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BMTY7004 New Technology in Music and Creative Entertainment

Essay

Word Count: 2,302

Discipline Tutor: Zohe Mustafa

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1.0 Introduction

With new technologies, the music industry was digitised and digitalised over only a couple of decades. These evolutions brought fundamental changes to the way that music is created and consumed, shifting from a product-based model to a service-based model.

In this essay, I will give a brief overview of the history surrounding recorded music followed by a discussion of the impact of DIY music and streaming platforms on the recording industry. I will also consider the applications of new technologies in the live sector as well as the implementation of blockchain technology in music and its implications.

2.0 A Brief History Of The Recorded Music Industry

To understand how the music industry shifted from product-focused to service-focused, it is essential to be familiar with the history of recorded music. The first instances of recorded and played-back music came with the invention of the phonograph in 1877 (Britannica, 2022). In the late 1880s, pre-recorded cylinders came to market, followed by flat-disc records in the 1890s, allowing the public to listen to the music of their choice from their own homes. The medium evolved to vinyl records and cassettes in the mid-1900s and the consumption of music was made portable by the release of Sony's Walkman in 1979. Only a few years later, the compact disc (CD) was introduced, setting the digital era in motion for music. With the internet came the ability to share audio files and in 1999, Napster was launched, making piracy the recording industry's biggest threat (Forde, 2019). CD sales plummeted and free digital downloads became the public's favourite way of obtaining music. Apple's iTunes was launched in 2001 in an attempt to remedy the situation, but piracy was still prominent until the appearance of streaming platforms such

as Spotify in 2008, which effectively turned an ownership-based, product-focused industry into a subscription-based, service-focused industry.

3.0 The Recording Industry

3.1 The “Do It Yourself” Approach

With the digital era of music and the internet came digital aggregators: platforms such as TuneCore or DistroKid allow anyone to make music available on streaming platforms in exchange for a fee. With streaming and digital downloads making up almost 70% of global recorded music revenue for 2020 and physical sales only accounting for under 20% (IFPI, 2021), the pressing of CDs or vinyl records is of minor importance to unsigned artists. Additionally, the manufacturing and distribution processes of physical products can be a lengthy and costly enterprise to take on (Tunedly, 2021) and only a few digital distribution services, such as CD Baby, offer physical product fulfilment, further dissuading unsigned artists from bringing CDs or vinyl records to market. In this context, artists only need home recording equipment, which is now available at accessible prices, and access to the internet to release their music to the world.

The possibility of bypassing traditional gatekeepers such as record labels means “that the success [that artists are] going after is more attainable than they might think” (Brumskine III, 2020). However, the door to a music career being open to virtually anyone comes with new challenges. In 2021, over 60,000 songs were uploaded to Spotify every day (Ingham, 2021). The market for new music is oversaturated and talent scouts for record labels find discovering promising new

artists “a real struggle” (Raymonde, 2018, quoted in Lynskey, 2020). Artists therefore need to cut through the noise more than ever before in order to stand out from the crowd. Additionally, record labels now often expect potential signings to have built their own DIY career beforehand (Bezrutczyk, 2018).

3.2 Streaming Platforms

Music streaming platforms such as Spotify or Apple Music have fundamentally changed the way that consumers view music. Before the streaming era, the public valued ownership of music and buying a CD or even a digital file on iTunes gave a false sense of possession, especially because if you owned a physical product, you could sell it (Bowe, 2021). Nowadays, consumers appreciate “ease of access to a large library of music” over particular songs or a particular artist (Robinson, 2021). Moreover, the subscription model offered by streaming services is cheaper than the cost of a CD or a digital download, especially as Spotify also offers a free, ad-supported subscription.

In addition to having facilitated the listening process, streaming platforms have given rise to a “significant long-run shift in music consumption toward more plays, variety, and new music discovery” (Datta, Knox and Bronnenberg, 2018, p.6). This ability to discover various music, coupled with the blending of genres in contemporary music, has given consumers a more diverse music taste than ever before (Spotify, 2022a). Record shops used to be organised by genre, now streaming platforms are organised by themed or genre-specific playlists.

