2 billion market.

**Exhibit 1 – Global Music Market Historic Development: 2004-2009**



Source: IFPI reports, GP Bullhound

## Digital Sales Exhibiting Strong Growth

Digital platforms in 2009 accounted for approximately 27% of recorded music sales, up from 20% in 2008. This continued growth in digital sales has helped to slow down the rate of decline in the overall market for recorded music across all geographies. In terms of market share, the USA and Asia are leading the industry with 36% and 22% respectively of digital formats (Exhibit 3) which indicates the fact that digital penetration in Europe still has room to grow.

**Exhibit 3 – Music Market Share by Type and Geography**

Geography	Physical	Digital	Performance Rights	Total
USA	63%	36%	1%	100%
Europe	81%	11%	8%	100%
Asia	75%	22%	2%	100%
Latin America	83%	12%	5%	100%
Other	84%	12%	4%	100%
<b>Global</b>	<b>75%</b>	<b>21%</b>	<b>4%</b>	<b>100%</b>

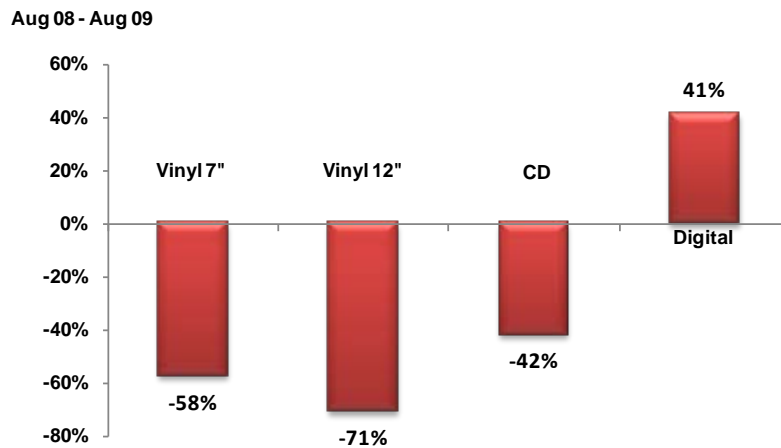
Source: IFPI Report 2009

<sup>1</sup> Source : IFPI, GP Bullhound estimates

## Digital Singles Sales is the Fastest Growing Segment

Digital revenue streams from singles have exhibited strong growth, despite the current economic climate. According to the BPI (organisation representative of the British recorded music industry), **digital singles sales increased by 41% in 2008 while physical singles sales plunged 42%** (Exhibit 4). As of August 2009, sales for the year stand at just below 10 million units, 3.5 million more than at this point in 2008.

**Exhibit 4 – Singles Sales Growth by Format**



Source: BPI August 2009

## New Ways for Music Consumption Across all Geographies via Social Networks and Other Services

Over the last few years, the viral popularity of social networks, enhanced portable music devices and increased broadband Internet access has driven the expansion of online digital music offerings. Community music sharing, and social networking web sites are a growing phenomenon which have an increasing influence on people's digital music discovery and consumption.

These new ecosystems have enabled value added music services, such as subscription, pay-per-track, etailers, music download and ad-funded music streaming models to exist.

## Favorable Trends from Teenagers Leaving Illegal Music

Recent research shows that the number of teenagers illegally sharing music is decreasing. A study conducted by UK newspaper The Guardian states that **as of July 2009, less than one-third of teenagers are illegally downloading music compared to nearly one-half of teenagers in 2007**. These recent statistics indicate the awareness of the consequences of illegal file-sharing is growing amongst teenagers, a favourable sign for proponents of legal music distribution.

## KEY TRENDS IN THE INDUSTRY

### What Options Do We Have?

#### Download vs. Streaming

Download models gave consumers their first taste of online music, albeit illegal online music through popular online sharing services such as Napster. iTunes, one of the most well known and regarded download stores celebrated reaching a 10 billion download milestone during the start of the year. The muscle power of Apple has ensured its dominance both in the legal music download space, and as a result in the portable audio hardware sales market, with the sale of ipod's reaching 275 million globally in September 2010. **iTunes biggest market (USA) has however reported a drop in downloads from 35.2 million in 2008 to 34.6 million in 2009.**

Traditional download models imply a user must go through a manual and often time consuming transfer in order to access their music from a number of devices, thus pushing consumers away from a model which does not fit naturally in line with the growth of device proliferation in their everyday lives. However, pioneering companies such as 7digital are transforming this space by storing a user's songs in the cloud, accessible from multiple locations across multiple Internet enabled devices.

Download models were also initially adopted by pioneering mobile operators in an attempt to decrease churn, increase ARPU and ultimately increase market share. However, the mobile industry soon realized it made sense to utilize existing services in order to omit the complexities and costs related to music licensing i.e. negotiating with the music labels, along with up-front costs. The dominance of Apple and the ipod which had already penetrated the market and provided users with a more diverse and complete catalogue of music to access, along with a higher quality device on which to enjoy such music, made it hard for others to compete. Exhibit 5 shows the current partnerships mobile operators have created with music service providers in order to provide a service which has been shown to increase mobile phone handset sales.

**Exhibit 5 – Mobile Operator Partnerships with Music Providers**

Country	Operator	Music Service Provider
France	Orange	Deezer
Sweden	Telia	Spotify
UK	Three	Spotify
USA	Comcast	Rhapsody
USA	Sprint	Pandora

Source: Informa Telecoms & Media

Nokia's established "Comes with Music" service, now called "Ovi Music Unlimited", offers a license for unlimited MP3 downloads through the purchase of a Nokia handset such as the 5310 or the N95. After one's Ovi Music Unlimited subscription ends, one is able to continue to listen to the tracks for free forever.

However, all MP3s are guarded by tight DRM protection meaning all songs are tied to one handset only, and can only be synchronized to a PC or MAC, but cannot for example be burned onto a CD, or transferred to any other MP3 enabled device. Renewing an Ovi Music Unlimited subscription implies buying another Nokia Ovi Music Unlimited enabled device, or paying per song like on iTunes – perhaps not a compelling proposition.

