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New Technology Essay

How New Technology Has Turned the Music Industry from a Product to a Service Sector

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How New Technology Has Turned the Music Industry from a Product to a Service Sector

Introduction

The creative nature of the music industry translates to its business practices in that it is a constantly evolving entity, adaptable to advances in technology as well as highly reactionary to consumer habits. The distribution of music is a two way relationship between the professionals and artists who provide these services and the consumers who can drive change through trends and habits.

The nascent industry was ownership based, people relied on purchasing physical products and live event tickets in order to listen and in large part, to discover new music. An increase in digitalisation of our world in general has transformed the industry into an access based model, also defined as subscription based as consumers rely on aggregators and platforms to provide. Collecting physical music meant the amount of music consumed was limited; be it by budget, physical space or accessibility and location. Today, the abundant market of creators and methods of consumption make it overwhelmingly easy for people to find music, thus consequently replacing the old barriers with new ones such as saturation and choice burnout.

This essay will evaluate new technologies and their effects on contemporary music services, creative models and consumer behaviour. The improvements brought on by digitalisation will be assessed, as well as the complications and their proposed solutions by existing and suggested future operations.

The question is, who benefits from these new technologies and how do we address the collateral damage done to certain sectors in the midst of transition ? Additionally, how have these changes transformed the way we create and consume music ?

Background: The Physical Music Industry

During the prevalence of record stores as distributors of music, genre was tightly bound to categorical positioning of vinyls, cds and cassettes. Consumers walked into a store with a predisposition to a certain sound they trusted themselves to enjoy, or perhaps a recommendation from an acquaintance or a curiosity to purchase something new they had discovered in a public space (Borthwick, 2004). This was due to the monetary commitment represented by purchasing physical music, most significant in vinyl sales that costed around £5 on average in 1970 (Hoffman, 2020), contrasted to the average £18.37 weekly salary (Braggs, 2022).

Notably, this model meant artists could make substantial income from physical music sales if they could adequately promote and distribute their music to larger audiences. The principal method of promotion was practised through live events, which tended to be cheap if not free, making it possible for people to attend frequently. Artists played live and attempted to gain physical press coverage in music magazines and posters, in order to direct consumers to their principal product; the album (Hepworth, 2019).

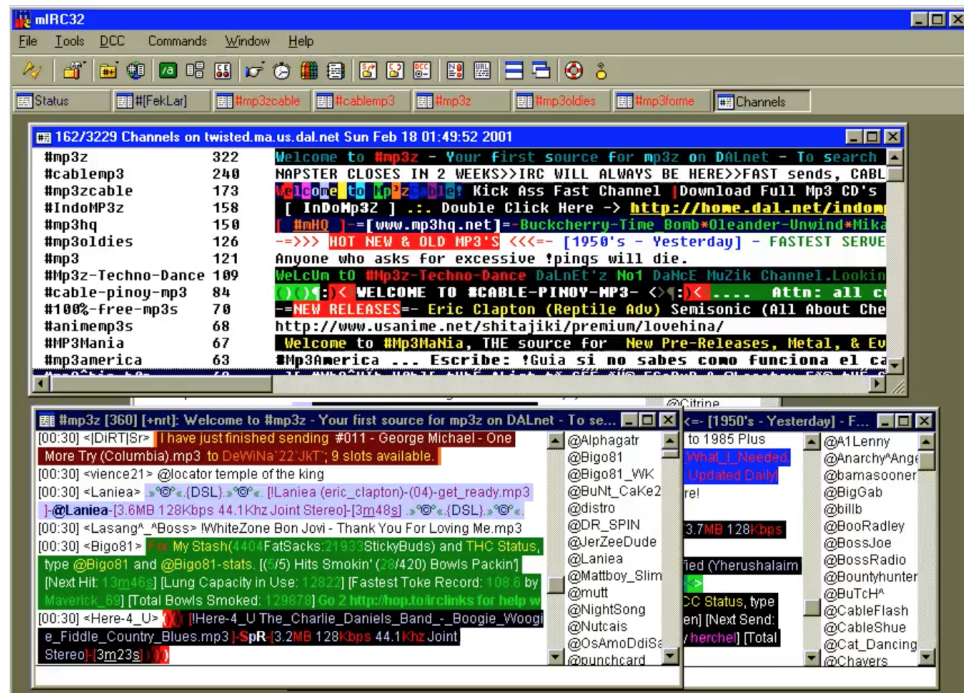


Figures 1 and 2: Two photos showing the inside of Record Stores in the 1970s.