Streaming platforms undeniably have a significant influence over what consumers listen to. Spotify’s most popular playlist, “Today’s Top Hits”, has over thirty million subscribers (Spotify, 2022b). According to Corson (2020, quoted in

Aswad, 2020b), getting a spot in a playlist is “an important part of launching a new song”, and Mulatto (2020, quoted in Aswad, 2020b) insists that it “can be career-changing”. On the flip side, streaming platforms have replaced record labels as gatekeepers. According to Chernofsky (2016), streaming services “own the path to both getting signed and getting heard” and “if they choose to promote a song or album, they can easily draw millions of listens for the artist.” Additionally, playlists greatly impact artists’ creative process as, according to Scott (2021, see Appendix), artists increasingly aim to make songs “playlistable”, with short intros and a running time of under three minutes. Playlists, where one song lies in between forty other songs, also contribute to the song becoming more important than the artist as, according to Keller (2021, quoted in Harding, 2021) “streaming is a great way to make an artist faceless.”

While artists tend to hate streaming platforms, largely because of their notoriously low royalty rates, Sisario (2021, quoted in Ovide, 2021), argues that they have been “the industry’s salvation.” In addition to reducing piracy, streaming platforms allow for invaluable data for artist development as well as audience reach. Streaming platform analytics provide information on how songs are performing and what kind of audience they are reaching, including where streams came from (playlists or search), what countries and cities a song is most popular in and the age and gender of an artist’s audience. This data can help artists decide where to tour and whom to target in a marketing campaign (Occhino, 2018). Spotify has also integrated tour dates with links to tickets as well as artist merchandise through a partnership with Shopify, effectively turning an artist’s Spotify page into a one-stop shop for fans, which helps “turn listeners into fans, fans into superfans” and contributes to artists earning more (Hearst, 2021, quoted in Dredge, 2021).

4.0 The Live Industry

The live music sector has been greatly impacted by new technologies, altering the very meaning of the word “live”, which is defined as a performance “as it is happening, rather than being recorded to be shown or broadcast later” (Cambridge Dictionary, 2022). This definition has been challenged by the development of hologram concerts such as late Whitney Houston’s 2020 hologram tour. Besides, live shows have been filmed and streamed on platforms such as YouTube for some time. However, new technologies allow for a much more immersive experience with augmented and virtual realities. Services such as MelodyVR offer VR concerts to stream anytime. Alternatively, live concerts have been done in VR and offer benefits that regular livestreams cannot, such as additional content and different points of view, and “open the experience to people all over the world who might not have the chance to physically get to the venue” (Standish, 2017, quoted in Wired, 2017). Live-streaming technologies grew more mainstream when the Covid-19 pandemic hit and prevented concerts from taking place. Shows first started as “quarantine concerts”, live-streamed from home on social media, and went as far as sophisticated, ticketed, multi-camera events in empty venues. Dua Lipa’s “Studio 2054” livestream in November 2020 drew over five million views (Aswad, 2020a).

With livestreams, the subscription model adopted by the recording industry is beginning to appear in the live industry. In 2021, live music discovery platform Bandsintown launched a monthly subscription giving access to 25 live-streamed concerts per month for the same fee as the biggest music streaming platforms (Lanigan, 2021). This model is even starting to take off in the classical music sector, with the Berliner Philharmoniker “Digital Concert Hall” offering monthly and yearly subscriptions. In an “on-demand economy”, where consumers expect “simplicity, efficiency, and convenience”

(Jaconi, 2014), subscription models with instant access to content are almost a requirement for businesses to last.

New technologies also gave rise to a different type of show merging the music and the gaming industries: in-game concerts. Epic Games' "Fortnite" held its first virtual concert in 2019, with DJ Marshmello attracting over ten million people. Since then, in-game shows have also been staged in Roblox Corporation's "Roblox" and in Mojang Studios' "Minecraft", among others. These entirely virtual concerts allow artists to do anything, disregarding "any limitations, whether it be gravity, seating or anything else" (Rampulla, 2021, quoted in White, 2021).

While virtual or live-streamed concerts cannot replicate a real, in-person live show, they offer different ways of experiencing music and broaden the spectrum of possibilities for both artists and consumers.

5.0 Blockchain

Blockchain, which is defined as "a shared, immutable ledger that facilitates the process of recording transactions and tracking assets" (IBM, 2022), has been gaining popularity in the music industry due to its ability to store and share accurate information in a fast and transparent way (Cooke, 2021).

