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The Conflict over Consent Decrees

By Griffin Davis

In early June, the United States Department of Justice announced that it would be launching a review of the consent decrees governing the nation's two largest performing rights organizations, ASCAP and BMI. The review, which began with the DOJ calling for comments on the efficacy of the consent decrees from industry stakeholders, has re-ignited a decades old debate over the management of publishing performance rights, and has the potential to significantly change the landscape of the music industry.

Background

America's oldest PRO, the American Society of Composers, Authors, and Publishers, or ASCAP, was founded in New York in early 1914 by American composer Victor Herbert, after Herbert's colleague, Giacomo Puccini (pictured on right), informed him that, unlike in the United States, composers in Europe were paid for the public performance of their compositions. With a group of prominent American composers assembled, Herbert set out to collect performance royalties from venues that were performing works by ASCAP members. As is often the case when one asks someone to pay for something that had previously been free, ASCAP faced quite a bit of resistance from venues. However they received the legal backing they needed from the Supreme Court's decision in Herbert v. Shanley Co., which reaffirmed a composer's right to be compensated for the public performance of their work. Further, the decision in Herbert v. Shanley established the blanket license, which allows a business to pay an annual fee to ASCAP in exchange for the right to any composition written by an ASCAP member.

ASCAP continued to grow over the years, and began granting licenses to radio broadcasters as the popularity of radio increased. By the mid-1930s, ASCAP was a dominant force in both the music and broadcasting industries. Broadcasters looking for a blanket license were required to pay ASCAP a set percentage of their annual revenue, regardless of the amount of ASCAP-controlled compositions they broadcast. In 1939, following a hike in the share of revenue licensees had to pay to ASCAP, a group of broadcasters decided they were fed up and started their own PRO, Broadcast Music, Inc., or BMI, which



was intended to be a lower cost alternative to ASCAP.

In 1941, the DOJ sued both ASCAP and BMI for violations of the Sherman Antitrust Act. The DOJ claimed that the unrestricted use of the blanket license constituted an illegal restraint of trade, and that there was not a reasonable degree of competition in pricing. Both of the cases ended with the establishment of the consent decrees that lay out a set of rules governing the operation of the two PROs.

The decrees allow licensees to license either through a blanket license or on a per program basis, and prohibit the issuing of a license that "discriminates in license fees or other terms and conditions between licensees [who are] similarly situated." Fur-

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Mission Statement

October 2014

The Music Business Journal, published at Berklee College of Music, is a student publication that serves as a forum for intellectual discussion and research into the various aspects of the music business. The goal is to inform and educate aspiring music professionals, connect them with the industry, and raise the academic level and interest inside and outside the Berklee Community.

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EDITOR'S NOTE

In our first issue of the new school year, our cover story focuses on the Department of Justice's review of the consent decrees that govern ASCAP and BMI. The decrees, which have been in place since the early 1940s, have faced harsh criticism from the publishing industry, and as they are reviewed, the future of performance royalties hangs in the balance.

We also interview Google great Chris Wilson to discuss his role in the development of the Web Audio API, and the future of online music collaboration. The automation of music creation is also becoming a hot topic and we cover music stems in a separate article.

In today's music industry, information is amongst the most highly sought-after commodities. Echo Nest founders Tristan Jehan and Brian Whitman recognized this and developed the industry's leading music intelligence platform. In the wake of their most recent collaboration, the music industry has been abuzz about Apple and U2. Though their partnership is only one of many recent innovative releases, it has sparked discussions over the future of music distribution, and the impact of free music. Apple and U2, however, were not the only ones to shake things up, as the nation's largest radio broadcaster, Clear Channel, changed its name to iHeartMedia to help build the already strong brand established by their internet radio service, iHeartRadio. The company has yet to make any significant changes to its operations, but nonetheless, the renaming has caused many to question the future of terrestrial radio.

While it used to be that most if not all musicians began their careers with the goal of signing to a record label or publisher, more and more of today's musicians choose to maintain a DIY approach through their entire career. The second installment of our DIY playbook will help DIY artists approach the often daunting live music and licensing industries. Perhaps the most important tool for any musician, DIY or otherwise, is their fan base, and there is no better way to make use of this tool than by communicating with them through what is known as direct-to-fan marketing. Finally, Chinese e-commerce giant Alibaba had its record-breaking IPO last month. Though the company has not yet announced its intent to do so, it seems poised to enter the music industry in a way that could have a far-reaching impact.

I would like to extend a warm welcome to the new members of the MBJ team, and thank you all for reading. $\boxed{\text{MBJ}}$

Sincerely,

Griffin Davis Editor-In-Chief

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LAW SECTION

The Conflict over Consent Decrees (cont.)

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ther, the consent decrees force the PROs to grant a license upon the licensee's request, even if a rate has yet to be agreed to, and establishes the Southern District Court of New York as the arbiter in cases when the PRO and licensee are unable to agree on a royalty rate. Perhaps the most important provision of the decrees is the establishment of a royalty distribution system that mandates equal payment to both the publisher and the composer of a work. This split is significant because it means that half of the royalties earned from the public performance of the work go directly to the songwriter, and cannot be held against an un-recouped advance given to the writer.

The Ire of Music Publishers

Since their inception, the consent decrees have been the source of great contempt within the music publishing industry. As music sales have slowly given way to streaming, these sentiments have only grown stronger, with the publishing industry citing the rate setting procedures established by the consent decrees as the source of the exceptionally low rates paid for the public performance of a composition. As the streaming industry continues to grow, publishers have worked hard to try and secure higher rates for the compositions they control, frequently finding themselves wrestling in the courtroom.

Recently, however, Sony/ATV music publishing decided to go a different route and announced their intention to withdraw their digital rights from the PROs, opting to negotiate with digital music services on the open market. Unfortunately for them, the rate courts ruled that membership to the PROs had to operate on an all-in or all-out basis, meaning that publishers and songwriters have to grant their PRO rights across the entire spectrum of public performances, or withdraw completely. While the publishers have decried this as unreasonable, this ruling is not without just cause. ASCAP and BMI have long been subject to criticism for their lack of transparency and administrative failures. Even now it can be difficult for a licensee to understand the full scope of material covered by a blanket license from either PRO. Adding another licensing source without a standardized database would only exacerbate the confusion. Further, Sony/ATV would not be required to issue a license upon a licensee's request like the PROs are, so new digital music services engaged in negotiations with Sony/ATV would face the very real possibility of having to launch without the Sony/ATV catalog, or waiting to launch until they can come to an agreement, either of which could risk sinking the company. The major publishers obviously weren't too happy about this decision, and ultimately sent National Music Publisher's Association Chairman, and former DOJ attorney David Israelite to convince his former colleagues to begin a review of the consent decrees.

Higher Rates for Whom?

Opponents of the consent decrees often like to point out the age of the decrees and suggest that there is no way that rules set in the early 1940s could still be useful today. While it is true that the decrees have been in effect for quite some time, and aren't really optimized for the digital marketplace, the suggestion that they have been gathering dust for the last seventy years is very misleading. The decrees are in fact periodically reviewed and amended, with the last review of the ASCAP decree having occurred in 2001. The main argument offered by the major publishers in their crusade against the consent decrees, however, is that they feel the rate setting procedures established by the decrees have resulted in unreasonably low royalty rates. They feel that if they were able to directly license their catalog and use the PROs simply as a royalty collection and distribution agency that they would be able to secure far higher rates for their catalog, and they're probably right. Given the tremendous degree of concentration in the publishing industry, no digital music service or radio broadcaster can really exist without the catalogs of the major publishers, and in a direct licensing situation they would have to pay whatever rate the publishers demanded.

While the major publishers would certainly be making more money, there's no guarantee that the same would be true of songwriters. Without the consent decrees there would be no requirement that public performance royalties be split 50/50 between the publisher and writer, and that the writers share be paid directly to the writer. The major publishers have insisted that they would pay writers a reasonable share. However, given that the music publishing industry has a history of unsavory behavior, and the fact that their trade group, the NMPA, inexplicably resigned from the International Confederation of Societies

of Authors and Composers, a group that advocates for writers, and promotes reasonable business standards as well as data collection standards, their suggestion that they be trusted seems more than a bit suspect.²

In addition to guaranteeing the equitable payment of songwriters, the rules of operation set forth in the consent decrees help to promote a functional marketplace. The requirement that a license be granted to a prospective licensee upon their request allows small streaming startups to make available the same catalog of songs as much larger, well-established services, thereby helping to foster competition and innovation in the realm of music streaming. This rule, in tandem with the requirement that the PROs not discriminate in the terms of their license between similarly situated licensees ensures that the publishing industry does not choose the winners and losers in the streaming race.

