“THE MUSIC HAS SOMETHING IN COMMON WITH THE CURRENT ENGLISH-SYNTHESIZER LED ELECTRONIC DANCE MUSIC...”

-LIAM LACEY, CANADIAN GLOBE & MAIL 1982
What is “EDM”? The answer to this question is not the purpose of this paper, but is a relevant topic all the same. The earliest recorded use of the term is from a 1982 band review.

“There is something in common with the current English synthesizer-led electronic dance music, ranging at times from the moody sweeping electronic effects of the New Order to the bright, sweet pop of Depeche Mode.”

-LIAM LACEY, CANADIAN GLOBE & MAIL 1982

There are instances of marquis DJs like Paul van Dyk referring to “electronic dance music” as early as 2003. Today EDM is primarily a way for the recent phenomenon to be packaged up for public media, where artists like Skrillex, Pretty Lights and Armin Van Buren are thrown together despite the fact that the music they play is very different. For the purposes of this research EDM refers to culture and community, as well as the related music, both genres, and sub-genres.

Even though this movement in music appears relatively new to much of the public, it is rooted in a much deeper story. This story of EDM is best told looking through the lenses of Technology, Culture and Curation with the following overarching themes:

ADOPTION OF TECHNOLOGY
STRENGTH OF CULTURE
POWER OF CURATION

The multi-billion dollar global industry is drawing interest from top brands, and virtually every segment of the entertainment industry is looking to capitalize on the “DJ”, but this rise to fame is one that did not happen overnight. EDM has long since been an early adopter of technology; Beatport launched in 2004, less than one year after the launch of the iTunes store in 2003. The strength of the culture in this space of music is staggering, with events like Electric Daisy Carnival drawing 400k+ in attendance. Major services perpetually struggle with the future of curation in a virtual space. The ability to masterfully curate has been a mainstay of DJ and EDM culture since the beginning. This skill has been reinvented in the digital age with streaming services like 22tracks and brands like UKF building businesses around their ability to provide the right music to the right people in the right way.

The goal of this paper is to provide a resource for the music industry, DJ’s, producers and super fans that will offer insights on the evolution, depth and sustainability of EDM. Additionally, it is hoped that this research will encourage others to continue the dialogue on these topics and explore them in new and interesting ways.

It is important to note that the overall focus pertains primarily to EDM in the US, the discussion of EDM in other countries is limited to only when relevant to a particular theme.
1.1

SURVIVAL OF THE FITTEST
Dance Darwinism

There can hardly be any better motivation for listening to a school of music than the age-old my-parents-just-don’t-get-it mantra. Factors like this, coupled with the level of widespread acceptance the culture offers create a very unique social atmosphere. In addition to the social phenomenon surrounding EDM, there is a Darwinian element behind the success of the genre. The current state of EDM is the result of its early adoption of digital distribution as well as its resilience during the decline of recorded music. The culture, music and professionals have flourished outside the more conventional models of the music business.

Several key events contributed to the decline of recorded music. These events also provided an opportunity for early adopters of the internet and digital music to excel. Unlike other genres (e.g., Pop) bound to a major label structure, EDM had the flexibility and technical prowess to make their music more accessible to the masses via download and streaming.
Following the adoption of the CD as the principle format for music consumption, the recorded music industry experienced a time of massive growth. In addition to customers purchasing new music, they were also replacing their existing collection of vinyl, 8 track tapes and cassettes with CDs. However, the vast majority of these CDs were unprotected from anyone with a CD drive and the know-how to rip the audio content to their computers. Hardware, software, and format (mp3) eventually converged to create the perfect storm at the turn of the century, leading to the significant declines in recorded music revenue that have lasted until present day.

Given the ongoing challenges in recorded music sales, the industry continues to pursue effective ways to supplement with ancillary revenue streams like brand partnerships and enhanced focus on direct to fan. However, in the midst of these events is a genre of music that never relied on record sales as the primary revenue stream. In a sense it was already positioned to foster in an environment when the days of $18 CD sales ceased to exist. There have been a few examples of platinum albums from artists like Fatboy Slim and The Prodigy in the late 90’s and most recently with Daft Punk’s Random Access Memories*. As a result, the genre as a whole never garnered significant major label support similar to that of other genres. This has changed in recent years, with major labels eyeing the genre with more interest. However, according to SoundScan, most major EDM artists will top out around 500k albums or less. Avicii’s True only sold 178k in 2013 and Skrillex’s widely successful Bangarang stalled at 426k in 2012 (Source: SoundScan). There are some standout examples with platinum

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*870k units in 2013, certified platinum in Feb 2014
singles coming from artists like David Guetta, Calvin Harris and Skrillex. In 2013 Avicii’s “Wake Me Up!” was Universal’s #3 highest grossing track at 8M copies sold. Baauer’s “Harlem Shake” was the top streamed track of 2013 at 489,674,000 streams*.

Although EDM is primarily a digital singles market in terms of volume, its album sales are very telling of the genre’s adoption of technology. According to SoundScan, EDM has been the number one music genre in digital album sales relative to other genres since they started tracking digital album sales by genre in 2006 (see table on pg. 8).

Another area of notable success for EDM in recorded music is compilation sales from labels like Ultra Music, since the early 2000’s. The point Moxey, now President of Dance/Electronic Music (Sony), makes was true then with early series like Ultra.Dance and Ultra.Trance and has remained a constant with current series like Ultra Deep House and Ultra Hits. The success of compilations is not limited to legacy EDM labels like Ultra Music. It is also a part of current trends with compilations like UKF Bass Culture and All Trap Music consistently topping the Dance album chart on iTunes.

“PEOPLE JUST WANT IT HANDED TO THEM RATHER THAN THINK OR FIND ANYTHING NEW THEMSELVES. THEY JUST WANT AN INSTANT COLLECTION OF A CERTAIN STYLE.”

– Patrick Moxey, Founder of Ultra Music (Billboard March 2003)

*Streams include data from multiple audio and video services including AOL, Cricket, Medianet, Rhapsody, Rdio, Slacker, Spotify, YouTube/Vevo and Zune
While EDM’s current presence on the charts today is arguably one of the strongest in terms of volume and sustainability, it is also part of a cycle dating back several decades. Freestyle music like Stevie B and Exposé in the mid-late 80’s charted on both the Dance and Hot 100 charts. In the early 90’s tracks like “James Brown is Dead” by L.A. Style peaked at #59 on Billboard’s Hot 100 and #4 on Hot Dance Club Songs.

