MAGICNUMBERS

How can data and analytics really help the music industry?





A SPECIAL INSIGHT SESSION REPORT BY MUSIC:) ally FOR THE BPI AND THE ENTERTAINMENT RETAILERS ASSOCIATION

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Forewords

Geoff Taylor, chief executive of the BPI, and Kim Bayley, chief executive of ERA, on why big-data and analytics matter for labels, artists and digital service providers alike

Forewords



Kim Bayley, CEO
Entertainment Retailers Association

Much has been written about how digital music services including Spotify, Amazon, Apple, Deezer and Google have helped return a music industry whose decline once seemed terminal into growth again.

But while digital services are proving their worth in terms of revenue, their greatest contribution may yet turn out to be the vast quantities of data they generate about music fans' preferences and listening habits.

Not only does this data allow them to hone their services, optimise playlists and generate insights which could lead to new, value-added offerings, it is also potentially game-changing for the supply side of the business, taking some guesswork out of what has always been a hit and miss business.

Artists can get deep insight into their music – why is that kind of track so often skipped in favour of another? – as well as practical insight into tour itineraries ("We seem to have a lot of fans in Lithuania: why don't we play there?"). For labels there is the potential to optimise and potentially reduce marketing costs with granular information on what is working – and what is not.

Data has always been an important element of what retailers bring to the music business – the Official Charts Company is built on retail data after all – but digital services take it to another level. We are delighted to sponsor alongside the BPI this important seminar outlining the value and uses of the data our members generate



Geoff Taylor, CEOBPI and BRIT Awards

What powers the UK's exceptional success in producing global hit records? First of all, of course, the natural talent, open-mindedness and originality of our songwriters, producers and performers. But creating consistent commercial success also means relentless investment in A&R, an appetite for risk-taking informed by years of experience and judgement, and innovative, expert marketing and promotion.

Increasingly, data, in all its forms – spanning metadata to big data – is playing a key role in shaping this process. As streaming comes to dominate music consumption, data is becoming a progressively more important part of the process of producing and marketing music and, arguably, one of the determinants of a song's popularity.

In understanding data, we are learning how fans are consuming songs and albums via playlists and within the wider music ecosystem: how they discover and search for them; what influences their choices; and how they share their favourite songs and advocate to others. In turn, this gives us the scope to develop intelligent tools to know and grow our audience, and, ultimately, to optimise the reach and appeal of a song. Even the process of composing songs to engage the broadest possible audience is being shaped in some cases by data, maximising the chances of chart success.

If data is a new coalface for the music industry, then the key is to know where the richest seams are and how to extract maximum value from them, so that they fuel greater engagement with fans and greater success for our future business.

Executive Summary



Streaming services have helped the recorded-music industry bounce back to growth. Now the data that they are generating can help music companies fine-tune their strategies to build on that comeback

Executive Summary

Music streaming services like Spotify, Apple Music and Amazon have returned the recorded music industry to growth, YouTube has more than one billion people a month watching music videos and social networks like Facebook and Twitter have become important marketing channels for labels and artists.

All these platforms are also huge generators of data for labels, distributors and managers. But they are also the spur for a new challenge for our industry: how best to process, understand and act on the billions of lines of data that they are providing.

This goes hand-in-hand with another key trend: the shift from measuring sales of music to measuring consumption of music and acting on the lessons of that measurement to help services maximise their user base and engagement, and give artists the best chance of reaching, retaining and growing their audiences.

The use of data in an industry which has often relied on 'gut instinct' created some initial tensions, despite the historical importance of chart data within the industry. In 2018, the

emphasis is on marrying the two disciplines: the intuition of creative humans and the analysis of data to back up their instincts, or to help them understand when they may need to tweak their strategies.

Data is also a new source of costs for labels, services and distributors, as they decide whether to build their own data-processing and analysis tools in-house, or use those of third-party technology providers. Some use a hybrid of the two.

There is a widespread understanding that a firehose of data from streaming services and social networks is useless unless it can be interpreted correctly, and used to make key creative and business decisions.

There is already a hierarchy of digital service providers (DSPs) in terms of how much investment and effort labels are able to put into bespoke tools and teams to analyse their data. Services like Spotify, Apple Music and Deezer are the audio-streaming focus for the data teams at most labels, while YouTube is key on the video side.

The data provided by these DSPs also necessitates collaboration for different industry players: for example between labels and artist managers, when labels are granted access to the data that artists and management have already been receiving directly from the streaming services.

Labels are putting this data to work on a day-by-day basis in the service of their artists. It may be as simple as identifying when a track is taking off so that marketing resources can be shifted instantly to take advantage; through to using 'data storytelling' in the pitching process to get on to the key programmed playlists at Spotify and Apple Music. Evidence that an artist is building traction on those platforms and elsewhere can help to build a convincing case.

From proving that a 'heritage' act is already reaching young fans via streaming ahead of a tour, to identifying spikes in a certain territory that may indicate potential for collaborating with local artists, data can have an impact on the businesses as well as the creative projects of musicians. However, labels understand that the data must be used to inform the creative process, rather than to drive it.

In the year of the Cambridge Analytica data-privacy controversy, labels, music companies and streaming services are well aware of their responsibilities around the data they collect, store and use on fans.

Compliance with the recently-introduced GDPR regulations in Europe has been a priority for the industry, and although labels accept that this compliance has, for example, reduced the size of many mailing lists for artists, they hope that the fans who remain are the most engaged – and so qualitatively, this is no bad thing.

Finally, the challenges and opportunities around data are sparking plenty of activity in the startup sector, with technology companies keen to help labels and music companies make sense of their data pipelines, or simply to ensure that their own data is clean and fit-for-purpose.

Ten of them – Asaii, Auddly, Chartmetric, Instrumental, Linkfire, Seated, Seeqnc, Sodatone, Soundcharts and WARM – are profiled in this report.

Eamonn Forde, Music Ally report author on behalf of the BPI and ERA

Data Comes of Age



There is no shortage of data on how music is being discovered, consumed and shared. The trick is how to make the best use of that data to provide actionable insights for labels

Big Data: Big Deal?