What Happens Now?

Unfortunately, it seems unlikely that this process will end with the consent decrees existing as we know them today. In the highly concentrated music publishing industry, the major publishers wield a significant degree of power, and don't hesitate at all to show it off.

In early July, at the beginning of the review process, Sony/ATV chairman and CEO Martin Bandier informed songwriters signed to his company that if the review process did not end in modifications to the consent decrees that Sony/ATV found suitable, they would be more than willing to consider the "nuclear option", i.e. "the complete withdrawal of all rights from ASCAP and BMI."3 One, let alone all of the major publishers completely withdrawing from ASCAP and BMI would have an absolutely disastrous effect on public performance licensing. Currently, because ASCAP and BMI primarily issue blanket licenses that cover their entire catalog, small publishers and independent songwriters receive the full licensing leverage of the major publishers' vast, in demand catalogs. Full withdrawal by the major publishers would leave the PROs tremendously weakened, and the benefits of collective licensing would disappear, likely resulting in incredibly low rates for the already disadvantaged independent publishers and songwriters. Even worse for the indepen-

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BUSINESS ARTICLES

Apple As a Record Label

By Anahita Bahri



If you are an avid Apple product user or have been following tech news recently, then you've probably heard about Apple's most recent partnership with U2. While Apple unveiled their new products, which include the iWatch, and two new iPhones, Irish rockers U2 pulled off the largest album launch in history by making their latest record available for free to half a billion iTunes users. Songs of Innocence, their first album in five years, was automatically downloaded onto users' iTunes libraries and de-

The Rise of Innovative Releases

There's no doubt that music distribution is changing as fast as the rapidly evolving industry. August saw the lowest weekly album sales ever recorded by Nielsen SoundScan. So far this year, US album sales have fallen 14.6%, while digital album sales are down 11.7%. Artists and labels are grappling to find feasible revenue models in the new music business. Because of the rather bleak state of affairs, artists are looking for more creative and innovative ways of releasing music.

U2's album launch has been compared to several recent music marketing campaigns, including Jay Z's partnership with Samsung, in which one million copies of Jay Z's Magna Carta Holy Grail were released to Samsung Galaxy owners for free through an app, and Beyoncé's surprise album drop, which, like Songs of Innocence, was considered disruptive to traditional industry release models. Fans actually had to pay for Beyoncé's album. Unlike U2 and Jay Z's albums, however, her unique approach still garnered 800,000 sales. Additionally, music-identification app Shazam, and

social networking sites Facebook, and Twitter Future Collaborations have released songs, and music videos for artists including Fifth Harmony, Bruno Mars, and Michael Jackson. Lastly, CBS.com debuted Bruce Springsteen's High Hopes album before its worldwide release as part of a marketing campaign for the CBS show The Good Wife. Has the novel marketing push worked well for Bono and the rest of the rock band, as it did for other artists?

Apple's collaboration with U2 garnered a much less enthusiastic response than previous innovative marketing stunts. In fact, the marketing ploy received quite a bit of criticism, prompting Apple's release of a tool to remove U2's record from users' iTunes library. In general, people want pull, not push. Contrasting Jay Z and Beyoncé, U2 didn't give users a choice, and essentially forced the album upon them. This sparked many privacy concerns and issues, as many users believed that they had an "unwanted musical virus planted" in their iTunes library.

The Cost of Free Music

U2 is using its music as a loss leader; instead of selling albums, U2 hopes to sell concert tickets. Through the album launch, they have reached a potential audience of 500 million listeners. Their ultimate goal was to reach as many people as possible, gain younger fans, and help fill seats during future concert tours, even though the band regularly sells out huge concerts. The idea of reaching someone on the other side of the world excited them.

Despite U2's rationale behind the release, many have argued that U2 is damaging the music industry by giving their music away for free. In actuality, however, the music was not entirely free. Apple paid the band and Universal a blanket royalty fee and committed to a marketing campaign worth up to \$100 million. Even though the rock stars were paid, music industry professionals believe that the giveaway still undermines up-and-coming artists since the end-users are still getting the music for free. The music industry changed back in 1999 when Napster was founded. It changed the way most people obtained music and altered the perceived value of music by lowering the average album price from around \$12 to nothing. U2's unconventional album release may have "devalued" music, but it offers a new union between technology and music to embark on innovative and creative projects.

What's next for Apple and U2? They hope to revolutionize the music-listening experience with yet another collaborative project - one they hope will assist artists in selling more albums and singles by building creative capabilities and making the music experience more digitally immersive. A few media outlets claimed that the tech giant and Irish rock band were creating a new digital music format, when, in reality, the project is actually an "audiovisual interactive format for music that can't be pirated and will bring back album artwork in the most powerful way," according to Bono. This project comes at a time when musicians are exploring new ways to distribute and market music, all while fighting declining sales in the age of streaming and downloads. U2 is also planning to storm through the criticism with a 2015 arena tour to promote Songs of Innocence. In the meantime, U2 are preparing for the physical release of the album, which will include exclusive acoustic versions of many songs to appease traditional retailers who weren't too happy with the giveaway.

When thinking about Apple's plans for Beats Music, the future is unclear. Analysts claim that Apple would shut down Beats' streaming service, but in a public statement, an Apple spokesman denied it. Wall Street experts and industry analysts predict that the Beats Music brand will eventually be retired and streaming music will be incorporated into iTunes. By integrating Beats, Apple could offset their declining digital download sales and find new ways to fuse technology and music projects through streaming.

Technology can't do without music, which has been evident through Samsung's project with Jay Z and Apple's partnership with U2. Technology firms are buying music directly and offering users this music for free or through a freemium model. This cannot be neutral to the music business. If the record labels can no longer be relied to break releases by stellar recording artists, and instead share their cash cows with the technology sector, the old pillars of the music industry are, at the very least, not doing the job they once did. MBJ

TECH NEWS

Stems and The Business of Stems

By Esteban Roa



Karl Marx rightly said that man is himself and his instruments of production. Musicians, of course, do not live alone in their own creative bubble. Indeed, the shifting frontier of music making is arguably best observed today by dropping in on a gathering of audio and game developers, audio and technology manufacturers, audio production specialists, and musicians. Changes in the way we make things are likely to carry over into music production, and a list of such carry-ons might include more automated processes in the creation of music itself, the use of artificial intelligence in the selection of musical events that make up compositions, and even the outsourcing and more efficient use of creative nuggets to bring out the right musical muse.

The Advanced Audio & Applications Exchange (A3E) conference, recently held in Boston, afforded the MBJ a good opportunity of observing music futurists in action. An instance of this was Google's current involvement with the development of new standards for Web Audio production. Such standards would enable musicians to collaborate creatively in different physical spaces instantaneously by just using their Internet browser, avoiding the current incompatibility of user plug-ins and mismatches of software translators (the reader should consult our interview, elsewhere in the issue, with Google's Chris Wilson).

Stems

Here we choose to report on the new use of 'music stems' for purposes of musical creation. Irish startup Score Music Interactive (SMI), for example, is beta testing Xhail, a program that is meant to automate music production for film, advertising, television, and video game projects.

SMI uses templates of chord changes that it outsources to chosen musicians and composers around the world. The idea is that these musicians and composers would create unique compositions based on the templates-and supply one or more recordings of their work, known as stems, on a single instrument. Each stem would be sent back to the content library, and then a team at SMI would listen and tag emotions and other characteristics from a predefined list of fields (romantic, slow, moonlit, and so on). When a producer or music supervisor asks for material for a project, SMI would look for the various stems in the cloud and put them together to create a completely new, and original composition.

Since each individual composition was composed against the same template, once they are drawn together, every part will work harmonically. If the user is not satisfied with a specific part or perhaps even the entire composition, SMI will extract different stems to add a new part or even create another entirely new piece.

