musicmetric

Digital Music Index

Issue 1 - September 2012

Introduction

Musicmetric's first Digital Music Index (DMI) is the most in-depth study ever conducted of the global digital music landscape. The DMI tracks the preferences of millions of music fans and analyses social media trends across every corner of the world.

The DMI was created to offer the music industry a reliable, accessible resource which benchmarks performance across key career events such as releases and tours. The DMI highlights how fans interact using the plethora of digital portals now available and above all, looks at where this occurs.

The DMI offers record labels, promoters, artists and all other music professionals a better understanding of their fans. It aims to stimulate a global conversation about opportunities for artists and the industry to capitalise on the trends of consuming digital music.

The DMI, along with Musicmetric's real-time online analysis, make this possible. Being informed by and basing decisions on what this data can tell us, the music industry will be better equipped to engage and more fully captivate its audience, capitalising on all digital opportunities.

Digital technology continues to bring thousands of new fans to the door of music every week. Record company revenues from digital music grew by 8 per cent globally in 2011 to an estimated

US$5.2billion.

This compares to growth of 5 per cent in 2010 and represents the first time the year-on-year growth rate has increased since IFPI started measuring digital revenues in 2004[1].

According to the IFPI, this year digital music retailers are rapidly expanding their reach globally. At the beginning of 2011, the largest international digital services were present in 23 countries. Just a year later they are present in 58 countries. In 2011, iTunes opened for business in 28 new markets, totalling more than 50 countries worldwide, including the entire European Union.

Download service 7digital announced new stores in Australia, New Zealand, Malaysia and Singapore in October 2011 and it is now available in 37 countries. Subscription services Spotify, WiMP and Deezer are also expanding fast across national borders. Spotify launched in the US during 2011 along with four European markets and now serves 12 countries. The USA also witnessed the launch of Muve Music in 2011 while Deezer opened its service in the UK in partnership with Orange, and plans to continue to expand globally in 2012.

It is no secret, however that music fans are engaging with digital music in a wide variety of ways both authorised and unauthorised. They are streaming and downloading artist content on licensed sites such as Spotify, Deezer, 7Digital and iTunes. They are engaging directly with artists on networks such as Facebook and Twitter, discovering and sharing music on social networks like SoundCloud, Last.fm, YouTube and via blogs.

The DMI data concludes that fans are engaging directly with artists via networks such as Facebook, Twitter, SoundCloud, Last.fm and YouTube and via blogsIn addition they are also sharing unlicensed content in vast amounts all over the world. As well as aggregating all key licensed portals, Musicmetric tracks BitTorrent with unrivalled accuracy to present a comprehensive view.

Introduction

There is no doubt that online technology is instrumental in the changes happening across the music industry, Musicmetric has carried out detailed research into these less visible online trends. As digital growth continues and music consumption moves online and mobile, understanding how fans are discovering, sharing, playing and engaging with music across the web becomes absolutely vital for the new music industry to thrive.

Musicmetric's first Digital Music Index is an ambitious look at the trends year on year across social networks. The DMI also offers an acute picture of file-sharing through the BitTorrent network between January and June 2012.

To create the DMI, Musicmetric processed an unprecedented amount of data and in forthcoming reports we will expand this further, working with partners to offer further insight and comparison.

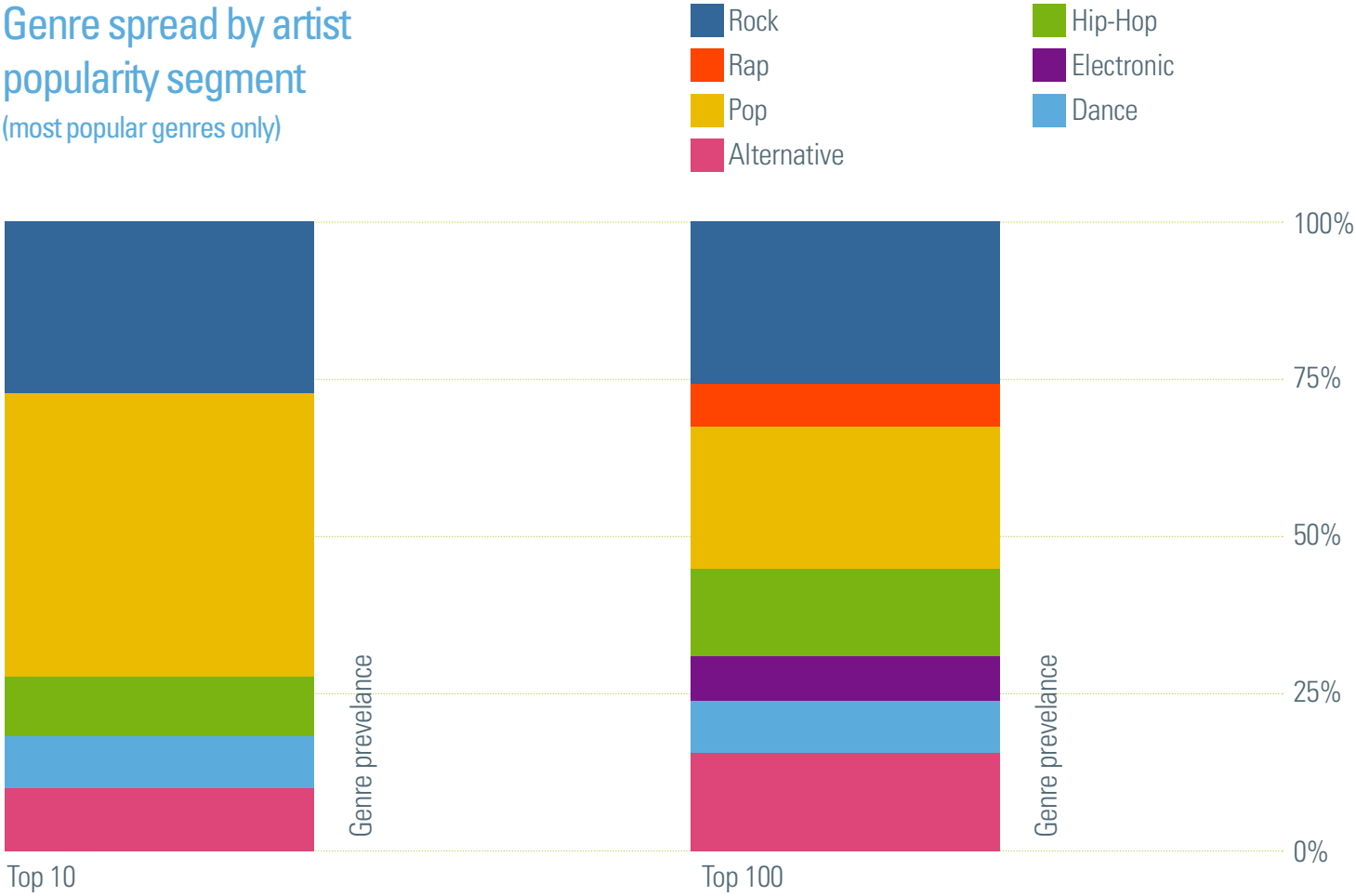
750,000

Artists are currently tracked by Musicmetric

Musicmetric tracks more than 750,000 artists within its real-time analytics service. The DMI will offer insight on the scale of music consumption - often fragmented and localised - in a wider cross section than typically presented. So to present a balanced and comprehensive overview of the market, the DMI examines artists in the following segments: top 10, then next 100, next 1000, next 10,000. Each segment is then grouped by genre. Where possible, these findings have been broken down into regional and country trends.

Genre spread by artist popularity segment

(most popular genres only)



Executive summary

The global music industry has continued to expand online and recent years have seen healthy growth in sales of digital music.

2011-2012

Executive summary

Access to legal streaming and download services grew substantially globally[3] and Musicmetric recorded clear growth of activity across all music related social networks.

For all artists, play counts are growing at a higher rate than the addition of fans. New artists represented a third of new fans added, but just a fifth of the total plays during the same period. Getting an artist heard online is fundamental to their growth and success. Social networks have become an established, low-cost alternative to traditional marketing which facilitate distribution of content and build profile internationally. The DMI identifies which artists were the best at garnering a direct impact on social networks, ie had the most plays and/or added the most fans across social network channels following album or single releases.

