

New Technology



Chasney Maturine 1910394

Module Code: SBTY7004

Discipline Tutor: Zohe Mustafa

Introduction

In this report I will explore, evaluate and analyse the impact of new technology on the music and entertainment industries by breaking down the components of the digital world, mapping key stakeholders and analysing start-up companies, platforms, applications and new technologies following the food chain of creation, production, distribution, marketing and sales.

I will critically evaluate how new technology is introducing new market opportunities for the creation and consumption of music in a global market during a global pandemic.

Case studies of start-up companies developing and adapting new technology for the music industry will populate the module alongside a new tech accelerator programme where groups of students compete to develop a new digital product or service.

- To develop the ability to analyse and evaluate strategic priorities to deliver business at speed in an environment where digital technology is reshaping traditional revenue and business models.
- To develop a deep knowledge of a range of current and recent digital music and entertainment products, (Instagram Live, Zoom, Twitch) services, platforms and providers through case study analysis, guest lectures and personal research.

A Brief History of Technology timeline in Music

- The Phonograph (1877)
- Microphone (1877)
- Headphones (1910)
- Record player (1925)
- Magnetic Tape (1928)
- The LP (1931)
- AEG Magnetophon Tape Recorder (1935)
- Stereo Speakers (1937)
- The Vocoder (1940)
- Radio (1954)
- Guitar Amp
- Cassette Tape (1963)
- Technics SL-1200 Turntables (1972)
- The Walkman (1979)
- Compact Disc (1982)
- Akai s900 Sampler (1986)
- The World Wide Web (1989)
- Pro Tools (1991)
- The MP3 (1995)
- MP3 (Peer2Peer sharing) (2000)
- iPod (2001)
- Garage Band (2004)
- Soundcloud (2007)
- Streaming (2010)
- VR Technology (2014)
- Blockchain (2018)

Blockchain

Blockchain is the distributed ledger of network technology that powers the online currencies Bitcoin, Ethereum, Stellar and more. Blockchain is a decentralised database that stores a registry of assets and transactions across a peer to peer network.

Before Blockchain the only ways you could move money digitally was through a bank or Paypal although the money used was still government issued and controlled currency.

As a decentralised public ledger sitting on top of a peer-to-peer network, the blockchain can be used to store information without relying on any intermediary, instead relying on the participation of each peer in the network to create a completely decentralised database of cryptographic algorithms ensuring security and honesty. 'Creating an unforgettable record on the systems of everyone involved and receipts' (Vennom, 2019)

What new technology encapsulates more for me than the Blockchain, the potential for positive change for this struggling music industry? As such, I would like to discuss a concept that affects this gamechanging technology in an actionable way that I feel would help everyone in the musical ecosystem. (Beer, Rahman, 2017)

Digital commerce (D-commerce) is the activity of buying or selling of goods and services through multiple digital channels. Digital commerce can also encompass the entire processes of development, marketing, and servicing through a digital channel as well.

Instagram Live

Instagram Live is an Instagram stories feature that allows users to stream videos to followers and engage with them in real time. As users share live video streams on their accounts, a ring will highlight their profile picture in the Instagram stories to alert followers that they can view live streams.

Zoom

Founded in 2011 by Eric Yuan. Zoom is currently the worlds most popular video conferencing application. Artists who saw their users spike during the global pandemic. Zoom has allowed users to hold meetings with up to 100 people for 40minutes on the free version and up to 24 hours on the paid version.

Twitch

Twitch is a live streaming video platform that allows players to stream their games for others to watch while they play. Introduced in June 2011, Twitch.tv focuses on music broadcasts, sports competition broadcasts, creative content, and video game playbacks.

The content of the site can be viewed on demand or streamed live.

By October 2013, Twitch had won 45 million unique views, and by early 2014, the channel claimed the title of the fourth largest Internet traffic source in the United States.

In January 2015, the Wall Street Journal reported that Twitch.tv had more than 1.5 million unique broadcasters and had an average of 100 million monthly visitors.

What the global pandemic has shown us during the lock down and social distancing using apps like Instagram Live, Zoom and Twitch have been the go-to apps for providing escapism and bringing the world together. Going forward in the future this pandemic has shown the positives of new technology has enabled us to see our families and friends. Speaking as an artist. Instagram Live has allowed me to interact directly with my fans and answer questions. Problems with

Instagram Live can be connection issues as well as getting cut off when playing music for copyright issues.