Mick Kiely, the Irish founder of SMI, built a reputation as one of the leading composers for Irish television programs and video games and received international recognition, signing publishing deals in Ireland, the U.K., and the U.S. In 2010, while figuring out how to integrate enough content to drive music in a game engine for Xbox/PS3, Kiely wondered if, under the right conditions, music stems could be blended together, arguing that "if you look back in history, thousands and thousands of songs have been written to similar chord-maps or identical chord-maps, the Beatles did it all the time."

This begs some elaboration. Even if Kiely was right, any musician that is a Beatles fan will know that the devil of the music is in the details and that whereas rhythmand-blues inspired much of their music, the Beatles blended chord, melody, and lyrics in ways that surprised and won the admiration of listeners and musicians worldwide.

The Business of Stems

If Kiely is suggesting that randomly made music from trunks of common harmony have a place hitherto unexplored in the music business—and for starters, this would work well with video games-the licensing of such music is intriguing.

To begin with, Kiely argues that for the first time in history, session musicians will be given a publishing deal: "if you play harmonica really well...we want to get harmonica tracks that work interactively with our templates, and [we will pay you] every time that [your] harmonica is used." This is because SMI wants to be constantly building up their sound database in order to keep generating completely unique compositions with the Xhail platform. The incentive acts as a supply management tool.

Secondly, Kiely claims that every final composition licensed will never be generated again for any other user: it remains unique to that user and that product. Individual stems, however, will return to the content library to be used multiple times in different unrelated combinations. Nevertheless, if the original user decides to use the same composition in a sequel, the user will pay SMI again to get a new license.

Thirdly, SMI, who becomes the publisher of the work, recognizes the creative input from contributors and rewards each of them by equally splitting the performance royalties: "[we] allow the user to give the piece of music a name that is relevant to the project, we register that piece of music with the PROs and we make sure that it's tracked; any royalties that are collected go to the creators of the parts, including a share to the user."

Finally, unlike US publishing deals, SMI gives their musicians 100% of the writer's share, plus a 50/50 split of the sync license fee, a popular European model. Kiely emphasized the importance of keeping musicians and composers in the revenue lane.

Based on research, SMI believes that for every 1,000 stems created in their library, SMI can create up to 50,000 unique licenses. Keil says that if a composer made available a piano piece for one of their socalled fantasy templates, they could expand that piano part to all the other templates in their database adapting the harmonic structure of that part "[while] keeping the emotional performance of the composer intact ".

New copyrights would also be generated for each reproduction of the original stem, and the same publishing deal would be given to the composer as though every reproduction was his/her original work. SMI would provide too a back portal for creators, allowing them to upload and track all of (CONTINUED ON PAGE 16)

BUSINESS ARTICLES

On Smart Artists and Smart Fans

By Dan Servantes

The Internet age has drastically altered the dynamics of the interaction between corporations and their customers. Talking down at consumers, for instance, is less preferable than engaging them in a conversation that can later lead to a commercial transaction. This is what direct-to-fan marketing should be for the music industry, and there is literature to support it ¹

Before the Internet, the figure of the rock star was dominant. The aura of mystery, backstage antics, and secrecy at the recording studio was a valuable commodity. The perspective seems quite different today. An aura of mystery means there is no story to tell, backstage antics end up on Twitter and Reddit before the encore, and the singer's mother gets less updates from the studio than her fans. This is the expectation, and bands that can't deliver are forgotten. But for artists that understand these new dynamics the promise of growing a loyal audience is real.

A loyal fan base is paramount. 1,000 of them can do a far better job of helping an artist's career than ten times the number of casual fans. This is because in the current music industry, casual fans don't pay for music. They don't have to. A casual fan can listen to an artist's hit song a couple times on YouTube or Spotify and move on without paying the artist. Five years ago, such a fan might have spent 99¢ to get the hit single from iTunes and if an artist could sell to 10,000 casuals the song normally paid for itself. Today downloads are dropping and iTunes sales are much harder.

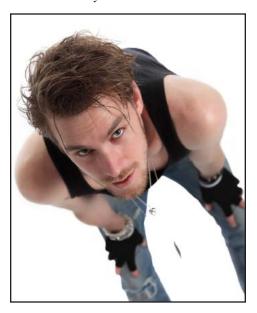
Casual fans may still be in the sweet spot, but there is a new breed of companies that target loyal fans, among them Patreon, Pledge-Music, and BandPage.

Patreon allows fans to pledge a certain amount of money per work that the artist releases and the fan receives certain rewards based on the amount of money pledged. Tony Lucca, an alumnus of The Voice, has a Patreon page set up where users can spend \$1, \$5, \$50, or \$100 per each YouTube video he produces.² In return, the patron will receive anything from exclusive access to Lucca's Patreon stream to a monthly, and private, Skype session. Tony currently receives \$1,553 per video from 170 patrons and has released 63 videos in the past 10 months.

PledgeMusic is another platform that caters to loyal fans. PledgeMusic allows fans to

watch the entire recording process of an album via updates straight from the artist, and offers a multi-tiered merchandise and experience store. Essentially, PledgeMusic acts as an extended pre-order campaign with an emphasis on fan engagement. Fans can spend as little as \$10 for an album download to upwards of \$20,000 for a house concert from the artist, with unique items such as signed vinyl copy, handwritten lyric sheets, and Skype music lessons. On PledgeMusic, the average fan spends \$60 on an item, and the record pledge is over \$40,000.³

Patreon and PledgeMusic have in common that they take an artist who is at their



most vulnerable, i.e. in the middle of the creative process, and encourage and enable interaction between artist and fan. On both platforms, the artists share updates from the studio, and participate in discussions with fans in the comments section. Singer-Songwriter Mike Doughty had a PledgeMusic campaign where he not only showed in-production mixes of songs, but allowed fans to vote on the album artwork, t-shirt designs, and more. These campaigns both maximize the amount of revenue earned per fan and breed added loyalty among the listeners.

Other artists utilize platforms that have already been adopted by a mass audience to communicate with fans. Both Drake and Brad Paisley used Twitter to release new songs to their fans. In Paisley's case, a song was released without his label's permission, and caused some very public distress within his camp. Paisley presumably understood that a backlash would be com-

ing but chose to favor his loyal fan base.

Interestingly, it seems that U2 completely misunderstood the direct-to-fan model when it released its latest album "Songs of Innocence". U2 planted the album in Apple users' iTunes libraries. Rather than breaking into a conversation with their fans, U2 may have ignored the new cardinal rule that nothing replaces the value of preparing a release with its own conversation. Quick access to the album on a smartphone, an apparent benefit to the user, became a big PR blunder: the invasion of users' privacy (in this Apple was guilty too).

U2 was really using tactics that one would expect of lesser-established and younger artists whose fan base is smaller. Indeed, this direct-to-fan marketing tends to involve free downloads of music in exchange for an email address. It is good to reflect on three of the most effective platforms here: Bandcamp, NoiseTrade, and Topspin.

Bandcamp is by far the most utilized platform by independent artists. It serves as an online storefront where artists can put up all of their digital releases, as well as vinyl, CDs, and t-shirts. Their 'name-your-price' model allows artists to put up their music for free, or at a very low cost, in return for an email address. Bandcamp reports that on 'name-your-price' albums, fans spend an average of 50% more than the minimum amount.4

NoiseTrade offers the same exchange that Bandcamp does. Fans can get a free download in return for their email address. NoiseTrade, however, has done something Bandcamp has not. They have released a twice-weekly newsletter called 'New & Notable', in which they choose their favorite albums from the NoiseTrade 'catalog'. To be promoted in the mailer, you have to pay a small fee and be approved by the NoiseTrade staff. If you're lucky enough to make it into the letter, your music will be blasted out to NoiseTrade's 1.3 million fans.5 If only a tiny fraction of those subscribers download this music, an artist will still see significant growth in their email list in a very short period of time.

Topspin allows artists to place a widget on their website that gives fans the option to download a free song in return for

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LAW SECTION

Artist Progress, Pre-1972

(FROM PAGE 6)

their email address. These email addresses allow artists to talk directly to their fans through their email inbox. As any successful independent musician knows, it is not enough to simply acquire fans' email addresses. While these early fans have made the effort to download the artist's music, they have likely not yet been converted from casual to loyal music fans. Getting them to make that leap is an especially difficult task as the independent music market is so saturated. Artists must make every effort to engage with potential fans and pull them in to the artist's story.