## Streaming Services Offering Legal Instant Access to Music

Good streaming services that offer a unique and simple user experience, along with an extensive catalogue of songs stand to both combat piracy by giving users a viable alternative to downloading music, and also ultimately act to increase the value of the music they are representing, by increasing the overall consumption of the content. Streaming services offer benefits to consumers by giving them access to a large and growing catalogue of songs that more than one user could amass over the years. Integrated social media twists such as shared and public playlists further allow users to diversify their music consumption through listening to others' playlists.

Streaming services such as those offered by the popular Spotify in Europe, we7 in the UK and Pandora in the US, have sky rocketed into the consumer market offering a variety of models such as pure advertising funded to subscription based models. **The success of these models has been clear with Spotify boasting a usage time of over 40 hours per month for the average premium account user.** The beauty of streaming services is that without having to offer the end user ultimate ownership of the content, the licensing hurdle of such a service can become less complex. Streaming services can also act as DJs at parties!

The streaming vs. download debate plays into the access vs. ownership debate which will be covered in the next section. One point to note is that streaming services generally have limits to the amount of offline data you are able to access, a service which will also only be offered to premium customers. This implies that music entertainment during holidays abroad, or on airplane journeys will be restricted to this offline playlist, unless of course you are happy to pay for roaming data charges abroad and have access to the Internet!

The uptake of free on-demand streaming services has been reported to have effected the paid download market (Crupnick), with streaming services decreasing the download market by 13%. Interestingly, the uptake of free online radio services has had the opposite effect, with online radio increasing the number of downloads by 41%.

## Merger of Music and Video in the Streaming Model

The outlook for the download vs. streaming model suggests that we will eventually move into a streaming world. If you take a look at the movie business, DVD sales were a huge driver. This market has seen extreme erosion which has led to one of the many problems which are plaguing the movie industry today. Forward thinking services such as Netflix begun letting users sign up for stream only accounts in Canada, as opposed to having to wait for physical DVDs in the post, for a price of \$7.99 a month. The success of the Canadian service has led tests to be held in the US before launch of a full service streaming only product if

they can see that the appetite is there. Chief Executive Reed Hastings said "By every measure we are now primarily a streaming company that also offers DVD-by-mail...**DVD-by-mail shipments are still growing, but streaming for us is much larger and growing much faster**". This is quite a transformation, but great for a business that can offer both. This consumption of content generally suggests people are moving from an ownership to an access model. This is in line with the increasing mobile nature of our everyday lives along with our desire to be able to consume media easily while on the go, and the development of our music tastes through social media.

### **Access vs. Ownership**

This is a debate which occurs often in the music space and can also be linked to the buying vs. renting argument given previously with Netflix in the DVD market. This debate also translates into the digital ebook and video game market, where ebook growth has been strong, and services such as xbox live and PSN have gained traction over traditional physical hardware disc sales. Is the ability to access content at all times not greater than ownership of content where the user is burdened with the time cost and technical difficulty of transferring content to multiple devices? A problem which will only be mitigated through the development of cloud based music services which have not to date been adopted by giants such as Google and Apple. Older download / ownership services such as Napster never made it to the mainstream in the same manner as newer streaming / access services such as MOG and Spotify, which have attracted abundant consumer interest, implying access might just be the way forward.

### **Access Often Means Recurring Membership and Revenue Streams**

Pushing forward as a user who simply wants access to music as opposed to ownership means paying for services where there are still gaps in the catalogue of songs, as different companies have managed to negotiate deals with different music labels. In addition to this, a user is not able to merge music they already own with music which they accessing. In saying this, there is no doubt that existing access only models will expand their services to incorporate the aforementioned features.

Spotify, one of Europe's most talked about streaming music services, has demonstrated that the music industry is willing to give streaming services a real push, with the four major music labels taking direct ownership stakes in the business – the key from a licensing perspective being that the music remains on Spotify's servers and is played either via cache memory or over the Internet. Spotify's service skyrocketed due to its ease of use, making it popular amongst teens as well as adults; clever viral marketing tactics which saw the service launch as an invite only service, creating an apparent scarcity; and the fact that it offered users for free, full access to the complete comprehensive song catalogue. It is reported Spotify now has around ten million users (not clear whether they are active or registered) accessing ten million tracks, across seven European countries (Sweden, Norway, Finland, UK, the Netherlands, France and Spain)

with around 1 out of every 20 paying for the service. The company has shown strong user growth with the user base increasing sevenfold over the course of 2009. Spotify Limited reported revenues of £4.51 million from advertisers along with £6.81m from subscriptions, i.e. just under 40% from advertisers and just over 60% from subscriptions. Spotify has also revealed that the company has paid more than €40 million to rights holders, with €30 million of those payments coming from the first 8 months of 2010. The industry now awaits a much publicized USA launch.

Some hybrid music service such as 7digital grant both access from multiple devices and ownership due to the fact that once one purchases a song, one is able to download the same song up to five times across multiple devices as the song itself becomes part of the user's "my locker". Another clever feature of this service is that even if you initially download a smaller resolution file on a smart phone, you own the full resolution version which again sits on the user's "my locker" which can be found online. This comes as a positive step forward compared with services where the downloaded song is linked directly to the application on the e.g. smart phone, thus giving the user a lesser degree of ownership of the material.

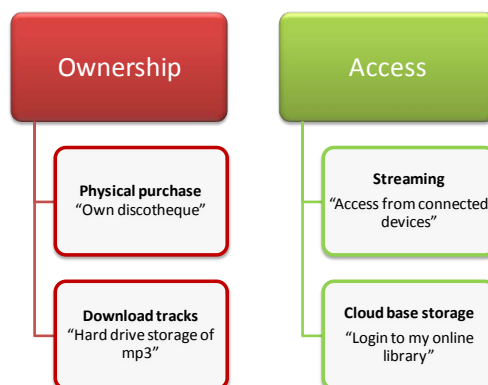
It can be seen that people might be moving from ownership to access, as this would then separate the buying decision from the user experience, where one could increase their options in terms of user experience without having to commit to a particular album, or artist, or movie. But for now it seems music services are adapting to the trends offering hybrid services where a monthly subscription includes both access and ownership to a set number of tracks per month.

