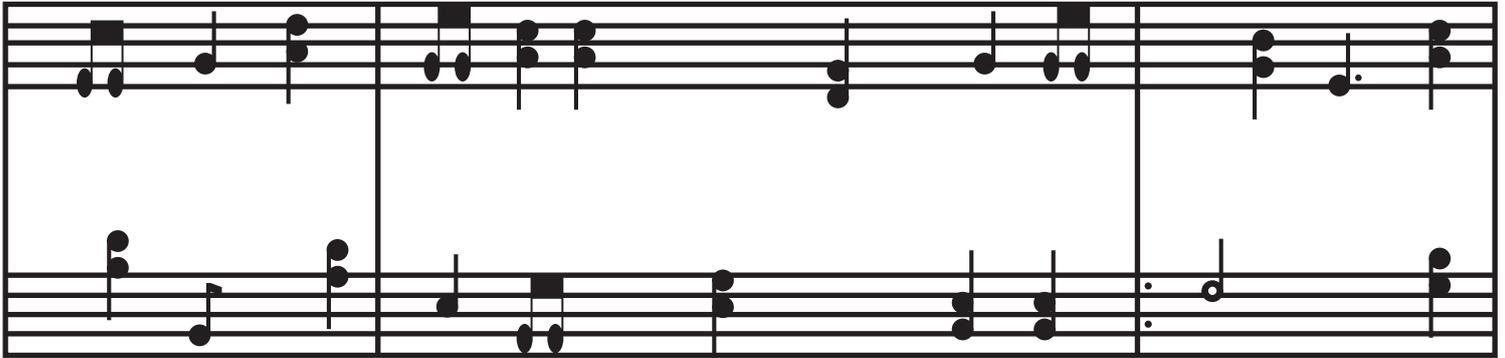


How will Technology affect the way we experience music?



Contents :

Introduction	1
The History of Music	2 - 7
The Rise Of Smart Speakers	8
Effects Of Social Media	9 - 10
Television	11
Festivals	13
Concerts And Clubs	14 - 15
Dangers	16
AR and VR	17
Education and Surveys	18
Summary	19



INTRODUCTION

This project aims to get a better understanding of how the technology of the future will affect the way we experience music. The reason for this subject is because music can express many emotions that people can latch on or relate to. It can mean something personal, a statement even. When you think about how much music has evolved over the past hundred years, you forget that with music, came the technology. We went from listening to music being played live to being able to listen to music in our living room and now its evolved further allowing us to use our smartphones and take music out where ever we go.

My objective is to conduct interviews with people that are either in the music industry or enjoy listening to music, along with using different research methods such as ethnography and design research into current literature to get a better grasp of where I could take this project.

In this day and age, technology is evolving faster every year. Whether it is apps, mobile phones, tablets or even speakers. The way we experience music in today's society differs greatly compared to how we did over the past hundred years, which begs the question, How will the future of technology affect the way we experience music?



THE HISTORY OF MUSIC

To understand where technology is going, we need to understand where it has come from a musical background. Starting from how we used technology to listen to music, that would be with the Phonograph Cylinder invented in 1877, it would produce music via sound waves being directed into a diaphragm causing it to vibrate, using a crank to rotate a cylinder which allowed the needle to cut into the groove with in the record to produce sound. This would eventually develop in to the much-loved record player from the late 40s, a much simplified version of a Phonography Cylinder that would not require the user to turn a crank to get the same results, with better sound quality.





THE HISTORY OF MUSIC

The most interesting trend is the resurface is vinyl records. With records being mass-produced and bought by the younger generation despite having popular streaming services available, people are turning back to listening to something physically in the room. We decided to go and investigate just how popular vinyl has become again by visiting various record shops in Cardiff. The first being D-Vinyl, a small shop that sells various CDs and vinyl and has been around for 25 years. Although we visit this shop often, it never surprises us with the number of people that come through its small doors.