One remarkable case study on direct-to-fan marketing is the Barbadosbased band Cover Drive. Cover Drive came to prominence on YouTube—an incredibly saturated platform where breaking through the noise requires high-quality music, and a story to go along with it. As their name suggests, Cover Drive began by recording cover songs in their own unique "Baja" style and then expanding their branding with a weekly vlog series called the "Weekend Lime". In this series they would show behind-the-scenes clips covering everything from recording sessions to pranks that they would pull on each other as they were answering questions from fans. An intimate connection between them and their fans developed as the fans began to see the story behind the music. By the time Cover Drive started writing their own music, they had a dedicated following of 29,000 active You-Tube subscribers. All Cover Drive had to do was to continue the conversation.

Regardless of the level that an artist is operating at, or the number of fans they have, artists must make themselves available to their fans. Artists can no longer talk just through their record label, and certainly cannot talk down to fans. Social media gives fans the power to be heard just as loudly as the artists. If artists are smart, they'll start listening.

- 1. "Markets are Conversations" Doc Searls & David Weinberger. In Levine, Locke, Searls & Weinberger. "The Cluetrain Manifesto", 1999.
- 2. "Tony Lucca". Patreon. http://www.patreon.com/tonyl-
- 3. "Learn". PledgeMusic. http://www.pledgemusic.com/ learn/artists
- 4. "Bandcamp empowers artists". Bandcamp. https:// bandcamp.com/artists
- 5. Coyle, Chandler. "The Coyle Report". Music Geek Services. September 18, 2014. http://us2.campaign-archive2. com/?u=3713316874bd35483e0ef9005&id=8c5e12b1b1

By Griffin Davis

odd loophole that limits federal protection for have been effective in preventing any serious sound recordings to those made on or after steps toward full federal protection for pre-February 15, 1972. This means that the full 1972 recordings. catalog of sound recordings by the Beatles, John Coltrane, Janis Joplin, and countless Court Cases others receive no federal protection, and therefore do not benefit from many of the revenue streams associated with sound re- are not eligible for federal protection, they cordings. This distinction has been a serious must instead rely upon state law. Recently, point of contention for many years; however, recently, several steps were taken toward through lawsuits, primarily in California, closing the loophole and ensuring equitable against Sirius XM and Pandora. The most treatment of all sound recordings.

The RESPECT Act

On May 29th of this year, a rather odd group gathered in the Rayburn House Office Building for an event the likes of which are not often seen on Capitol Hill. The group, mance of pre-1972 recordings. SiriusXM will which included SoundExchange CEO Mike almost certainly appeal the decision, but this Huppe, musicians Martha Reeves, Richie Fu- is nonetheless a significant step for pre-1972 ray, Roger McGuinn, and Sam Moore, and a artists, and, if upheld, could have a far-reachnumber of members of Congress, among othing impact on the music industry. ers, met to give short speeches, and, in some cases, perform pre-1972 songs of theirs in honor of the launch of the Respecting Senior tion, it seems that we are on the verge of a Performers as Essential Cultural Treasures Act.

Act, was introduced by Rep. George Holding (R-NC), and longtime music advocate Rep. John Conyers (D-MI), and, if passed, would grant pre-1972 recordings the same public performance right given to other sound recordings. This right would entitle legacy artists to royalties, distributed through SoundExchange, whenever their recordings are 29 May 2014. Web. 12 Oct. 2014. https://www.govtrack. played on non-interactive streaming services, such as Pandora, and on satellite radio.

The bill, which has about a 37% chance of being enacted,1 would create a significant new income stream for some legacy artists, many of whom still have to tour full time just to make ends meat. That being said, in order for these artists to receive the respect they deserve, their recordings need to be granted full federal protection.

Full federalization would allow these artists to recapture the rights to their songs, many of which are extremely valuable, from their record labels, and exploit the full range of rights given to the owner of a copyrighted work. Unfortunately, despite support for full federalization from the Copyright Of-

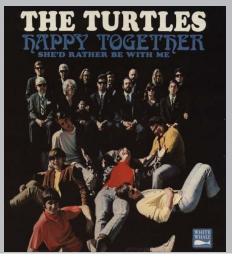
U.S. copyright law currently has an fice, the lobbying efforts of the major labels

Because pre-1972 sound recordings several groups have taken advantage of this notable of these is a recently decided case in which Mark Volman and Howard Kaylan, also known as Flo and Eddie, of the Turtles sued Sirius XM for their failure to pay the duo for their pre-1972 recordings. The court ultimately sided with Flo and Eddie, finding that California law covers the public perfor-

Whether by legislation or litigasignificant victory for artists who have been disadvantaged by current copyright policy. However, as we move forward it is important The bill, known as the RESPECT to remember that these artists deserve more than a stopgap, they deserve respect, and protection that is equitable to that given to those who came after them. MBJ

Endnotes

1. "RESPECT Act (H.R. 4772)." GovTrack.us. GovTrack. us/congress/bills/113/hr4772>



INTERVIEW

Music, Browsers, and Online Collaborations An Interview with Google's Chris Wilson

By Griffin Davis and William Kiendl



Chris Wilson has been involved with web browsers since 1993, when he co-authored the original Windows version of the NCSA's Mosaic. Between 1995-2010 he worked on Internet on that, and he had designed the API to do all Explorer at Microsoft. He has since moved to Google, where he develops Chrome and leads the Web Audio API team. The MBJ spoke to him recently at the A3e conference in Boston.

MBJ: Why are you currently involved with music?

Chris Wilson: I graduated in computer science and engineering but I was a huge synthesizer fan when I was a teenager and played quite a bit. I kept it up into my thirties and had a band, which broke up. My wife and I decided to start having kids almost right after that and any free I learned a tremendous amount about DSP, time since I spend with them!

I have been working with web browsers my entire career, and started at the University of Illinois. I worked at the National Center for Supercomputing Applications (NCSA), and got involved in NCSA's Mosaic. I co-wrote the Microsoft version--these were very early browsers. Then I moved to Microsoft in Seattle, and helped develop Internet dio API important to musicians? Explorer. About four years ago I was hired by Google, but due to a non compete clause in my contract I had to take a year off from browsers.

I moved into the developer team for Chrome after that and was looking for some-

thing to do when I ran across the Web Audio API (Web Audio Application Programming Interface). Chris Rogers was the lead engineer kinds of really powerful audio stuff simply. For any other audio API, you had to study a book on Digital Signal Processing (DSP) and process every bit of output. I liked the idea of scheduling sounds like oscillators, setting up a biquad filter, a cutoff frequency, and a O factor. Putting all those plugins together in a web browser made perfect sense to me. Chris was a really hardcore engineer and there were parts of the API that weren't easy or transparent to use for developers and end users. As I was representing the perspective of the developers, I was the perfect foil for him. With Chris, and how the Web Audio API could work, so when he later left Google, I took up the slack in the Web Audio Working Group. I then started standardizing the API to push it even more inside Google. I do other jobs too, but the development of the Web Audio API is definitely my biggest passion.

MBJ: Why is the development of a Web Au-

CW: Because it will allow a new long-distance collaboration between musicians that we don't have today because of all the hardware and software incompatibilities. Think about collaborations on a web browser that go from

inception to actual creation and the potential for community building. Imagine a digital audio workstation that lets you do stuff and immediately hit publish so that other people can poke into your production. There are things that need to be fixed and stuff that needs to be added, and we're discovering the challenges as we go along.

MBJ: What are those challenges?

CW: Collaboration in music is very natural. We react to sound instantaneously. Let's take WiFi and TCP/IP (the most popular Transmission Control Protocol of the Internet Protocol suite). When a group of laptops are using the same WiFi network to play music they send data packets on request. Each computer asks "did my packet get there?" When packets happen to collide with one another, the system waits some random period of time and then tries again. If a few data packets are sent this is not a problem, but with many packets collisions escalate; imagine adding video to the

The problem with WiFi is that it cannot use a scalable protocol. It has a builtin latency—up to about 6 milliseconds of latency for every packet. If I'm using my Wifi connected laptop at one end, and I'm trying to collaborate with my buddy at the other end, also on Wifi, we'll have twelve milliseconds of latency just on account of the WiFi network. Latency happens for other reason too. In fact, getting fewer than fifty milliseconds of latency across a WiFi network today is pretty much impossible because of the restrictions of the TCP/IP protocol. So musical collaboration online in real time will evolve slowly. A truly live musical collaboration would need a new network. 4G LTE connections have much lower latency and could be a solution, but they are very expensive.