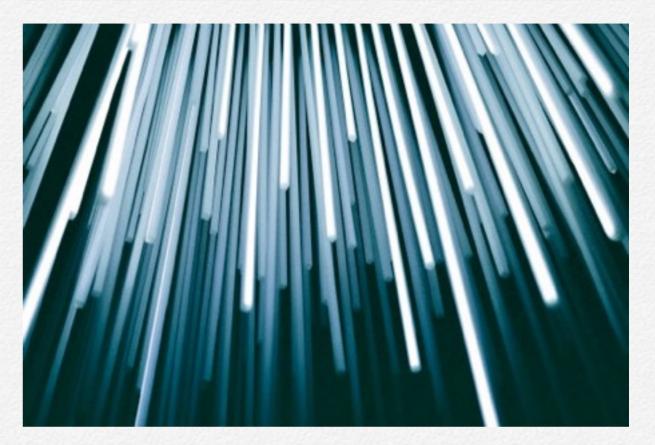
Data has been variously described as the new oil, the new gold, the new black, the new soil and even as the new bacon: "It sizzles; it's crispy..."

That may be a metaphor too far, but data is arguably the defining currency of the modern, digital music business, particularly in the streaming era.

Labels, publishers, managers and artists are enjoying a boom in access to data on how music is being discovered, consumed and shared. But they are also grappling with the challenge of processing, understanding and acting on that same data.

Two or more decades ago, the record business ran mainly on sales data – sales data that arrived long after the fact.

Marketing money was spent, promotional efforts were undertaken and there was a hazy presumption that all of that somehow contributed to the eventual chart placing of a record and its overall sales.



In a digital world, not only can consumer behaviour be tracked in real time, but the focus has shifted away from measuring just sales, a visible financial transaction, to also measuring consumption and engagement. This is not just an economic shift; it's a philosophical shift, albeit one where sales are still a part of analysis – alongside consumption (and other metrics like social-media data) rather than replaced by it.

"That move from measuring sales to measuring consumption is what really lies behind this enlightening new age of data," says one senior UK label source. "Unquestionably the challenge becomes about synthesising it, making sense of it and then turning that sense into action."

He readily accepts, however, that this is still a nascent skill in all media companies, let alone music labels and other companies in our industry.

"Every day we're striving to make our data services better and better, and it's a challenge we're relishing. The data is coming from different sources and from different angles. Increasingly it becomes the job of my department and many others to find a useful way to bring it all together,"

he says.

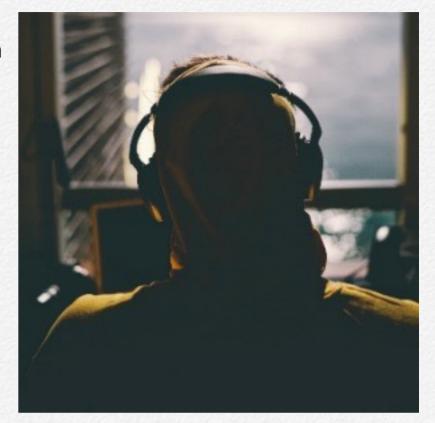
"There is no way on earth that a decision-making executive at the sharp end of the company has the hours in the day to labour over all come from experienced gut feeling and intention and 70% is probably coming from data

of this material. The task is about how we boil that down into something that makes sense for somebody quickly and, just as importantly, is sufficiently contextualised to inspire or invoke some kind of action."

In the past, phrases like "golden ears" and "gut instinct" defined not just how labels signed and developed artists, but how they marketed them. The arrival of data at scale brought new opportunities, but also tensions. Some labels talk of an almost 'church and state' internal division between the 'all gut' and 'all data' camps. However, recent years have seen these two sides move towards one another.

"If you go back maybe six or seven years ago, there was a split in the way that people could do marketing," says Callum Caulfield, Head of Marketing at Atlantic Records UK.

"They could do it on gut, taste and tone. There was



even a trend where you could maybe afford to ignore data, arguing that you were not about numbers and that you were actually about creativity and art. Then there were the people who were about data and analysis that would lead to educated decisions. But now one side cannot ignore the other. Where it works best is where creativity and data are aligned in decision making."

Caulfield estimates that today "30% of decisions will come from experienced gut feeling and intention and 70% is probably coming from data", while stressing that data must be used to reaffirm what you already know, or offer a guiding principle as

to where you want to go. Data, ultimately, can refine creativity, but it should never replace it."

"Our company motto is 'Makes You Feel' but if you constantly look at the data, then you might miss that intention," says Caulfield. "At Atlantic, we approach data like the weather. We are always mindful of it and always aware of its impact, but we don't necessarily dictate every decision by what that is saying to us."

Navigating The Ocean Of Data

To use an alternative metaphor: if data is an ocean, then music companies need to build (or at least rent) bigger boats. This is a process that is already underway. While insights teams within major labels may be able to commission bespoke consumer research, all other data is created equal.

That is a blessing in one sense: all the digital service providers (DSPs) essentially offer labels and distributors the same access to data on streams and listeners. However, it's also a curse if the data from these DSPs is being pumped out in raw form, leaving labels to make sense of billions of lines of data.

Hence the need to invest in technology and in-house staff to process and decipher the data, or working with external data-processing companies. Either way, this adds a new cost-pressure to the labels bottom line.

Simon Wheeler, director of strategy at Beggars Group in the UK, says that his company built its own solutions internally rather than use an off-the-shelf one, after finding that templated services did not slot neatly in to the company's systems. There was a cost, here, but the label deemed it an important investment in the future.

"Around five years ago, we decided to invest and prepare ourselves for the world that was coming which we knew was full of data," says Wheeler. "We

not-insubstantial
investment here in terms
of people as well as the
technology

started from scratch then. We weren't taking a legacy system where we had to try and build it into the new world. We didn't have to worry if other people could use it or not; it's just exactly what we wanted to do."

Doing this required hiring a data architect to plan the technology, and senior-level staff to help them build it. "There is a not-insubstantial investment here in terms of people as well as the technology and resources to be able to do this. We realise that is not accessible to everyone in the marketplace; but we are at a level of scale where it just about makes sense for us to do this as long as we can keep it pretty lean and be smart about how we do things," says Wheeler.