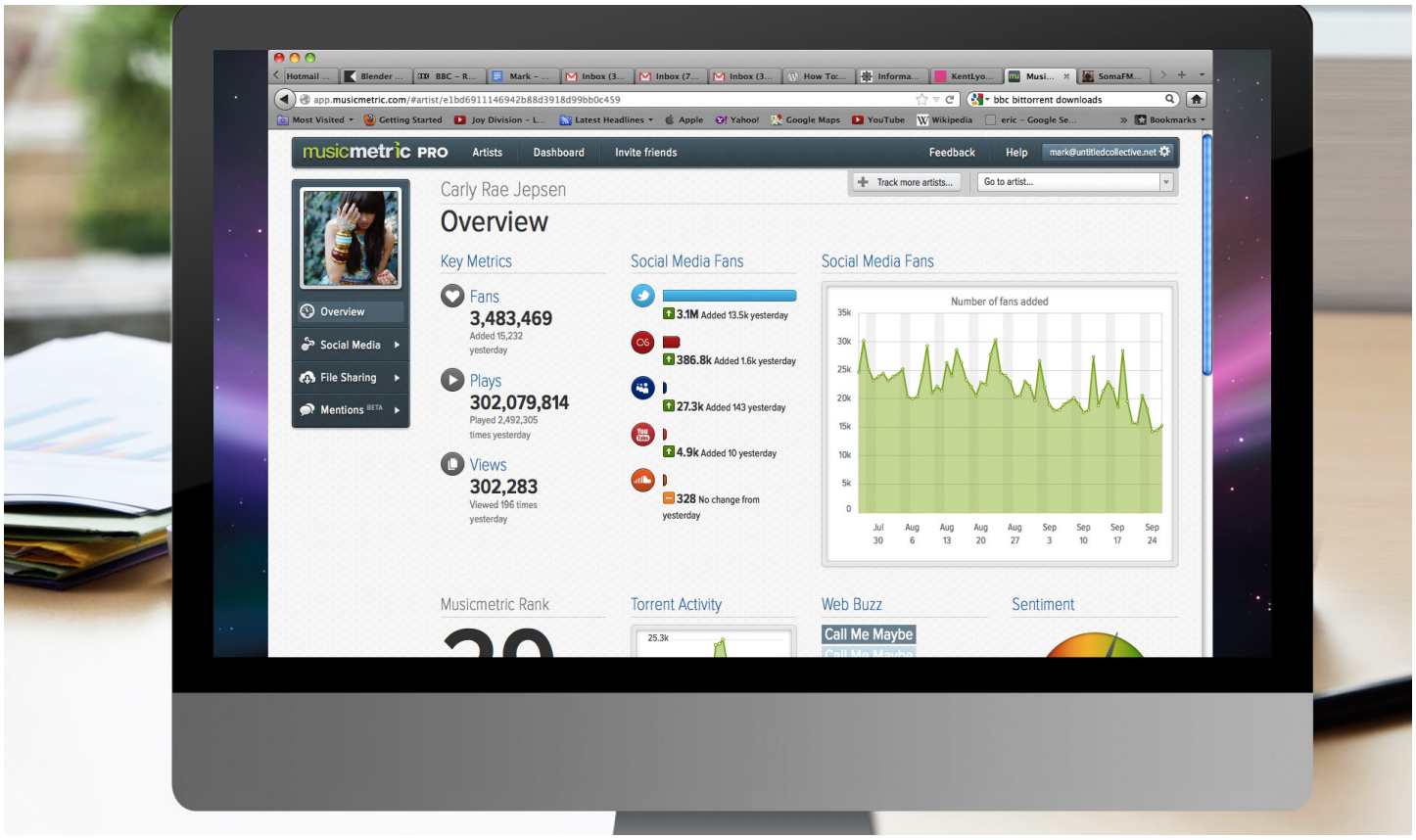
For more popular artists, singles have a far greater impact on social media channels than album releases, but the widely accepted view is that consumers of digital music continue to eschew albums for "tracks".

SoundCloud has emerged as the leading portal for new artists. Data shows SoundCloud helps new bands gain plays well before they are picked up or gaining fans anywhere else. A key factor in this will be the ease with which SoundCloud users can share content posted on it around the web.

The data gave increased evidence of SoundCloud's importance as both a powerful means to distribute music and a network where bands and fans interact. Emerging artists that had a lot of fans today across all networks were found to have had high numbers of plays on SoundCloud last year.

This indicates that artists who grow their plays on SoundCloud today are more likely to grow their fans across other social networks in the future.

Musicmetric Pro dashboard



Executive summary

The DMI also reveals interesting trends around the impact of events such as releases, gigs or TV appearances across all networks. The artists who drive new plays vary wildly to those who deliver new fans following a release. Tritonial, Tinie Tempah and Rihanna saw the greatest increase in fans following a single release, while Lady Gaga, We Are the Physics and Sean Paul generated the largest increase in plays.

The DMI also assess US TV shows featuring either an artist or their music, aired during the last year. The aim was to assess which benefited the most on social network activity. Heading the list is The Battlefront; the top three US shows which give artists the biggest impact in fans/plays are The Battlefront, NFL Films Presents and Grey's Anatomy.

The DMI index for streaming networks shows where the most plays are occurring in total and by genre. While Youtube is the clear winner in most genres, Vevo generates more plays in Country, Dance, and Pop genres. Worldwide BitTorrent trends reveal that in the first six months of 2012, the total number of music releases downloaded globally was 405 million, of which 43 million were in the UK.

Of these downloads, approximately 78% of these were albums and 22% were singles.

405 million

music releases downloaded globally

One indicator of the power of this network is how "The Cardigan" EP by Billy Van was the number one torrent downloaded in five of the top 20 countries (by volume).

This is noteworthy because, unlike the majority of releases measured here, this release was licensed for distribution via the BitTorrent network. It has become hugely popular in place of other illegal content in a quarter of the top 20 countries for downloads (list cities).

It is worth noting however, that a key factor in its successful dissemination would have been the fact that it was supplied free of charge with BitTorrent software.

Top 10 countries for all downloads in the first 6 months 2012

US	96,681,133
UK	43,263,582
ITALY	33,158,943
CANADA	23,959,924
BRAZIL	19,724,522
AUSTRALIA	19,232,252
SPAIN	10,303,633
INDIA	8,964,360
FRANCE	8,398,550
PHILIPPINES	8,380,208

Timeframe & artist segments

Timeframe & artist segments

For the purpose of this report, unless otherwise stated inline, 'now' means 26th August 2012 and 'a year ago' means 29th August 2012. For BitTorrent data the start date is December 1st 2011, except where another date is explicitly given.

Throughout this report artists are grouped into segments. These segments take two forms: order of popularity and prominent genre.

First, artists are categorized by popularity, in terms of the number of fans each artist has, across all tracked networks. All artists are then ranked and divided to make four groups as follows.

The first segment contains the top 10 artists, the next contains the following 100 (i.e. rank 11 to 110), then the next 1000 (ie. rank 111 to 1110), and the next 10,000 (ie. rank 1,111 to 11110).

These groups will be referred to in the report as, respectively, the Top Ten, the Next 100, the Middle 1000 and the Long Tail.

The second segmentation method is genre label. DMI genre labels are the top level music genres from the US iTunes Store.