In the meantime, you will see a lot more collaboration of the Google-doc-style type, where maybe you and your friend are working on the same Ableton Live tracks, and as long you're producing audio on your system and she's producing audio on her system, you both send control messages and don't have to worry about latency. From the point of view of latency, control messages are a lot easier to handle than audio messages. Gobbler, a new program, makes it possible to work on an Ableton Live pack as long as I can

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INTERVIEW

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work on the music for a couple hours and then hand it over to my buddy. JAM with Chrome is trying that too. However, doing something like jazz drumming and pushing it live in real time to someone else that is not in that room is really hard. It probably won't happen soon.

MBJ: Can we expect the development of a new network soon?

CW: Unfortunately, you don't have the same network needs for a live music collaboration on the web anywhere else, which makes it difficult to advocate for it. Who is going to want to replace the existing network infrastructure just to make live music collaboration possible? For video you can easily push 1080p (Full HD) through our current pipelines. In gaming your frame rates are 60 frames per second, so that means you have almost 17 milliseconds between frames. At that rate you can lag several frames behind your buddy before it gets really obnoxious.

However, there are systems being built inside academia that could help, but I don't think they are going to get deployed in homes any time soon. You might see it happen with Google Fiber, which is 100 times faster than the average broadband connection. But the last ten feet is problematic—unless you plug your system into the wall to get rid of the WiFi hop.

MBJ: Wouldn't that new network need a new business model?

CW: Yes. In the US, people get really frustrated when they hear about heavy data users getting throttled by networks. But if the alternative is trying to push five HD videos through the pipe at the same time, you're sucking up all the bandwidth and impacting the entire neighborhood. In that case, throttling is not so bad. We tend to wildly prefer unlimited data plans, and don't like metered use. In Europe they're used to paying by the byte and that changes the vision around the network. Indeed, paying by the byte would be better for live music collaboration online.

MBJ: Can you go a bit more in depth into the Web Audio API?

CW: At the time Chris Rogers started developing Web Audio, audio in the web was awful. You could play back an audio file but not tell precisely when because the loading and decoding of the audio were wrapped together. Also,

audio events with JavaScript produced jitter, depending on what else was going on.

Building a sound editor was actually difficult too for a variety of reasons. The maximum number of audio tracks you could have was five, so people who were trying to build, say, a platform jumper game had to manage these five playing audio instances and swap between them. You had the ability to precisely position the sounds but very poor quality audio.

Web Audio was an attempt to build a pro audio platform, so that you would have precise, sample-accurate access to audio playback. You could hook in and do processing, you could get filtering and things like that built into the system, and also do audio analysis and visualization--because one of the first things you always want to do is visualize whatever you're hearing.

We solved the encoding and decoding problem by giving developers access to a decoder--not a fabulous one, but it worked: you can load and decode your own audio and then you can play it back precisely when you need it. You can have many simultaneous overlapping sounds—beyond the ear's ability to actually detect them. The software is doing the math so there are no hardware limitations. With Web Audio you can build a 128-voice synthesizer and never hear dropping voices. Then there's a routing and effects pipeline, and hooks to visualize, analyze, encode, and record.

At the core, this is a great and easy to use platform for building sound in games. One of my co-workers was recently preparing a talk about building HTML 5 games for Google's I/O Annual Conference (a conference for software developers). He came to me two weeks before the event and told me he needed a sound manager for his game and that he knew he should be using the Web Audio API. So I took a look at his project and twenty minutes later came up with a sound manager. Doing anything from panning to 3D sound effects is quite easy in the Web Audio API. As a matter of fact, I always tell people that there is no apriori framework needed to learn the language. Just use Web Audio, because it's easier to figure out how the pieces plug together and from there you can tackle other stuff.

MBJ: What is your take on Music AI (Artificial Intelligence)?

CW: I don't think that anybody has ever figured

out how to make a computer truly creative. For example, even today coming up with a lead track or a unique riff is not something we really consider a computer task. Computers may help our creativity and assist us. Band-in-a Box helped me when I was using it to fill the gaps of stuff that I didn't really care to come up with. "Give me something random and I'll see if I'll like it"—that idea has ben around, in my time, since the first arpeggiators.

Also, to think that computers will replace musicians is a bit farfetched. People feared that drum machines were going to replace drummers and that organs were going to replace chamber musicians, but none of that has happened. Compared to the 1700s, the average person likely listens to more music throughout the day and there are many people making music, not just professionals.

When you look at some of the music services like Pandora or Spotify, they are effectively using AI to figure out what tracks to play you next. These programs can ideally sense your mood in context and make recommendations. You can track listener's habits and sound analytics well, but humans must be in the room at some point too.

MBJ: What role has open licensing of software had on music/audio development?

CW: It's one of the things I find most powerful about working for Google and doing what I do. Pretty much everything I build is open source. The bar for this software is quite high and development depends on sharing ideas and educating. I believe that open source software has been tremendously beneficial to the industry, particularly in the music space over the last five years. I believe it can coexist with closed source software and I have nothing against making money as a developer. But I particularly enjoy letting people learn from what you're doing. That is what our Web Audio API is all about.

Beyond that, I have pet favorites. There are hundreds of convolution impulse responses files that you can mix into your own recordings that are available for free on the Internet today. You can find some guy who recorded a reverb from a cathedral in the middle of Germany and make it available on the web to everyone else.

BUSINESS ARTICLES

Lessons for DIY Musicians: II

By Nick Fuller



Editor's Note: This is the second of two installments dealing with DIY issues. We printed the first in August 2014. There, Fuller covered music production, distribution, and promotion. Here, he tackles performance related topics and music licensing.

Performance

Performance, a specialized form of promoting, has long required independent musicians to hustle for gigs. The web, as with other areas, has made this, too, easier for musicians. They no longer package and deliver recordings to venue promoters, they just email a link to a website where their music can be streamed. Sonicbids has pioneered using the web to connect performers with event planners and live venues.1 The internet, moreover, has created new performance spaces altogether. Ustream, Justin. tv, Big Live, and JustJamIt allow musicians to live-stream traditional shows or web-only performances.² Additionally, musicians can now perform through avatars in virtual environments like Second Life.3 These trends are likely to strengthen with time as virtual reality becomes less and less distinguishable from first life.4

Lesson 4 - Divide Yourself & Conquer. Whereas other forms of promotion are an up front investment with uncertain returns, playing live is a relatively stable way for DIY musicians to earn income.5 DIY musicians should try to play out as much as possible. However, physical venues will require booked acts to honor "radius exclusivity"; meaning, DIY musicians that commit to playing a club are often not allowed under their booking contract to perform within a given geographic radius of the club for a set length of time.6 In the internet and digital age, however, geography is no longer our master.7 Hence, DIY musicians should explore performance opportunities in cyberspace, open to the possibility of adopting different stage personas, or alter egos, to meet diverse audience demands in virtual worlds.

Licensing

Musicians in the U.S. earn four main kinds of music licensing revenue: royalties from terrestrial radio, compulsory fees from cover songs, sync license fees (from licensing music to synchronize with audiovisual works), and royalties for digital streams of sound recordings.⁸ Royalties from terrestrial radio have been harder to come by

since the Telecommunications Act of 1996 deregulated radio, resulting in the consolidation of ownership in the radio market and a subsequent decrease in playlist diversity. Nonetheless, performance rights organizations (PROs), which monitor the airtime of all songs in their registry, now harness the power of IT to improve the accuracy of their monitoring and, hence, their songwriter services. 10

The information revolution has improved songwriters' chances of being covered insofar as it increases their ability to share their songs with potential cover artists. Songwriters' sync license opportunities, however, have increased dramatically in the digital age, as the volume of entertainment content has ballooned - from cable TV, to web-based shows, to video games.11 Music libraries have popped up in the digital marketplace to connect songwriters with content buyers.¹² While these warehouses of digital tracks have been criticized for diluting both the quality of the licensing market and how lucrative it is,13 they meet a demand for quick deals on short notice, created by the incessant turnover of new media.