Its most disputed application is copyright management. With over £500M being "delayed, unallocated and/or mis-allocated to songs that have already received payment" (Ivors Academy, 2021, p.2), "black box" royalties are one of the recording industry's main issues. ASCAP (US), PRS (UK) and SACEM (France) started a collection society blockchain venture in 2017 in an attempt to remedy the situation. In addition, smart contracts, which are essentially "computer code that automatically executes all or parts of

an agreement ” (Levi *et al.*, 2018), can be used to facilitate royalty payments, speeding up the process and allowing artists to be paid faster (De Leon and Gupta, 2017, p.22).

Another promising application of blockchain technology in the music industry is ticketing. With over 140 European representatives of the live industry currently “calling for the European Union to introduce tougher laws to combat secondary ticketing” (Paine, 2022), ticket resales are an undeniable issue. Using smart contracts, ticket purchases can be made completely secure. All transactions linked to any one ticket are accessible on the blockchain, allowing for absolute transparency and control over potential resales and their price (Event Manager Blog, 2021). Blockchain ticketing is still in its infancy, however entertainment companies such as Live Nation have begun partnering with blockchain ticketing firms (Ledger Insights, 2021).

Even streaming platforms have begun utilising blockchain technology, giving artists “more power over how their music is monetised” (Genç, 2021). Crypto-powered Audius has over five million unique users per month (Audius, 2022) and has been referred to as a potential “Spotify rival” (Hissong, 2021). However, as the content on the platform is decentralised, “there’s no way for Audius to remove infringing material, and there is also no way to file an infringement claim on the website” (Deahl, 2019), which defeats the purpose of producing fairer payments for artists.

As blockchain technology is spreading through the music industry, some point out its limitations. Levi *et al.* (2018) argue that the blockchain’s immutability poses an issue as “smart contracts cannot easily be amended or terminated unless the parties incorporate such capabilities during the creation of the smart contract”. Additionally, scalability is a challenge as blockchain transactions are slow and costly and the current state of the blockchain is not fit to host the enormous amount of data that the music industry would generate (Silver, 2016, p.15).

6.0 Conclusion

New technologies have undeniably contributed to the shift from a product-based to a service-based music industry. This change was accentuated by the rise of music streaming platforms, which reinforces the idea that technology dictates consumer habits, much like the phonograph introduced the three-minute pop song as it could only hold between three and five minutes of sound.

With the democratisation of music, anyone can be a recording artist, which opens the door to the industry to much more people. However, this comes with its downfalls. The market is flooded with songs, raising the need for new gatekeepers: streaming platforms. Nevertheless, these services provide consumers with easy and varied music discovery and artists with valuable data. As for the live industry, it is growing into a hybrid of physical and digital experiences with the technological advances in virtual reality and augmented reality as well as livestreams and in-game concerts. Alongside these changes is the spread of blockchain technology through multiple areas of the industry, including copyright management, streaming platforms and ticketing.

As this new service-based industry allows for more content to be created, made public and consumed, it will be interesting to see how it evolves and whether streaming platforms will grow into definite gatekeepers. Ultimately, a service is defined as an entity “providing a particular thing that people need” (Cambridge Dictionary, 2022). If the need arises for streaming platforms to be more selective in order to sort through the extensive amount of music made available, we could see the industry go full circle with barriers to entry to the distribution stage rather than the recording stage as it used to be.

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8.0 Appendix: Jamila Scott interview transcript (25 march 2021)

S: I don't know whether it's just because of streaming. But I feel that, well, yeah, probably is predominantly because of streaming, but you're seeing the the length of songs is being shortened. People's attention span is getting shorter and shorter. I think I saw somewhere it's like you've eight seconds or something to hook someone in, something ridiculous like that. You know, eight seconds is no time at all.

J: Yeah, now it's like, no intro, no time to waste.

S: Exactly. I think you're seeing more choruses right at the beginning of song or like some kind of hook at the beginning of the song to pull people instantly and it is that's the playlist effect if you're sat between 150 other songs, how is your song stand out? Obviously, being something well written, obviously, having an interesting and unique sounding vocal or lyric in there is going to help but everybody else is also striving for that so may making something sound playlistable or, you know, there's a Spotify sound, having a song that's three minutes or less. Something that I feel more artists and more people at labels are more conscious of. And if you have a song that doesn't necessarily fit into that format, you see more edits. I mean, if you look through the 90s, loads of the songs actually ended up charting, versus the original was a remix of something. So like a fat boy slim remix of something that actually is eight minutes long, when originally remixed, that might have been the song that everybody got hooked on to. That's the one that started in the 90s.