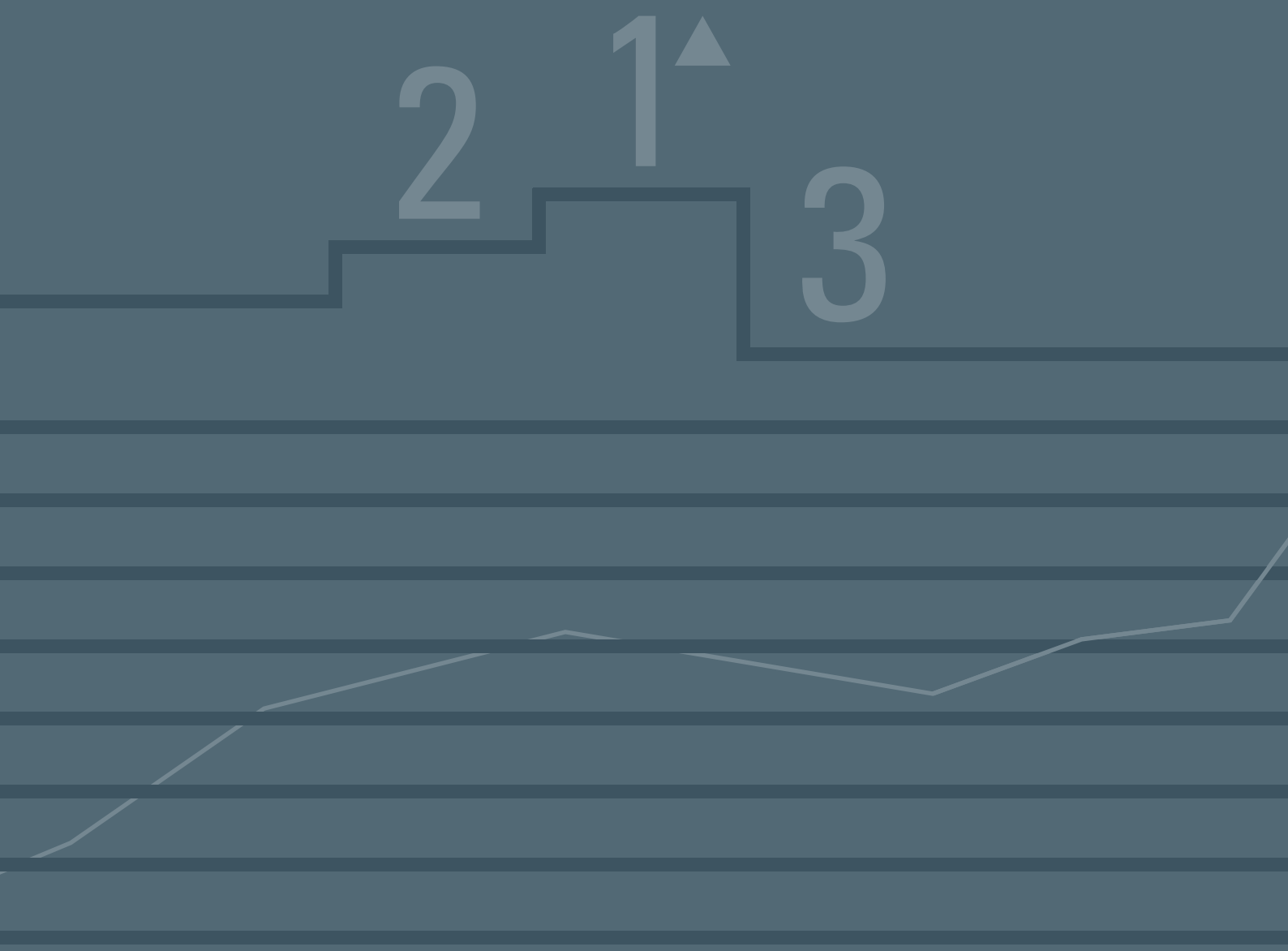
These genre labels are slightly tokenised (eg. 'R&B/Soul' becomes 'R&B' and 'Soul'), then artists are selected based on the prominence of the label as a social tag from last.fm.

Top genres per popularity segment

Genre	Top 10	Next 100	Middle 1,000	Long Tail
Pop	50%	21%	19.8%	18.9%
Rock	30%	18%	Rock, 19.6%	17.5%
Soul	20%	13%	10.9%	12.5%
Alternative	10%	11%	10.9%	10.8%
Hip-Hop	10%	7%	8.9%	8.1%

Key trends: social networks

Social networks play an important role in marketing artists. They create visibility and are trusted portals to engage and share content through.



Key trends: social networks

Maximising use of social networks is a vital part of any artist's success. The DMI analyses the subtle ways in which user profiles and music tastes affect the growth across each network.

The DMI identifies the types of artists favoured by users of different social networks; which genres naturally thrive where online; and which artists were best at generating plays or fans around their releases.

Total stats

Overall, growth was seen across all activity types in varying amounts. The DMI breaks the activity down by type in order to examine top level measurements.

In the last 12 months, 3,523,683,592 new fan adds (or follows) were observed. This comes to approximately 9.68 million new fans adds and follows per day, every day, across the year. Of these 1,002,466,990 were generated by new artists who have emerged during the this same reporting period. Looking at play counts, 135,661,029,859 have been observed, giving a daily rate of approximately 372 million, with 28,145,850,984 generated by artists who have emerged in this period. Total page views observed during the past 12 months number 9,206,453,980 with 2,159,625,083 coming from new artists.

Lastly, the DMI turns to BitTorrent, using a six month reporting period for the first half of 2012. Here the data reveals 110,594,560 unique peers in the first 6 months of 2012, approximately 3.85 million unique peers per day, with 23,865,128 of those daily unique peers participating in swarms distributing content from new artists.

Activity

Top 10	Over 12 months	Mean per day	Emerging artists	Emerging artists %
Plays	135 Billion	372 Million	28.1 Billion	20.75%
Fans	3.52 Billion	9.68 Million	1.00 Billion	28.44%
Downloads (daily unique peers)	693 Million	3.85 Million	23.8 Million	3.442%

Rank matrix

Moving deeper from these top level insights, leads to an examination of top performers in various metrics and activity types. For example, it can be noted that when ranking artists by daily play rates on various networks, the most dissimilar are Vevo and SoundCloud while the most similar are Myspace and SoundCloud (note that this doesn't take into account the total popularity of one given network over another, simply which artists are on each network, and how well they are doing in each).

At this point it is important to acknowledge that Vevo is a network featuring exclusively major label content and thus the dissimilarity between Vevo and SoundCloud, which is open to anyone to use as a way of distributing and hosting their music, is not altogether surprising.

The similarity between Myspace and SoundCloud indicates that SoundCloud appears to be taking the place of, or at least becoming synonymous with, Myspace in terms of being a platform predominantly favoured by new music artists and music fans.

To get an idea of this spread, the top five acts by current daily plays on Vevo are Justin Bieber, Nicki Minaj, Rihanna, Jennifer Lopez, and Katy Perry.

While on SoundCloud they are Two Door Cinema Club, Adventure Club, Skrillex, EDX, and DJ Bl3nd.

Fans of EDM, indie and dance music favour SoundCloud as a place to consume music. The relationship between where people consume content and where they engage with its creators is also explored. What follows are the three pairs of play sources that are most similar and least similar, by artist popularity ranking within them. These are then contrasted with the fan ranking. This provides insight into the relationship between the networks and the tastes or habits of their users.

Most similar artist rank by playcounts

1 - SoundCloud, Myspace
2 - Last.fm, Myspace
3 - Last.fm, SoundCloud

Most dissimilar artist rank by playcounts

1 - Vevo, SoundCloud
2 - Vevo, YouTube
3 - Vevo, Last.fm

This demonstrates that fans look at all three networks as good places to discover new music, and that although SoundCloud may be the newcomer and gaining significant traction, Last.fm is still a very solid place from which to discover new music. SoundCloud, Last.fm and Myspace are where consumers go in the first place to play new music, what they do after that is an interesting question.

Arguably, the features of Last.fm make it easier for fans to then discover similar artists based on what they already like, whereas SoundCloud makes it easier to embed the tracks on other websites, or to comment directly on them.

From this it is evident that accessibility of music is hugely important, and the modern gatekeepers hold a lot of power. But that there is movement across all segments where accessibility is more open and the opportunity to gain plays occurs as much outside of the network as it does within it. For example when looking at the top three global artists on YouTube (by daily play counts) today - that is right now and not over all - both first and second are Psy and Big Bang, two South Korean artists.

Neither would qualify for Vevo at this point, but they can feature themselves on YouTube and have managed to create a huge amount of interest and engagement on this network.

