

New Technology in Music & Creative Entertainment - Essay



Over the years, technology has evolved extremely and contributed to many changes in all industries. In music, new technologies have transformed all areas of the industry. From producing, marketing, distributing, and releasing a record to live performances, new technology has influenced each sector dramatically. The term 'New Technology' or 'Modern Technology' can be defined as 'the advancement of the old technology with new additions and modifications', according to Swalih (2017).

Due to constant changes in terms of technology, music also had some drastic transformation over the last two centuries. First, there was the phonogram followed by Radio and TV as well as the development of electric instruments and synthesisers. The listening experience shifted from vinyl, cassettes, and CDs to digital downloads for MP3 players to now music streaming. With the newest technology of streaming music online there comes many advantages but also disadvantages for both the artist and the consumer. (Breaker, 2018)

Music streaming has become one of the biggest changes in how people listen to music nowadays. In general, streaming can be defined as a 'real-time media method in order to consume music of visual product' according to Rutter (2016, p.318). As stated by IFPI (2019), music streaming has grown by 32.9% in global paid streaming revenues and has had a total of 255 million listeners of paid streaming subscriptions at the end of 2018 spread over all platforms including Spotify, Apple Music, Deezer, Youtube Music, etc. Furthermore, 37% of the total global recorded music revenues comes from streaming which is a contribution of a total of \$8.9 billion global recorded music industry revenues in 2018. The overall streaming industry has had a share of 46.9% of the total music industry which means that this type of technology has a massive influence on the overall music industry. The biggest impact streaming has on, however, are on artists and how they share their music nowadays. These days it is easier than ever for artists to release music due to streaming platforms. For smaller independent artists this type of technology is particularly beneficial due to zero costs coming from physical manufacturing and distribution, as stated by Brunicardi (2018). Moreover, the quality of music on streaming sites is often better than on physical copies. With streaming services, there is a higher likelihood for new artists being discovered. Additionally, services such as Spotify or Apple Music offer features where artists are able to create their own marketing campaigns. This is particularly useful and convenient for up and coming artists as those most often have yet to establish a wider team which will be in charge of the musicians' career and their marketing.

Music streaming benefits the artist by gaining access to valuable data and statistics about their listeners and the songs that are most popular in a certain territory. This means that musicians are able to see which songs are the most popular in whatever territory, as claimed by Stelomane (2016). With this information, it is easier for artists to establish an appropriate tour plan according to the base of their listeners. Furthermore, streaming gives artists the opportunity to engage with their peers by sharing their personal playlists on Social Media platforms for fans to follow. In addition, with the era of music streaming sharing music has never been easier with only a click and a link attached that can be sent to friends and family or shared on Social Media. Statistics from music streaming platforms such as Spotify have proven that fans spend 80% more on purchasing concert tickets as well as merchandise than people who buy physical or digital copies, according to RAC Law Firm (2017).

According to Spotify (2019), for the consumer of music streaming, there are two options of streaming. The first one is the unpaid version which has the disadvantage of ads interrupting the listening experience every thirty minutes. The other one is the paid version where fans can listen to music without interruption for a monthly subscription fee which lies between £4.99 and £14.99. For the consumer, it is a very practical and more portable way to listen to music which means it can be accessed whenever and wherever desired. Another big advantage of music streaming is that it does not require any storage in contrast to digital downloads from iTunes or Amazon Music for instance. Moreover, consumers are able to create their own playlists that are available to download to listen to when the device is in offline mode. Music streaming subscribers have also the power to 'use their playlists to help make new releases potential hits', according to Brunicardi (2018). Furthermore, streaming offers the opportunity for music fans to listen to records that are out of print and not available as a physical copy anymore. In addition, most streaming services, nowadays, offer so-called 'trials' which offers the potential customer a free test of the platform that can vary between 30 days and three months depending on streaming service. This gives the consumer the chance to test the service before any fixed subscription takes place.

However, with many benefits coming with streaming services there are also some negative sides artists have to face with this technology. One of them is the fact that only a small percentage of artists are able to make a living from recorded music these days. This is due to a very small royalty rate, often £0.00054 per stream depending on the artist's career position, paid to artists these days. Furthermore, music streaming revenues are only being paid out to artists once a year by collection societies. For smaller artists, in particular, it can take years to receive a profit on their investments. In addition, with streaming services, newer musicians have it harder to get noticed by the industry due to the reason of an overabundance of competition of established artists. (Brunicardi, 2018) According to Cross (2018), one thousand songs are being uploaded to streaming services every hour which makes it 24,000 songs per day. This means there is an over saturation of music on platforms such as Spotify, Apple Music, Deezer, etc. which can lead to an overextension of music choice for the consumer. Another disadvantage for consumers involving streaming is the fact that music is not owned by the listener.

