

Critically evaluate how new technology has turned the music industry from a product to a service sector

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New Technology Essay
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1. Introduction

The evolution of new technology within music has resulted in the democratisation of an industry that once was restricted to a few people and controlled by the major labels. As new technology has developed, the ability for independent artists and musicians to create, share and market their music has grown exponentially. As a result, the shifting dynamic of the music industry has meant that the major labels have begrudgingly had to adapt their business strategies and offerings to maintain their market share. New technology has attacked the music industry from all sides, from disruptive new software and its ease of availability forcing a shift in the way music is consumed on demand, to allowing artists with little budget and no team the opportunity to deliver professional looking assets and high-quality sounding masters. The resulting levelling of the playing field means that the music industry now is unrecognisable from the traditional music industry model employed for so long, as labels and artists continually strive to create, seek and adapt innovate new technology in order to stay ahead of the curve.

This essay seeks to define the difference between a product and a service sector, timeline the shifting consumer demands brought about by new technology and the continuous pursuit of innovation, before offering some predictions into how new technology can further skew the existing framework of music industry norms.

2. Defining Products and Services

Prior to the digital revolution and the rise of streaming, the music industry was easily defined as a Product sector, with consumers offered traditional methods to listen to their favourite music in the form of physical products such as vinyl, cassette and more recently, CD. However, as new technology infiltrated the music industry, the rise of digital software and disruptive technology such as illegal file sharing meant that the traditional business models that had been so profitable for the major labels previously was no longer viable. As a result, labels and artists have had to adapt to remain profitable, and so a longer tail approach was required, as the music industry looked to capitalise on any additional revenue streams to help maintain their market share. This meant new, digital income streams were developed in addition to the traditional means of consuming music. To better understand the concepts, and differentiate between the two, it is important to define what is meant by Product and Service sectors.

It has been argued by some that music isn't a product, with some people stating it is a piece of content that adds value to a physical item (Grasmeyer, 2012), a perspective that correlates with many people's view that music will always be art. For this essay, a product refers to Giroux's definition of music as a product that is "designed to be marketed and sold to a particular demographic" (Giroux, 2018). As the music industry has shifted into the digital realm, the lines have been blurred and there is some crossover between products and

services, however products in this case will be treated as things you can buy - such as vinyl, CD, cassette and relating to live shows. For this essay, we will treat services as “part of the economy that provides various services, as opposed to providing tangible goods” (CFI, n.d.)

3. Music: A Timeline

Music was first recorded and reproduced in 1877, when Thomas Edison patented the phonograph. Prior to this, innovators were utilising technology to monetise music in some form. This stretches back to the days of King Henry VIII, who introduced the Statute Of Anne (The Guardian, 2007), the first copyright law which put the writes of sheet music into the writers hands, not the printers, and allowed them to have the sole license to reproduce and sell music in the written form, the first semblance of music being sold as a product.

3.1 The traditional music industry model

For years, the music industry employed a business model that was accepted as a framework for artists wanting to be a success. Due to the financial costs of recording, producing, and marketing music, the major labels held an oligopoly that meant that they alone had the infrastructure and resources required to break new artists. Ferrone (2019) explains that the artists “needed the record company to pay for and perform all of these functions on their behalf” and described there being an “almost complete absence of an alternative route to market”. During these times, fans were restricted to a select few channels to consume music, and the major labels had the relationships, network and distribution that meant they were the only option for most artists. As a result, major labels were able to refine their business models and strategies to maximise profit. At its height in 1999, when CD and physical sales were at their highest, music revenue in the US alone hit \$22.7 billion. Of that figure, \$20 billion was brought in by CD sales alone, “more than twice the recording industry’s total revenue for 2018” (Richter, 2021). That all changed with the rise of the internet.

3.2 The digital disruption

As we’ve seen, technology has long influenced the music industry, even in its most basal form, and no other technology impacted the industry more than the internet. Although the internet was first invented in 1983, 56k modems weren’t made available until 1996, allowing for faster web surfing, and the wider adoption of the internet coincided with the release of Apple’s iBook in 1999 (Murphy, 2019). As the physical-oriented peak of the music industry’s revenue occurred in the same year, it is strongly argued that its collapse was due to the internet.