In the past decade it is arguable that producers like Timbaland ushered in a lot of EDM influence and popularity through tracks like “Promiscuous” (2006) and “Give It To Me” (2007). However, the true pioneer for charting this recent wave of EDM is David Guetta, collaborating on tracks like “I Gotta Feeling” (Black Eyed Peas) and ongoing collaborations with some of the biggest pop stars on the planet. These collaborations coupled with his solo success of tracks like “The World is Mine” (#1 Hot Dance Airplay, 2007) help solidify EDM as a regular on the charts and push the music further into the mainstream.

“PROBABLY NOT SINCE THE DISCO ERA HAVE WE SEEN THIS LEVEL OF SUSTAINABILITY FOR DANCE MUSIC ON THE CHARTS. SIMILARLY TO DISCO, EDM IS MORE THAN A GENRE, IT IS A CULTURAL MOVEMENT INCORPORATING ELEMENTS OF FASHION AND MORE.”
-SILVIO PIETROLUONGO DIRECTOR OF CHARTS FOR BILLBOARD MAGAZINE

In the past two years, EDM singles have become a staple in Billboard’s year-end chart assessment. Approximately 15-20% of the year-end Hot 100 for 2012 and 2013 consisted of EDM tracks. Top Artists saw a 100% increase in 2013, with 10 EDM artists making the year-end list versus 5 in 2012. The presence of albums is minimal with 2013 only including Daft Punk’s Random Access Memories in the year-end 200 album list. Although this assessment evidences the significant presence of EDM artists and tracks in popular music, album sales are still lagging significantly when compared to other genres.

Note: Billboard does not segment their year-end review by genre, the methodology utilized to create these statistics reviewed the year-end Hot 100 based on production style in order to count as an EDM track. The year-end artist and album count was limited to those artists, which are primarily an EDM DJ or producer.
The environment for today’s EDM fan is vastly different from that of 10-20 years ago. From social media to gaming devices, today’s fan has grown up immersed in technology. This can be seen through an array of cultural and creative examples, from Deadmau5’s Space Invaders tattoo to Porter Robinson MMORPGs (massively multiplayer online role-playing games) inspired album, Worlds.

“Today’s EDM shows give fans music and visuals on steroids, basically like a real life video game. This music also has a tension and release in the arrangements that is extremely appealing for bringing people together.”

–Brian Long, Founder of Astralwerks

Every generation has a genre of music for kids to claim as their own – 20 years ago that genre was hip-hop – today it is EDM. What better way to captivate a generation engrossed in a daily routine of stimulating technology, than with lasers, mau5 (mouse) heads and soul shaking drops?

According to the 2014 IMS Business Report, the annual global EDM industry is growing fast. At $6.2 billion the global EDM industry has grown 38% up from $4.5 billion in 2013, an increase of only 12.5% from 2012. Of the $6.2B total, 68% or $4.2B is attributed to live revenue from club gigs and festival appearances. To provide some context to that number, the entire live music industry in the US totaled $8.9B for 2013 (Source: PwC Outlook Report).

Forbes recently issued their third installment of ‘Electronic Cash Kings’ showing that gross revenue for the top 10 DJs went from $241 million in 2013 to $268 million in 2014, an increase of 11%. Not as dramatic as the 93% increase from 2012 to 2013, but does indicate a sustained steady climb. The #1 slot for 2014 is a repeat with Calvin Harris topping the list at $66 million, up 43% from 2013. This year Harris further lengthened the gap to the runner-up position by more than doubling Guetta’s $30 million total. In 2013 Harris grossed $46 million, more than doubling Tiësto’s $22 million for 2012. At $46M in 2013, Harris surpassed superstar artists like Jay-Z, Kanye West and Katy Perry. At this pace, a $100 million DJ in the next few years is possible, if not probable.

Utilizing these estimates even further for a hypothetical example, if the Electronic Cash Kings only played gigs in the US, they would make up approximately 2.3%* of all live revenue. This may not seem like a huge percentage, but this is only 13 DJs in a country of over 300 million. Please note that this calculation is derived from three different sources, as indicated in the footnote below.

*Total Electronic Cash Kings 305M x 68% (Est. Live Percentage from IMS) / 8.9B (PwC) = 2.33%
What is the true strength and longevity for this music and culture? SFX Entertainment is betting heavily that EDM is a core segment of the mainstream and will be for sometime. An IPO for an EDM conglomerate of this kind signifies that pure business professionals (e.g., investors) believe that EDM is a strategic investment for continued growth and profits.

Robert Sillerman continues to acquire companies as building blocks for an end-to-end platform serving every segment of the EDM community. SFX acquired Beatport in March 2013 for $58.6M. The company’s IPO in October 2013 raised $260M, which was used to complete purchases of the following: ID&T at $130M, i-Motion at $21M, Totem OneLove Group $69.1M and Made Event $35M. SFX has also acquired ticketing companies Flavorus and Paylogic, which will assist in building out core business processes needed to support their live event acquisitions.

Equally impressive to their acquisitions are the global partnerships SFX has secured. The company has partnered with companies like AB InBev (Corona), viagogo, T-Mobile and MasterCard. SFX is also a key partner in Syco Entertainment’s ‘Ultimate DJ’ reality show.

The overall financial performance of SFX has waned since the IPO in Oct 2013 with share price and market cap both down significantly. Q2 2014 revenues continue to increase $82M (+199%), but are accompanied by deepening losses $43.7M (+78%). Given the ongoing acquisitions and deal-making, it appears they have significant commitment to a long play for electronic music culture (dubbed EMC by SFX).

Financial performance is not very telling of success or failure given the youth of the company. The EDM community has been built over a significant amount of time and its patrons are deeply connected to the authenticity of the music, events and culture. There is significant evidence of how the fans of this music are “hypersocial” when compared to other genres. A public company does not have the luxury to focus solely on the fans. The positive indicators for SFX will be if they are able to maintain the EDM integrity their subsidiaries were built on, with a rise in market cap and share price to follow.
One dramatic difference in the rise of EDM versus other genres is the logistics. DJs have the flexibility to show up with only a usb stick and play a six figure club night or possibly two. These logistics are much more complicated for a traditional band of similar caliber and revenue potential.