### Music in the "Cloud" for both Streaming and Download

Music accessed via the cloud has been a hot topic, with "the giants" Google and Apple reported to be positioning themselves in the field, either through in house developed software, or acquisitions of cloud based systems (such as Apple's acquisition of lala.com in December 2009). Music in the cloud is inevitable. We have already moved and accepted business critical software services in the cloud such as salesforce.com, along with games in the cloud though services such as steam, and so the natural and obvious next step is for our music to go into the cloud.

**Exhibit 6 – Technology Concept Mixing with Music access and Ownership**

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Source: GP Bullhound

## Apple and Google Close to Release of Cloud Based Offering

Apple is definitely thinking of a cloud based service underscored by their acquisition of lala.com, a cloud based music streaming service which has since been shut down. Apple could make it work due to their scale in terms of users, and lala.com technology of uploading users existing songs onto a cloud that can then be accessed from anywhere alongside new music they buy. However, it is not clear today what their strategy is in this space with the new version of iTunes already being launched in early September and no hint of any cloud based services. However, Apple's competitiveness in the cloud space may be limited by the fact that their service will most likely involve only streaming to Apple devices, a limitation which other services will not need to deal with. In saying this, Apple is currently rumored to be working on a video in the cloud product, as opposed to focusing on music in the cloud, which makes sense for them as there are storage capacity problems on the horizon with the uptake of HD movies etc that will push towards a cloud based service where direct streaming of video content would be the norm. **From a convenience standpoint, music in the cloud is the way forward. For videos, the cloud is a necessity!**

Google has been rumored to be circulating a proposal to record labels to sign a licensing deal that will allow them to offer download services, music sharing, music discovery and a cloud based "digital locker" where one can store music for \$25 a year. One of the quirky features is an ability to allow users to stream all songs for free from Google's online music store, much like services such as Spotify allow, with the added ability of being able to stream or download songs actually purchased. Another neat feature that has been reported, is the ability for a user to share a playlist of songs with a friend, who is then able to listen to a song once for free – which is great since most current services only allow a short 30 second preview before buying a track. **It is thought that Google is attempting, through music, to incorporate more social features into its online business.** Licensing will be Google's main challenge, but it is clear that record labels are pushing to end the Apple music dominance and so might license others e.g. android based cloud services ahead of Apple in a bid to create a more level competitive environment.

The cloud space appears to be ever evolving, with the Apple application store harboring an array of new cloud services such as Cloud Music, a service which simply uploads one's music to Google Docs from a computer, then accesses Google docs on a phone and streams the songs directly there. Due to the functionality of Docs, files can be uploaded and shared with friends, thus allowing an individual to upload a number of tracks, stream them to their phone and share them with friends! It will be interesting to see what other companies develop through the power of the cloud.

## mSpot Already Offering Cloud Solutions on Android

There are a number of companies to watch out for in the cloud space, such as mSpot whose timely (ahead of giants Google and Apple) cloud product has turned out to be popular on the Android platform after having been downloaded half a million times already (as at end of September) since it launched early in the summer. mSpot allows users to upload their music to the cloud and then stream

onto other devices such as a Mac, Windows and Android with free storage of 2GB per user. mSpot has succeeded where other services have failed such as mp3Tunes which has faced several lawsuits. **mSpot claims it has a blessing from the music labels and pays them nothing in return.** The way it does this is that it does not replicate the music on your computer onto the cloud, it instead uploads your entire iTunes, Windows Media Player or other music catalogue, which takes a fair amount of time depending on your connection speed. Following on from this process, mSpot converts your music into streamable files, which are then ready to access. The option can then be to either stream music directly onto your android device, or download it if you will not have a fast Internet connection. Apple's lala.com offered a similar service to this.

### Some Form of Cloud Service is on Everyone's Mind

Carphone Warehouse, Europe's largest independent mobile phone retailer has also launched a subscription based cloud music service named "Music Anywhere", one which is set to rival existing service such as Spotify, Rhapsody and Napster. Users are able to synchronize their personal collection with a cloud database that contains around six million tracks. An annual fee of £29.99 allows one to access their music library through Music Anywhere on PCs, laptops, mobiles etc. Carphone Warehouse are also looking at offering access to videos and films in a similar manner.

Other players in the market such as Sony, have also announced cloud services recently via their "Music Unlimited" service (linked to Song Qriocity) – cloud based digital music streaming service which gives users the ability to stream their music on all Sony devices. This is early days for this product and Sony's successful music ambitions with negotiations with the labels ongoing.

### Labels Dilemma

Music labels appear to be fixated on the past when they were able to generate high margins and album sales were all the rage. It is clear we have since moved away from this to a model where singles are downloaded by the masses, with album sales maintaining a degree of momentum. In saying this, we have seen the four major labels, along with others, license a variety of differing music services. **They appear on the surface to be supportive of digitalized music consumption, perhaps simply in an effort to see which service(s) will ultimately work, thus giving them an appropriate foothold in the future online arena.**

The four major music labels, Sony BMG, Universal Music, Warner Music and EMI cannot seem to decide their ultimate strategy with respect to the online music arena. All these four music labels have put their monetary muscle behind streaming services such as Spotify taking direct ownership stakes, yet it is the same labels that are rumored to be hindering Spotify's USA service launch. The labels have taken differing views this year with respect to payment structures, with Warner chief executive, Edgar Bronfman saying the focus would be on promoting services that require payment, which he said could appeal beyond those who currently pay for downloads in stores such as Apple's iTunes.

Subscription services would be promoted by Warner as they would be more profitable for them over individual track downloads over the long term. Rob Wells, senior vice president of Universal Music Group International has however been quoted before Mr Bronfman saying "Spotify is a very sustainable financial model – full stop". We7's chief executive Steve Purdham has been quoted saying "...they have also been very supportive of us (labels). I think Edgar's comments are more a reflection that subscription services are currently the key focus for the industry and I strongly support that view, especially in the mobile arenas".

### Minimum Guarantees or Cost per Stream Slowing Small Players

The payment structure of existing music services is clouded due to the lack of transparency in the market. It is assumed that most services have to pay royalties for each song played. However, the size and impact of these royalties on each service is assumed to be different due to the shareholder DNA of the companies in question. Companies have come under strain due to their growing user base and the direct link with streaming fees, therefore it will be interesting to see how the labels move forward by taking more ownership stakes in businesses, or perhaps adopting revenue sharing models instead.