Even for smaller labels who can't afford this, there are similar decisions to be made over investment and restructuring. Indie label Anjunabeats, for example, uses technology from analytics firm Entertainment Intelligence to do much of its heavy lifting, data-wise. However, the company has also been lucky in having a member of its accounting team who was so fascinated by big data, they taught them self how to use analytics and visualisation platform Tableau, in anticipation for future tasks.

"You can use it to create very simple visualisations of very complex datasets," says Anjunabeats' marketing director Duncan Byrne. "Everybody is pulling in so much information from so many different sources. What everyone is desperately craving is a way to corral that data into one platform or a format that is easily digestible for the whole team. Tableau has been a game changer in that sense."

At another independent firm, PIAS, there is a hybrid strategy of building technology in-house, while also using off-the-shelf data tools. "We have a custom dashboard that is specific to Spotify. It's to look at the actual source of streams coming from individual playlists and from which territories," says Justin Barker, group director of streaming strategy at PIAS.

For everything outside of music (notably social media), PIAS uses a third-party service as it only requires analysis around headline numbers from these assorted platforms, rather than something more granular.

"For social media data, in my role I only really need to look at top-line stats - initially to flag them, but then I might drill down into them afterwards," says Barker, "But for that I often use Chartmetric. It pulls in so much information from everywhere -Facebook.



Duncan Byrne of Anjunabeats

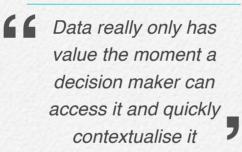
Instagram, Twitter, YouTube, SoundCloud and so on. With the Facebook demographics, you can see where your likes and engagement are coming from. It has total views for YouTube and breaks them down by territory. It's just a really rich source of everything."

For major labels, building dedicated data teams has been a core task for several years now, as the volumes of data they have to process for their millions-strong catalogues rocketed.

For example, Lucy Ball is director of analytics at Sony Music UK, and her current role and team were put in place two years ago, growing out of the insights team at the company. While the insights team was primarily focused on understanding consumers, the rise of digital necessitated the establishment of a dedicated analytics department.

"It is about how we use and understand that data internally," she says of her team's function within the company. "We get

data from all our partners and we think it is valuable to try and understand that data. What we have done over the years is to try and disseminate that data in the best possible way so it gets into all parts of the business so that



people can make the most informed decisions they can with the data that is available. We have a variety of ways that we [disseminate] that internally. Some of that exists in a dashboard and some of that exists in other ways. It is really dependent on the need within the industry."

It is a broadly similar story at Universal Music. Jack Fryer, senior director of strategic planning at Universal Music UK, also acknowledges the increasing importance of understanding and optimising the use of data, and doing so in a timely manner.

"Our job is to create a sharp connection between the data analytics expert and a senior label executive who needs to make an immediate decision on something. Data really only has value the moment a decision maker can access it and quickly contextualise it



Lucy Ball of Sony Music

alongside their real-world knowledge of a particular project," he says.

The same challenges are facing music distributors, who are adopting similar responses: investing in data-processing teams and software to ensure they are at the cutting-edge of developments, and thus continue to attract and retain label clients. This also fleshes out the distributors' pitch: that they are investing so that labels do not have to themselves.

"From our side of things, dealing with lots of raw data isn't really a problem," says Chris Manning, senior director of international operations & business development at The Orchard. "It is not a headache as such like it might be for a small label on their own. Essentially that is our job. We have a big technology team, we have a big product team and we have a big data team. So dealing with all of the different variances isn't so much of a problem."

The DSPs Data Hierarchy

Labels and distributors are having to process rapidly-increasing volumes of data from an expanding number of sources. However, there is a hierarchy emerging where certain DSPs have to be processed in bespoke ways, simply because of the scale of the data that they produce, and how much they contribute to labels' total revenue.

In fact, it is clear that three services are particularly dominant in their impact on labels' data-processing strategies: Spotify, Apple Music and YouTube.

The first two are responsible for the lion's share of audio-streaming data that labels have to process, while on the video side, YouTube is utterly dominant. Labels and distributors are this investing most time and effort in their activities around the data from these three services.

While Spotify has its Spotify For Artists tool open to artists and managers – and Apple Music is slowly rolling out its own version – labels themselves have to be granted access by the artists in question or their management.



Chris Manning of The Orchard

Unlike the raw data

labels get from these two services, the artist-centric data comes with its own dashboard and is already visualised within, making processing of that data much more straightforward, while eliminating the need to build a dedicated dashboard or rely on a third-party service to interrogate it.

There is increasingly a data-exchange process happening here, where labels and management have access to slightly different datasets from the biggest DSPs but see the importance of pooling information and resources when it benefits both sides.

"One of the most valuable things now is to feed it back to the managers of artists and to try and give them an oversight on what is happening on their campaigns on a sensibly regular basis and in a sensible level of detail so that they can understand it," says Wheeler, of how Beggars Group exchanges data with managers of acts across its large roster.

"A campaign needs to be understood by everyone working on it across the company, including the manager and artist. That is

one of the most important things that we are doing. Yes, it is helping us understand how the business is progressing in terms of business intelligence. But I think we are all still trying to really draw out what are the valuable

A campaign needs to be understood by everyone working on it across the company, including the manager and artist

and actionable insights out of all of this data. We are finding our way through it, as I guess everyone else is. It is still early days."

It is the sharing of data and the growing need for transparency around it that is underpinning next-generation music companies who see openness, rather than obfuscation, as their USP in the marketplace.

"We have [the AWAL Artist Portal] in house and we also give that as an app to every artist and client on AWAL," says Aaron Bogucki, the company's VP of digital marketing. "The artists can see all of their streaming analytics, the audience analytics, the regions, the playlists they're getting featured on, the playlists they're being removed from and so on. We have a metric looking at streams per listener so they can see how engaging and sticky their tracks are within the services."

This, he says, is currently being overhauled and later in the year a new version will be made available that offers even greater insights for those using it.