Additionally, the cost structure is drastically different. A club owner only needs to buy one pair of the latest CDJs (CD version of turntables used for mixing tracks) until a preferable model comes out, they break or Steve Aoki drops cake on them. A marquis rock band has a much more cumbersome stage set up of instruments, mics, amps, and more, that must travel with them to each show. More complex logistics for the respective artist or band eliminates the opportunity to play multiple high paying gigs in one night. The simple setup available in EDM is why DJ’s like Aoki can play 270 gigs in a year.

Some of the more elaborate EDM shows will have gear that travels with them from one venue to the next, and production costs can be significant for larger shows and festivals. However, the flexibility most DJs have in terms of logistics and lower overhead costs places them at a significant advantage to a traditional band. Although vinyl sales have grown significantly in recent years, it is a rarity to see DJs spinning vinyl records. Digital DJ controllers, laptops, CDJs and several hybrid setups are the norm, and most of them fit in a backpack, or will already be waiting at the venue. Technology has created an environment where in many cases a usb stick is all the gear a DJ needs.
“JUST TO GET TO THE POINT WHERE YOU HAD A FINISHED PIECE OF ELECTRONIC MUSIC TOOK A LONG TIME, A LOT OF MONEY, A LOT OF EFFORT, AND A LOT OF UNDERSTANDING OF HOW ALL THESE PIECES OF EQUIPMENT WORKED WITH EACH OTHER.”

-MOBY, PRESSPAUSEPLAY (MOVIE)
EDMTCC.COM
The genesis of EDM has been rooted in early adoption of technology. As mentioned previously, EDM has the largest proportion of digital albums sales relative to other genres. In 2013 EDM sold 62% digital albums, compared to Rock (44%), R&B/Hip-hop (41%) and Pop (38%). But even more significant than distributing and selling EDM is the technological roots of making the music in its stages of infancy.

“Just to get to the point where you had a finished piece of electronic music took a long time, a lot of money, a lot of effort, and a lot of understanding of how all these pieces of equipment worked with each other.”
–Moby, PressPausePlay (Movie)

Entire genres are defined by a piece of gear. One of the most iconic examples is the Roland TB-303 as the backbone of acid house. With a little twisting of knobs, a piece of equipment originally intended for creating straightforward bass lines transformed the way electronic music would sound throughout history. The same could be said for the infamous “clap” put forth by Roland’s TR-909. Groups like Orbital were performing “live” when it was still a painstaking process of routing together massive amounts of wire and temperamental analog gear. Point being that an affinity to technology was ingrained in this music well before every studio had abandoned analog tape for the latest version of Pro Tools.

Electronic music lends itself to a fantastic level of geekery that is not as prevalent in other genres. In many interviews DJs and producers self-proclaim their geekdom.

“This is what many people don’t see, but it’s very much part of the artist’s life. Actually we are all great big nerds who play on their little computers all day long. And at night they can present it and can jump around happily.”
– Don Diablo, Dutch Influence (Movie)

The gear was also very expensive, further indicating the producer’s commitment and passion to create those sounds that have shaped EDM for decades.

**ROLAND TR-808 ’80 $1195**
($3392 adjusted for inflation)

**ROLAND TB-303 ’82 $395**
($958 adjusted for inflation)

**ROLAND TR-909 ’83 $1195**
($2807 adjusted for inflation)

This affinity for technology, coupled with early tool developments for the genre, gave the EDM DJ/Producer the incentive to fully champion recorded music’s transition to digital.

The timeline on the following page profiles a convergence of technological advances and cultural events that coincide with the previous ‘Recorded Music Timeline’.

Within this timeline there are five core technological advancements that will be profiled for their ability to serve as a sustainable catalyst for the EDM community.

**ABLETON LIVE (PRODUCE)**

**SERATO (PLAY)**

**BEATPORT (SELL)**

**SOUNDCLOUD (SHARE)**

**DUBSET (LICENSE)**
2.1

**ABLETON LIVE (PRODUCE)**

Although Ableton Live has a variety of uses, in its early years it was mostly used as an innovative production tool with minimal learning curve. Free versions of the software were offered as an add-on when purchasing studio gear. With little to no background in production, users could produce beats and tracks in a relatively short amount of time. Ableton offered a building block approach to production that supported the spectrum from novice to professional. Widespread adoption of Ableton as a standard live performance tool was some years away when it first launched. However, the ability to “produce” tracks and beats had been significantly altered for the industry.

Currently, the barrier to entry for utilizing Ableton Live for live sets is essentially non-existent. The Novation Launchpad Mini is available on Amazon for $100. When paired with Ableton and a few sample packs, the possibilities are endless.

Now anyone has the means (though perhaps not the skill) to become the next Sasha or Richie Hawtin. This has fostered an immense amount of creativity and growth, and the broadened age range of producers and perpetual variation of genres is additional evidence of this shift. Madeon was only 17 when he created the “Pop Culture” video, a quintessential representation of how accessible production tools are for today’s youth.

Producers like Madeon are becoming the norm, not the anomaly. UK based electronic music duo Bondax started receiving notoriety on BBC Radio 1 before either of them was 20 yrs old. Martin Garrix (NL) was noted in Billboard’s 21 under 21 in Sep 2013 at age 17.
Equally important to accessible and intuitive production tools is the way in which DJs can play the tracks produced for an audience. Historically, DJs used vinyl records to perform. Vinyl will always be a cornerstone for the DJ, but there have always been a few issues. Vinyl is relatively expensive and heavy, really heavy. More than a decade ago, the precursor to Serato, Pitch N’ Time, was developed. It provided a way to slow down bass lines making them easier to practice. Pitch N’ Time eventually became a market leader as a time-stretching and pitch-shifting plug-in.

Around the turn of the millennium, the company began experimenting with the idea of “scratching” audio with a mouse. Scratching in traditional turntablism is a technique where the DJ manipulates the record and mixer during specific parts of the track to create a rhythmic scratching audio effect. Through some blood, sweat and a lot of scratching the company eventually developed Serato NoiseMap, which provided the right feel to emulate traditional scratching. Serato was introduced to the DJ mixer manufacturer Rane at the NAMM (National Association of Music Merchants) conference in the early 2000’s. Serato partnered with Rane to assist with making standalone boxes
to house their NoiseMap technology. In 2004 Serato Scratch Live was born. Scratch Live has since been replaced by Serato DJ (announced Sept 2013).