3.2.1 Illegal file-sharing

While the MP3 and digital downloads opened-up another revenue stream for the music industry, revenue sharply decreased during this period, largely down to the newly available accessibility of this new technology. Platforms like Napster arrived and allowed users to download the music they wanted for free, illegally.

3.2.2 The MP3

As internet speeds began to increase, there was a rush to capitalise on those new opportunities, and the music industry was no different. While it was still virtually impossible to transfer a music file in a reasonable time,

Karlheinz Brandenburg invented the MP3. The MP3 reduced the file size by 11 times compared to an uncompressed track (BBC, 2012). This presented a whole host of opportunities for this new technology to be utilised, and arguably the most prominent early on was the MP3 player. Apple released iPod in October 2001, a portable device that integrated the new MP3 technology. Apple introduced the Apple Store, and despite this new revenue stream, revenue generated from the iTunes Store ran at around break-even point once all the licenses and rightsholders had been paid, as Apple used the purchase of MP3's on their platform to drive sales of their iPods (Resnikoff, 2006), a product with a far higher profit margin. The iTunes Store and other similar channels were a response to platforms like Napster, but by this time, consumers had become used to acquiring their music for free. According to an IFPI report (2009), around 95% of tracks were being downloaded without payment to rightsholders. As a result, a new value had to be added to music to entice fans to pay for music again.

4. The music Industry response and shift to a service sector

With music revenue dropping sharply and illegal file sharing becoming the widespread method for acquiring and listening to music, the traditional business model employed by the music industry needed a complete overhaul. Numerous tactics and strategies were employed with varying success but streaming eventually won after some initial resistance from major labels. Major labels are traditionally slow in responding to change, and initially resisted against Spotify. However, eventually Spotify was able to sign licensing deals with the major labels which enabled them to offer a free service which was paid for by advertising, along with a paid monthly subscription, which enabled you to pay £10 a month to listen to music ad-free (BBC, 2018). This was the tipping point as the music industry looked to recover from the impacts of piracy. While Spotify, and other music streaming services that launched as a result (such as Apple Music, Pandora and Deezer) paid royalties to rightsholders, the remuneration for artists was far inferior to the revenue that was lost due to piracy, and so the music industry needed to further adapt to maintain its size.

5. A Long Tail approach

For the music industry to recover to a point where it was able to see a return to some form of pre-piracy scale, it had to turn to other revenue streams to facilitate that. Chris Anderson defined the long-tail approach after years of research into societal and economic dynamics. Anderson explained how technology was “turning mass markets into millions of niches” (2009), and this approach is one that has been applied across the music industry, as they increasingly saw the value of multiple lower-profit revenue streams amounting to sizeable income collectively. This, coupled with the internet's democratisation of previously unavailable resources, created a perfect environment which allowed innovative creators and new technology to combine to great effect, and gave independent artists previously unreachable possibilities.

6. Music as a commodity

Track-technology has evolved to a stage where it is possible for software and programmes to recognise registered music with impressive accuracy, and this has enabled tech companies to better regulate the use of copyrighted music and enabled the rightsholders to monetise those platforms. YouTube has faced a long battle against rightsholders, who argue that they should be paid for their music being used. While it was normal for labels to request the music was taken down, YouTube has now become a recognised promotional tool, with many labels choosing to monetise another channel's use of their music if the channel has enough subscribers and is a viable secondary revenue stream. Several channels with substantial followers now have agreements

with major labels to split the revenue for a set period for an upload, and there are now multi-channel network partners such as The District, who work with several YouTube channels and major labels to facilitate this partnership. This is all made possible by advertising and premium subscriptions, further feeding into the cultural shift towards on-demand content across all forms of entertainment, such as Netflix for TV and film. Social platforms such as Tik-Tok have been able to negotiate huge licensing deals with major labels (Stassen, 2021), who have evolved sufficiently to recognise the growing value of being present on these platforms.

Companies such as Hypgnosis has further cemented the idea of music as a commodity, treating music as “investment assets” (Graham, 2021), and with more on-demand offering and opportunities to exploit recordings, it looks to be a sound logic.