"The iteration we have on the platform at the moment is great, but the new version we are launching later this year is going to go even more granular," Bogucki says.

"You will be able to see who your listeners are in local areas. Right now you can see per country what your listenership is, how they are engaging and where they are discovering things as well as how they are behaving when they find your music. We are going to be able to get even more granular. That is really exciting."

As noted earlier in this report, PIAS has a bespoke dashboard just for Spotify data and it, along with Apple Music, are the processing priorities for all labels and distributors offering data analysis services baked into their label deals.

Data from other services will be important in certain contexts, but the results of the data from the three dominant services – Apple Music, Spotify and YouTube – are where most of the efforts are being focused.

But just having access to an API is, in and of itself, not necessarily the end of the story.

"We get access to raw data from some of the DSPs, but not many to be honest – because it is quite a sophisticated undertaking to do that," says Wheeler.

"There are two sets of data here. There is the flash data: the daily or weekly non-financial data; and then you get the financial reports. You have got to be able to cross over from one to the other and understand where one finishes at the other begins as well as what it means. There aren't that many useful APIs out there, to be brutally honest."

Despite the pre-eminence of a handful of services in terms of the volume of data they deliver, there is an ongoing issue for the industry for how these data sources sit in distinct silos. How can a label join the dots between something they're seeing in Spotify's data with what's happening on other platforms, for example Facebook or YouTube.

While some UK management companies are building teams to better understand how to map different datasets from different services on top of each other to trace connections and correlations, this is – for now, at least – less of a burning issue for labels.

"We are not trying to do all of that. We are not trying to boil the ocean at this stage. We are really focused on what our commercial



Simon Wheeler of Beggars Group

partners are telling us – and we are trying to do that part of it," says Wheeler.

"We are obviously looking at social media data and all sorts of other things – but that is done on a much more ad hoc basis. We are not trying to overlay all of that stuff at this point in time."

It is unsurprising that the larger labels are the ones who are making the most aggressive moves to better understand these silos and how they relate to each other. "It is no good having the data compartmentalised and siloed," says one source. "The datasets have to speak to each other. The data has to connect and synchronise somewhere. That is where the data science efforts will be. What data at scale is amazing at is the what, who, when, how much and how often. It is less good at why. The 'why' question for us as a creative company still becomes the most important question."

Data Translators In Action

There are two key tasks for the data teams charged with collecting and processing the growing amounts of data that labels and distributors have access to. The first is navigating the tension between the quantity of that data, and its quality.

"With all the data in the world, what is most important is that we are able to make actionable decisions off the back of that," says Ball of her role in Sony.

"To me it is not necessarily about the volume of the data – it's the decisions that can be influenced within the company that we can take from the data. It is just making sure we are looking in the data in the most appropriate way so that we are getting the relevant insights."

The second task is sharing data within the company – but doing so in understandable and actionable ways that senior executives and the different departments can put into practice.

"The true space race here is around who can make the information available and usable – and for it to make sense," says one label executive. "It almost becomes a question of user experience. For the decision makers on the front line, ultimately a data dashboard has to be frictionless, seamless and super user-friendly."

The ultimate end goal is having an internal dashboard that is self-serve so that anyone in any department in the company can quickly and easily access it and have total clarity on what is

being presented to them. For now, however, data teams – or those at third-party analytics companies – have to provide a support network around data translation.

The true space race here is around who can make the information available and usable – and for it to make sense

"On the one-hand, there's a scenario where executives can freely 'self-serve' around this data from some kind of dashboard," says the executive.

"This, of course, can be a powerful enabler – almost democratising the information for everyone in an organisation to see and use. On the other, there are moments when an executive might seek something deeper or more granular. I think this is where the true data specialists can deliver that extra value on top of the dashboard-style model."

Labels Putting Data To Work

Having data is one thing; being able to put it into action is another thing entirely. For this report, we spoke to label executives and marketing heads to ask them for examples of where data guided their decision-making and also how it translated into business strategies and marketing efforts.

"It is a constant thing," says Barker of how data is put to work at PIAS. "I cannot think of an artist campaign I have worked on that I haven't used data and analytics. You can set up custom reports that tell you when something is reacting. It tells you when you have viral chart placements and playlist additions."

He adds, "I often use it as a means of differentiating between artists. You can see that the heat around one act is happening in one place and we will cross-reference it against what is happening off-platform."

A common theme for music companies is how data is being used in storytelling, feeding directly into the narrative arc of marketing and promotional campaigns.

"We need to have someone who is a data storyteller," says Bogucki on where the focus is now moving. "Someone who can make sense of this but who can also be passionate in a marketing sense about it." Barker backs this up, explaining how the data from DSPs can be looped back to those services in order to secure key marketing angles such as playlist placement.

"A lot of my use cases for data is in B2B storytelling," he says. "We are aware that DSPs



Justin Barker of PIAS

wield a huge amount of power editorially and we need to get them onboard for our artists. So we need to tell the most compelling story that goes along with the music in order to secure placements. It is like a constant dialogue."

He gives an example of this in action. "We had a meeting recently about one artist who has seen an enormous amount of their streams and new followers come from South America," he explains.

"Now we are talking about potentially reworking some of those songs to feature a local artist from that region or maybe get a



AWAL's analysis fuelled the latest Kooks campaign

remix from someone in that region. That is with a view to securing more [DSP] editorial support further down the line."

This notion of data opening up international opportunities for labels is something that AWAL is also seeing – and looking to recalibrate campaigns around. Ahead of the upcoming album by The Kooks, 'Let's Go Sunshine', the band were touring South America earlier in the year.

AWAL ran listener analysis on the band's catalogue and in South America it disproved presumptions that they were a heritage act simply playing to the same audiences they played to back in 2006 with the release of their debut album. AWAL overlaid social media data on this and found their biggest location globally for fans was Mexico City and they were reaching a much younger audience in Latin markets.

"The fans are also highly engaged socially and so around the tour we worked with local teams on the ground to put together little fan events around the shows but also to find South American and Latin American influencers who we had seen engaging with the band," says Bogucki.