During a time when the whole of the music industry was still wrapping its head around "digital" and in many cases struggling to fully embrace the future, a digital revolution took place in the hands of the most critical touch point for EDM (the DJ). This was not 2-3 years ago. Serato Scratch Live first became available to DJs a decade ago. In addition to providing an alternative to hauling vinyl and organizing catalogs of CDs, by default Serato forces the DJ to become more adept in music’s metadata, tags, organization and genre classification. Arming the whole of the EDM industry with this kind of knowledge also assisted in equipping them with the right tools to fully leverage digital distribution (e.g., Beatport).

The DJ’s job is to find and play the right music for the right people at the right time, which means systematic categorization and filing (physically or digitally) is critical during a live set. Accurate categorization and selection has also become a key focus of streaming services and data companies today, which is evident in the enhanced focus on "curation" in recent years. When comparing the standard fields of Serato DJ to the key elements of Gracenote Rhythm, we see that most of these have been core components of the Serato platform since the beginning. Gracenote claims to maintain "the largest source of audio and video metadata on the planet", which will no doubt provide some amazing horsepower for their Rhythm API. However, the fact that DJs have been leveraging these “main categories” for a decade is another indicator of how this community has been building an extremely strong foundation in the digital space unique from all other genres in the industry.

The competitive landscape for Serato has become more substantial in recent years. During this formative period Serato was considered the industry standard in digital DJing, and still is by many. Serato allowed DJ’s to “play” gigs in a way that offered an infinite crate (i.e., music library). This depth of musical choice combined with growth in the hardware utilizing the software has spawned a level of innovation for a DJ’s live setup that only continues to evolve. Bands like Toronto based Keys N Krates continue to push the boundaries of what is possible in a live performance of electronic dance music. Utilizing Serato as the digital foundation, their shows present elements of traditional instrumentation (keyboards, drums) combined with scratch DJing and live remixing for original and sampled recordings.
Simply described Beatport is “the iTunes of EDM.” However, one key difference is that the former does not allow the same amount of access to their service. In short, not every EDM track gets on Beatport. Beatport has a strict vetting process through their distribution service, Baseware, and partnered distributors like Ditto Music to help maintain the integrity of their digital store.

Beatport’s current catalog is greater than 3.5 million tracks from over 31,000 labels. The service’s free music previews generate approximately 4 million streams daily, primarily driven by its electronic music charts. In 2013 Beatport had approximately 43 million unique visitors, including 220,000 registered DJs. Virtually any noteworthy EDM track released for purchase is available through the service. Audio file formats available are MP3 (320kbps), AIFF and WAV. In addition, Beatport sells sample packs and stems, which grew from $600k (2010) to $6 million (2012). In its 10 years of existence the all-time top seller on the service is Deadmau5, with Martin Garrix leading the charge in 2014.

In addition to tracks, samples and stems, Beatport offers additional services such as gear, merchandise, desktop apps and more. Tools like Beatport Pro utilize the service’s DJ and consumer community for initiatives like expanded ID3 tagging that allows users to tag tracks with multiple genres, mood, BPM, key, rating and energy level. This additional contextualization of tracks aids Beatport in further honing search, discovery and curation of their EDM catalog.

As mentioned previously, SFX acquired the company in March 2013, thus giving the platform a wealth of opportunity for growth. In February 2013, Beatport and audio identification service Shazam announced a partnership that would provide Shazam access to the audio imprints of Beatport’s catalog. The platform has provided a dedicated avenue for the EDM community to “sell” and discover music since 2004, less than a year after iTunes launched in the US. The store’s ability to super-serve the DJ and EDM community was another key component in laying the groundwork for EDM’s domestic and international success.

2.3 BEATPORT (SELL)
SoundCloud has openly declared that it wants to be the YouTube of audio. The social aspects of the platform positioned it in a way that allowed a level of interaction focused specifically on audio that was new and needed, especially for EDM.

Launched in 2008 the company has grown to bolster statistics, such as approximately 12hrs of audio uploaded every minute and 175 million unique listeners each month. Analytics provider Next Big Sound tracked approximately 8 billion plays in 2013, an increase of 1125% from 2012. When comparing the first eight months of 2014 to the same time period in 2013, plays are up 357% at just over 12 billion. Of the audio uploaded, 90% are played with most being played the same day and more than 50% within the first hour. In a given hour the service reaches 200+ countries. The company was valued at $700M earlier this year company and has raised a total of $160M in funding since January.

Users can find most every genre of music on the service, but EDM is king in terms of fully leveraging the maximum potential of the platform. Of the 36 music genres listed in SoundCloud’s ‘Explore’ (section dedicated to discovery and trends), almost half are electronic music genres. Compare Skream (DJ/Producer) at 356k followers to Beyoncé at 703k. To provide some additional context, Beyoncé has approximately 64 million Facebook fans where Skream only has 530k. Although dominated by EDM, top tier artists like Justin Timberlake (5.8M followers) have seen the potential and are leveraging the service for album promotions.

SoundCloud provides intuitive functionality as an audio repository and player. However, the socialization of this audio sets SoundCloud apart. The ability to “share” your comments, tracks and mixes with fully embeddable players has given the EDM community a dedicated audio outlet requiring no intermediary (e.g., digital distributor). SoundCloud’s innovations also overlap during a period where internet bandwidth and connectivity constraints have started to become nullified.

Earlier this year SoundCloud announced plans to monetize through advertising and eventually launch a subscription service. Although the service had secured several partnerships, licensing discussions with the three major labels had stalled until the recent announcement of a partnership with Warner Music Group. Warner will become part of the ad-supported program “On SoundCloud” (launched August 2014) and the subscription service set for launch in 2015. Although deals like this are somewhat encouraging, it still begs the question of how much user generated content will continue to be flagged for copyright compliance? A streamlined and scalable technology to legitimately license DJ mixes, remixes and mashups is still in need.
Dubset Media Holdings (Dubset) is the parent company founded in 2008 with a straightforward vision focused on allowing DJs to legally sell mixes or mixtapes. Since that time Dubset has evolved into an overarching holding company that is comprised of multiple services and technologies.

One type of audio content you will not see coming from subscription-based streaming services is DJ mixes. No one has adequately tackled rights management and distribution of this content. Of course you can listen to mixes on a countless number of legal platforms, but monetization of these mixes has been something of a pipe dream until now. According to Dubset, several billion tracks will be downloaded, streamed and shared within DJ mixes in 2014, without royalties paid or DJs being compensated.

