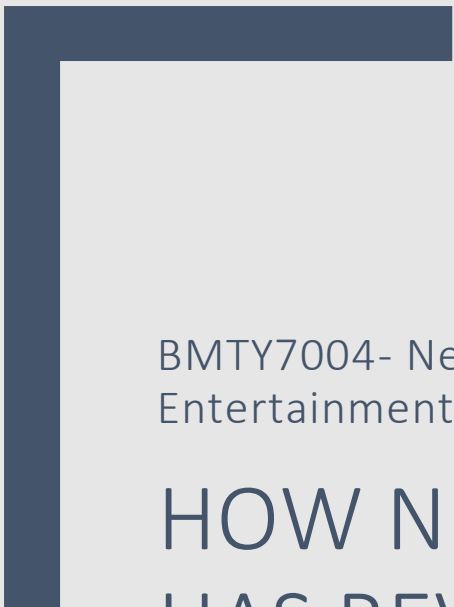




BMTY7004- New Technology in Music and Creative
Entertainment

HOW NEW TECHNOLOGY HAS REVOLUTIONISED THE MUSIC INDUSTRY

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Introduction

The music industry has seen a shift from product-focused to service-focused consumption with the advent of new technologies. What was once an industry that survived on physical sales of vinyl, CD's, cassettes etc. is now heavily reliant on online streaming platforms. With some aspects merely being digitised, such as ticket sales moving from in-person to online, the very way in which the industry operates has been entirely digitalised.

The essay will discuss this shift in consumption, where the user that once relied on D2C product purchase to access music now relies on services providing instant music access. Though there are debates, legal and otherwise, on what is considered a service versus a product when it comes to digital goods, there is no doubt that emerging technologies have fundamentally altered how the music industry operates. This is where the essay's focus will lie. The analysis will begin by providing a brief but essential overview of the industry's digitalisation to this point, as well as the reluctance of the industry to accept these changes. Next, it will examine how new technologies impacted the industry in three core areas: consumption, creation, and interaction. It will conclude with an opinionated discussion on the effects of this shift, as well as offering some future projections on where this technology and the industry is heading.

The digitalisation of the music industry

The music industry has seen tremendous change in the past 150 years. In the late 19th century, people had access to recorded music in their own homes for the first time in history with the phonograph, as seen in the timeline in Figure 1 below. An industry that previously relied almost entirely on live performance was suddenly transformed. This accelerated rapidly into the 20th century with the ability to listen to music becoming increasingly more accessible, culminating with the famous Sony Walkman, truly popularising the concept of portable music-players.