Not only has technology transformed the recording industry over the years but also the live side of the business. Nowadays, the live experience has many facets. According to Kornell (2017), one of the key technologies in this era is the live streaming of events such as concerts and festivals which became a standard for the live music industry in recent years. Concerts and festivals such as Glastonbury, Coachella or Ultra can be experienced via live streams on Youtube or Facebook. Live streaming can be particularly beneficial for up and coming artists who want to build a platform online and promote their music via Social Media services such as Facebook, Instagram, or Youtube. It is a very effective tool due to the reason that it is a real time interaction with fans and viewers and is, therefore, able to reach a new audience which in turn can lead to a boost in concert ticket sales. A disadvantage, however, is that live streaming is not able to replace the actual live experience for fans. Another impactful technology that has emerged in recent years are so-called holograms. Holograms, 'are 3-D images produced by the interference of light beams that reflect off a real, physical object and can be seen with the naked eye', as stated by Castellanos (2016). Nowadays, holographic images are used for performances to replace deceased artists and bring them with this tool back to life to a degree. As claimed by Kornell (2017), this type of technology can be in a way a replacement for live performances but it is more used to enhance an experience to add extra dimensions. Nonetheless, holographic technology is often criticised as it is seen as a manipulation of

the term 'live' and is not considered as a real experience. Other new technologies that have and are still transforming how people experience live music are Virtual Reality (VR) and Augmented Reality (AR). According to Bardi (2019), 'Virtual Reality (VR) is the use of computer technology to create a simulated environment.' The benefit of this technology is that the user is allowed to visit live events with the use of a headset without physically attending the concert, as claimed by Rogers (2018). Further, VR can be very appealing due to the fact that the fan is able to get access to their idol without the effort of travelling to and from the venue or having to face long queues. The viewer is also fully engaged in the experience and completely in the moment as there are no distractions present. Moreover, this type of live experience can make it possible for people who are physically not able to attend a show to still be a part of it. In addition, since ticket prices become more and more expensive these days VR is a cheaper and more affordable option for music lovers. However, the downside of this invention is that it is not able to replace and capture the complete reality including the smells of the venue or the feeling of the environment. Augmented Reality or AR, can be defined as 'images produced by a computer and used together with a view of the real world', as stated by the Cambridge Dictionary (2019). The only difference between VR and AR is that VR completely shuts out the physical environment whereas AR includes the users' surroundings and adds elements to it, according to Rogers (2018).

Another technology that is currently transforming the music industry and is deemed to be the solution for its many problems as well as foreseen for all other industries is Blockchain Technology. In general, a blockchain is 'a system in which a record of transactions made in bitcoin or another cryptocurrency are maintained across several computers that are linked in a peer-to-peer network', as stated in the Oxford Dictionary (2019). The advantages of this type of technology are that it is a decentralised and secure ledger which is transparent for everyone on a system, according to Gatto, Fohrman, and Bear (2018). Furthermore, blockchain is very cost-effective and can eliminate expenses coming from unnecessary intermediaries such as record labels. In addition, blockchain is also seen as the solution for intellectual property issues such as copyright infringement through piracy which is one of the biggest problems the music industry faces nowadays. With the use of tokens, which can be a digital currency and can also be programmed to include other functions such as the ownership of a title, interests, and voting and distribution rights, this problem can be mastered. Furthermore, with blockchain and smart contracts, 'a 'self-executing computer code that includes the operational terms of an agreement, between two or more parties, where the operational terms are written into and executed by the lines of code', as claimed by Gatto, Fohrman, and Bear (2018), it is very easy to monetise rights and automatic royalty payments to each rights holder can be accomplished whenever licensed or plaid. Not only can the recording industry benefit from this technology but also the live side of the business. With the ongoing issue of the secondary ticketing market and touts buying tickets in huge bulks and reselling those for a higher price not only affects concert goers but also artists. Many companies such as GUTS Tickets or UPGRADED, which is part of Ticketmaster, have already been founded to prevent these problems with the use of blockchain, tokens, and smart contracts.

However, while the technology of blockchain can provide effective solutions for the music industry a few legal issues have to be considered when implementing this technology. One of them is the structuring of smart contracts in order to ensure full enforceability as they are rather 'the code that implements the operational/business logic of a contract', as claimed by Gatto, Fohrman, and Bear (2018). Other legal issues concerning this type of invention are data privacy and their laws based around it. This means that laws

concerning this matter differ from country to country and could, therefore, raise difficulties when using the technology.

Overall, the music industry has entirely transformed due to new technologies emerging throughout the years. It is certain that music streaming is one of the biggest and most influential change in music history which came with many advantages but also disadvantages for both the artists and the consumers. The data collection from target audiences, low distribution costs for artists or the portability are only some of the benefits of music streaming. The drawbacks that this technology brings along is the low royalty rate per stream for the artist as well as the quantity of music that is being released each day which leads to an over saturation for music fans. Not only has the recording industry and the way people listen to music nowadays massively transformed with the progression of technology but also the live experience. Livestreams, VR, AR as well as Holograms have changed the way society perceives live music. In addition, Blockchain has changed and will continue changing all sectors of the music industries whether it is the recording or the live side. With new emerging music businesses that are based on this type of technology, it is very likely the case that blockchain is the solution of all issues music faces these days.

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