Key trends: social networks

Much of their ability to gain such high quantities of plays is due to the fact that YouTube links can be shared so the content can be seen outside of YouTube and the plays happening in external embeds still count overall. Third is Rihanna, which highlights how big YouTube is as a global network for fans playing the music of the most popular artists.

This process can also look at how the various social networks' ranks compare in terms of fans (sometimes called 'following' or 'subscribing' depending on the network) behaviour. It may seem obvious, but what the DMI proves is that music consumers will play first and then add themselves as a fan. There will be little incidence of consumers becoming a fan first, which again speaks to the value of cutting through the noise and building up plays. However, growing artists will demonstrate a steady fan growth as well as high play count.

When ranking artists by the number of daily new fans the most similar are Last.fm and SoundCloud, the least similar are Twitter and SoundCloud. The top five artist from each of these three networks follows (with Facebook for good measure).

The Top 5 artists on Twitter get 230,000 new Twitter followers per day whereas the Top 5 artists on Facebook get 122,000 new Facebook fans per day.

Top five artists

New daily fans on Last.fm

1 - Of Monsters and Men: 1,631
2 - Carly Rae Jepsen: 1,467
3 - The xx: 1,378
4 - Maroon 5: 1,288
5 - Lana Del Rey: 1,277

New daily fans on SoundCloud

1 - Skrillex: 929
2 - Major Lazer: 347
3 - Sian Sanderson: 303
4 - Bebel Gilberto: 298
5 - Passion Pit: 291

New daily fans on Twitter

1 - Rihanna: 54,388
2 - Katy Perry: 53,134
3 - Justin Bieber: 48,098
4 - Taylor Swift: 38,363
5 - Lady Gaga: 36,956

New daily fans on Facebook

1 - Pitbull: 28,502
2 - Shakira: 24,210
3 - Taylor Swift: 23,643
4 - Adele: 23,091
5 - Skrillex: 22,618

Key trends: social networks

As above, when ranking the top three most similar and dissimilar pairs, but this time by daily new fans, rather than daily plays the results are as follows:

Most similar artist rank by daily new fans

1 - SoundCloud, Last.fm
2 - SoundCloud, YouTube
3 - YouTube, Last.fm

Here the data shows there is a lot of overlapping taste in the users of the above networks - people likely to become fans on YouTube or Last.fm have similar music taste.

Unlike the data for top plays, Myspace drops out significantly around fan adds. This will be partly due to the fact that fans need an account with Myspace in order to be a fan of an artist. Subequently, Myspace does not rank as a top network for fans.

Consumers seem to use Myspace to check out music but they are not committed enough to the network to create an account there in order to become a fan - they will engage with the artist in their preferred networks.

Most dissimilar artist rank by daily new fans

1 - SoundCloud, Twitter
2 - YouTube, Twitter
3 - Last.fm, Twitter

This data suggests that Twitter may really be very different in the way that users engage with it compared to the other networks. Twitter allows for a very different type of interaction: it can be incredibly direct, which leads to a perception of it having greater authenticity "in the moment" and therefore being a more effective way to engage fans. The emphasis with Twitter however, is more around engaging with individuals rather than music. While this may also be true with Facebook on some levels, Twitter is the network that actually get used more in this way, as it is perceived as the best way to interact directly with an artist.

The DMI also supports the idea that on Facebook the trend of consumers is to interact more frequently with "real" friends and connections than with those less well known personally.

750,000

Artists are currently tracked by Musicmetric

Growth rate for top 10 artists

20,000

Fewer daily new fans on Facebook compared to a year ago

11,000

More daily new fans on Twitter compared to a year ago

Social networks ranked by segment

Fans

Network	A year ago: Top 10	A year ago: Next 100	A year ago: Middle 1000	A year ago: Long Tail	Now: Top 10	Now: Next 100	Now: Middle 1000	Now: Long Tail
Twitter	2	2	2	2	1	2	2	2
Facebook	1	1	1	1	2	1	1	1
Myspace	5	5	5	5	3	3	4	6
Youtube	4	4	4	4	4	5	3	4
Last.fm	3	3	3	3	5	4	3	3
Soundcloud	6	6	6	6	6	6	6	5

Plays

Network	A year ago: Top 10	A year ago: Next 100	A year ago: Middle 1000	A year ago: Long Tail	Now: Top 10	Now: Next 100	Now: Middle 1000	Now: Long Tail
Vevo	4	4	5	5	1	1	1	2
Youtube	1	1	1	1	2	2	2	1
Myspace	3	3	3	3	3	4	3	5
Last.fm	2	2	2	2	4	3	4	3
Soundcloud	5	5	4	4	5	5	5	4

Growth matrix

Artist growth occurs naturally in waves, and it can be difficult to spot which ones demonstrate the fastest growth overall as well as by social network. The DMI charts the acceleration of artists overall (by both fans and plays) and ranks the top 20 below.

For all these metrics, the rate of daily change is calculated. This is a reasonable proxy for the acceleration rate of an artist for a given activity or metric. Below, the data reveals the artists with the top acceleration of plays, then fans, and how they currently rank in various networks.

Plays acceleration rate top 10

Artist name	Daily plays on Soundcloud	Daily plays on YouTube	Daily plays across all networks
Wild Nothing	1115	28565	1435
2Pac	18998	2500	2616
Belinda	25980	26852	199
The Darkness	24469	869	768
Timomatic	14093	2247	1623
The Vines	27577	28206	1188
Tomboxe	5882	578	1114
Transit	12948	3922	4772
MILLIONYOUNG	22231	23672	15074
Dum Dum Girls	10085	11334	24446

Fan acceleration rate top 10

Artist name	New fans from Facebook	New fans from Soundcloud	Total fans of all time
Little Mix	18286	19854	1186
The Wellington International Ukulele Orchestra	19363	29984	16931
The Paper Jets	13867	3137	24843
Cabal	26524	21271	11806
Five Finger Death Punch	262	17778	453
Alesha	1316	2728	1916
Shaggy	337	24411	769
Cosculluela	252	8133	1426
Reik	63	4098	318
Jessie Ware	809	156	5862

Genre & social network trends

Activity can also be broken down into segments, both by popularity and by genre. The DMI popularity segments are in four orders of magnitude increment (ie. Top 10, Next 100, Middle 1,000, Long Tail) broken out from the overall rank based on the number of fans across all social networks.

Growth rate for top 10 artists

20,000

Fewer daily new fans on Facebook compared to a year ago

11,000

More daily new fans on Twitter compared to a year ago

Similarly, the data reveals patterns among artists grouped by genre. These genres are taken from the set of top level music genres in the US iTunes Store. When looking at which networks streaming play occurs on, YouTube is the most popular across most genres, however, more plays occur via Vevo for Country, Dance, and Pop genres. Additional, while SoundCloud makes up only a small portion of overall plays, its impact is felt much more strongly across a few particular genres, Dance, Jazz, R&B, and Reggae, perhaps reflecting the network's early focus on Urban and Electronic music.

Key trends: social networks

This chart highlights for the first time which social networks record the fan activity for various genres.

By combining genre and popularity segments, the genres that rank highest in each of the popularity segments is revealed. The following table shows the five most common genres in each segment and the percentage of artists in that genre (NB: an artist can show up in multiple genres)

The five most common genres in each segment

Top 10	Next 100	Middle 1,000	Long Tail
Pop, 50%	Rock, 21%	Pop, 19.8%	Rock, 18.9%
Rock, 30%	Pop, 18%	Rock, 19.6%	Electronic, 17.5%
Soul, 20%	Alternative, 13%	Alternative, 10.9%	Pop, 12.5%
Alternative, 10%	Hip-Hop, 11%	Hip-Hop, 10.9%	Alternative, 10.8%
Hip-Hop, 10%	Dance, 7%	Rap, 8.9%	Hip-Hop, 8.1%

Life stage milestones by release

The following table shows the expected value for number of plays and fans on social media for specific milestone points in an artists career (e.g. First Single, Second Single, etc.).