With Zoom going forward as an artist I would use this as a way to perform intimate gigs and visually see your audience I would develop a monetised version using a cash app or sell tickets in advance. Many artists who have experimented with Zoom may well continue to use the service in a less isolated future, just as some companies and workers who have discovered the advantages of remote work may be unwilling to return to conventional office life. I would plan to use the platform to hold sessions with audiences around the world.

Going forward Twitch offers an abundance of ways to make money. It's more financially focused and it supports different tiers of subscriptions and donations. So, Artists can get paid. People can subscribe to a channel for free with their Amazon Prime account. Fans can tip you in micro amounts with things like Cheers. Other platforms usually just pay out on ad revenue or number of plays.



Using Apps like Snap Chat, Instagram, Facebook / Facebook Live and YouTube which allow you to stream concerts and gigs freely to your followers. This has caused certain artists and performers to ban camera phones at their shows, productions and exhibitions to maintain a level of exclusivity.

Thus, raising piracy licensing and copyright issues.

On a low independent level, if my whole live show was available online people wouldn't pay to see my show as they would have seen the whole thing streamed online already.

This question is. Has technology taken away the exclusivity and devalued the live music experience?

This detailed case study will review and analyse companies and new technologies operating in the music and entertainment sectors, both major labels and independent music labels.

The impact of new technology on intellectual property, the administration of rights, the nature of piracy and the monitoring and collection of income from digital commerce. Along with the strategies for growth of new technology operations.

Melody VR

Back in 2017 on a visit to my cousin's house, during a conversation about start-up companies to buy shares in. He told me to download this app called Melody VR. Saying that he sees it as the future of viewing live events.

Everyone knows the well-worn narrative of how, Napster caused the music industry to suffer a quasi-collapse, with illegal free downloads of music with revenues for "physical" music falling from more than \$23 billion in 2001 to just under \$5 billion in 2018. As a result, the industry turned to live shows as their main source of income, yet the problem with live concerts is that they place a natural limit on the number of people who can attend; but just as technology once threatened the existence of the music industry, now it has returned with what looks set to become its saving grace: virtual reality.
(Simon, C : 2019)

Melody VR utilises virtual reality technology and 360 cameras where the angles can be controlled by the viewers.

Many people in the live music sector consider VR's greatest benefit to be significantly larger and accessible for fans. For example, Anthony Matchett, CEO of Melody VR, recently described the value of his company's content as helping fans reach the "unobtainable," while live music execs once told me that VR 's benefit to the concert sector lies in "helping to bring fans to a place where they can't normally be."

The popularity of Melody VR was boosted significantly during the global pandemic with music venues closing down, concerts and festivals postponed and cancelled and the desire to see live music hasn't wavered.

Melody VR was founded in 2015 in the UK by Anthony Matchett, and Steven Hancock.

Melody VR is a Virtual Reality music platform available in the United States, the United Kingdom and Europe. Melody VR is the world's only licensed VR music platform and has secured partnerships with all of the major record labels - Universal Music Group, Sony Music Entertainment, Warner Music Group, Jay Z's Roc Nation and many more.

The end-to-end process of the companies has helped some of the world's largest artists take their first steps into virtual reality. They boast the largest interactive music library in the world, having worked with over 650 international artists to date. Users can have multiple perspectives, from deep into the crowd to close-and-personal with the band on stage. As well as recorded