Lastly, the digital age has ushered in a new, statutorily-created form of licensing revenue - digital sound recording streams. ¹⁴ Sound-Exchange is the PRO that collects royalties from satellite radio (e.g. SIRIUS XM), internet radio (e.g. Pandora), cable TV music channels, and other digital platforms on behalf of sound recording owners. In 2013, SoundExchange allocated a record \$590 million in royalties, a 28% increase from 2012 (the former record year). ¹⁵

Lesson 5 - Register Your Songs with PROs and Do Business with Music Libraries That Offer Non-Exclusive Licensing Opportunities. The lesson here is straightforward. DIY musicians must register with ASCAP (The American Society of Composers, Authors, and Publishers) or BMI (Broadcast Music, Inc.) in order to collect broadcast royalties.16 Moreover, after signing up with a digital aggregator, per Lesson 2 (see MBJ, Aug. 2014), a musician's music will be available to stream on many digital platforms. Meaning, musicians should also register their songs with SoundExchange. As for doing business with music libraries that offer non-exclusive licensing opportunities, the logic is: what's the harm in it? At

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worst, the musician earns nothing. At best, the musician earns revenue, without sacrificing the potential to earn more revenue. The concern about "selling out" is passé. ¹⁷ Musicians should pursue every reasonable licensing opportunity available, unless it precludes other licensing opportunities or truly diminishes their creative control over their works. Of course, if DIY-ers are concerned about being credited for music obtained through non-exclusive licenses, or have any other legitimate concerns, they should diligently research the business practices of any music library they are thinking of transacting with. ¹⁸

* * *

Prior to rise of the internet and digital technologies, barriers to enter the music market were daunting. In fact, these barriers still exist in the traditional music industry. However, the web and web-based technologies present exciting opportunities for DIY musicians. Low production costs make it easier for songwriters and performers to maintain creative control of their works. New communication platforms allow them to reach potential fans and business partners. Digital music marketplaces make room for even the most obscure recording artists.

Songwriting and performing music are still super competitive occupations, fraught with daunting uncertainty; but today looks like a better day than ever before to make a dent in the music universe (at the risk of being too cloy in cloning a famous digital age mantra). The DIY musician should view their venture as an entrepreneurial one, because it will involve a lot of experimentation and risk. But with no need to relinquish creative control over songs, recordings, or branding, at least their destiny is self-guided.20 "The new does not have to be scary and it's a lot less risky than it ever was."21 The five lessons described in this series, three of which were printed in August 2014, serve as a reasonable starting point for the DIY musician who is thinking strategically about how to optimize their chance of survival in the jungle of the digital music age (lessons I-III were printed in Aug. 2014). MBJ

Nick Fuller is a graduate of Northwestern University School of Law and a musician that has worked in the performing, licensing, and booking end of the business. Endnotes

- 1. See SonicBids, sonicbids.com (musicians sign up for the service and fill out electronic press kits, that include all the information an event organizer needs to assess whether to book the act or not).
- 2. Antony Bruno, "Online video sites embrace live concert streams," Reuters (Jun. 11, 2010), reuters. com/article/2010/06/12/industry-us-internet-idUS-TRE65B0D520100612.
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- 7. Andersen, supra note 18 (claiming we are in many ways past the "tyranny of physical space).
- 8. Terrestrial royalty fees are bargained for by PROs, compulsory fees for cover songs are guaranteed by 17 USC § 115(a)(1), sync fees are bargained for under 17 USC § 106(2), and royalties for digital streams of sound recordings are guaranteed by 17 USC § 106(6).
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- 10. See e.g. "The ASCAP Advantage," ASCAP.com, ascap.com/about/ascapadvantage.aspx, claiming ASCAP, has developed technological innovations, like digital fingerprinting, which enhance performance identification.
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- 12. See, inter alia, Audiosocket, audiosocket.com; Taxi, taxi.com; Music Dealers, musicdealers.com.

- 13. See Weiss, supra note 116.
- 14. See 17 USC $\S\S$ 112 & 114, additions to Title 17 resulting from the 1995 Digital Millenium Copyright Act.
- 15. "Music Industry Leader SoundExchange Celebrates Year of Milestones with 2013 Distributions Reaching \$590 Million" (press release) (Feb. 4, 2014), soundexchange. com/pr/music-industry-leader-soundexchange-celebrates-year-of-milestones-with-2013-total-distributions-reaching-590-million.
- 16. Or SESAC, however, songwriters must be invited to join SESAC.
- 17. See Josh Sanburn, "Advertising Killed the Radio Star: How Pop Music and TV Ads Became Inseparable," Time Business & Money (Feb. 3, 2012), business.time. com/2012/02/03/advertising-killed-the-radio-star-how-pop-music-and-tv-ads-became-inseparable.
- 18. See David Philips, "Red Bull DIDN'T Steal My Music: More Important Lessons for Indie Artists," MusicThink-Tank.com (Apr. 25, 2013) (discussing how songs can be part of blanket license deals between music libraries and creative directors, which don't include any requirement on the part of creative directors to accredit songwriters or performers).
- 19. See e.g. "Contact," BMG.com, bmg.com/category/ contact, which states "Please Note: BMG Rights Management does not accept unsolicited materials. We only accept materials recommended to us by established music industry professionals such as agents, managers, lawyers and artists;" and "FAQ," WMG.com, wmg.com/faq#box3, which states "Demos should only be submitted to Warner Music Group's record labels (e.g., Atlantic, Elektra, Warner Bros.) for consideration, not directly to Warner Music Group. However, please note that Warner Music Group's record labels do not accept unsolicited materials. This means that your demo must be recommended to our labels by an established industry professional (manager, agent, lawyer, journalists, one of our artists, etc.). Industry professionals that understand the creative goals of our record labels are best suited to make these recommendations. We strongly suggest you seek out the assistance of one of these individuals '
- 20. "[C]reative control is number one for Ryan and I. It's a no brainer." Macklemore quoted, Hardwick, supra note 33, at 00:16:45.
- 21. Benji Rogers, CEO, Pledge Music, quoted in "30 Pieces of Advice from Music Industry Entrepreneurs," VentureHarbour.com, ventureharbour.com/30-pieces-of-advice

BUSINESS ARTICLES

Spotify's Secret Weapon

By Christopher D'Amico



Spotify announced in March the acquisition of The Echo Nest, the industry's leading music intelligence company. The deal signals the rising importance of big data in the music industry. Founded by MIT Media Lab doctoral students Tristan Jehan and Brian Whitman, The Echo Nest provided intelligence to some of the world's leading music services including Clear Channel's iHeart radio, Rdio, SiriusXM, and social media networks such as Foursquare, MTV, Twitter, and Yahoo. This might change as the company moves away from being an open source platform, useful to outside developers as well, and services Spotify exclusively. Spotify, whose market cap is estimated at around \$5billion, acquired the music discovery company for reportedly \$100M, with 90% paid up in equity.

Tristan Jehan earned his doctorate in Media Arts and Sciences from MIT in 2005. His academic work combined machine listening and machine learning technologies in teaching computers how to hear and make music. He first earned a Masters in Science in Electrical Engineering and Computer Science from the University of Rennes in France, later working on music signal parameter extraction at the Center for New Music and Audio Technologies at U.C. Berkeley. He has worked with Echo Nest can both create coherent playlists leading research and development labs in the U.S. and France as a software and hardware engineer in areas of machine listening and audio analysis. Brian Whitman is recognized as a leading scientist in the area of music and text retrieval and natural language processing. He also received his doctorate from MIT's Media Lab in 2005 in Barry Vercoe's Machine mind, such as The Echo Nest is working on, Listening group and has a master's degree in copyright law would have to evolve in tancomputer science from Columbia University's Natural Language Processing Group. Brian's research focuses on the cultural analysis of music through large-scale data mining and machine learning.