Here we can see that, not surprisingly, both second album and single release happen after an artist has accumulated more plays and fans. What is perhaps a bit unexpected is that singles are released by artists with more fans and more plays on average than those who released albums. This is almost certainly an artifact of bias. Generally, lower ranking artists simply don't release singles as commercial units. A consumer can buy a single song off an album, but the single as commercial release appears to predispose to a larger fanbase, suggesting a different sort of artist.

Source	1st album	2nd album	1st single	2nd single
Fans this year	152,432	188,431	361,044	707,516
Fans last year	77,398	82,599	211,720	379,296
Plays this year	5,960,897	6,898,042	14,297,351	21,630,740
Plays last year	1,778,495	2,822,137	6,710,520	9,663,213

Impact of events & releases

Release scheduling and the marketing and promotional activity around a tour or release launch is a key focus in any artist's career.

Impact of events & releases

It is important to understand the cycle of single and album releases during the year, and even more important to understand performance against established benchmarks. Every release launch is working to achieve maximum impact, Musicmetric's data reveals what that is on average for any segment of artist.

The data shows which artists played gigs that significantly generated fans or plays across social networks and also looks at data around US broadcast of TV shows to identify which had an impact on social networks.

This chapter identifies which artists were the best at creating interest through their social networks from an album or single release . The data reveals for the first time, what kind of impact on average can be expected on plays and fans across each of the social networks.

Event trends

This section provides analyses over all music-related events. The table shows the combined number of events for all artists in the Top 10, Next 100, and Middle 1000 artists for each year going back to 2007.

	2007-08	2008-09	2009-10	2010-11	2011-12
Album releases	1,192	1,303	1,165	1,171	910
Single releases	600	612	647	1,016	709
Gigs	12,006	11,811	14,386	16,079	16,115
TV appearances	1,134	870	1,140	1,422	1,337

This indicates a decline in the number of album releases, but an increase in singles, which might account for the apparent market trend towards singles. It also shows a steady increase in numbers of gigs with relatively stable but modest increase in number of US TV show appearances.

Trends

Numbers of releases per month over last year

Numbers of TV appearances per month over last year

Impact of events & releases

Numbers of gigs per month over last year

The above charts show numbers of releases, TV appearances and gigs of all tracked artists over the last year. These charts reveal that the numbers of events peak at the end of October and beginning of November. In the summer, multiple peaks spread from March to June. In all categories, the number of events are at their lowest in the end of December during the holiday season.

When assessing the impact of album or single releases on social network activity, it is clear that the more popular artists created a higher impact through singles than albums.

Again, this highlights the current consumer trend towards a singles market.

The types of artists whose album release create a massive leap in plays online and artists whose album release create a leap in fans online are actually quite different.

We define the impact by comparing activity in the week immediately prior to release with the week following release. For example, Tritonal received 12.42x more fans during the week after launch of the single compared to the week before.

Top 3 single impact releases

Top 3 **single releases** with biggest impact in **fans**

Rank		Date
Tritonal	12.42x	21/05/2012
Tinie Tempah	10.11x	11/02/2011
Rihanna	7.78x	11/04/2011

Top 3 **single releases** with biggest impact in **plays**

Rank		Date
Hopsin	16.57x	17/7/2012
A$AP Rocky	41.24x	27/4/2012
M.I.A	35.60x	3/2/2012

Impact of events & releases

Top 3 albums impact releases

Top 3 **albums releases** with biggest impact in **fans**

Rank		Date
Paul Baloche	69.79x	13/03/2012
The Black Eyed Peas	12.84x	29/11/2010
Peter Andre	5.82x	01/02/2010

Top 3 **albums releases** with biggest impact in **plays**

Rank		Date
Depedro	30.27x	01/10/2010
Super Junior	13.76x	03/08/2011
The Invisible	11.75x	11/06/2012

The artists who created the most social media impact through a release vary considerably with artists whose releases drove downloads through BitTorrent.

Singles

Top 3 **single releases** with biggest impact on **BitTorrent**

Rank	Text	Date
Loreen	6.57x	28/05/2012
Minus the Bear	1.37x	31/07/2012
Travis Barker	1.31x	01/04/2012

Average impact by event type

Event impact is computed by the change in one week after the event subtracted by the change in the week before the event. Core definitions for the following tables:

Mean abs change:

The average absolute change between one week after the event and one week before the event.

Mean rel change:

The percentage change between one week after the event and one week before the event (e.g. 11% increase).

Abs change stdev:

The Standard Deviation of the above (variation from the average).

Rel change stdev:

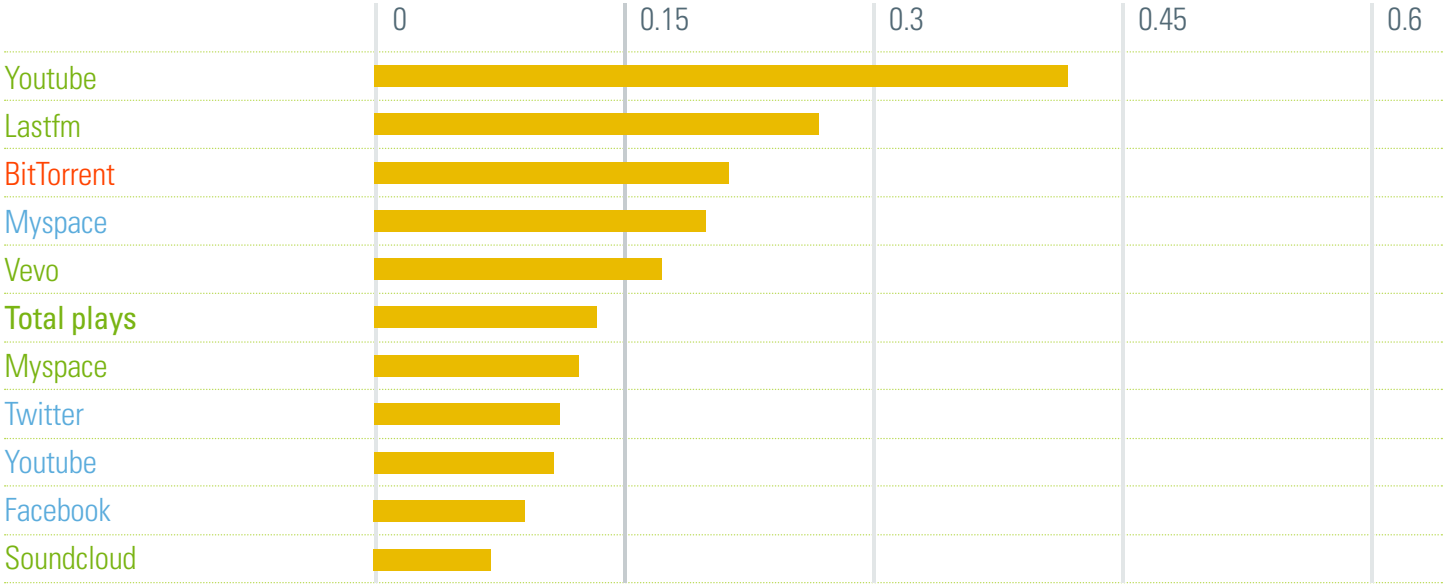
The Standard Deviation of the above (variation from the average).