"Our international promotions teams found these people on the ground and put together experiences for them. That amplified them with that fanbase in that market. We let South America lead with the engagement strategy. That was fairly new for us and also very successful."

For Anjunabeats, one of the biggest uses of streaming data is as a way to broker introductions to key third-party playlist curators in electronic music on Spotify.

"We have been very good at proactively looking at that and then reaching out to the curators who run them to see if we could potentially do some swaps with them," says Byrne.



Honne's strategy was influenced by data

"We could put music from their label on our playlists or even give them tickets to shows. It's about reaching out to them and making them feel they are in the loop with our label output."

Everyone is naturally cautious about leaning too

heavily on the data and having that become a proxy for creative thinking. But, if used well, it can help acts transition into a new musical area rather than paint them into a corner.

Caulfield gives the example of Honne on Atlantic Records.

Their debut album, 'Warm On A Cold Night', was released in
July 2016 but the act wanted to change musical direction ahead
of their second album, due for release this August.

"They had a bridging track from the first album which was a totally new avenue that they went down musically," he says.

"It was a total departure from the first album and it was exactly what the band wanted to do and exactly how they wanted to express themselves moving forward. The audience just completely rejected it. Every metric of everything that we saw [backed that up]. They rejected the new look and play counts were a third of where the tracks were at this point in the previous campaign. Rather than sitting down with the band and telling them they could only write songs that sounded like the first album, it was about taking the data that was afforded to us by this test and thinking about how we could use it."

He continues, "We did not want them to be creatively stifled by data, but we told them they had to be respectful of the data that was coming back. So we created a two-pronged approach for the new campaign where every song that they put out that was going in a new direction they would do a new song paired with it that was more reflective of things that they have been known for previously."

"Rather than just completely disregarding data or being completely owned by it, we decided to be respectful of what was being told to us and how we could move forward from that with the audience insights and analytics that were available to us."

GDPR And The New Speed Bumps

With the new rules around General Data Protection Regulation (GDPR) having come into effect in Europe on 25th May, this has had a major impact on many companies – including music ones – who hold and use consumer data. For example, the data used for 'remarketing' campaigns on the web.

Labels have been planning the move into GDPR compliance for a long time but they differ somewhat in terms of what they feel

That is what we are telling artists: it is about quality rather than quantity in so many situations

the immediate aftermath has been.

Sony has a dedicated team handling this issue, and it therefore sits outside of the analytics department. At

Universal there is a dedicated taskforce with the company who are in charge of GDPR compliance, working with all other departments to ensure they are following the rules.

Companies like AWAL believe it is still too early to say what impact it is going to have in the medium or long term. According to Aaron Bogucki, "You are going to lose some fans over time, I think," he suggests of the short-term effects. "That feels like it is the way it is going to go. But the fans that you do have in your

remarketing pools hopefully will be opting in to be engaged with."

So, labels are aware that the new privacy regulations may mean there may be less fans on the mailing lists for their artists, for example. But they are encouraged by the sense that there will be a



Aaron Bogucki of AWAL

qualitative increase, because the fans who are still signed up will be more engaged and willing to respond.

"Although it doesn't feel great to lose mailing list followers or remarketing audiences in any way, you are lying to yourself if you think that all of these people are engaging with you – because they are not," says Bogucki.

"That is what we are telling artists. It is about quality rather than quantity in so many situations. We are complying with all of the data privacy rules when it comes to remarketing data. The onus is back on the marketers and the artist to create an engaging experience so that those people still want to be there."

This is something that Byrne echoes at Anjunabeats. "We lost a lot but not as much as some other people, put it that way," he says of the falloff in the numbers on the company's mailing lists processed via MailChimp.

"We lost enough to go, 'Ooof!' – but I am not stressed as we will be able to get those numbers back sooner rather than later. We have rearranged our whole mailing list. All our mailing lists are merged into one company-wide mailing list across the label and our core management acts. Anyone signing up from now on is presented with a GDPR-compliant form no matter where in the world they are."

Byrne firmly believes the onus is now on music companies and artists to give fans a reason to want to sign up to their mailing lists, and thus to know that they will be more open to the marketing messages that they are being sent.

Metadata's Growing Pains

It is a commonly-voiced concern in the digital media sector that nothing will work properly if the metadata is wrong or incomplete. This goes way beyond just matching a sound recording to a publisher (or set of publishers) as the current lack of standard codes and tagging systems that works across all content and all DSPs is the hole in the data's hull here.

Bad metadata going in equals poor results taken out. For a lot of classical music in particular, metadata is still an unsolved issue as far as the DSPs are concerned, with so many elements – composer, conductor, orchestra, soloist – competing to be the lead category as well as other issues such as variations in spelling and operas being broken into distinct movement and tagged accordingly.

But for everyone the next major metadata challenge will be around voice. The focus to date has been heavily centred around mood or era which generally work well but which are reliant on the services' editors to create fitting playlists, with lyrical databases also helping users locate tracks when they might only remember key phrases rather than the artist or title.

Certain band names (like The The, A, or names containing symbols such as dollar signs) could continue to cause problems for voice-activated speakers, but they may be the exceptions to the rule as smart speakers get even smarter and machine learning starts to plug the gaps.

For now, however, we are in a holding pattern with regards to robust metadata. It may not be the most glamorous part of the music business but, in a digital age, without it everything else falls apart.

What's Next For Data And Analytics?

Labels have their hands full tackling the current challenges around data and analytics, but they are also trying to look forward and gauge what the future trends in this area will be, and how they can plan accordingly.

Artificial intelligence is a common theme, in terms of how Al

Just because you have got loads of data, it doesn't mean that you always have to follow it slavishly

could help companies to interrogate data, as well as forecast business models, marketing plans and strategic decisions. However, labels are for now declining to be drawn on what their specific plans are to make use of AI – likely because they are

still assessing the technologies, and the startups that might be able to help them.

It's been clear for some time how AI technologies like machine-learning are playing a crucial role for the streaming services in how they analyse listeners' habits and musical preferences, and then serve up recommendations in response. Spotify's acquisition of US firm The Echo Nest in 2014, for example, led directly to much of its work since on personalisation, with playlists such as Discover Weekly and Release Radar tuned to each individual user of the service, based on large-scale data-crunching.