### Advertising vs. Subscription

Pure advertising funded models have faced challenges to date in retuning good profits due to often crippling content costs that escalate as the user base grows. The advertising market growth is showing a slow down, however digital was the only advertising format to experience an increase in 2009, mainly due to the growth in search advertising – online advertising grew 4.5% in 2009, as opposed to 20% in 2008 and 40% in 2007 (IAB Europe / Screen Digest, June 2010). The display advertising market however in Europe was flat (+0.3%) with a decline shown in most mature markets: France -6.0%, UK -5.0% and Sweden -5.0%. According to Vincent Létang (Senior Analyst at Screen Digest who compiled the AdEx Report for IAB Europe) "Search outperformed display last year as advertisers focused on achieving return on investment through direct response formats at the expense of brand advertising. In addition, some advertisers felt online brand advertising was not yet delivering the enhanced measurement standards that they needed to justify further investment in digital campaigns, particularly given the recession".

The good news for display is that the countries in the IAB Europe network are already reporting a recovery in online display in the first quarter of 2010. Alain Heureux, President and CEO of IAB Europe concludes, "In the first recession of the digital advertising era, we have been impressed with the resilience shown by the countries in the IAB Europe network. **We are at a crossroads for the online advertising market; we have a booming search market supporting traffic and sales and lead generation, and online display is ripe for further growth due in part to the success of video and social media.** New techniques and business models provide the perfect platform for the next phase of online display

growth. We believe the time is perfect for advertisers to move their branding campaigns online...”

The growth in the display space and ability to advertise on varying and new platforms will spur the continued growth in the revenues for online music companies, thus pushing companies into profitability. **However, in this particular business model, Volume ≠ Success.** Many services such as Spotify and we7 to name but a few have felt the squeeze where a rapid increase in users has meant an equal parallel growth curve in licensing costs, as their per stream licensing models have forced them to either close down new free user accounts in order to manage the user base, or re-negotiate per stream fees with the music labels – both challenging situations to be in during the growth stages of a business.

### Hybrid Subscription Models and Unlimited Plans Receiving Strong Interest

Pure subscription models have evolved with the times to incorporate certain download features, such as Napster who are offering users five MP3s to download a month, coupled with the ability to stream 10 million songs for a flat fee of £5 a month, and Rhapsody, who offer in addition to a catalogue of 10 million songs, the ability to download unlimited songs to your iPhone and soon Android and Blackberry phones for on the go, Internet free listening. The popularity of the subscription model is on the rise, especially for new services which are launching, as they are fully aware of the licensing costs and long runway ahead of them to become a profitable business in the current climate.

The key challenges with hybrid models (e.g. free and subscription model integrated into one platform) in the industry is the conversion of users into paying premium subscribers. As an example, Spotify has a reported user base of 10 million as of October, with 6.5% of them paying for the service (around 650k users) of which 90% pay the full monthly price of £9.99 to be able to access the service on mobiles, and the remaining 10% paying the cheaper tariff of £4.99 (where no mobile access is granted). The subscription model will need to offer users more than access to music streaming to be able to compete with the free version – a better user experience, additional perks etc. It will be interesting to see the development of hybrid services going forward.

### Usage Patterns

#### Device Proliferation

It is interesting to note, that at one point in time, CD manufacturers were trying to derive ways to force users to pay extra for using their purchased media on different devices. We are of course in a different world today, where only connected / multiple devices are the only way forward.

Tablet devices being released onto the market today contain pre-installed music services. For example, the iPhone comes with Shazam as standard. Music services are increasingly becoming as standard as the ability to make a phone call. **Service and content will differentiate providers going forward, thus**

**creating an opportunity for music services to help drive sales and popularity of hardware devices.** Exhibit 7 shows the current music streaming services available on selected devices:

**Exhibit 7 – Music Streaming Services Availability on Selected Devices**

Service	Smartphones	Connected devices / services
Deezer	Android, Blackberry, iPhone	Multiroom music systems: Sonos, Squeezebox. Connected TVs: Samsung, Phillips
Last.fm	Android, Blackberry, iPhone	Multiroom music systems: Sonos, Squeezebox. Games Consoles: Xbox Internet radios. Roberts, Ikon
Napster	iPhone	Multiroom music systems: Sonos, Squeezebox. Terratec. Internet radios: Noxon. Connected TVs: Yahoo (Samsung, Song, LG and Vizio)
Pandora	Android, Blackberry, iPhone, Palm Pre, Windows	Multiroom music systems: Sonos, Squeezebox. Internet radios: Livio, Grace Reciva. Connected TVs: Mitsubishi, Panasonic, Samsung, LG, Sony, Toshiba. Tablets: Chumby, iPad. Media streamers: Roku, Popbox. Various high end stereo systems
Rhapsody	Android, iPhone	Multiroom music systems: Sonos, Squeezebox, Linksys Home Audio, Yamaha MusicCast2, Control4 Home Automation System, Russound Collage System. Connected TVs: Yahoo Vizio DVRs: Tivo, Moxi. Various other high end stereos
We7	Android, iPhone	Multiroom music systems: All room systems with internet connectivity and internet browser with flash or html 5 compatibility
Spotify	Android, iPhone, Symbian, Windows	IPTV: TeliaSonera. Multiroom music systems: Sonos

Source: Informa Telecoms & Media

However, some companies, such as those involved with cloud services are of the belief that one should not have the burden of multiple devices, and that any device should be able to be transformed into a music media player. An Internet connected cloud based streaming service would be enough to instantly turn a normal mobile phone, or portable games console into a music enabled device.

## Music Discovery

New and disruptive music discovery services like Rdio and mflow are adding to the innovation in this space, innovation which will ultimately increase the consumption of digitally downloaded music content and help the fight against piracy (fingers crossed!).

Movies are packed with an array of songs in order to create the different moods and scenes. Having a service like Shazam embedded into domestic TV sets is a real vision, one which would bring the music discovery process front of mind in a medium which is consumed on average for 2 hours and 45 minutes a day in the UK (Ofcom), increasing the chances of consumers legally downloading more music on demand.