Album release social metric impact by artists in Top 10

Fans
Plays
BitTorrent downloads

Metric	Average Abs. Change	Abs. Change Stdev	Mean Rel. Change	Rel. Change Stdev
Facebook	1,495	59,913	0.10	0.43
Twitter	1,149	6,764	0.12	0.37
Myspace	1,059	15,785	0.21	2.43
Youtube	67	1,655	0.11	0.34
Youtube	109,280	1,214,029	0.39	5.79
Myspace	3,390	112,166	0.13	0.54
Lastfm	38,780	141,218	0.27	0.78
SoundCloud	7291	55,924	0.08	0.59
Vevo	165,692	1,215,869	0.18	0.59
BitTorrent	4,922	13,662	0.22	2.53

Mean relative change by album releases



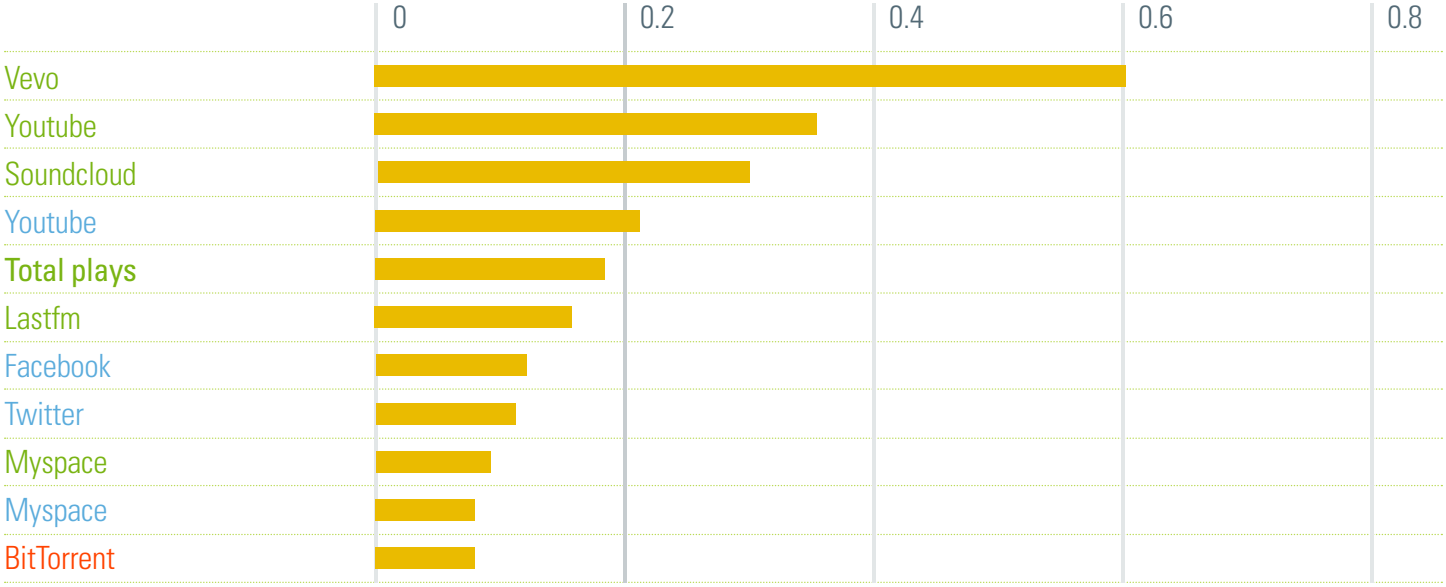
Impact of events & releases

Single release social metric impact by artists in Top 10

Fans
Plays
BitTorrent downloads

Metric	Average Abs. Change	Abs. Change Stdev	Mean Rel. Change	Rel. Change Stdev
Facebook	520.05	71009.26	0.11	0.55
Twitter	890.10	8786.19	0.10	0.54
Myspace	2.14	1667.71	0.05	0.47
Youtube	352.27	3430.39	0.21	1.03
Soundcloud	13.23	277.19	0.02	0.23
Youtube	68742.12	926100.25	0.37	2.29
Myspace	229.91	86640.53	0.07	0.42
Lastfm	24328.50	187016.78	0.16	0.58
SoundCloud	4165.72	47757.13	0.30	1.60
Vevo	171686.45	1992503.83	0.60	3.39
BitTorrent	504.13	14236.23	0.05	0.23

Impact by single releases

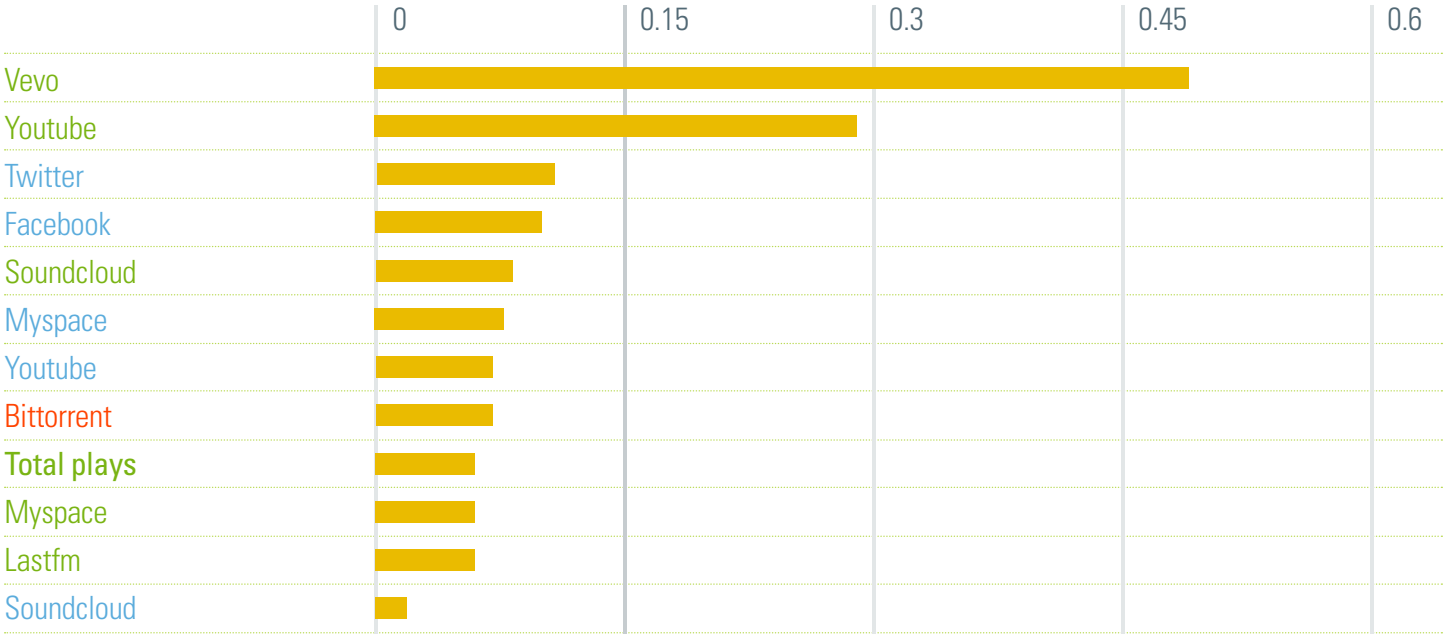


TV event social metric impact by artists in Top 10, Next 100 and Middle 1000

Fans
Plays
BitTorrent downloads

Metric	Average Abs. Change	Abs. Change Stdev	Mean Rel. Change	Rel. Change Stdev
Facebook	965.21	60623.86	0.10	0.63
Twitter	985.82	13126.90	0.11	0.58
Myspace	-13.26	3781.18	0.07	0.40
Youtube	-13.24	3106.16	0.06	0.51
Soundcloud	19.64	249.18	0.02	0.20
Youtube	39891.44	687182.45	0.29	3.97
Myspace	-745.22	112104.19	0.05	0.61
Lastfm	-2084.19	83514.40	0.05	0.36
SoundCloud	-2769.72	27692.34	0.08	0.55
Vevo	30439.15	1113085.35	0.49	5.21
BitTorrent	1050.30	13162.13	0.06	0.32

Mean relative change by TV appearances



Peer-to-peer

Users of BitTorrent provide a wealth of information around geographic location and interests – simply by participating in file-sharing.

P2P

However Musicmetric does not track or retain any personal information about any users whatsoever. All data is anonymous and its value comes through understanding trends and locations.

The DMI shows the network is growing and that attempts to reduce it through regulation and legislation do not appear to be effective even in the short term. While Musicmetric does not in any way condone the unlicensed sharing of content, the trail it leaves behind shows BitTorrent's popularity is not entirely the result of unlicensed access to content but also reflects the potential for distribution opportunities signalled by an increased presence of authorised content. Content shared across the network illustrates artists and management companies using BitTorrent to experiment with avenues of revenue generation.

The P2P data is characterised by its richness of detail. It provides an insight into regional demand for artists and genres across the globe, and it is also the most accurate way to judge the geographic spread of an artist's fans, where they are growing the fastest and what is becoming more popular in the world.