Other interviewees had more near-term wish lists, particularly in regards to what the DSPs could do. PIAS' Barker, for example, would like to see the streaming services provide greater and more precise data around playlists.

"It would be quite useful to see a bit more granularity in the sources of streams and where they are coming in terms of playlists specifically," he says. "Spotify clearly has a lot of data that it just uses internally – and that is their prerogative. But we don't get skip-rate data or the saves-to-collection that come as a result of a playlist feature, for example."

Another source, speaking off the record, adds: "Some companies have heavy-duty systems that predict what skip rates might be based across all of the songs on the playlist; but that is a hard computational thing to do. If you are not a tech company or a major with those sorts of budgets, it is difficult to get that sort of information on your own. Even then, I would not want to guess it."

Multiple sources concurred that labels and distributors are somewhat at the mercy of the DSPs, who can decide to switch off access to certain datasets provided through their APIs with very little notice. If this happens, the music companies will have to accept it, and look for ways to work around it – although the positive view is that there is also potential for collaboration between labels and DSPs on improving these tools.

Ultimately, the lesson here is that data is important in guiding decisions and pointing out new opportunities; but seeing it as a replacement for the creative thinking that has always underpinned music companies is the first step on the road to ruin.

"We have to hold onto creative leadership," argues one label executive. "Just because you have got loads of data, it doesn't mean that you always have to follow it slavishly. We are fed by data, but not necessarily led by it. That difference is important for any creative company.

DSP Dashboards

Spotify, Apple Music and YouTube are three of the key dashboards providing music companies and artists with valuable data

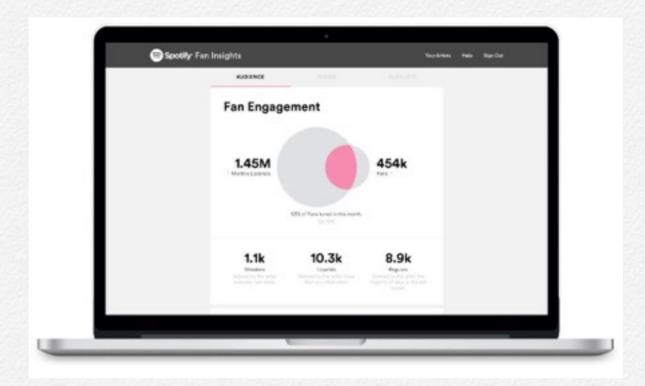
The Big Three

Spotify For Artists

Spotify has been the go-to DSP data dashboard since its launch. Recently though, with new players entering the space, like Apple Music, Spotify's analytics dashboard has been put under scrutiny. Spotify for Artists still remains strong in many of its core value offerings, such as playlisting data.

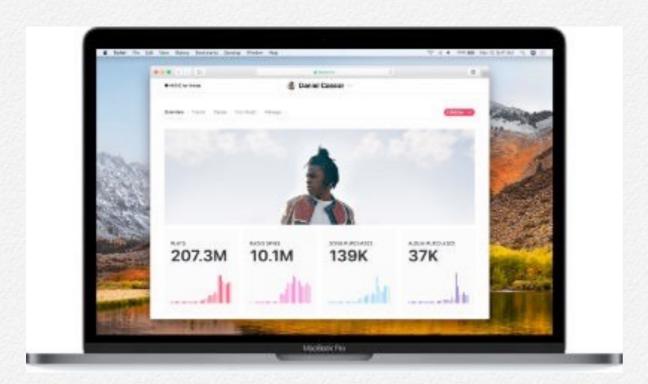
The information you can access by looking into Spotify for Artists mainly revolves around streams, where you can see the evolution of streams for one artist, and can compare these to other artists too. Other interesting data points include information about followers (again, assessing the evolution of followers), listeners (demographics etc.) and sources of streams. This is where playlisting data comes in, still remaining Spotify for Artists' biggest value.

From Spotify you can see the numbers of listeners per playlist that your track has been put on, as well as the number of



streams this playlist has generated for your tracks. Spotify or Artists also informs on the playlist type, sorting them into personalised, editorial and listener playlists. Spotify for Artists also gives artist control over their artist page — including the ability to update the profile image, biography, artist's pick, photos, and social links.

The tool also has a mobile app (something which Apple Music does not yet offer) and real time data around listeners and first week streaming numbers for new releases.



Apple Music For Artists

Apple launched its Apple Music For Artists dashboard in beta in January 2018, and initial reactions have been positive: particularly regarding the depth of data that users can access from the streaming service.

For example, its 'heatmaps' are already impacting teams and how they are working on campaigns on a regional and international level. The granular level of detail on location is seen as being particularly beneficial where users are able to zoom in on a map to get a more detailed breakdown.

Another popular feature is the so-called milestone feature which informs the user when a track or artist is going to pass a certain

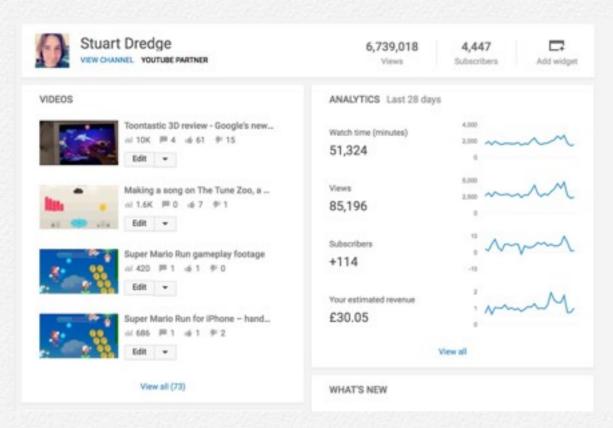
streaming number so they can plan marketing activities to coincide with this. It's also possible to look at more specific moments in time from the time view.