The social playgrounds of Facebook and Twitter are also doing their part in the music discovery space, with users able to recommend music on Spotify to friends via Facebook. In addition, if a person mentioned a song name in a tweet, wouldn't it be great to be able to hear that song and buy it immediately there and then?

**If you were able to generate revenue through being social, it would be something worth trying.** mflow has developed such a system. It offers the user a download software client through which one is able to preview tracks and purchase them for between 79-99p. The music discovery / social twist comes through a Twitter like function where users are able to follow others, and then go on to recommend tracks to their followers. The magic happens when one of the followers, who is able to listen to a full length version of the track once, purchases the track and 20% of the price paid gets automatically credited to the user who recommended the track's account. These credits can then be used towards the purchase of additional tracks. **This cleverly creates a social currency which is valuable for both the consumer and the company.** If only Facebook was able to offer their users a similar deal...?

A great new business which just launched in the US and Canada in August whose DNA is pure social is Rdio. The Company is a cloud based subscription music streaming service where the ultimate idea is to discover music through people. This is a step forward from the traditional search and play services to which we are all accustomed. The service works by suggesting a number of users to follow, which gives one access to their playlists. The users are suggested to you based on your tastes in music which Rdio learns over time as you use the service more. In addition to this, you can also find your own friends through Facebook, Last.fm and other services. The idea is that over time your music taste will develop and grow as you are exposed to the evolving playlists of others. **Music is inherently social, as is the process of music discovery, and so this model perfectly marries together social media with music content, and it's this cross promotion that will inherently encourage growth.** Much like Spotify, Rdio offers a standard subscription of \$4.99 which gives access to the online site, in addition to a premium subscription which also gives access to the service via mobiles.

## DIGITAL MUSIC UNIVERSE & COMPANY PROFILES

Exhibit 8 – Digital Music Matrix



Source: GP Bullhound

### 7digital

7digital Limited is a leading digital media delivery company based in London and operating globally. Through 7digital's download store ([www.7digital.com](http://www.7digital.com)) consumers can access over 11 million legal high quality MP3 music tracks as well as audiobooks and videos across 30 countries in Europe and North America. Its service has been used by more than two million registered users. 7digital was the first to provide a 100% mp3 DRM free music store and it now powers download stores for clients such as HMV and Spotify. 7digital has worked with record companies, artists, FMCG brands, retailers, consumer electronics companies, fashion brands, advertising agencies and many other organisations to harness the power of digital entertainment - music, video, audiobooks and ebooks, to engage customers. Recently the company also launched music services on BlackBerry and Android phones and launched its mobile download store. The company was established in 2004 and is headquartered in London, United Kingdom. As of September 11, 2009, HMV Group acquired a 50% stake in 7digital for \$13m buying out the original private equity backers Balderton and Sutton Place.

### **AOL Music**

AOL Music Now, a Chicago, Illinois based business, was founded in 1999 and operates as a subsidiary of AOL. AOL Music allows users to stream both audio and visual music content through its web-based media player. The Company offers streaming media with a focus on offering visitors a balanced music site with heavy emphasis on music industry news, exclusive artist interviews, and up-to-date tour announcements. AOL Music is well established with over 24 million unique visitors per month globally.

### **Deezer**

Paris-based Blogmusik, trading as Deezer, was founded in 2006. The company is privately funded by IDInvest Partners, CM-CIC and Dot Corp. In 2007, Deezer was the first France-based music site to sign an agreement with a publisher rights' organization to pay artists from advertising revenue. Deezer has since agreed with all four major and numerous independent music labels to grant access to their catalogue to French online viewers. With seven million unique viewers per month, Deezer is the leading online music website in France. From a pure advertising-based business model, Deezer is now evolving towards a premium subscription-based service and already counts several hundred thousand paying subscribers. For €4.99 a month, users can have access to Deezer's entire catalogue without ads. For €9.99, they can access music offline and through mobile applications on the various smartphones and devices (iPhone, iPad, Android, Blackberry, Logitech, Sonos, etc...). The company has also recently signed an agreement with the French leading mobile player Orange to have Deezer's premium offer distributed in the operator's stores. In August 2010, Orange acquired 11% of Deezer in return for its own online music assets (Wormee). Deezer is now focusing on international expansion in order to replicate the model developed in France.

### **Dizzler**

Dizzler, a Scottsdale based business, was founded in 2006. Dizzler allows users to stream music from its site through a flash player or download client. Dizzler also offers users the ability to create customised playlists, select or create player skins, play online games and use promotional tools. Dizzler operates primarily as an aggregator of playable media. In adherence to copyright infringement laws, Dizzler returns publicly available media content from the Internet, indexes and encrypts oin-line links to third party websites. However, the Dizzler search engine has no way to distinguish between authorised and unauthorised media unless the copyright laws are attached to the content files. According to company news, Dizzler is currently associated with a lawsuit which targets the unlicensed use of publicly available music.

## **Emusic**

EMusic.com was founded in 1998 and is based in New York. EMusic is currently privately owned by Dimensional Associates, and was formerly a subsidiary of Universal Music Group. While initially launched as a CD retailer, EMusic now offers subscription-based means for consumers to listen to and explore new music. EMusic subscriptions range from £9.99 per month or £0.42 per song. The company complements its music discovery system with editorial recommendations, a social community, and a technology-based recommendations system. EMusic offers selections from over 6 million tracks and 60,000 record labels, covering all genres of music. EMusic is supported by the catalogues of Sony Music Entertainment labels such as Arista, Columbia, Epic, Jive, LaFace, Legacy Recordings and RCA.

## **Grooveshark**

Grooveshark is based in Gainesville, Florida and was founded by students of the University of Florida. The Company offers a web-based streaming music platform which delivers on-demand music for free. The Grooveshark Widget enables registered users to embed song and playlists into other websites, blogs, and social media profiles. Grooveshark also allows artists and record labels to promote themselves through the application. All data and analytics relating to an artist (or group of artists) are freely available to promoters, such as the number of times their content has been listened to, along with demographic and geographic information about the listeners. According to public press Grooveshark lacks licensing agreements with record labels. Its new VIP service is part of the move towards legal offering.