The company provides the following three-pronged approach to resolving this problem: MixBANK (content ingestion), MixSCAN (audio fingerprinting) and The Future FM (consumer-facing distribution). The most critical component for monetization is MixSCAN, as it could enable a scalable solution for licensing and monetization previously unavailable. Where other services have worked to monetize mixes within their respective site or platform, Dubset’s MixSCAN looks to deliver a globally scalable technology that could be implemented into a variety of digital retailer and streaming services.

Dubset secured a strategic investment from Rhapsody International as part of their Series B round of funding. Monetization of mixes through a scalable platform or API could revolutionize revenue streams for DJs, producers and many others.
“IT’S AMAZING THAT PEOPLE IN AMERICA FINALLY FIGURED OUT WHAT THE REST OF THE WORLD WAS DOING FOR SO LONG.”

-PASQUALE ROTELLA, FOUNDER OF INSOMNIAC EVENTS (POLLSTAR LIVE! 2012)
ANOTHER KEY FACTOR THAT SET THE STAGE FOR EDM TO TAKE THE SPOTLIGHT IS THE CULTURAL STRENGTH OF THE MANY PEOPLE SUPPORTING THE GENRES UNDER ITS OVERARCHING UMBRELLA.

It is unfair to broadly describe the culture of EDM as one unified group of people. The anthropology of EDM contains different cultures and subcultures for genres like techno, house and bass music. But regardless of genre, EDM lends itself to being more tribal than most other types of music. The techno rave scene at Peter Gatien’s Limelight (NY) in the 90’s and the success of festivals like Electric Daisy Carnival today both exemplify this cultural dynamic. It feels good to belong somewhere or to something and EDM provides an avenue for this through its long history as a live supported music open to a diverse and eclectic mix of people. Public demand of music does not always mean public demand of records, and to meet said demand EDM has supported its fan base and growing culture through independent labels, pirate radio and live events. Many EDM festivals (including EDC) also support their fans with cutting edge technology and apps through partnerships with companies like Nashville based Aloompa.

Well before the EDM explosion of today, independent labels like Astralwerks (founded 1993) were signing “Big Beat” acts like Fatboy Slim and The Chemical Brothers. This was during a time in the US when signing these acts would have been considered extremely risky. This DIY (do it yourself) mentality and commitment to the music and culture of EDM provided the label with the sustainability to work with modern day DJ superstars like Eric Prydz and newcomers on the rise like Australia based Alison Wonderland.
The Dutch take the profession of DJ/producer very seriously as a core component of the economy and entertainment industry and have for some time, with companies like ID&T starting in the early 90’s. Dutch crowds are also notoriously difficult to play for, which serves as an amazing training ground for the DJs growing up there. Their resources and passion for this music are so intensely effective that they seem to have a permanent home as the top country of EDM.

Forbes 2014 ‘Electronic Cash Kings’ list of DJs included four Dutchmen with gross revenues totaling $75 Million. Based on a conservative estimate of 10% of DJ revenue being derived from recorded music sales, we can estimate that the NL Electronic Cash Kings (3 DJs) could account for approximately 3.6% of the Netherlands total recorded music revenue of $205.6M. For the first time since Forbes started providing the Electronic Cash Kings report the Netherlands ($75M) grossed more than the US ($57M), compared to 2013 US ($72M) versus NL ($67M).

Tiësto may have put it best in a graphic he tweeted parodying the prominence of the Dutch in today’s EDM industry (see above).

A study released in 2012, entitled “The economic impact of EDM for the Netherlands,” noted that in a span of a decade, the Netherlands experienced a 20% growth in the EDM industry at home and abroad totaling €587M ($805M) for festivals, events, tourism and recorded music sales. According to the study “Dutch EDM going global has its clear impact on the economic significance of EDM for the Netherlands.”

Based on DJ Mag’s 2014 Top 100 DJ List, 31 of 100 are Dutch including 4 of the top 5. Hardwell (NL) owns the #1 spot for the second consecutive year. A Dutchman has taken the top spot on the DJ List in 10 out of the last 13 years.
DJ MAG’S 2014 TOP 100 DJS BY COUNTRY

*CHART ONLY INCLUDES TOP 10 COUNTRIES MAKING UP 81/100 OF THE DJ MAG TOP 100 DJS FOR 2014
Rinse FM is another instance of where the culture, community and passion around electronic dance music provided the strength and sustainability well before mainstream recognition.

The strength of EDM culture takes shape in many different forms, but there are pivot points that happen around the development of specific genres of music. In the case of genres like jungle, garage and dubstep in the UK, Rinse FM is the epitome of organic cultural growth. The pirate radio station eventually realized mainstream recognition and acceptance by obtaining a legitimate FM frequency in 2010, after 5 years of Sarah “Soulja” Lockhart spearheading the efforts.

The station has fostered music from several iconic DJs and producers, such as Wiley, Dizzy Rascal, Skream and Kode9. Their imprint label Rinse Recordings saw its first chart success through Katy B’s Katy on a Mission. In 1994 Geeneus started the Rinse family from very humble beginnings of skating around tower block buildings, stashing FM transmitters and trying not to get nicked (arrested). Now they are fully recognized as one of the most influential radio stations and brands in global EDM culture.
3.3 ELECTRIC DAISY CARNIVAL
Insomniac Events

Insomniac Events has served as a frontrunner and catalyst for establishing EDM events and culture in the US since the late 90’s. The first EDC was actually held by Gary Richards (HARD Events) in the mid-90’s. Pasquale Rotella asked Richards’ permission to use the name for a series of festivals he was promoting, which Richards granted in 1997.

The 2010 Electric Daisy Carnival (EDC) festival that took place in Los Angeles boasted 185,000 attendees making it the largest EDM festival outside of Europe, and could arguably be viewed as the crowning event solidifying EDM’s rise in the US. This past March, Rotella was named the second most important person in EDM by Rolling Stone magazine. The 2011 documentary Electric Daisy Carnival Experience has Will.I.am telling stories of a much younger Rotella flyering outside venues.

From those grassroots in 1997, Rotella has built an EDMpire beyond what he ever imagined.