Apple Music For Artists also combines streaming data from Apple Music and historical data from iTunes, enabling users to see how revenues have been shifting as a result of a consumer migration from ownership into access. However, for some, the amount of data being generated is increasing the need to bring in third party agencies simply to be able to cope with the volume of data which needs to be analysed and interpreted.

YouTube Creator Studio

YouTube's Creator Studio is a powerful tool for YouTubers. It has long been a great place to not only view analytics, but also manage your videos and playlists as well as interact with the YouTube community. They also have a new Beta version that is live, which streamlines many of its existing features.

Within YouTube's Creator Studio you are able to see all the analytics for videos on your channel, including estimated earnings, reach, and other metrics on how your content is performing. Beyond just analytics, however, Creator Studio is a place to manage your catalogue and work with videos. Think of it as though you could enter Spotify's backend and update properties on your content as well as decide what you promote



and how. There's also an Advanced settings available, allowing you to verify your channel, link up with AdWords for remarketing, as well optimising how your channel gets searched for via channel tags. The new look of YouTube Studio Beta, though not integrated with all the features of the classic Creator Studio, is a further step in the right direction, putting analytics and asset management in the hands of the creator.

Data and the Charts



Data and music isn't a new topic, as the history of the British charts shows. In 2018, the Official Charts Company is also navigating the brave new world of streaming data

Chart Changes

The Official Charts Company (OCC) is the pre-eminent supplier of data to the music industry. It compiles and publishes the charts, but also has a large database of more detailed sales and streaming information to which many labels subscribe. This database goes back 24 years to April 1994, providing bespoke data on anything that has been released since then.

One of the key metrics that labels now use is AES [album-equivalent sales]. Rather than measuring the success of an album project through the sales of the album, you can now accumulate the physical sales, album downloads, track downloads from the album, streams of the tracks from the album and video streams to give an indication of the performance of the album overall.

Each one of those formats is a revenue generator. This has completely shifted the focus of labels. So labels are no longer just looking at selling albums but rather at how they can drive streams and convert track streams into people listening to complete albums.

As of the beginning of July 2018, the UK chart will move towards a split-ratio approach



[where 100 subscription streams equal one track sale and 600 ad-supported streams equal one track sale]. The US has already announced that it is going to move to weight ad-funded and premium streams differently. On top of that the OCC has introduced official video streams for the first time for the singles chart.

As the OCC Chief Executive Martin Talbot observes, "The challenge for an organisation like ours, from a data perspective and a chart perspective, is that the market is constantly changing. Premium streaming is still at a relatively early stage. YouTube has just launched its subscription service. With these new premium streaming platforms it's absolutely important that we factor that in.

Practical Tips for Music Companies



What are the first steps a label or other music company can take to make best use of the data available in 2018? Here are Music Ally's key tips

Practical Tips and Recommendations

In this report, we've talked about the wider landscape of music and data/analytics and profiled some of the startups that are trying to help labels and artists make the most of it.

Whether you're a label or a management company, what are the practical steps you can take right now? Here are some tips from Music Ally's in-house experts, as well as from the label executives interviewed for this report:

- It's an obvious point, but getting your metadata in order is essential for everything that follows. Without it, nothing else can happen smoothly and efficiently.
- Data should not be the preserve of the senior executives or the data team in a company. The more accessible it is by everyone at every level, the more uses it can be put to.
- Use tools to help show which fans have listened to which acts or tracks the most to help with more detailed segmentation of audience engagement levels and push casual listeners into

becoming more engaged listeners. Get access to unique anonymised user IDs where possible.

- Use data to inform A&R decisions but never rely solely on data.
- Think much more globally in both the data you gather and how you put it to work. More services are beginning to provide not just country specific data but city specific data too. Not only is it easier than ever to find where your fans are but it's important to monitor your campaign or streaming performance across multiple territories - what works in one country won't necessarily work in another.
- Employ an in-house data and analytics expert even if it is a
 part-time role. This is an investment in the future and it will
 only grow in importance. Machine-gathered data is great, but
 you also need a human sitting on top of the data to really
 interpret it.
- Much data analysis comes after the fact. Using AI and machine learning alongside human skills to make forecasts from this data will be increasingly important. This is already happening in the financial sector, but there is scope for this to be mapped across to A&R and marketing. Accurate projections will only grow in importance.

- Keep a close eye on what third party analytics companies are offering. There is an arms race between them and it pays to keep abreast of which services are evolving and expanding fastest. The best dashboards and tools will become their strongest calling cards. Shop around.
- Where possible to have access to it, device ID data can help show user behaviour over multiple platforms (e.g. desktop and mobile).
- Don't keep data in silos. Seek to understand how different datasets relate to each other. What happens on Spotify tells you nothing of what happens on Facebook. There is slow progress happening here but more companies need to start bringing this in house with the development of bespoke dashboards.
- Internal dashboards will increasingly be expected to overlay digital data with offline data (e.g. radio plays) to arrive at a more rounded picture of what is happening in the market.
- Access to more granular data (e.g. skip rates on tracks) and a wider variety of data points (e.g. album insights as well as track insights) will benefit decision making

Data Startups



Startups to Watch



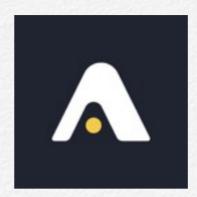
Asaii www.asaiitech.com

Pitching at this year's Midemlab, CEO Sony Theakanath, described Asaii as follows: "Our vision is to capture, contextualise and connect all music data

on the internet. We think there's too much data and too little context."

Its main thrust is around giving label A&Rs and promoters early insights into new acts building a following online, but it is also pitched at marketers to help them fine-tune campaigns. It claims to tune out much of the data white noise online by aggregating from multiple sources, and applies machine learning to fillet this data and yield actionable insights.

For A&Rs and promoters, it helps them get onto new acts as early as possible; and for marketing teams it helps them see which activities and campaign elements are having an impact as well as, from that, help campaign budgets to be worked smarter and more efficiently.



Auddly www.auddly.com

Initially pitched at songwriters, this platform has broadened out in the last year to include managers. The initial proposition was to offer a "song data hub" for writers to

add details on songs as they worked on them – allowing them to drop in details of other writers, samples, performers and producers as well as split agreements so there is full transparency when the song in question is recorded and released.