## **Last.fm**

Last.fm is a music recommendation service which helps you discover more music based on the songs you play. The Company was founded in 2002 and is based in London, U.K. As of May 2007, Last.fm operates as a subsidiary of CBS Corporation following its acquisition for \$280m. The company provides international online music services to over four million unique visitors daily. In addition to on-demand, streaming music, Last.fm also analyzes the music tastes of the user and his or her friends to suggest more music that might be appealing to it. Most recently, Last.fm has been emphasizing this online, community-based structure rather than its pure-play streaming music vertical.

## **MOG**

MOG, Inc. operates as an online community for music lovers. The company enables users to find new music, watch music videos, and read news and reviews that match personal taste in music. It also allows customers to listen on computers using a Web browser or download songs to their Android or Apple phones. The company was founded in 2005 and is headquartered in Berkeley, California. Since inception \$21.8m

has been invested by Balderton Capital, Gracenote, Menlo Ventures, Simon Equity Partners, Sony Music Entertainment, The Angels' Forum and Universal Music.

### **mSpot**

mSpot, operates as a mobile music company that provides content and technology to carriers, handset manufacturers, and media companies in North America. The Company delivers music, movies, radio and TV to more than six million mobile customers across 10 wireless carriers. mSpot also offers mSpot Remix that enables consumers to use their mobile handsets to access music on their PC. Similarly mSpot Radio provides access to various content including music, news, sports, finance, and entertainment. The company was founded in 2004 and is based in Palo Alto, California Trinity Ventures invested \$2.3m in 2005.

### **MXP4**

Founded in 2007 with the idea to create a new format for interactive music, MXP4 has developed a remixable and video game like music experience for artists, fans, labels and brands, allowing music fans not only to play the music but play with it. Its proprietary technology is based on an analytic engine which performs a numerical treatment and segmentation of an mp3 track. The solution allows one to turn any MP3 into a casual game, easily embeddable within social networks. Today the company has more than one million plays per month and the growth is driven by a strong viral effect from existing users. The benefit of its offering is improved interaction with the interface (10 minutes spent per track) compared to traditional music sites. Both the ease of integration with social networks and the social gaming potential open the door for strong monetization. Superstar DJ David Guetta (and 150 other artists) is using MXP4's music game solution to engage his 12m fan base on Facebook. The company is backed by Orkos Capital, Sofinnova Partners and Ventech.

### **MySpace Music**

MySpace Music was launched in 2008 and is based in Los Angeles, California. The site offers a community where any individual can upload and share music and playlists. Additionally, MySpace Music features artists from Sony BMG, Universal Music Group and Warner Music. MySpace Music represents the first attempt to marry social networking to music. While MySpace Music has effectively attracted users, many music label representatives voiced concerns during the May 2009 board meeting regarding the profitability of the site. Executives believe that greater integration of the MySpace Music site with the MySpace social network will aide MySpace Music in realizing profits.

## **Napster**

Napster was founded in 1999 and is headquartered in Los Angeles, California. As of October 2008, Napster operates as a subsidiary of Best Buy. Napster offers interactive music services that enable users to sample, listen to, subscribe to, and purchase from online music catalogues, utilizing secure and legal platforms. The company provides its service through individual downloads and subscriptions, which start at £5 per month for unlimited on-web streaming and five free MP3 downloads. Napster provides pure subscription play through its massive catalogues of on-demand selection, radio, Billboard charts, pre-programmed playlists, personalisation features, message boards, and community features. Additionally, subscribers are able to enjoy their music offline on various media, including personal computers, CDs, MP3 players, music-enabled cellular phones, and digital media devices for the living room.

## **Pandora Media**

The company provides Internet radio music discovery services in the United States. Pandora's advertising product includes a video marketing platform that allows users to discover upcoming entertainment based on their interests and demographics. The platform offers a branded radio station with a tailored music selection. Founded in 2000, Pandora Media was formerly known as Savage Beast Technologies and is based in Oakland, California. The Company is backed by a number of investors including Greylock Partners, CrossLink Capital, Labrador Ventures, Selby Ventures and Walden Venture Capital.

## **Playme**

Play.me is a digital music service that gives users the ability to stream music on demand and download MP3s compatible with all electronic and portable devices. The Company also offers an interactive radio that enables users to create custom radio stations and personalised playlists. Playme's offering is available via both a free ad supported service and premium subscription packages. The €4.99 monthly subscription allows HQ web streaming and ten mp3 downloads, the €9.99 packages offers web and mobile streaming with 20 mp3 downloads per month. Developed by Dada Entertainment, a digital and mobile entertainment company, Playme is part of Dada Group (a subsidiary of RCS group) and is also backed by Sony Music.

## **Rdio**

Rdio operates as an online portal offering search, play, download, and music sharing services. The Company has implemented a recommendation feature based on the ability to share playlists and listen to what you like through friends or other people with great taste. The unlimited service is available for \$4.99 per month and gives you access to music on or offline on PC and mobile phones.

The company was incorporated in 2008 and is based in the United States and is backed by Atomico Investment (Skype's founder).

### **Rhapsody**

Initially known as Listen.com, Rhapsody has been operating since inception on an all-you-can-eat subscription model. It started with 30,000 classical tracks and today the Company offers more than ten million songs from all Major label catalogues as well as 450 independent labels covering every genre. The Rhapsody experience is available for network stereo components, set-top boxes; and mobile phones. Each innovation has made it easier for Rhapsody customers to take millions of tracks with them wherever they might find themselves. The Company offers two main unlimited subscription packages at \$9.99 or \$14.99 allowing users to download music on mobile devices or mp3 players. Rhapsody was incorporated in 2001 and is based in Seattle, Washington.

In 2007 RealNetworks formed Rhapsody America, a joint venture with MTVNetworks. In 2010 the company spun off as an independent entity called Rhapsody International.

### **Spotify**

Spotify provides online digital music services. It offers music fans access to catalogues of licensed music, as well as enables on-demand streaming of audio content.