“No, I never envisioned it to be this big. For our genre of music I thought I was retired. I always tell the story that I would tell kids Daddy was a cool techno DJ and nobody really cared... it’s amazing that people in America finally figured out what the rest of the world was doing for so long.”

- PASQUALE ROTELLA (POLLSTAR LIVE! 2012).

Insomniac currently has more than a dozen festivals hosted in the US and internationally. Live Nation purchased a 50% stake in Insomniac events for an estimated $50 million in 2013. The most recent EDC Vegas was estimated to have total attendance in excess of 400,000. Rotella’s success through Insomniac provides evidence that true culture cannot be manufactured, but can definitely be fostered.
Social media is a key focus for anyone trying to build a fan base for an event, band, artist or brand. What if your fans were inherently more active on social media, simply because of the culture surrounding the music? This is exactly the case for EDM; the fans are just more engaged about music, culture and events with the statistics to back it up.

According to a study published by Eventbrite on EDM fans, there is a significant amount of data validating the community’s “hypersocial” fan base. The study analyzed more than 70 million relevant English social media conversations. The representative sample consisted of 1000 EDM fans ranging in a variety of EDM sub-genres. These conversations were then compared against a group of 1000 music fans of ten broad genres (rock, country, etc.).

EDM fans tweeted 1.85x more than the average Twitter user at 11 times a day. Approximately 1/3 of those tweets were about EDM. These passionate EDM fans posted about their genre 52% more than the broad genre music fans.

EDM fans also tweeted about their listening behavior four times as much as other music listeners and generated approximately 72% more conversations on the major topics in their lives. They post about events 30% more than other music fans, with 1 in 4 posts about EDM occurring during a live event. This equates to approximately 42 billion potential impressions over the course of a year.

Startups like Cultivora are building entire business models around the strength of EDM culture. The company serves as a combination travel agent meets festival guide for some of the biggest festivals in the world including BPM and Ultra.

A key part of SoundCloud’s success has been the social nature of the platform and how the EDM community embraced the service above and beyond all other genres. The culture supporting EDM is invested in the community and music in a way that has always been different, and is currently at its peak in today’s music scene.
“IT WAS A SIMPLE IDEA THAT HAS GOTTEN TOTALLY OUT OF HAND.”

-VINCENT REINDERS,
22TRACKS FOUNDER

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Playing the right track, at the right time, for the right people, in the right setting, this is the job of the DJ, curation. It is one of the primary pillars to DJ and EDM culture, and is an integral difference that sets the music apart from other genres and shows. Just like listeners tune into their favorite radio station because there is a level of trust in knowing that DJ will consistently play tracks they like, DJs build that level of trust and connection in a live setting for a few hours or more.

When attending a rock show, the audience generally has a good sense of the catalog of music that will be performed. The Rolling Stones might play a few different versions from what is on their anthology, or perhaps cover a song or two, but the audience is pretty much guaranteed that there will not be a series of songs from other rock bands and musicians interlaced throughout their set. For a DJ set on the other hand, this is and always has been the norm. When DJs are also producers, they will usually play a set more heavily concentrated with their own original tracks. But there is an innate motivation amongst DJs and EDM fans to be the first to hear a freshly cut track or a remix that will never be publicly released. This aspect of curation is fundamental to the culture amongst DJs, as well as to the fans who attend their shows.

Curation has been present in the physical medium of EDM through record shops and whitelabel culture for decades. Whitelabel records, also referred to as promo or bootleg, have been a key way for DJs and producers to curate and share new music throughout history. In many cases the tracks on the record have not received the necessary copyright clearances (e.g., bootleg) or the label may want to get a sense of the record’s impact so it is released as a whitelabeled “promo” copy. DJs have utilized whitelabels as a symbol indicating exclusivity, limited supply and in many cases high demand. This culture still exists digitally through services like SoundCloud (until recently) and Serato’s whitelabel.net.

**CURATION STRETCHES BEYOND THE DJ TO THE EVENTS THEMSELVES, WHICH IS EVIDENCED THROUGH THE LEVEL OF METICULOUS DETAIL IN CURATING THE EXPERIENCE FOR THE ATTENDEE.**

Sensation (NL) is an international EDM event where all attendees wear white; their slogan is “Be Part of the Night – Dress in White”. Upon entering participants experience an ocean of white décor and installations. Events like this and EDC are an excellent representation of how curation touches all aspects of the EDM culture and community.

The sections that follow provide a sample of key companies and brands that exemplify curation in EDM.
Even with all the services, sites, blogs and channels available to EDM fans, there are still opportunities for aggregating key bits of information related to this music in a neutral setting. In many cases EDM sites and news sources are very genre (e.g., techno) specific, so finding out about new releases and events for multiple genres can be a fragmented experience.

Boomrat has set out to solve these issues for the EDM community. The company is the first ever incubated product team at Live Nation Labs, which was born from a very straightforward concept. Create a destination for EDM fans that is not genre specific and centralizes key content for any genre they might be interested in exploring. The site provides a very clean and responsive one sheet for each DJ, in addition to a “tracking” feature to help with organizing your favorite music as well as more tailored recommendations.

However, the really compelling insights from Boomrat stems from their curation of EDM content from over 300+ EDM blogs to identify current trends for their trending chart (updated hourly). Essentially, it is the tastemaker’s tastemaker. The platform also includes playlists provided by artists, industry professionals and uber fans. Users can create, share and follow the playlists for increased engagement and recommendations.

Plans for the next phases of Boomrat will include aggregation of live event data via Live Nation resources, in addition to native iOS and Android apps.
Conscious and creative curation, connection to audience and attention to detail have set UKF apart from other EDM companies since the beginning. Almost cliché to say, but yet again the stage set for a surreal success story takes place in the midst of a very normal college experience.

While attending Frome Community College in his hometown in 2009, Luke Hood started UKF (United Kingdom Frome) at the age of 16. He and some of his friends were looking for an online destination to listen and share some of their favorite tunes. Luke set-up two YouTube channels (Dubstep, Drum and Bass) and in just over 3 years the aggregate of all UKF YouTube channels crossed 1 billion views in total.

Curating for his audience was something that Hood captured from the beginning, largely due to the fact that he was a part of that same demographic. The tracks provided have always been exclusive. Even today, virtually every release that comes out through UKF is a premiere. This constant stream of exclusive content has provided an even more compelling reason for EDM fans to tune into UKF. The quality of the tracks sparked a viral socialization and organic growth in the early years, according to Hood. The viral nature of the channels and content is still evident today with approximately 3.4% of all plays taking place outside YouTube through embedded players on sites like Facebook and 18% of plays on mobile (also including non-native plays). For all tracks posted in 2013, there have been 685k comments, 750k shares* and 3.8 million likes.