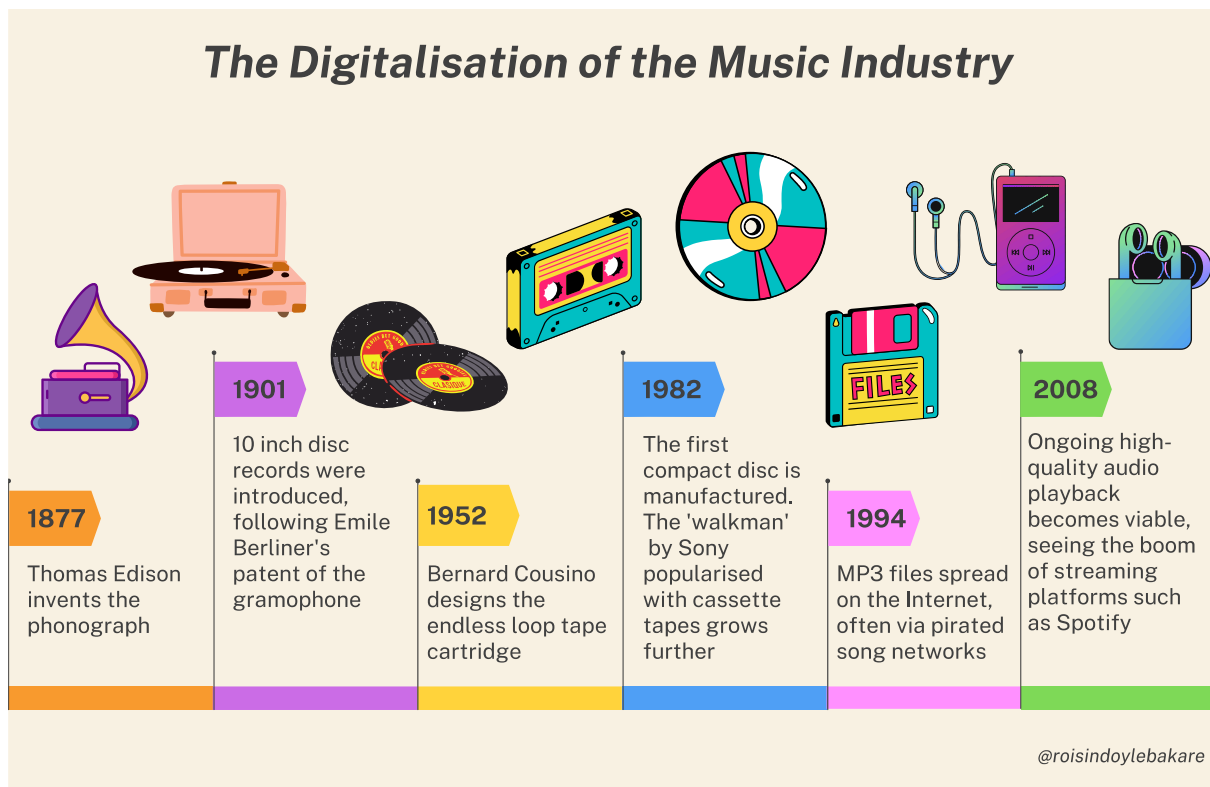


Figure 1: A brief timeline of the digitalisation of the music industry

The advent of the internet and, with it, MP3 files of downloadable music, catapulted the music industry into the digital age. The infamous music download site Napster brought the industry to its knees seemingly overnight, with representatives claiming that the very existence of the industry was at stake (Peitz and Waelbroeck, 2004). The site that managed to make music free and instantly attainable had 150,00 sign ups in just four months, with estimates topping 80 million users two years later (Forde, 2019). The industry's value plummeted over the next decade, until its saving grace finally took off: streaming. Creators of streaming platforms such as Spotify, evidently inspired by the model and pathway created by Napster, began to convince the rest of the industry to accept and embrace the digital era.

It was necessary, it seems, for the industry to collapse under the weight of illegal downloads to make the essential shift to how we now consume music. It is a running theme that the music industry is reluctant to embrace change, particularly when it comes to digital advancements. As put by Gerard: “[the industry’s] response to every new technology since the cassette has been to try to strangle it in the crib” (2017). There was little choice, however, but for record companies to eventually accept streaming services and utilise them effectively. Streaming now accounts for 62.1% of global revenues for the modern-day music industry (IFPI, 2021a). Piracy remains to be problematic, with 1 in 3 people admitting to using unlicensed or illegal ways to

listen to music (IFPI, 2021b). However, illegal downloads have decreased in popularity massively since the early 2000's, with low-cost streaming services that give you legal access to the songs you like without hassle. Further, it became possible to legally stream at no cost at all, with video-streaming sites like YouTube, or free ad-supported tiers of music streaming platforms. This has brought with it a massive shift in how music is created and consumed.

The impact of new technologies

The creation of the world wide web brought with it an ever-increasing appetite for on-demand content. People saw that it was now possible to access *anything*, and that included music. With music based online, people no longer had to purchase a full album to access their two favourite songs or pay for multiple separate products to enjoy their music. This shift has altered three core areas of the industry:

1. Music consumption
2. Music creation
3. Artist-fan interaction

The three are naturally inextricably linked, with the consumer impacting what the artist creates, and the two having a relationship that now heavily relies on digital services- primarily streaming and social media platforms. The entirely new service-oriented approach that the internet created changed how the consumer accesses songs, tickets, merchandise, the artist's personal content, and more. Speaking with industry professionals such as Senior A&R Sebastian Smith from music company Believe, it is widely understood that the industry is swiftly moving away from 'old school' media into the digital age. This is in response to the consumer reaching sooner for an artist's Instagram profile than their magazine interview, which in turn has created an additional service that the artist needs to provide. The veil between the artist and the fan has been lifted, with artists having to share more personal information than any previous generation of artists. In an attention-seeking industry, with a population of people with increasingly short attention spans, it is important to focus on paid advertising and to constantly stay up to date with the newest technologies, platforms, and trends (Ferrone et al., 2019). This, however, also acts as genuine revenue for many artists, as well as providing opportunities, with up-and-coming artists so often discovered on platforms such as TikTok (Rosenblatt, 2019).

A further appeal of social media and streaming platforms is their algorithmic understanding of personal listening habits that lead to further music discovery (Marius, 2021). People have come to expect technology to understand them as much as we do in return- from tailored ads based on our purchasing habits to what we should watch next on Netflix. This is no different for music, and is entirely reliant on the technological accumulation of data. The collection and utilisation of data is a vital aspect of building a modern business- which includes building an artist's profile. Despite the notoriously low payouts for artists by streaming platforms, and the hassle of social media, it is all necessary in return for user data. Humans generate astronomical amounts of data every minute, and a lot of this is useful for artists and labels (Moon, 2017; Soundcharts Team, 2022). There are countless services in place to help artists monitor user data, such as Chartmetric and Soundcharts, designed to collect as much useful information as possible to incorporate into marketing campaigns and to help steer the artist's creative pursuits.