The DMI analysis hints at how the industry might monetise files either directly or through live and licensing. What follows is an investigation into global BitTorrent users, focusing specifically on digital music files.

110,594,560

unique users were seen for the first 6 months

The DMI analysis begins by examining activity on peer-to-peer networks using the BitTorrent protocol to distribute music. For the six months to the end of June 2012, a total of 110,594,560 unique users were seen, with 215 different nations and territories having at least 100 users observed. Participation of course varied highly; at one end, with over 18 million unique users in the USA, while at the other end, with just over 1,300 unique users, Liechtenstein.

Around the world, 404,931,976 distinct downloads were observed over the reporting period. Of these, some 14.2 million are attached to the Top 20 most popular releases.

Of the official releases being file traded on BitTorrent;

78% were albums

22% were singles

This shows a contrast to the singles based sales market.

Top 20 releases

The chart of the Top 20 global releases and the number of downloads for each is shown below:

*Bittorrent.com featured content

Artist	Release	Type	Global downloads
Rihanna	Talk That Talk	Album	1,228,313
Billy Van	The Cardigan	EP*	1,017,502
Adele	21	Album	990,046
Gotye	Making Mirrors	Album	903,603
Drake	Take Care	Mixtape	860,472
Jay-Z & Kanye West	Watch The Throne	Album	766,938
Gotye	Somebody That I Used to Know	Single	683,123
Chris Brown	F.A.M.E	Album	662,549
The Black Keys	El Camino	Album	649,641
LMFAO	Sorry For Party Rocking	Album	645,979
Pitbull	On The Floor	Single	632,644
Drake	The Motto	Single	632,340
Lil Wayne	The Motto	Single	632,340
LMFAO	Party Rock Anthem	Single	630,290
Ed Sheeran	"+ (Plus)"	Album	608,037
Jessie J	Who You Are	Album	583,169
Pretty Lights	Discography	Discography	561,236
David Guetta	Where Dem Girls At	Single	555,235

Billy Van's The Cardigan EP stands out on the chart. This release was part of the 'BitTorrent featured content' program and was marketed and promoted as available via BitTorrent, and its distribution via BitTorrent was licensed by the rights holders. Further, consumers are able to download and redistribute this release regardless of any locale specific measures designed to block Torrent indexing websites (eg. The Pirate Bay ban in the UK).

Billy Van's The Cardigan EP stands at 2nd in the global torrent chart, above artists such as Adele, Drake and Gotye with over

1 million downloads this year.

Regional insights

In addition to overall analysis, many regionally specific pieces of analysis have been performed based on user location, at the city and country level. The top 20 countries, in terms of unique users, can be seen in the following table

Countries	Unique Torrent-IP Pairs	Population	Per-capita
United States	96,681,133	313,232,044	0.3087
United Kingdom	43,263,582	62,698,362	0.6900
Italy	33,158,943	61,016,804	0.5434
Canada	23,959,924	34,030,586	0.7041
Brazil	19,724,522	194,037,075	0.1017
Australia	19,232,252	21,766,711	0.8836
Spain	10,303,633	46,754,784	0.2204
India	8,964,360	1,189,172,906	0.0075
France	8,398,550	65,102,719	0.1290
Philippines	8,380,208	101,833,938	0.0823
Mexico	7,522,056	115,017,631	0.0654
Netherlands	6,671,624	16,847,007	0.3960
Portugal	5,607,910	10,760,305	0.5212
Poland	5,052,277	38,441,588	0.1314
Greece	4,933,478	10,760,136	0.4585
Hungary	4,460,855	97,976,062	0.0455
Chile	4,213,851	16,888,760	0.2495
Romania	4,155,863	21,904,551	0.1897
Sweden	4,083,279	9,088,728	0.4493
Belgium	3,878,173	10,431,477	0.3718

This chart has a strong overlap with economic size with nine of the top 20 countries being direct members of the G20 and a further nine being represented by the EU seat on the G20. A total of 12 EU member countries feature on the Top 20. But countries in the Top 20 come from five continents, showing use of BitTorrent is by no means limited to the developed world.

Based on 'per-capita' values rather than 'absolute' volumes, Australia and Ireland were the top countries per when normalised by population. For every person in Australia there are 0.8 release downloads. Interestingly, the United States, whilst being number 1 in the absolute chart does not feature in the Top 10 after adjusting for population.

Regional trends

Overall, the BitTorrent network is showing very small decline in daily activity during the first half of 2012, driven by the fact that the US global share of the 'BitTorrent market' is declining over that period, as is that of the UK (the top two countries). That being said, absolute activity is still very high with over 110,000,000 unique users during the first half of 2012.

110,000,000

unique users observed during the first half of 2012

Top 10 countries by growth of global BitTorrent market share

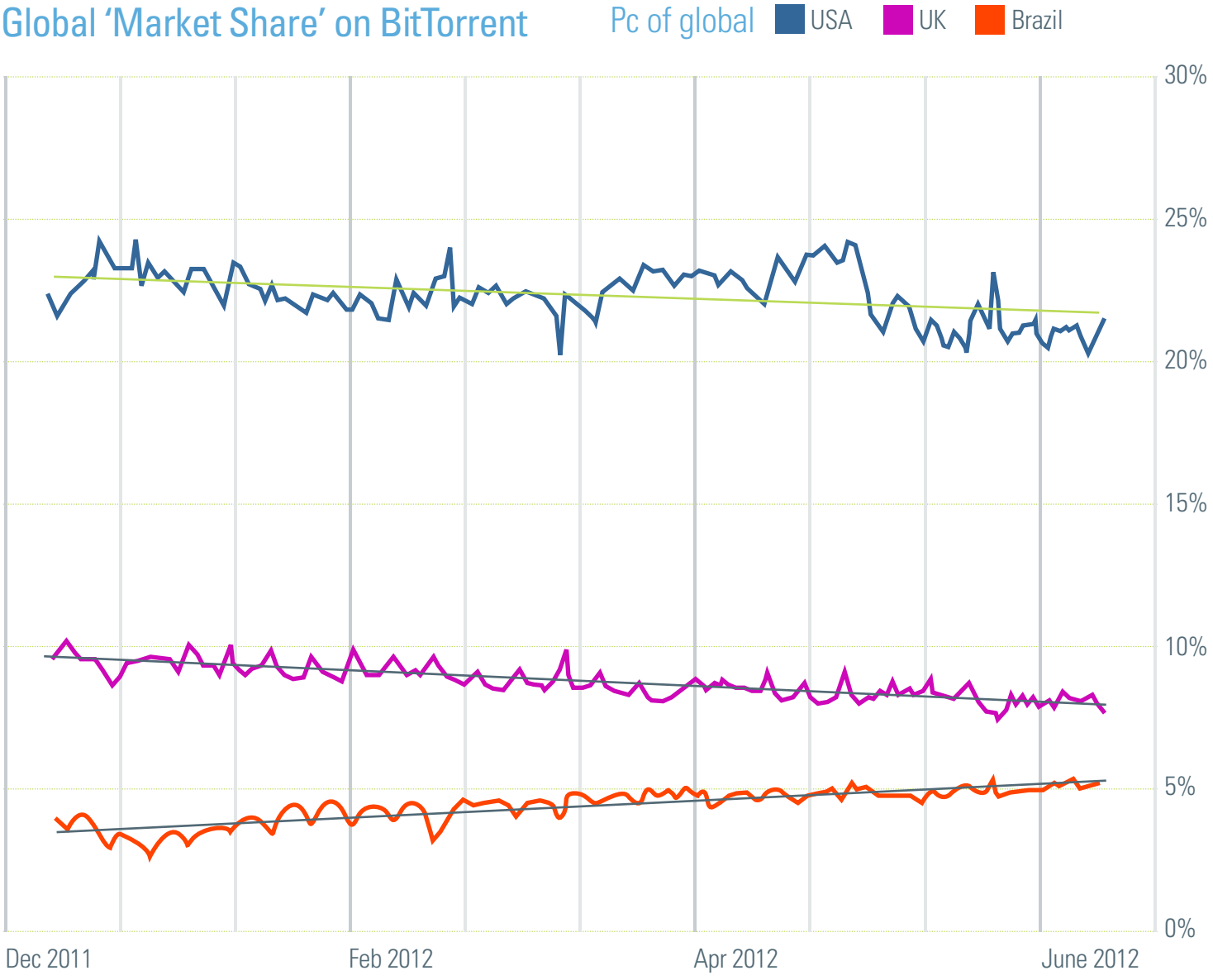
Based on growth of global market share by country, the fastest growing territories on the BitTorrent network are:

1 - Brazil
2 - Estonia
3 - Russia
4 - Argentina
5 - France (indicates Spotify availability)
6 - Chile
7 - Mexico
8 - Ukraine
9 - Pakistan
10 - Columbia

Latin and South American emerging markets feature prominently in the Top 10 countries based on growth.