Digitalisation and The Service Sector

The number of physical records sold annually close to tripled between the 1970s and 90s, indicating important growth in the global industry that could not foresee the oncoming turbulence of the internet era that was to disrupt its foundations. Napster emerged in 1999, a peer to peer file sharing and downloading service that bypassed compensation to rights holders. Though the industry was quick to sue and shut it down, a series of increasingly sophisticated and abundant equivalents such as The Pirate Bay and Limewire deemed the industry's technical and legal attempts to fight back fruitless. By 2013, physical sales had returned to the 1970's relatively low unit measures. Today, digital streaming platforms dominate listening habits to replace the ownership based model with an access, subscription based one.

Figure 3: A screenshot showing Napster, where users could download musical files illegally and anonymously (Ghoshal, 2018).



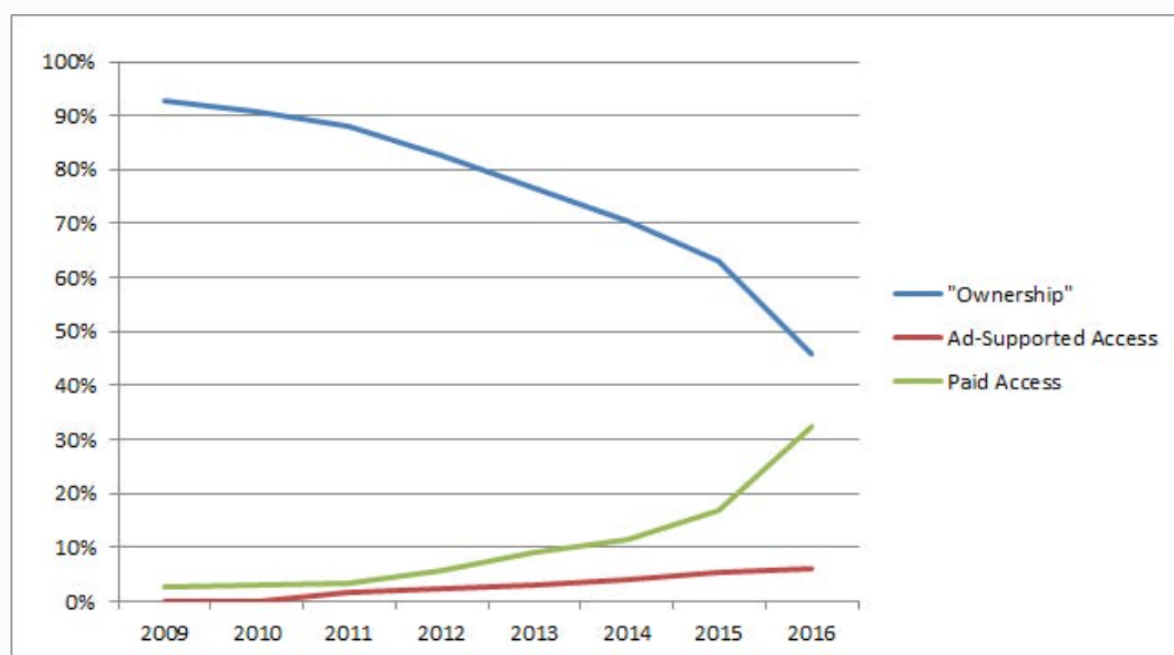
The shifted scale of physical scales has restructured revenue generation. In contrast to the pre-internet era's live promotion of albums, today the majority of an artist's financial success is to come from concert ticket sales, turning the music itself into the method of promotion (Publications.parliament.uk., 2021). Artists are pressured to coordinate consistent single campaigns around vigorous touring schedules, further supported by merchandise and sponsorships for extra income. It could even be argued that cassettes, cds and vinyls are now purchased by fans as collectible merchandise rather than for the purpose of listening, as the on demand economy of streaming means music is available anytime, anywhere without the barrier of affording gear to hear it through, so long as one can access an electronic device connected to wifi.

The music industry can be split into three categories; recording, licensing and live. Digitalisation blurred the boundaries between these as companies began to generalise and diversify their services, for example embodied by Autonomy Music Group who offer individual label services such as distribution, artist & representation and publishing though without standard label contract period and terms (Autonomy, nd). Companies are less straightforwardly categorised into one industry sector, and the need for these clear cut services has additionally decreased now that independent practices are more accessible to the general public than ever. Arguably anyone with a laptop and minimal recording equipment can not only produce but distribute and promote their art without the need of support from outside services. Where record stores used to mediate their shelves and labels once determined who was given recording time and promotional resources, artists can now build their career from scratch utilising social media and independent distribution services such as DistroKid and Tunecore to construct fanbases. The positive result of this is creative democracy, and its accompanying downfall is the now saturated market making it difficult for up and coming artists to be discovered by both listeners and professionals. Where labels were once a necessary gatekeeper of music creation, they are now still relevant to a global career in their drastic upscaling of promotional reach and networking.