Managers can now add in details around their clients and the long-term ambition for the company is to align and match metadata from publishing and recording – something that is still an issue that the industry, collection societies and DSPs are struggling with.

It has big-name backers like Björn Ulvaeus and Max Martin using it (fittingly given its Swedish origins) and says it will let creators "say goodbye to chaos and incorrect payments", creating a workflow around each composition as it evolves.



Chartmetric www.chartmetric.io

Founded in late 2015, Chartmetric is a classic bootstrapped startup, with staff numbers still in single figures and total funding of just \$200,000 according to

CrunchBase.

In the boom and bust world of venture capitalism, this suggests it can last the distance. Its focus is on providing data and insights into playlisting and curation on Spotify, Apple Music and Deezer (as well as scooping up related social media data), drawing on 1m+ playlists and 300,000 curators.

It is pitched at music marketers to help them respond to upticks or downturns in plays or playlist adds for the tracks and artists they are working with. It uses machine learning to clean up and help visualise the data as well as giving guidance on pitches to the most favourable curators for their music.

On top of this, there is a sell to A&Rs that the data here can help them move quickly to spot new acts starting to gather steam.



Instrumental www.weareinstrumental.com

An A&R resource that claims to sweep tastemaker playlists to identify the key unsigned acts and tracks getting adds and plays as well as tracking social media

traction around the artists.

It is presented almost as an early-warning system to give talent scouts a competitive advantage – altering them to the new wave of music that is possibly going to start bubbling up. Its sell is: "Talent scouting has changed. Forever!"

Its core thesis is that acts, via self-serve distribution platforms, are uploading their music to DSPs and building their followings on social media first rather than knocking on the doors of managers, labels and publishers. Instrumental argues it puts these industry professionals back in the loop, regarding itself as a "matchmaker for the music industry".

Using its bespoke AI technology to comb platforms including Spotify, YouTube, Facebook and Instagram to pinpoint who is seeing strong growth and, from that, forecasting what their commercial potential is likely to be.

Linkfire www.linkfire.com

In a multi-platform world, where audiences skip across a variety of platforms and DSPs, tracking where they go becomes incrementally more complex. Linkfire has been around since 2014, creating what it terms "intelligent links" to direct fans to music on their platforms and apps of choice. Rather than create a variety of individual links in marketing and social media posts to direct fans to releases on every music platform, a single link can be set up that, based on the settings on a user's device, will direct them to the service they use most. It then delivers back clickthrough data so that those using Linkfire can see exactly where the user traffic is going and how fans are spread across different services, something that can inform their marketing and promotional decision around individual platforms.

Seated

www.seated.com

seated.

Specifically for the live industry, there is still plenty of relevance here for labels as both majors and independents move into the concert market through acquisitions,

partnerships or the establishment of events arms.

Seated's proposition is that acts are sending fans to ticketing sites when they announce tours but, in doing so, are losing visibility on what happens after that. The company is working directly with artists, who it says trust it to drive fans to the right place, via links on their websites and social profiles, powered by the Seated platform.

It also reminds fans as tickets go on sale, or it can take their information and credit card details and automatically buy the tickets for them. Seated also collects data on behalf of artists, which integrates with their existing marketing tools such as MailChimp. The company was a winner at this year's Midemlab startups contest in June.



Seeqnc

www.seeqnc.com

Aimed heavily at international DJs as well as labels, Seeqnc claims to enable users to track and analyse where their music is being played in real time.

On the DJ side, subscribers will be alerted when anyone around the world is playing one of their tracks, but it also has a promotional element where the DJs can get noticed by producers on the platform by playing their tracks; plus they can see what new tracks are starting to surface globally and give them a head start to be among the first DJs to play them.

For labels, the sell is not just on awareness of who is playing their tracks but also data and analytics on the track distribution. There is an additional A&R element, seeing which new artists are using their tracks. The service is currently in beta.



Sodatone

www.sodatone.com

Another A&R data tool – but one with a very different end story. It was set up in Canada in early 2016 but had, according to CrunchBase, received no angel or seed

funding, with only a handful of staff.

It pulls in data on acts based on what blogs are covering them, what venues are booking them and what playlists they are being added to – also shining a light on the tastemakers who are helping to break artists and shape careers. On top of this, it claims to be able to weed out acts trying to game their data.

It clearly had an immediate impact as it was acquired at the end of March by Warner Music Group. Given that Next Big Sound was bought by Pandora, Spotify snapped up The Echo Nest and Apple swallowed up Musicmetric in recent years, this is proof these data and analytics platforms are viewed as acquisition targets not just by DSPs but also labels themselves.



Soundcharts

www.soundcharts.com

One of the winners at Midemlab in 2017, the French company was launched in 2016 and has raised \$3.1m in Series A funding last September, having got to that stage

with just \$300,000 in initial funding.

It pulls in data from social networks, streaming services, charts and radio airplay, with the aim of helping music companies to make sense of it all.

It claims to pull in data from over 3,000 charts across 50 markets, monitor 2m social profiles, offer real-time radio monitoring in 23 markets and collate insights on key official and third-party playlists on Spotify, Apple Music and Deezer (as well as YouTube).

The data has multi-dimensional usage – ranging from campaign measurement/auditing and workflow optimisation to A&R and transparency across all partners and stakeholders.



WARM

www.warmmusic.net

It stands for World Airplay Radio Monitor and plugs into over 25,000 radio stations and just under 7,000 cities from across 120+ countries to give artists, managers,

publishers and others data on where (and how often) their music is being played on radio – and delivering results in real time.

While many data services will look to aggregate and dissect streaming and social media data, radio plays are still enormously important. WARM's multifunctional sell to users is that they get transparency on radio plays (so they can cross-check with broadcast royalty payments), target fans in the locations where new tracks are being added or receiving heavy rotation.

That means it can help shape where tours are planned and give guidance on where marketing efforts need to be scaled up or down. It is priced on a per-track basis, charging €5 a month or €36 a year for each song, but for the annual fee users can switch out the tracks they are monitoring.