Hood was also creative in establishing the brand. In the beginning UKF utilized YouTube almost solely as an audio streaming platform. Now they provide an ongoing stream of video premieres, but in the early days the tracks were presented with a static logo or a video of a wooferesque object with some flowing wind effects.

The company’s slogan was previously “Bass Music Connected”, but roughly a year ago was changed to “New Electronic Music” given the breadth of genres UKF is now servicing in addition to bass music. The connection to their fans is an ongoing initiative where UKF is always seeking enhancements. The company’s annual survey covers a gamut of topics, like the following:

*YouTube warns before November 14, 2013, sharing data did not include shares from logged out users.
Challenges with data, specifically artist metadata, have plagued the music industry for over a decade. As noted previously, EDM has maintained a focus on music metadata since the launch of platforms like Serato and Beatport. This forward thinking attention to detail has given this music an advantage on cutting through the masses. UKF has leveraged metadata extensively in their channels and follows a clear and consistent convention for contextualizing each track. Minutia like naming conventions and capitalization is not the most fun topic, but it is critical for reaching fans today. So much data is inaccurate or missing in music that providing the right story and digital breadcrumbs around your music has become integrally important for success.

**SAMPLE OF UKF SURVEY RESULTS LATE 2013**

- **AGE RANGE IS PRIMARILY TEENAGERS TO 24 YRS OLD (86%), MOSTLY MALE**
- **FOLLOWERS FROM COUNTRIES AS FAR AS GHANA, BAHRAIN & COLUMBIA WITH THE UK AND US TAKING THE TOP 2 SPOTS**
- **DRUM N BASS IS THE #1 LOVED GENRE**
- **95% ARE SMARTPHONE OWNERS (IPHONE 40%, SAMSUNG 22%)**
- **20% OF RESPONDENTS ARE DJS**
- **DUBSTEP IS MORE POPULAR IN THE US BY NEARLY 20%**
- **UK FANS ARE HEAVIER TWITTER USERS THAN US**
- **NEARLY 50% OF EUROPEAN FANS DO NOT USE TWITTER**
- **NEARLY 1/4 USE SHAZAM AT LEAST WEEKLY**
- **NEARLY 20% OF 35+ YR OLD FANS SPEND MORE THAN £25/MONTH ON VINYL.**
- **NEARLY 30% USE INSTAGRAM AT LEAST DAILY**
The following example is a good representation of how to be clear, succinct and thorough in your YouTube descriptions.

**UKF YOUTUBE METADATA EXAMPLE**

**CHANNEL:** UKF Dubstep  
**TITLE:** Moody Good - Hotplate (Ft. Knytro)  
**URL:** http://youtu.be/ioGPwnzm6Jk

**ABOVE THE FOLD (SHOW LESS):**

Published on Mar 16, 2014  
Brand new track from the Moody Good album!  
Available to pre-order on iTunes: http://bit.ly/N1e5ub

**BELOW THE FOLD (SHOW MORE):**

Published on Mar 16, 2014  
Brand new track from the Moody Good album!  
Available to pre-order on iTunes: http://bit.ly/N1e5ub

**MOODY GOOD**

LIKE: http://facebook.com/moodygoodofficial  
FOLLOW: http://twitter.com/moodygood

**KNYTRO**

LIKE: https://www.facebook.com/Knytro  
FOLLOW: https://twitter.com/thisisknytro

**SIGN UP FOR THE UKF NEWSLETTER:**

http://ukf.com/signup  
http://www.facebook.com/ukfdubstep  
http://www.ukfmusic.com  
http://www.twitter.com/UKFLuke  
http://www.twitter.com/UKF

UKF is now part of AEI Media’s multi-channel network (MCN) supporting 5 separate UKF channels, in addition to affiliate relationships with other channels like SubSoul, All Trap Music, TheSoundYouNeed and Majestic Casual. AEI Media acquired 50% of UKF in 2010, which provided avenues for compilation sales (physical and digital) and cross platform builds via SoundCloud and MixCloud. AEI also took the lead on building the first UKF website, as well as outreach to strategic brand partners.
These monstrous stats mean that after crossing 1 billion total views in June 2012 (3+ years post launch) the channels have added well over 900 million views in just over 2 years. For the period March 2012-2014, UKF Dubstep had 583 days with more than 500k views on the channel and 138 days with views greater than 1 million (Source: Next Big Sound).

Comparatively Ultra Music has 2.6 billion views to date across their 3 channels, but launched on YouTube in Oct 2006, close to 3 years before UKF. They have uploaded 2200+ videos, which is roughly 400 more than UKF. In addition, Ultra has a massive amount of brand equity, given the initial company launched in New York in 1995. Comparisons like this show how staggering UKF’s success has been. 

This meteoric rise started from an uncomplicated mission; curating and distributing the best dubstep and drum and bass tracks to Hood’s friends, and their friends, and their friends’ friends, and so on. Focusing solely on audio and maximizing the impact and scale of YouTube through areas like metadata positioned the channels for rapid socialization and growth. Hood was a fan before he became a founder, and the company has always maintained a close connection with their patrons.

As Hood puts it “sometimes you want to just have it and dance hard”. For clarification sake, “have it” translated to American English would equate to “raging” or “losing your s#!t”. A simple but profound mantra that falls inline with UKF’s 360 degree approach as a full service experiential brand through content, merchandise, shows and more.

“MORE THAN JUST PROVIDING FRESH PREMIERES THROUGH OUR CHANNELS, WE ARE ABOUT MAKING LASTING AND MEMORABLE EXPERIENCES.”

– LUKE HOOD, UKF FOUNDER

Monumental genres like dubstep are not solidified in EDM everyday, but there inevitably will be another one. And those fans and followers will need someone to help them get their fix, just like Hood and team UKF/AEI have done for a generation of bass music fans and countless others seeking new electronic music.
22tracks serves as a substitute for the relationship that was previously maintained between record shop workers and their patrons. Although brick and mortar shops have found great difficulties in finding sustainability in the digital world, this has not removed the people from those markets that valued their services. One of the key challenges for digital music initially was providing access. Today this seems to have been replaced by a curation dilemma.