A crucial effect this has had on consumer habits is the disappearance of genre as a means of identity. Instead of flipping through categorised album shelves, consumers scroll through Digital streaming platform (DSP) playlists, algorithmically recommendations or social media exposure. The disintermediation has led listeners' choices to be driven by 'mood' or a freer flow of taste as opposed to adhering to boundaries of musical movements and scenes. This translates to the artistic freedom of creators who can now express themselves and construct unique selling points outside of genre, utilising visual world

building and textures referencing eclectic collections of influences. The success of an artist connecting to an audience is now dependent on their ability to incorporate listeners into their immersive world through social media as one tool, and to induce a recognisable into their work that can potentially transcend traditional dimensions. For example, the 1975's incorporation of Jazz, Hard Rock, Grime and Folk all within one album 'A Brief Inquiry into Online Relationships'.

Figure 4: A chart showing the percentage of recorded music revenue from ownership, ad-supported access and paid access models between 2009 and 2016. Data from the Recorded Industry Association of America (RIAA).



<https://www.riaa.com/u-s-sales-database/>

The Complications of Digitalisation

To further elaborate upon the negative repercussions of the shift to a service sector, one must consider the royalty and data rights issues as well as the new entitlement listeners may have to the accessibility of music. Online piracy in the early 2000s resulted in a generation accustomed to being able to stream anything anywhere at all times, and the subscription or ad based models of DSPs desensitised consumers to such low pay rates on which artists are not able to sustain careers, (Cooke, 2017).

An art versus content dilemma thus occurs; must artists prioritise taking the time to create meaningful and intricate artistry products such as albums and supporting materials, or must they prioritise churning out near daily products in order to stay relevant to algorithms and decreasing attention spans, moreover benefiting from an accumulation of micropayments due to higher content translating to higher consumption rates.

Perhaps the most complicated issue faced by today's industry is that of the lacking Music Rights Database. The prevalence of tv, advertising and radio sync deals as a source of revenue has placed increased importance on copyright management, (De Groot, 2018). There exists two rights embedded in recorded music, the composition right associated with the written words and instrumental, typically owned by the writer or publisher, and the performance right which lies within the sound recording and is owned by the label or artist (Lowe, B., 2020.). The missing decentralised database of musical metadata with real time updates means the process of royalty matching further hinders a musician's ability to make money from their work, as one may significantly struggle to understand whom must be

contacted and compensated for which right, territory and period when intending to utilise a recording.

Furthermore, access based models lack a personalised user experience, missing the special experience of owning and collecting physical pieces of music (Reynolds, 2011).

The Future and Potential Technological Solutions

Addressing these aforementioned consequences of digitalisation is of increasing urgency to assure the continued growth of the music economy and the livelihood of its parties. An industry that is maverick in nature is subject to much trial and error, numerous attempts are presently being suggested as potential trajectories for future industry practice. Notably, for changes to be fundamentally implemented it is crucial for key members, currently represented by the DSPs and Major Label Groups, to wholeheartedly adopt proposed solutions and behaviours before artists and consumers may benefit from their effects.

Perhaps the only solutions to problems caused by technological advancement are through further technological advancement. Blockchain technology has arisen as a dominating development that could offer resolution to multiple areas of complication. Blockchain refers to an immutable information storing system with no central point of failure but rather multiple independent locations with live updates and protected access (Fowler, 2020). Blockchain could assist in the creation of a one stop music rights database, could facilitate royalty micropayments, increase artist control by cutting out middleman services,

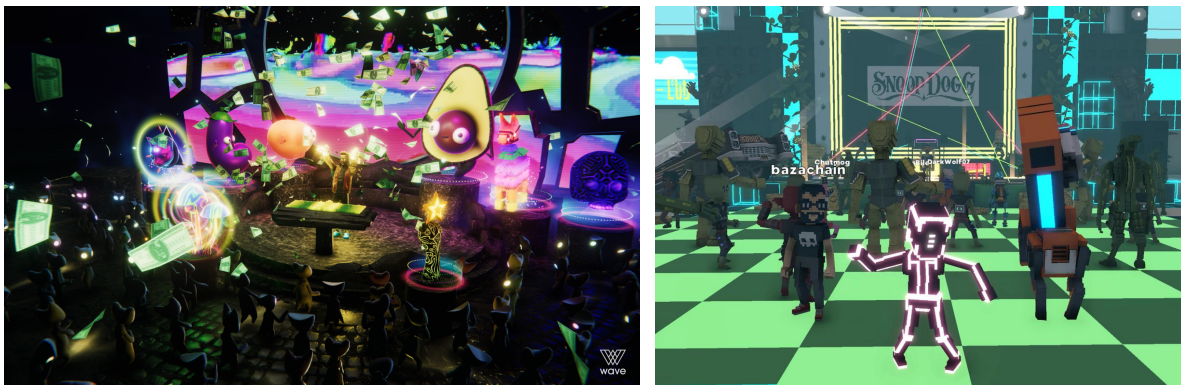
introduce new revenue sources, enhance fan interaction and provide transparency and protection from piracy. However, blockchain must be interpreted as progressive part of the solution and not a panacea as there remain obstacles preventing its complete integration, both technological and regarding public perception. For example, there has been clear backlash amongst split fanbases of artists introducing blockchain based technologies such as Non Fungible Tokens (NFTs) and crypto currencies. Potentially due to a lack of understanding this relatively new technology, some opinions view the selling of digital assets such as NFT artwork or songs as the ‘ripping off’ and betrayal of fanbases (Music Week Staff, 2022).