7. COVID 19’s effect on music as a service

There is no doubt that the COVID-19 pandemic has accelerated the move towards the music industry becoming a service sector. With the shifting culture towards a longer-tail model employed by major labels and independent artists alike, this has helped artists who are now more flexible adapt to the changing landscape brought about by the pandemic. Artists who have been unable to tour, for most still the main source of income, have had to look to other means to exploit their music and brand, and new technology has helped that transition. Prior to the democratisation of music and the depth of information readily available, artists were traditionally secretive about their process and ways of making music. However, there has been a shift to artists now offering that information at a price, with services such as Patreon allowing artists to monetise their artistic insight. An example of this is Brawther, who offers fans the chance to subscribe to his Patreon account, with different tiers of subscription offering different levels of access, from early access to music and podcasts to digital promos, merchandise, and fly-on-the-wall type track breakdowns (Matthew, 2021)

8. Live music

Even live music and touring, one of the last bastions of a product industry, has proven not to be immune to the shifting desire for on-demand service, caused by, or at least accelerated by, the pandemic. The past year has seen an influx of livestreaming platforms pop up, driven by a combination of the artist’s desire to perform, fans demand to see their favourite artists, and new technology making it all possible. Platforms such as Mixcloud have expanded their offering, launching Mixcloud Live to give DJ’s the opportunity to broadcast their sets uninterrupted. Previously, performing on social media channels and similar platforms has resulted in tracks being muted and takedown’s being ordered, however Mixcloud uses audio fingerprint algorithm technology to identify music and pay royalties, meaning that labels and rightsholders have been able to monetise this opportunity.

Development in track recognition technology such as DJ Monitor, have allowed for more platforms to integrate such technology, leading to more opportunities for artists and rightsholders to monetise on these platforms. As a result,

9. Democratisation

It has never been easier for new musicians to record, release and promote their new music, with many platforms offering monthly subscriptions to facilitate this process. Companies such as LANDR utilise new technology to instantly master music, while distributors such as Amuse and Distrokid now allow anybody to release as music as they want for a set monthly fee.

While the democratisation of music has undoubtedly provided previously unheralded opportunities for creatives and innovators, the easy nature of being able to release music has arguably led to a decrease in quality control, and people are required to sift through a higher volume of music to find something they like. This has contributed to a recent increase in vinyl sales as well as deluxe boxsets and other physical products, as fans continue to demand for more tangible ways to consume their favourite artists rather than just streaming. Vinyl sales increased by 10% year-on-year in the UK in 2020, with over 4.8 million vinyl records. This would suggest that the two can exist together, working in tandem to provide numerous ways for fans to engage with the artists they like most. Again, this provides another reason for fans to be engaged and in-tune with their fanbase, to provide them music that suits their needs with so many possibilities available.

10. The Future

With technology having a huge impact on our lives already, it's inevitable that it will continue to present new opportunities for those looking to innovate. One technology that is already prominent, and will increasingly become prominent, is artificial intelligence (AI). AI is defined by John McCarthy as "the science and engineering of making intelligent machines, especially intelligent computer programs." (McCarthy, 2004). Services such as Rotor use AI to allow users to pay a monthly fee to create unlimited amount of videos that both react to the music, plus any image or video that the user uploads (Stassen, 2020).

It has also been predicted that AI will also help in the creation of music in the future. Companies such as Jukebox, MuseNet, AIVA and SOUNDRAW already offer this service, and artist Grimes predicted that AI will eventually be "so much better at making art than us". While this is a possibility, it's more than likely that artists and music makers will learn to adopt these technologies to enhance their offering, and the two can work together.

11. Conclusion

For years the music industry was dictated by an oligopoly of major labels who all held the near-exclusive power to both break an artist, and control what music consumers had access to. The digital disruption caused by new technology meant that this model was no longer sustainable. The record industry had to adapt from the cycle of releasing and promoting albums, and the short-period, high-profit nature of the cycle. As a result, labels, artists, and the music industry at large have had to adopt a longer tail approach, targeting a higher number of lower-profit revenue streams that continually provide income to an industry recovering.

The shifting culture brought about by the internet, the democratisation of art and the fast-paced, easily disposed nature of the world we live in has further shifted the dynamic of consumer needs, with consumers across the board expecting full access to on-demand services in whatever they consume. Technology has facilitated this process, and the development of new technology has meant there has been, and will continue to be, new opportunities for those creative and willing enough to seek it.