22tracks launched in Amsterdam, NL in October of 2009 on the premise of providing 22 tracks of 22 genres from 22 DJ's. Each playlist rotates approximately once per month, with an average of five tracks changing each week. This methodical track rotation gives users plenty of time to absorb the content.

Vincent Reinders (22tracks Founder) cultivated the initial idea for the company while working at a radio station in Amsterdam. He noticed the need for showcasing several different genres that were supported by the DJs working with him at the station. The name and premise was born out of the fact that Reinders and many other DJ's standard playlist averaged around 20 tracks. From the very beginning the site received significant traffic as the curators (DJs) already had a trusted fan base. Shortly after the initial launch, the company was approached by DJs in other cities that wanted their own city station. The service currently provides city stations for Amsterdam, Brussels, Paris and London.

“It was a simple idea that has gotten totally out of hand.”
– Vincent Reinders, 22tracks Founder

The user experience is one that invites people to make a permanent home when they finally lock into the city and stations that suit them best. Want to hear 22 of the freshest bass
tunes in London? No problem. Looking to chill out for a bit? Try Amsterdam ‘Relax’. These stations are a window into the heart of each city’s musicality and culture, and they are programmed by a stellar list of industry veterans. Having a song selected by these DJs is not only a great promotional tool, but it is also a stamp of approval in the community that supports that specific genre.

Although each genre playlist is associated with a city, the tracks within that playlist come from all over the world. 22tracks as a business fully came to light when Gilles de Smit, Co-Founder & CEO joined the team. Advertising is the primary revenue stream, making up approximately 60% of gross. However, the company has seen significant growth through branding partnerships, activations and events (including 22tracks branded events), which now comprise approximately 30% of total revenue. The remaining 10% is made up of 22tracks merchandise sales.

“The opportunity to create experiences through brands is something that has been exciting for us as a company, and has inspired us to further explore 22tracks branded events as well.” – Gilles de Smit, 22tracks Co-Founder & CEO

The company offers a variety of advertising options via ‘branded takeovers’, which can be simple branded playlists, genre channel takeovers, city station takeovers or a variety of branded wallpapers and banners across the site.

Over the years, advertisements have included promotions for artists like Band of Horses and Daft Punk, along with branded advertisements for companies like Nike, Sony, Sonos and Lipton Iced Tea. The site also promotes several festivals and cultural events throughout Europe, such as Live Nation and ID&T festivals. The service does a good job of making the ads effective but not intrusive, which is a challenge beyond boutique services like 22tracks. It is something that major streaming services struggle with on an ongoing basis.

Through a partnership with Internet Explorer the company launched version 2.0 of the platform earlier this year with completely revamped website and mobile applications. Consistent with v1.0, clean and intuitive design allows for an instant feeling of familiarity.

The company has secured deals with Grolsch Kornuit (Beer), citizenM Hotels and UPC Horizon (Set Top Box). They are also organizing their own 22tracks festival and are exploring the launch of a record label in the near future.
There is a big difference between developing a cool concept versus truly filling a consumer need or market demand. The personal connection present with 22tracks cannot be provided through a discovery or recommendation algorithm. There is a confidence and assurance that comes with knowing that Venz (Vincent Reinders) is always the one picking tracks for Amsterdam ‘Relax’ or that Molly (a mainstay in the Parisian house and techno scene) is the curator for Paris ‘House/Techno’. This distinguishes the level of frustration presented when automated recommendations provide repeated tracks that miss the mark.

Services like 22tracks make the case for paralleled opportunities for presenting other virtual curation destinations. The need for larger scale services does not go away. However, dedicated streaming services providing thoroughly curated genres offers a plausible endeavor for the digital music entrepreneur. Based on a sample of 4 different stations (4x22=88 tracks total) for Amsterdam, when compared to a major streaming service, approximately 50% of the tracks were unavailable. Examples like this even further validate the need for boutique services. In this scenario boutique means specialized, but in no way implies small given the total reach and traffic of the service (see page 39).

22tracks combines creativity and curation to provide a virtual destination for its users. The fact that each user can identify with the person selecting their tracks provides a deeper connection than a conventional streaming experience. In an NPR interview in Nov 2013 Ali Aydar, Napster engineer and the company’s first employee makes a profound statement, “music is a very emotional thing”. This sentiment can be easily forgotten amidst the ubiquity of today’s digital music landscape. 22tracks has tapped into these emotions through a timeless service that will never go unwanted, personal connection through curation.
EDM is more than music, it encapsulates a movement that has very deep roots. In contrast to virtually every other genre, it is a form of music that has its very beginning in technology. This technological birth has maintained a consistent theme throughout the growth in production and performance tools. Technology is coded into the music’s DNA and those that embrace and seek this music as a mainstay of their daily life. Although the financial barrier to entry has been removed from making the music, the passion for technology continues on with the recent wave of teenage producer phenoms. These young and old producers not only have the tricks on how to make the music, they also thrive in their ability to share it through a variety of live, social and digital channels. This technological foundation helped build and sustain a culture that is now at its peak, where the underground has become mainstream.

In addition to the technical execution of how to reach so many is the common thread of acceptance and freedom that exists in EDM culture. It is for the “cool” kids, but even more importantly it is for the outcasts, band geeks, and those in far left field. The statistics are available to support how these fans are more intensely devoted to their music, which makes perfect sense given the significance around finding a place (any place) where social judgment and stigma is virtually non-existent. But why travel across the country or an ocean for a three-day festival? Simple, an unrivaled audible experience with surrounding spectacles expertly curated for an unforgettable experience. The proverbial “crate” is always present in this space of music making sure that the connection to fans and how to keep them moving on a floor, in a field or on a stage seems to outweigh all else.

The Dutch word *gezellig* has no direct English translation. Anyone native to Holland will tell you that this is an “important” word that embodies many things about Dutch culture. One resounding theme that seems to be present in the culture around this word is creating a connection to people, places and things. There is something very important about finding an inviting place, whether physical or virtual, to go where the experience and music has been hand selected for you and the community you love.

Now is not just a pivotal time in EDM, it is an iconic time in music across the globe. In the end the true root cause, external factors and social phenomenon for EDM can never be truly defined by this paper or any other. However, what is absolute is how crucial this movement is for so many and how greatly they value the connection it creates...*gezellig*.

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