Scaling and care in managing music related data is, according to Whitman, the basis of The Echo Nest's work. A greater quantity of music processed, of course, gives more punctual choices for better recommendations. Talent and content is identified regardless of popularity rankings, for that would not help discovering artists. Over two million of them and over thirty million songs get tracked. Apparently no other streaming service or manually edited database in the world has a similar reach. If recommendations are to be creative, moreover, projections have to be made about what the user is intending with his/her search, and this may depend on context. A search for Black Sabbath, for instance, may or may not require pulling Ozzy Osborne's solo projects.

To return recommendations, and for other reasons, The Echo Nest scans over ten million music related pages on the Internet daily. "Every word anyone utters about music goes through our system", says Whitman. "We look for descriptive terms, noun phrases, and other text, and such terms as we find bucket up into what we call cultural vectors; each artist and song has thousands of daily top terms that are changing, so we are able to understand them quickly as they are produced."

In fact, The Echo Nest claims to run over one trillion data points for the songs and artists they track. For purposes of analysis and recommendation, songs are not taken whole but rather are broken down into specific attributes, qualities, and even segments. Acoustic analysis has a major role in the company's algorithms when it decides what to play next. Listeners expect smooth transitions between songs in playlists, so this involves, in part, the analysis of tempo, key, and overall genre.

By dissecting these particulars, The and applications with which listeners can manipulate music. The latter is especially important, for new consumer devices will inevitably hit the marketplace soon. The renegotiation over new users' rights is not, naturally, a concern of the company right now, but if music were used with a new number of attributes in

Paul Lamere, one of their top software developers, has built several of The Echo Nest's popular web applications; see http://

static.echonest.com/labs/demo.html.'Girl Talk in a Box' allows interaction with a user's favorite song by speeding, skipping beats, playing it backwards, swinging it, and more. The Infinite Jukebox', on the other hand, will generate a never-ending and ever changing version of an MP3 song, which it breaks into beats: at every beat there's a chance that it will jump to a different part of song that happens to sound very similar to the current beat.

These two applications are for the fun user market, and, perhaps, DJs. There is much more behind the scene at a pro level, such as its use of Spotify's entire range of streaming data to identify, for example, where user listener wanes during a song—is it the extended drum or guitar solo, the weak chorus, or what? There has never been such a measurable tracking of listening habits and musical tastes, and in a digital world of 0s and 1s data reduction is more necessary than ever.

Jim Lucchese, CEO of The Echo Nest's CEO, is right when he says that Spotify has added value to its platform. This is especially true, and Spotify has since been better prepared for an early liquidation event, possibly a merger with one of the tech giants or an IPO. Press reports say that Google's Larry Page balked at the \$10 billion dollar tag that Spotify's owner Daniel Ek seemed to be demanding this July--a figure that if true, would more than duplicate the value of the company a year before. Not all of this is due to The Echo Nest. Still, the market continues to attach an inordinate value to consumer information that is cross-pollinated with music intelligence. Let musicians become the wiser for it. MBJ

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BUSINESS ARTICLES

A Radio Giant's Change of Heart

By Jim Campbell

On September 16th, the world's largest mass media company, Clear Channel, announced that it had officially changed its name to iHeart Media. What was formerly Clear Channel Communications is also switching its ticker symbol to reflect the new name. The move reflects the media company's growing momentum and reach of its Internet radio service, iHeartRadio, and its increasing push towards digital services.

Clear Channel

Clear Channel has come a long way from where it started—a single radio station in San Antonio, TX in 1972. Over the years it built an empire with the help of the 1996 Telecommunications Act, which softened radio ownership restrictions. Prior to the Telecommunications Act, companies were kept to a limit of 40 domestic radio stations. In the time since the restrictions were lifted, Clear Channel has grown continuously, and now owns an unparalleled 859 radio stations. The monthly reach of iHeart Media in the United States is argued to be greater than either Google or Facebook, with about a quarter of a billion listeners.

In 2008, Clear Channel was taken over in a \$17.9 billion private-equity deal with Bain Capital, and Thomas Lee Partners. The buyout occurred at the peak of the market and has since left the company with a significant debt. The result has been significant layoffs and the inevitable re-structuring. Yet throughout Clear Channel has stood firm as the most listened to radio station conglomerate in the US.

Content on multiple platforms

Today, iHeart Media serves over 150 different markets through its ownership and operation of radio stations. The company prides itself on being a multi-platform leader, with content delivered to consumers on many media including digital radio, terrestrial radio, and satellite radio. iHeart has also been building their mobile presence through their iHeartRadio mobile application.

In a broader sense, the shift towards digital content can be seen across the industry, with the development of new technology that allows new possibilities for listeners. Other competitors in digital music, such as Spotify, and Pandora, continue to make headlines and attract new listeners everyday. Perhaps a name change for a company so tightly linked to the

broadcast radio format is necessary as they look to compete with these well established services, and build upon the success the have already seen with iHeartRadio.

Evidence supporting the name change can be seen in the astounding level of consumer brand awareness for iHeartRadio—nearly 70% within three years. iHeartRadio has seen tremendous growth since its inception, reaching 50 million users in a shorter period of time than social networking sites Facebook, Twitter, and Pinterestand significantly faster than any competing digital music service. The mobile iHeartRadio application has already surpassed 345 million downloads. Additionally, in 2013, iHeartRadio was ranked as the #5 media brand on Facebook.

Terrestrial Radio

But a name switch by a leading media giant such as Clear Channel, even if meant to reflect the company's increased movement towards digital services, inevitably casts a shadow of doubt on the future of its traditional radio services. With an increasing number of appealing alternatives, it's easy to speculate that their broadcast radio stations will see their audiences greatly diminish. The numbers, however, paint an entirely different picture.

Chairman and CEO, Bob Pittman, remains confident in the future of broadcast radio. As Pittman points out, roughly 92% of Americans listen to broadcast radio every week. Many may underestimate the medium, but people utilize terrestrial airwaves far more than they are given credit.

According to Nielsen, consumers spend, on average, approximately two hours and forty-five minutes listening to broadcast radio every day. Interestingly, that's second only to watching TV, and surpasses time spent on the Internet. Another statistic says that 73% of listeners discover their new music through traditional radio, making it the leader in music discovery. Radio, of course, has the advantage of coming standard in every automobile, making it the most used platform for listening outside the home.

Another important distinction is that broadcast radio, unlike Pandora, Spotify, and other such services, offers a diverse array of programming, including talk radio, news broadcasting, and live sports coverage—all of which is in addition to musical offerings. So it is likely iHeart Media is going to continue bolstering traditional radio while delivering content on additional platforms.

iHeart

The company has made a commitment to expanding the iHeart name wherever possible, including in the broadcast of live entertainment. Three years ago, Clear Channel presented the first annual iHeartRadio music festival in Las Vegas, and was met with overwhelming success. Now in its fourth year, the concert continues to draw a sold-out crowd, while simultaneously allowing listeners to stream the concert live online, with mobile devices, and on certain radio station websites. This attention has been yet another driver of the iHeart brand among new consumers.

While the company's name change signifies some strategic shift, there isn't much right now to indicate that traditional radio services will play second fiddle to new media. Besides, despite iHeart, the Clear Channel name will not be completely lost. Clear Channel Outdoors is a successful subsidiary of iHeart Media, and one of the world's largest outdoor advertising companies. Its name will not be changed. Other Clear Channel brands such as Total Traffic and Weather Network, which boasts 196 million monthly consumers, will also keep their namesakes.



BUSINESS ARTICLES

A Story out of 1001 Nights

By John Lahr



On September 19th, the Alibaba Group had its Initial Public Offering, the largest in history, on the New York Stock Exchange. Alibaba quickly became the world's ninth most valuable tech firm¹. The \$21.7 billion deal was worth over \$5.5 billion more than Facebook raised at it's IPO only two years ago. It was a massive success, with shares rising 47% in the first ten minutes of trading, and closing up 38% at the end of the day².

The e-commerce giant has now secured plenty of funding to expand its business into new areas. Alibaba already had a large stake in many successful companies spanning a wide array of industries, including online video, maps, department stores, social media, transport, logistics, gaming, education, pharmaceuticals, data, and even professional sports. Most acquisitions were made in 2014 before the IPO, and investments of between \$20 million and \$1.2 billion followed. The music industry is arguably a prime candidate for the next big Alibaba purchase.