The company offers its services in three forms: a free ad-based version, an unlimited monthly fee for £4.99 and a premium monthly membership for £9.99 which includes mobile access. Recently Spotify announced the deployment of its Windows Mobile 6 platform, although the mobile applications will be free to download, it will require users to purchase a premium Spotify subscription. Company press indicates that Spotify currently has upwards of two million users in the U.K. and more than seven million users across Europe. The company does not currently have offerings in the United States but plans to launch soon. Spotify is based in Sweden and was founded in 2006, is privately owned by Creandum AB, Northzone Ventures and Wellington Partners. The company is reported to have received a cumulative €83m in funding since inception.

### **we7**

we7 is a cloud-based music streaming service that delivers Internet Radio Plus where users can listen to music they love by creating personal radio stations as well as making specific requests for their favourite songs, albums or artists. Music can easily be shared between friends and colleagues using email, facebook and twitter among other mechanisms. The music can be enjoyed on PCs or an increasing range of mobile devices such as iPhone and Android based phones and tablets. we7 provides three million UK users monthly access to a music catalogue of over 6.5 million songs either for free in an ad-supported environment or by paying a monthly subscription. With nothing to

install or download, we7 syndicates music to major publishers such as NME, The Guardian and Conde Naste allowing it to be the No 1 most accessed UK music website by pageviews. In 2010, we7 was the Musicweek winners of the prestigious “Consumer Facing Music Service of the Year”. we7 was founded in 2006 in the UK, with offices in Oxford and London. we7 is backed by Eden Ventures, Spark Ventures and Peter Gabriel.

## SECTOR VALUATIONS

### Private Placements

Date	Company	Investors	Deal Size (\$m)	Business Description
04-Nov-10	MusicMatic France, SAS	OTC Asset Management	3.6	Broadcast of in-store music and video flows for POS networks
02-Nov-10	Aupeo GmbH	IBB Beteiligungsgesellschaft mbH; Innovent Partnaires S.A.; Ventegis Capital AG (DB:VEG1); J.C.M.B. Beteiligungs GmbH	na	Internet radio platform
11-Oct-10	Music Networx AG	Holtzbrinck Digital GmbH	na	Digital live music company that engages in recording, distributing, and marketing live music
07-Oct-10	Music One	Sony BMG Music Entertainment (Thailand) Co., Ltd.; Universal Music (Thailand) Limited; Warner Music Thailand Limited;	na	Online music platform where users can download music through their computers and mobile phones
05-Oct-10	The Echo Nest Corporation	Commonwealth Capital Ventures; Matrix Partners	7.0	Music search and interactive online music applications
05-Oct-10	Beezik SARL	CoVent Partners	3.5	Online music download services
14-Sep-10	Memolane, Inc.	August Capital; Atomico Investment Holdings Limited	2.0	Digital platform which collects and connects thoughts, pictures, messages, and music
02-Jul-10	Top100.cn	Google Ventures	1.0	Online music Website for Chinese music fans
18-Jun-10	MOG, Inc.	Menlo Ventures	0.3	Online community for music lovers using a Web browser or download application for Android or iPhone
10-Jun-10	Octoshape ApS	Nexit Ventures Oy	4.8	Live and on-demand streaming audio and video technology
01-Jun-10	tunesBag.com Limited	INITS Universitäres Gründerservice Wien GmbH	na	Music hub that allows uploading and accessing personal playlists online
14-Oct-09	Shazam Entertainment	Kleiner Perkins Caufield & Byers, DN Capital, Acacia Capital, IDG Ventures	na	Mobile music discovery services
12-Oct-09	Deezer	AGF Private Equity, CM-CIC, Dot Corp	9.7	Free and legal music streaming website
21-Aug-09	Spotify Limited	Wellington Partners Venture, Northzone Ventures; Creandum AB	50.0	Online digital music services
11-Aug-09	RightsFlow	Originate Ventures	1.5	Music licensing, royalty payment, and accounting services
04-Aug-09	Melodis Corporation	WaldenVC	4.0	Sound search technology and applications
10-Jul-09	Pandora Media, Inc.	Greylock Partners	35.0	Internet radio company, provides music discovery services
31-May-09	EMusic.com Inc.	Sony Music Entertainment, Inc.	na	Online independent music community
15-May-09	OOIZIT Plc	Zooki Digital	na	Online music community
26-Feb-09	Beezik	Axcel France Loisirs	3.5	online music download services
25-Nov-08	Aristo Music NV	Limburgse Reconversie Maatschappij, Baekeland, Gemma Frisius, KBC PE	3.4	Technologies for digital music and related services
07-Oct-08	eMinor, Inc.	Novak Biddle , ETF, Southern Capitol Ventures	3.0	Networking and music-discovery tools
06-Oct-08	Melodis Corporation	Global Catalyst Partners, LP; JAIC America, Inc.; TransLink Capital	7.0	Sound search technology and applications
01-Oct-08	Spotify Limited	Northzone Ventures; Creandum AB	21.1	Online digital music services
30-Sep-08	Believe SAS	Ventech, Xange Private Equity	6.5	Digital music distribution and marketing services
06-Aug-08	YouLicense Inc.	Logia Group Ltd.; Ofer Media Ltd.	1.0	Online music licensing platform.
02-Jun-08	eJamming, Inc.	Undisclosed	0.2	Online music collaboration software technologies for musicians
15-May-08	H² media factory GmbH	Undisclosed	na	Online magazine and music shop
01-Feb-08	Deezer - Blogmusik SAS	Dot Corp.	8.3	Free and legal music streaming website
28-Jan-08	7 Digital Media	Balderton, Sutton Place Managers	8.5	Offers digital media delivery for audio and video
21-Jan-08	We7 Ltd.	SPARK Ventures plc (AIM:SPK); Eden Ventures (UK) Ltd.	6.0	Online music service that allows users to stream online music tracks
17-Aug-06	eMinor, Inc.	Novak Biddle Venture Partners; Southern Capitol Ventures	2.0	Networking and music-discovery tools
26-Jul-06	GarageBand.com	Khosla Ventures	2.5	independent online music discovery
01-Jun-06	MusicIP Corporation	JLA Ventures	2.0	Music discovery and identification solutions for music on Websites
16-May-06	Musicbrigade AB	Provider Venture Partners AB	4.1	Digital music & video entertainment
14-May-06	Ricall Limited	Benchmark Capital	na	Online music research and licensing company
08-May-06	Last.fm Limited	Index Ventures	na	Online music services
05-Apr-06	3Guppies, Inc.	VantagePoint Venture Partners	20.0	Online music and games download services
15-Mar-06	SNOCAP, Inc.	Morgenthaler; WaldenVC; Court Square Ventures, LLC	15.0	Digital licensing and copyright management services
13-Feb-06	La La Media Inc.	Bain Capital, LLC; Ignition Partners	9.1	Offers online full-length previews of songs
05-Sep-05	Apach Network	Iris Capital, OTC -AM, Sigefi Ventures, Triginta Capital	4.0	digital music and video services