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Bibliography

Anderson, C., 2009. *The longer long tail*. London: Random House Business, p.15.

BBC News. 2018. *How Spotify came to be worth billions*. [online] Available at: <<https://www.bbc.co.uk/news/newsbeat-43240886>> [Accessed 8 July 2021].

Bbc.co.uk. 2012. *BBC - WebWise - What is an MP3?*. [online] Available at: <<http://www.bbc.co.uk/webwise/guides/about-mp3s>> [Accessed 7 July 2021].

Beardsley, R. and Leech-Wilkinson, D., 2009. *A Brief History of Recording to ca. 1950*. [online] Charm.rhul.ac.uk. Available at: <https://charm.rhul.ac.uk/history/p20_4_1.html> [Accessed 10 July 2021].

Corporate Finance Institute. n.d. *Service Sector - Overview, Primacy, and Examples*. [online] Available at: <<https://corporatefinanceinstitute.com/resources/knowledge/economics/service-sector/>> [Accessed 17 July 2021].

Ferrone, T., 2019. *Start Up Guide To The Music Business*. AIM, p.8.

Graham, A., 2021. *Hipgnosis 'well on way' to turning songs into assets, boss says*. [online] The Independent. Available at: <<https://www.independent.co.uk/business/hipgnosis-well-on-way-to-turning-songs-into-assets-boss-says-b1860940.html>> [Accessed 9 July 2021].

Grasmayer, B., 2012. *Why Music Is Not A Product & Three Reasons Why That's A Good Thing*. [online] Techdirt. Available at: <<https://www.techdirt.com/articles/20120213/08223317744/why-music-is-not-product-three-reasons-why-thats-good-thing.shtml>> [Accessed 5 July 2021].

Landr.com. 2021. [online] Available at: <<https://www.landr.com/>> [Accessed 16 July 2021].

Matthew, T., 2021. [online] Available at: <<https://5mag.net/features/brawther-start-end/>> [Accessed 10 July 2021].

McCarthy, J., 2004. [online] Available at: <https://homes.di.unimi.it/borghese/Teaching/AdvancedIntelligentSystems/Old/IntelligentSystems_2008_2009/Old/IntelligentSystems_2005_2006/Documents/Symbolic/04_McCarthy_whatissai.pdf> [Accessed 16 July 2021].

Murphy, M., 2019. *From dial-up to 5G: a complete guide to logging on to the internet*. [online] Quartz. Available at: <<https://qz.com/1705375/a-complete-guide-to-the-evolution-of-the-internet/>> [Accessed 6 July 2021].

Resnikoff, P., 2006. *iTunes Music Store Crosses One Billion Download*. [online] Digital Music News. Available at: <<https://www.digitalmusicnews.com/2006/02/23/apple-16/>> [Accessed 8 July 2021].

Richter, F., 2021. *Infographic: From Tape Deck to Tidal: 40 Years of U.S. Music Sales*. [online] Statista Infographics. Available at: <<https://www.statista.com/chart/17244/us-music-revenue-by-format/>> [Accessed 4 July 2021].

Stassen, M., 2020. *Alex Branson and Pj Dulay join AI-powered video creation app Rotor Videos - Music Business Worldwide*. [online] Music Business Worldwide. Available at: <<https://www.musicbusinessworldwide.com/alex-branson-and-pj-dulay-join-ai-powered-video-creation-app-rotor-videos/>> [Accessed 17 July 2021].

Stassen, M., 2021. *TikTok and Universal Music Group sign global licensing deal - Music Business Worldwide*. [online] Music Business Worldwide. Available at: <<https://www.musicbusinessworldwide.com/tiktok-and-universal-music-group-sign-global-licensing-deal/>> [Accessed 18 July 2021].

The Economic Times. 2021. *What is Product? Definition of Product, Product Meaning - The Economic Times*. [online] Available at: <<https://economictimes.indiatimes.com/definition/product>> [Accessed 9 July 2021].

the Guardian. 2007. *The Statute of Anne*. [online] Available at: <<https://www.theguardian.com/technology/2007/aug/06/statuteofanne>> [Accessed 28 June 2021].