Plotting the market share of the top two countries (US and UK) against that of the fastest growing country (Brazil) shows that the US is clearly holding it's position as the number 1 market for BitTorrent users, but if the trends continue Brazil may pass the UK in the next year to become the second biggest market based on BitTorrent users.

Global 'Market Share' on BitTorrent



Countries ranked by rate of shrinkage of global BitTorrent market share

1 - United Kingdom
2 - United States
3 - Canada
4 - Italy
5 - Greece
6 - Hungary
7 - Indonesia
8 - Sweden
9 - Netherlands
10 - Norway

Dark green indicates Spotify enabled markets

It is interesting to note that of the Top 10 fastest growing markets on BitTorrent, only France has access to the music streaming service Spotify, whereas in the top 10 fastest shrinking countries, Spotify is available in 5 the markets (including the Top 2).

This implies, (although does not prove causation) that the proliferation of free to access or low cost streaming services is making a dent piracy rates in the countries where those services are available.

Conclusions

The first ever DMI has processed an unprecented amount of data and this will continue to expand in coming editions as Musicmetic continues to expand its reach.

Conclusions

Overall numbers show that Rock is the most prevalent genre across the segments with 19 of artists falling into that genre and Electronic is the second with 16%. Overall Pop is just above Alternative with 13.2% and 10.8% respectively. Hip Hop is the next with 8.3%. In contrast to the distribution of genres for all artists, Pop is overwhelmingly prominent in the Top 10 at 50%.

In terms of where fans of a particular genre reside online, Facebook is strong for all genres with all but Jazz artists having more than 40% of their overall fan base on Facebook. Twitter also has a high share of fans for all genres, showing a minimum of 20% share of fans apart from for Classical, Blues, Reggae and Metal artists.

The online sphere for new music is certainly very healthy, across social networks emerging artists account for a fifth of all plays over the last year and over a quarter of fans added over the last year.

Social media growth

Of the artists that have shown the most growth in the last year,equal or higher numbers came from SoundCloud compared to Facebook..Out of the top 4 artists with the most growth in plays in the last year, Soundcloud plays are also mostly equal or greater than Youtube plays.

Twitter is now surpassing Facebook in terms of its daily growth rate in new fans for Top 10 artists (11,000 more per day for Twitter against 22,000 fewer per day for Facebook compared to last year). Vevo is surpassing Youtube in terms of plays, compared to a year ago when it ranked fourth for plays, where it is now top. These trends are most visible across the Top 10 and Next 100 artist segments.

Event impact

Single releases have the most impact across social networks of any event, with Vevo seeing the greatest change: an average 60% increase in weekly plays after the event compared to the week before. This is followed by TV appearances, which again have the most significant effect across Vevo: an average 49% increase in weekly plays.

When assessing the impact across social networks from album releases, YouTube Plays (39% increase), Last.fm Plays (27% increase) and BitTorrent downloads (22% increase) prove to be most sensitive. Myspace ranks significantly above Twitter and Facebook for increased fan number following an album release (21% for Myspace compared with 12% Twitter and 10% for Facebook). Appearances on TV have a considerable impact on plays across social networks, mainly on YouTube (29% increase) and Vevo (49% increase), while Twitter and Facebook see the most change for fans with 11% and 10% increase respectively.

There is a steady increase in gigs over the last three years (14,386 in 2009 to 16,155 in 2011), and TV appearances are steady, with 1,337 last year. There has been a decline in album releases throughout the year with 910 compared to 1,171 last year.

Peer-to-peer

BitTorrent trends show albums make up 78% of official releases beingshared with singles numbering just 22%. This will be due to the fact that procuring an album is only marginally more time consuming than finding a single, leading downloaders to take as much as they can.

Looking at the Top 20 releases, the majority of singles being file traded were club hits, with the exception of Gotye which was predominantly a huge radio hit, particularly in the USA.

It is significant that the artist Pretty Lights is in the Top 20 of artists being file traded, because like the No. 2 artist Billy Van, he had consented to the distribution of his content via the BitTorrent protocol. The Pretty Lights material was initially offered free with BitTorrent software and, as a result, was downloaded 6,000,000 times according to BitTorrent, which said this resulted in 100,000 opt-in email sign-ups for the artist's website.

Future editions of the DMI will further explore the success of artists promoted in this fashion to offer insight based on wider data samples as the artists mature. One straight-forward conclusion is that legislative and regulatory attempts to reduce file-sharing have not been effective. The UK might be top of the countries ranked by shrinkage, but that downward trend was happening so far this year and there was no significant change in levels after British ISPs were forced to block access to the Pirate Bay website in April 2012. Similarly, France boasts the fifth fastest growth in file sharing by volume and in the last year France became the first country in Europe to introduce graduated response legislation.

The "Creation and Internet" law established a new government agency, Hadopi, which sends notices to internet subscribers whose accounts have been used to infringe copyright. To date there have been more than 700,000 notices sent, which IFPI estimates to have reached around 10 per cent of P2P users in France.

In any case, the DMI clearly indicates this has not yet affected piracy levels in the country overall.

Significantly, the data shows that nine out of the top 10 countries showing the fastest growth in file sharing numbers also do not have access to streaming Spotify. And that of the 10 countries ranked by rate of shrinkage, five of them have access to Spotify. While no direct causality can be drawn, it is an important consideration when looking at ways to increase revenue from licensed content.

Conclusions

Closing remarks

The first Digital Music Index has offered a broad overview of the online landscape. The aim was to shine a light on many trends that, until now, had no firm data to support anecdotal observations.

Analysing user and portal trends in every major market has ensured the DMI is comprehensive and all encompassing, and Musicmetric will continue to expand and refine it over forthcoming editions.

Musicmetric believes that understanding the drivers of consumer behavior will allow the music industry to grow and prosper. This is the first time that an analysis has been attempted across such a broad spectrum of data and it underlines just how much of a digital-based industry music has now become. Fan interaction using web-based portals will continue to define the success of artists, meaning that understanding this area will continue to grow in importance.

The increasing volume of channels and traffic across existing networks – including the BitTorrent sphere – show that numbers of fans sharing and engaging with content online continues to grow and this data allows artists to examine their progress against the overall trends.

File-sharing is rife right across the globe, and the value of the DMI lies in outlining geographical spreads of fans, showing where demand exists and for what artists. It paints a uniquely accurate picture of where BitTorrent users are based and what trends correlate with downloading.

The innaugral DMI has revealed about what networks are preferred by fans of different genres and the kinds of artists and genres that gain traction from releases, gigs and TV.

While the most direct media interpretation of the DMI will doubtlessly major on file-sharing, the music industry should focus on the opportunities – not try and quantify perceived losses as a result of piracy. For many, obtaining music online – whether through legal or unlicensed methods – is similar to trying out records at a music store. The vast opportunities that digital music offer the industry create the kind of global shop window that would have been inconceivable just 15 years ago.

The challenge for the industry is to stay ahead of consumer demand in order to deliver them the content they want exactly when and how they want it. The DMI aims to be the first port of call for anyone who wishes to attain this insight and will work with the industry to ensure that where the consumer goes our research will follow.

For further details and data on this issue of the DMI please contact:

dmi@musicmetric.com

All references: IFPI Digital Music Report 2012
http://www.ifpi.org/content/library/DMR2012.pdf

Image credits: Photographer - Brendan Lally