Source : Capital IQ

## M&A Transactions

Date	Target	Investors	Deal Size (\$m)	EV / Sales	EV / EBITDA	Business Description
28-Oct-10	Jiwa SAS	Digiteka SAS	na	na	na	Offers online music streaming services
19-Oct-10	Sound Around, Inc.	eMinor, Inc.	na	na	na	iPhone mobile applications for bands and musicians
01-Jul-10	JukeFly, Inc.	Sonic Solutions (NasdaqGS:SNIC)	na	na	na	Designs and implements music streaming software solutions
23-Jun-10	Melodeo, Inc.	Hewlett-Packard Company (NYSE:HPQ)	na	na	na	Mobile podcasting solutions including music and other media
19-May-10	Simplify Media	Google Inc. (NasdaqGS:GOOG)	na	na	na	Internet software that connects people to their online content such as digital music
14-Apr-10	Global Media Bank AB	PlusFourSix AB	na	na	na	Digital music bank and related content management services
31-Mar-10	Rhapsody International	Universal Music Group, Inc.	na	na	na	Provides digital music services
04-Dec-09	La La Media	Apple Inc. (NasdaqGS:AAPL)	na	na	na	Offers online full-length previews of songs
18-Nov-09	Imeem	MySpace	na	na	na	Online community for musicians, photographers, and groups
11-Sep-09	7 Digital Limited	HMV Group	12.6	na	na	Offers digital media delivery for audio and video
19-Aug-09	iLike	MySpace, Inc.	19.5	na	na	Music discovery service and music application on social networking sites
03-Jul-09	Puretracks,	Somerset Entertainment Income Fund (TSX:SOM.UN)	2.6	0.5x	na	Music download and content solution services
09-Jun-09	Online	Naxos International	na	na	na	Offers hybrid products, such as wish cards and musical compilations
25-Mar-09	24-7 Entertainment AG	Media-Saturn-Holding GmbH	na	na	na	Online and mobile distribution of digital media
25-Oct-08	Napster,	Best Buy Co. Inc. (NYSE:BBY)	137.0	0.6x	na	Interactive music services
03-Jul-08	Teevee Toons, Inc	The Orchard Enterprises Inc. (NasdaqGM:ORCD)	5.1	na	na	Digital music distribution
27-Jun-08	flatster GmbH	Next Generation Entertainment N.V.	na	na	na	Online digital music platform
30-May-08	iPeer Multimedia International Ltd.	Palmpay China (Holdings) Limited (SEHK:8047)	1.3	na	na	Online music services
05-May-08	AbsolutePunk,	Buzz Media, Inc.	na	na	na	Online music Website
14-Apr-08	Gawker Media, Idolator	Buzz Media, Inc.	na	na	na	Online music blog
30-Mar-08	Tagshine Corp.	Buzz Media, Inc.	na	na	na	Social music service company, provides on-demand music
18-Feb-08	SoundBuzz Pte. Ltd.	Motorola Inc. (NYSE:MOT)	na	na	na	Online and mobile music company
13-Feb-08	SNOCAP,	Imeem, Inc.	na	na	na	Digital licensing and copyright management services
02-Jul-07	Bugs Corp.	Gloworks Co., Ltd. (KOSDAQ034600)	16.0	na	na	Online music service provider
30-May-07	Last.fm Limited	CBS Corporation (NYSE:CBS)	280.0	na	na	Online music services
07-Dec-06	RightScale,	Brave, Inc.	na	na	na	Digital music distribution service for Pc and Mobile
16-Oct-06	Loudeye Corp	Nokia	60.0	1.3x	nm	business-to-business digital media services
30-Apr-06	Loudeye Corp, U.S. Based Services and Operations	Muze, Inc.	11.0	na	na	Wireless digital music retail and music encoding services
04-Mar-06	eMusic	GridLogic Informatics (BUSE:ECONET)	na	na	na	Music download website
01-Mar-06	Puretracks,	Bell Canada, Inc.	na	na	na	Music download and content solution services
07-Feb-06	Digital Musicworks International	Digital Music Group, Inc.	na	na	na	Digital music publishing services

Source : Capital IQ

## ANALYST PROFILES

GP Bullhound is a research centric investment bank headquartered in London with offices in San Francisco.



**Per Roman** — Per co-founded GP Bullhound in 1999. He previously worked as an investment banker for Lehman Brothers focused on technology and Internet transactions. Per also has experience from the software industry where he held various roles both in Europe and US for Autodesk, Inc. Per holds an MSc Finance from Stockholm School of Economics. Per is a regular speaker on CNBC Europe, CNN Int. and BBC World.



**Hugh Campbell** — Hugh is a co-founder of GP Bullhound. He started his career at Citibank in M&A before moving on to Goldman Sachs where he worked in Equity Research. Hugh is a frequent speaker at events and conferences including the Mobile Web 2.0 Summit, the European Leadership Forum and the Mobile Games Forum. He graduated from Pembroke College, Oxford University and holds a BSc in Physiology.



**Amanjit Dhani** — Prior to joining GP Bullhound, Amanjit worked at UBS Investment Bank in their European Communications Group covering both Media and Telecommunication customers. During her time at UBS she worked on a variety of M&A and equity market transactions. Amanjit graduated from Glasgow University with a BSc. Honours degree in Applied Mathematics and Computer Science.



**Remy Valette** — Prior to GP Bullhound, Remy worked as an M&A analyst at Societe Generale covering a number of industrial sectors. He holds a Masters in Corporate Finance from EM Lyon Business School and also a Master in Applied Physics from Paris VII University.

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