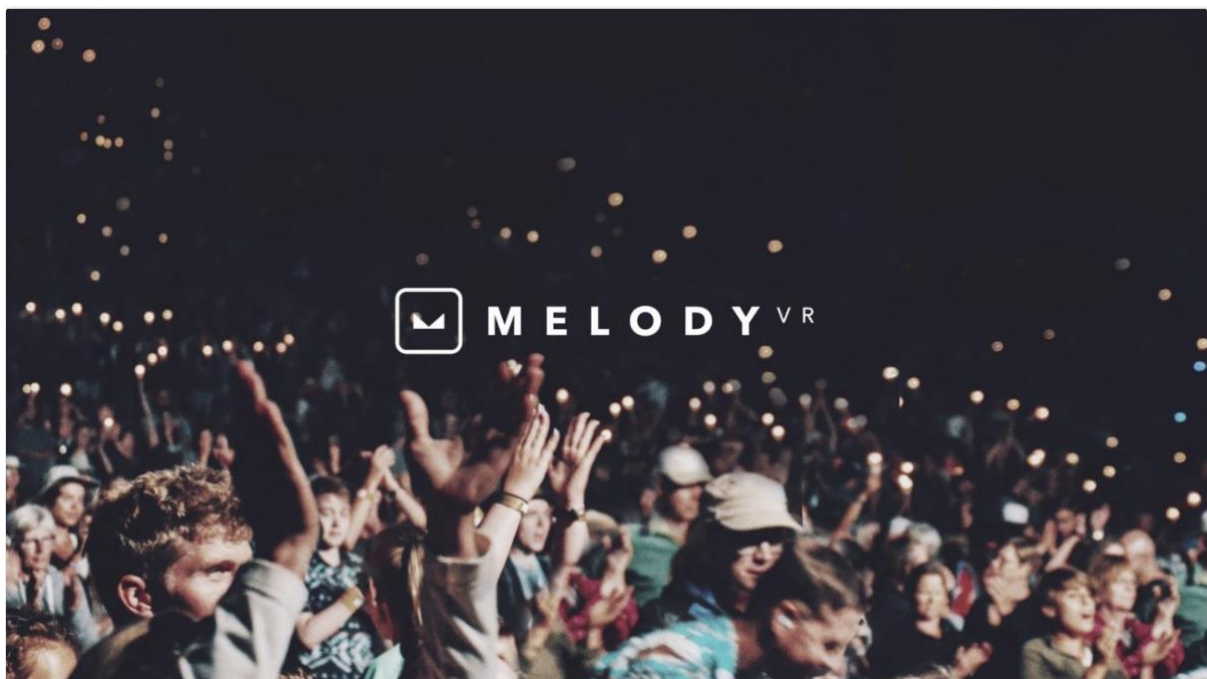
shows, the company will be streaming live concerts through Virtual Reality, which has partnered with a number of major UK venues.

Now, in addition to those who actually pay to be present at a concert, the music industry can monetize everyone who can't get tickets, or who doesn't always feel like going out to see their favourite acts perform. In other words, VR seems to enable the music industry to combine the best of both worlds: the apparent spontaneity and singularity of live music with the reproducibility and accessibility of recorded music.

VR already has the potential to be a lucrative platform for the music industry. On the Melody VR app, access to performance starts at £7.99 and can be increased to £14.99 depending on the profile of the acts involved and the views offered. The app has already attracted more than £90 million in financial support, underlining the expectation of success and profitability that surrounds it.

The future of VR technology in the music industry has advanced greater than anticipated due to the global pandemic which has seen a sharp spike in the use of apps like Melody VR as well as hardware for VR like the Oculus Quest released in December 2019.

In my opinion as an artist looking at new innovative ways, I can provide a unique live experience for my audience apps like Spatial which uses VR technology to be in the same room as people from all over the world offering full spatial audio and 3D telepresence solutions. Primarily used for conference meetings for global companies I would explore this technology to create intimate live music showcases.



Augmented Reality (AR)

Augmented Reality is an interactive experience of a real-world environment where objects that exist in the real world and can be enhanced by computer-generated perceptual information, sometimes across multiple sensory modes, which include visual, auditory, haptic, somatosensory and olfactory.

"The best way to predict the future is to invent it" - Rachel Anne Sibley

Mixed Reality / Merged Reality (MR)