Despite the debate, the proposition of NFT sales by artists and musical bodies may fulfil the demand for individualised, personal ownership of music that the shift to subscription models has left a gap for. This would be due to their introduction of a marketplace to sell unique creations such as unreleased recordings, memorabilia objects, social media posts, backstage access, ‘meet and greets’ with artists and merchandise. NFT experiences can therefore be intimate, nostalgic exchanges or communal experiences in either digital or physical spaces.

Assimilation of the Metaverse into the live music industry has also received mixed reception. After the Covid Pandemic, we have seen an increase in live streaming which did not replace the concert, festival and gigging economy but rather offered a new type of experience. The selling of live stream tickets has become an additional important revenue source for musicians and venues, and has given consumers the opportunity to attend international events that they could not otherwise access. Furthermore, it has taken away venue capacity limitations and facilitated a new ‘tier’ of ticketing. Live music can now be experienced socially as one would watch a sports match with friends and family from home.

The shift to live streaming could never replace the need for live music to be physically attended, although it could assist in ecoresponsibilizing the industry as touring has proven one of its greatest polluters thus far.

The implications of what the Metaverse could do for music extend further than attending shows. Artists could sell merchandise products within it, and it could also prove fruitful for synchronisation opportunities in games, advertising and public space plays. The metaverse could also reinforce the globalisation of music collaboration and consumption by simplifying online meetings and interaction. What is important is for the metaverse to prove it has no intention of replacing the in person industry that provides musical experiences that an artificial world could not, but rather that its coexistence may provide new opportunities for the industry to economically and artistically benefit from.



Figures 5 and 6: Virtual concerts held in the Metaverse.

Case Studies

Current Industry Examples of New Technology Based Services	
'Dollyverse'	Dolly Parton partnered with NFT Studio Blockchain Creative Labs 'Dollyverse to launch 'Dollyverse' at SXSW (Music Week Staff)
NFT sales	'Ethereal Pop' artist Grimes sold \$6 million worth of promotional digital artwork with an avatar named 'War Nymph' on Nifty Gateway platform. (Willings, S., 2021)
Major Group Investments	- Spotify acquires blockchain team at Medialabs (Cooke, C. <i>Spotify acquires blockchain team at Mediachain Labs.</i> 2017) - Warner invests 11 million in Dapper Labs blockchain firm, making available limited NFT merchandise and memorabilia (Cooke, C. <i>Dotblockchain announces Warner Music alliance.</i> 2018) - United Masters, a US distributor, deal with Coinbase to allow independent artists to be paid in cryptocurrency. (Stassen, M., <i>EMPIRE just paid a \$1m advance to an artist in Bitcoin via Cash App.</i> 2021)

Ticketmaster	Leading live-events ticketing service Ticketmaster acquired Upgraded startup that combines encrypted barcodes with blockchain technology preventing fraud of paper and pdf tickets. (Music Business Worldwide. <i>Ticketmaster acquires blockchain ticketing company Upgraded</i> . 2018)
Music Coin	Streaming service with no subscription or advertising. \$MUSIC blockchain model that allows free streaming of independent music and instant artist pay.

Conclusion

In conclusion, it is natural for innovation to be preceded with disruption to progressively outdated standards. New technologies in the music industry have led to the digitalisation of distribution, transforming the industry from a product based to a service based sector. This has resulted in an abundance of benefits to music creation, such as the accessibilisation of sharing, promoting and discovering art as well as an evolved, less boundary based interpretation of genre and taste. Nevertheless, the complications of technological adoption have had equally significant economic consequences on remuneration rates and accuracy. Further technological advancements are presently being presented as potential solutions or as new commercial opportunities, such as the implementation of blockchain based structures, the assimilation of the Metaverse and NFT sales. Nevertheless, there remains substantial experimentation with these services to be done and most

importantly, the key industry figures such as the major labels and DSPs must adopt change before they can become the new norm for artists and consumers and smaller companies.

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