An additional side effect of the advancement of new technologies is the ability for virtually anyone to venture into this world of creation. Digital aggregators saw the opportunity here, with platforms such as DistroKid making a 'DIY' music career possible by facilitating digital distribution to streaming platforms for a low cost. As explained by music manager Steve Rennie: "The old brick-and-mortar retail distribution network that was the linchpin of the major labels power has been usurped... Getting your record in a store today is doable for just about anybody with forty bucks and an Internet connection" (2014). As a result, there is a growing influx of people making their songs available to the public. CEO of Spotify Daniel EK hopes to see "as many as 50 million creators" with "a billion users around the world" by 2025 (Ingham, 2021). The industry now operates in a hyper-competitive environment where anyone, but not everyone, can be successful (Leight, 2020). This oversaturation of the market may cause issues down the line, particularly for record labels and artist discovery. However, the consumer generally has no cause to complain, having access to more and more music by the second.

Thoughts and future projections

There are a range of benefits and downsides to the new technologies that now define the music industry. On the one hand, the industry has become more accessible in more ways than one. A wider range of people now have access to music that they could not have afforded before, or to sounds that they would not previously have heard due to geographical location, age, or other

demographics. Further, artists now have the power to create and release their music without having to bypass gatekeepers, with the average person having the ability, if they so wish, to make their creations available for public consumption. On the other hand, however, this is creating an oversaturated market that is arguably making it more difficult for people to truly make a career out of music-making. With such widespread access to assistive technology, artists have no excuse for not having a pre-established audience, released songs, an Electronic Press Kit and so on when hoping to be signed with a major label. Further, the heavy focus on music being ‘playlist-pitchable’ above all else is in many ways impeding on the creative process, dictating a song’s length, wording, and genre to make it playlist-worthy (Leight, 2020). Any future technology ventures will need to account for these pros and cons in order to gain traction with both users and creators.

So, what is next for the music industry? It is difficult to say definitively, however there is no shortage of new technologies and business ventures popping up to be the next big thing. Many people suspect that usage of the blockchain and NFT’s, as well as the metaverse, are the next steps in the digitalisation of the music industry (eMusic, 2021; PWC, 2021). Celebrities and influencers are quickly discovering this, investing in, and publicly supporting these technologies (Viviana, O. and Harkins, M, 2022; Rao, 2022).

The main purpose of introducing blockchain technology into the music industry is to create an artist-centric model without intermediaries (i.e. digital stores, aggregators, labels, distributors, collection societies, publishers, etc). Currently, between the intermediaries and a handful of companies controlling music copyright, an array of problems are created for artists who have very little control over their songs and with little payment leftover for them, often received years down the line (Rethink Music, 2015; O’Dair, 2016). Blockchain appears to solve this, with “the combination of blockchain-based platforms and smart contracts... [enabling] artists and their collaborators to form a new music ecosystem” (Tapscott and Tapscott, 2018). Using blockchain technology for recorded music to have a networked database for music copyright information, fast, frictionless royalty payments, transparency, and access to alternative sources of capital could prove to be revolutionary (O’Dair, 2016). Another springboard of the world of cryptocurrency that could prove useful in the music industry is the dawn of non-fungible tokens (NFTs). NFT’s can act as digital assets/tokens such as music, videos, or a work of art, stored as digital files on the blockchain to verify ownership and prevent fraud (ArtGee, 2021). Many musicians and labels are already exploring this additional revenue opportunity.

More and more companies and services are appearing to fulfil this desire for blockchain and NFT's in the music industry: Audius are a blockchain powered streaming platform, OnChain Music' facilitate of NFT sales, The Open Music Initiative (OMI) are working to enable industry platform interoperability for a simplified approach to identifying and compensating music rightsholders. The main question that remains is whether they will prove successful. As aforementioned, the major shareholders in the music industry do not tend to welcome change, particularly when the technology itself intends to bypass intermediaries and gatekeepers to provide the artist with more control. As explained in a report by PWC, this "consortium of major labels... cover 80% of the music market. If the independent trade group MERLIN joined, their reach would grow to 95%" (2021). Ultimately, with their massive stake in the industry, it would be near impossible to reach critical mass without their support.

Conclusion

The purpose of this essay was to display the ways in which new technology have changed the music industry overall. This has been achieved by first providing a brief history of digital advancements in the music industry to date, and then evaluating and reflecting upon the ways in which they have made such an impact on how the industry is run today. This comes with many pros and cons, with many industry professionals on the fence about whether new technologies have caused more harm than good for the industry. However, in this digital-centric world, technology is not going anywhere, and is only advancing and developing further each day. The world has thus far seen success growing in the world of blockchain technology and NFT's, with many apparent benefits for artist and consumer to be found in their utilisation. Though it remains unseen which, if any, of these technological advancements survive or gain traction, undoubtedly the industry will have to keep pace with ever developing tech.

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