Moving into the music industry would create more value for the company. Music is an integral component in advertising campaigns, as well as in the branding of many of the entertainment and lifestyle products Alibaba already owns. With music, the company could have easy access to both back catalogs, as well as the top up-and-coming artists in the many global markets it operates in.

Investing in music also creates value for Alibaba's existing entertainment holdings. In fact, two of the company's three largest holdings, Youku Tudou (online video), and the ChinaVision Media Group (Television and Motion Picture), are entertainment businesses,

and have a combined value of more than \$2 billion. Since it has to pay many of the costs associated with entertainment production already, music ownership could lead to savings in the licensing of content while providing new sources of revenuenot least by combining different entertainment media. For example, an artist signed to an Alibaba owned record label would have their music videos produced, and hosted by Youku Tudou. The music could then

easily be placed in a movie or television show produced by ChinaVision, or used in the new Lyft commercial. By doing this, Alibaba would be able combine the roles of a well-connected publisher and a label. Talent would ultimately benefit.

Buying into music also gives Alibaba the ability to both create some differentiation with Amazon and better compete with it. Alibaba is a software platform that connects buyers and sellers while Amazon sells mostly from its own inventories. Alibaba does not have the overhead costs that Amazon pays to sell recorded music and it may be better prepared to take on the streaming revolution than the American giant is (we have covered Amazon's streaming efforts in the last two issues of the *MBJ*).

For this reason, it is not farfetched to imagine Alibaba buying into a streaming service in the near future. Apple bought Beats Music and Google attempted a move with Spotify but was put off by its steep asking price in July. Although Alibaba is not quite in the same league as either, a good inroad into music streaming would further the company's goals of increasing its mobile presence and revenues, one of the main reasons behind its recent IPO.

Apple is the big rival here. The most effective way to compete with Apple would be to buy an already established service. Rdio is one and it has an existing paid user base that Alibaba could buy at a bargain price. It is small though and to get traction on Rdio would require time and much more investment.

For Alibaba, it would make more sense to use its cash to buy a large stake in Spotify. With an estimated valuation of about \$4 billion it would cost Alibaba less than ten percent of its IPO capital to purchase a controlling interest. As demonstrated by Google's failed bid, Spotify is indeed open to the idea of being bought outright3. Spotify's ten million paying subscribers and thirty million free users would be good for advertising fees, where Alibaba's main revenue comes from, and for more mobile engagement. Purchasing Spotify would also give Alibaba an inside look into the most popular music in foreign markets. Spotify's market analytics, including The Echo Nest platform, seem tailor made to achieve some of its IPO goals.

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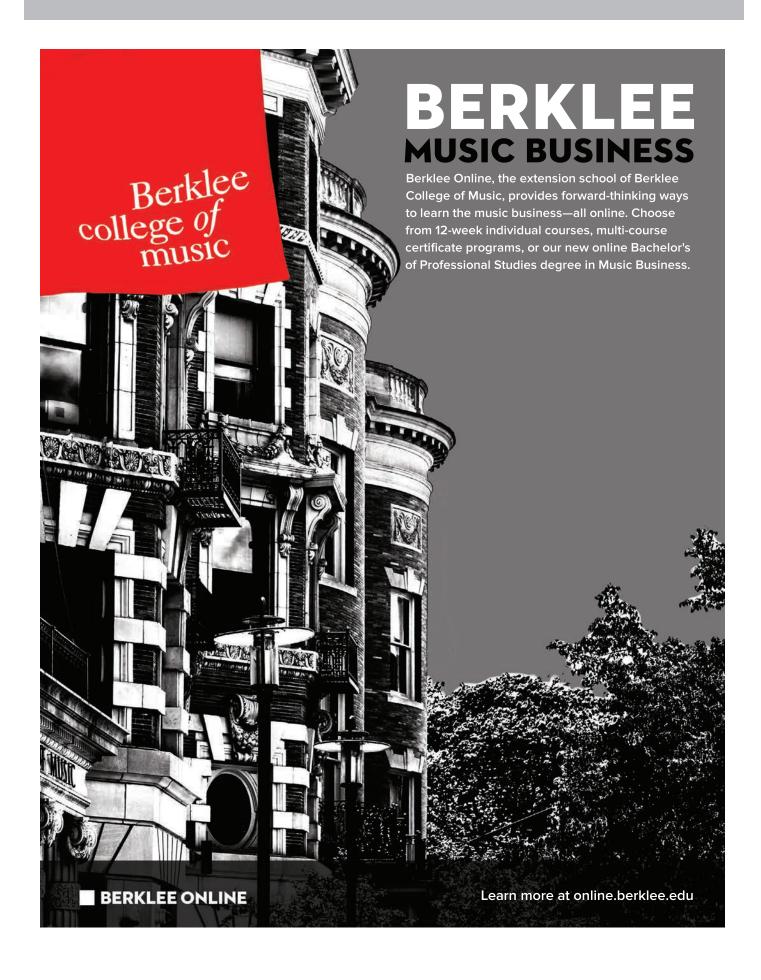
It has been suggested here that a move by Alibaba into music could be both lucrative for the company, and potentially beneficial for the industry. By buying a forward thinking company like Spotify, Alibaba could add to its brand and grow its mobile base worldwide. The highly diversified nature of Alibaba's corporate structure also means that its bet on music could be hedged against losses elsewhere, giving it some flexibility to float the service until it reaches profitability, while deriving value from it.

There are currently few companies that can stand recorded music on its head again, and musicians should pay close attention to Alibaba's developments over the next couple of years. A Chinese company that uses a Middle-Eastern name and is funded globally could yet become an important a player. It is truly a story out of One Thousand and One Nights. 'Open Sesame!'

Endnotes

1.http://projects.wsj.com/alibaba/ 2.http://www.bloomberg.com/news/2014-09-19/alibabadelivers-day-one-windfall-as-jack-ma-s-pledge-met.html 3.http://online.wsj.com/articles/google-considers-buying-

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Consent Decrees (cont.)

Stems (cont.)

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dents, major publisher withdrawal would not significantly reduce the operating costs of ASCAP and BMI, and would force them to bear the full burden of those costs. Further, withdrawal would have a disastrous effect on innovation in the streaming marketplace. Streaming services would be forced to negotiate licenses with the three major publishers, and possibly some of the top independent publishers, in addition to obtaining licenses from ASCAP, BMI, and the third PRO, SESAC. The combined cost of these licenses would likely prove too great for any new startup to bear. Worse yet, the NMPA, in conjunction with the major publishers, ASCAP, and BMI, has done a frighteningly good job of convincing the songwriters they represent that the continuation of the only thing ensuring they receive equal pay for public performances of their works is in fact a bad thing. This means that the only group of people who have the ability to influence the outcome of the review in the same way the publishers and PROs can have remained silent, save for a very few.

Fortunately, all hope is not lost. There are certainly ways the consent decrees could be modified to make it such that major publishers would likely not be able to justify withdrawing from the PROs. Perhaps the easiest step toward a solution would be the removal of the requirement that the rate courts not take into consideration the rates set by the Copyright Royalty Board for the public performance of sound recordings. Though this would only influence the rates paid for digital performances of compositions, it would still most likely result in higher payouts for both writers and publishers, while still maintaining a functional marketplace for public performance licensing.

While the future of the PROs, and for that matter of the industry as a whole, is up in the air, it is critical that we look past the rhetoric and make sure that, regardless of where we ultimately end up, the creators who are the foundation of this industry receive adequate compensation for their work.

(From Page 5)

Fortunately, all hope is not lost. There their content and enabling them to see which stems are being used and more importantly to make it such that major publishers which ones are being licensed.

SMI is planning a soft launch in Europe in January and fuller launch in the US next summer. It is still dependent on a successful investment round. Nevertheless, the company epitomizes a new paradigm for music making, where algorithms dominate, random functions rule, and music is ever more disembodied in its more complex forms from the human touch

It is odd that a composer like Kiely would surrender the aesthetics of music production to a machine. But video rules supreme these days and the synching of music in this automated way may be expeditious when sound is used as a complement to a larger production. Moreover, some form of artificial intelligence in music is seen already among services that cater to even dedicated listeners: the individualization of playlists by Spotify, a great reason for its success, is mostly machine driven.