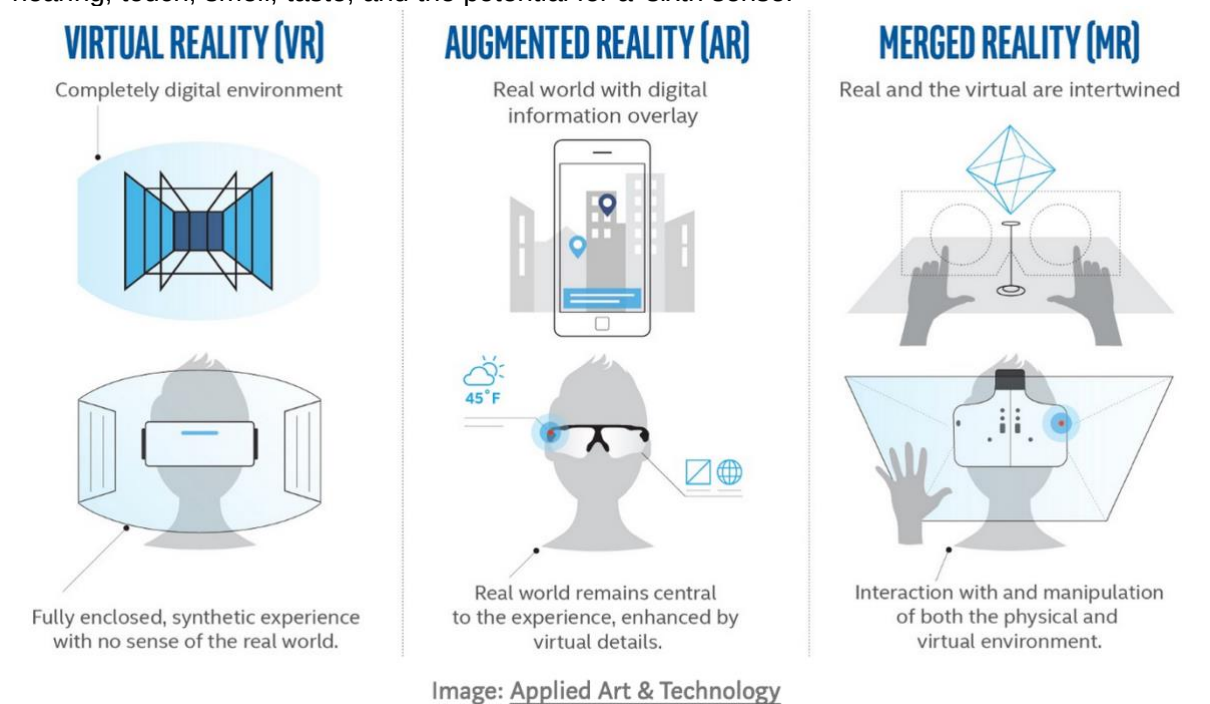
Mixed reality / Merged Reality is a Virtual reality and Augmented reality hybrid.

An example of mixed reality would be the Ikea app where you can select items from their catalogue and using your phone or Tablet to virtually see the furniture in whatever room you are in.

Extended Reality (XR)

Extended Reality (XR) is the umbrella term for environments that combine real and virtual reality. This would include Virtual Reality (VR), Augmented Reality (AR) and Mixed / Merged Reality (MR)

These technologies have developed at an unprecedented rate, laying the groundwork for an endless range of interactive and immersive experiences. XR can pull you in multi-dimensional directions with endless opportunity to develop unique and innovative experiences. To help illustrate this, we will explore these technologies as they relate to our five basic senses of sight, hearing, touch, smell, taste, and the potential for a 'sixth sense.'



Conclusion

In my opinion having analysed and conducted extensive research on VR, AR, MR and XR technology looking at what the future holds and how we can best work this tech into the Music Industry going forward. Speaking as both an artist and label owner during a global pandemic unaware of when music venues will be able to re-open.

We need to turn to alternative means to generate income by joining a platform like Melody VR and Spatial that way we can charge fans to get an exclusive full 360 live visual experience which they can control in real and Spatial to create a full 3D environment.

A recent example of this was by the Hip Hop artist Travis Scott who collaborated with the online gaming giant Fortnite on 23rd April 2020 in the midst of a global lockdown more than 12million

Fortnite players attended Travis Scott's 10minute virtual concert making it the games biggest event ever. "Including four replays spread over three days, 27.7 million unique players participated 45.8 million times in the digital gig. His success catapulted "THE SCOTTS," which premiered as part of the Fortnite set, to debut No. 1 on this week's Hot 100 chart." (Hogan, M - 2020)



Conclusion

Due to global pandemic and the closure of all Libraries I was limited to conducting all of my citations online.

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I critically evaluated how new technology introduced new market opportunities for the creation and consumption of music in a global market during a global pandemic.

I critically evaluated how new technology has turned the music industry from a product to a service sector.

Using new technology such as Augmented reality glasses which will be introduced by Apple into the market in the near future.

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