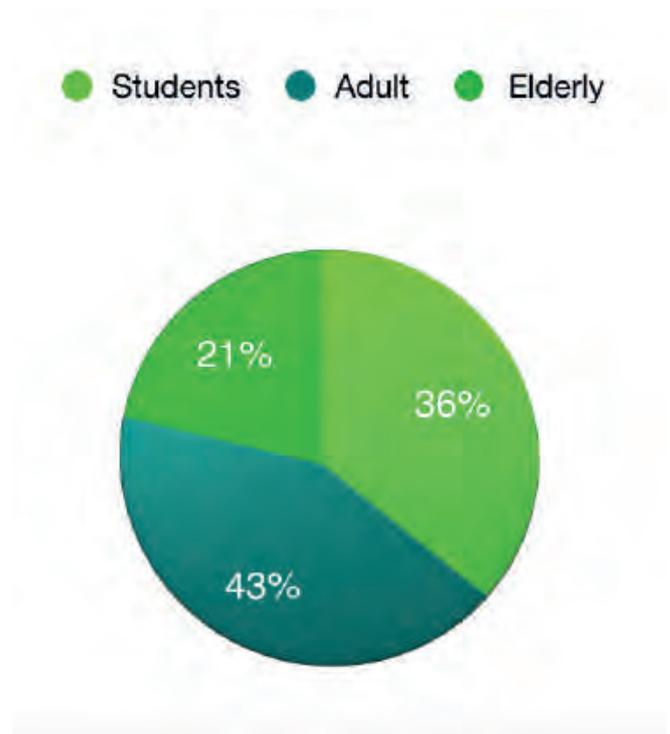
The age gap differs from students to the elderly, however, hardly anyone goes towards the CDs and more towards the vinyl in this small shop. We spent around an hour and a half in the store using ethnography as a way of research, we chose this method because we wanted to see what kind of vinyl (old or new) customers would either browse or purchase and to get a better understanding of the various types of people that would visit the store.



THE HISTORY OF MUSIC

The outcomes of this ethnography were that most of the customers were either students or adults with only a small fraction being elderly, this didn't surprise me as the shop was in the middle of a student area, along with the sudden resurgence of vinyl being back in fashion

From idle chit chat with some of the customers, most of the adults either grew up listening to vinyl or collected them long term with their taste being varied, whereas the students had only just started collecting vinyl and were interested more in the more classic albums from iconic artists. .



Pie chart to showcase different age groups

The number of different characters was interesting, from aged punks to hipsters there were no boundaries, which puts into perspective that it does not matter what your music preferences are there is an undying love for vinyl.



THE HISTORY OF MUSIC

We also went ahead and interviewed D-vinyl's owner, Steve, who didn't want their photo taken, about the ideas of technology and music. "I have grown up without smartphones, so I prefer using music in the more physical sense, however, the idea of having music at the touch of a button on your smartphone is amazing. It can get you more in touch with music but we still have to question whether or not we are losing part of history with listening to something physical and not just available online. I sometimes worry that my shop will eventually lose sales because of Spotify or apple music but I have faith in my customers"

(Steve, D-Vinyl Owner, 11/02/2020)

It was interesting to see this from an owners perspective as to what their opinion on the modern technology was, " The idea that so much music is out there for so many people to connect with is fantastic, it does make me wonder about the future, should I change how I sell items in my shop? Is streaming my main competition now? What is the next thing that is going to be bigger than music on your phone?"

(Steve, D-Vinyl Owner, 11/02/2020)

THE HISTORY OF MUSIC

Eventually, time moved on and cassettes and CDs became the new thing, replacing the vinyl, allowing the user to take their music out and about, no longer confined to their house. In 1999 CDs had the largest amount of sales of just over \$14.6 billion in the US alone, allowing record companies and recording artists to become very successful. However with the rise of the internet, websites such as Napster allowed people to download music for free, causing issues with loss of sales now that music was available for free download, without the licence to music, artists would have to tour more to make up for the loss of sales.



Until Apple came out with the now-iconic I-Pod, which allowed users to take a portable device that stored music out and about. The I-pod was the first of many media players, that had its own support with I-tunes (released eight months after the I-Pod) that allowed users to create their own playlists. From this many different types of generation of I-Pods were created, the mini, touch, shuffle, nano to name a few, however, only one is left in production, the 7th generation of the I-Pod touch. This is probably due to Apple no longer using I-tunes and with smartphones now having access to streaming services. It is interesting to see that nearly twenty years after the I-Pods release it already seems out of date compared to the technology we have access to now.



THE HISTORY OF MUSIC

The youth of today are used to using smartphones for everything, social media, games and music to name just a few things that smartphones have access too. With so many music apps available there seem to be endless possibilities for ways to listen to music. Do you want to listen to the radio? There are apps for that. Want to listen to an album? There are apps for that. Streaming music through apps such as Spotify allows consumers to pay a fee to listen to add free music on the go, if you did not want to pay a fee, you would still be allowed to use the app but at a restricted version. For instance, you would not be able to use it without internet or data, this is because your playlists or saved music would not be available to download directly to your device unless you paid a subscription fee. In a sense, Spotify changed the way users listen to music, by having the license for popular songs and allowing users to see what their friends were listening too as well, it brings people together.

Now with the latest update, you can also go ahead and see where the nearest concert of your favourite act is or what type of merchandise they are selling. So just how much influence does Spotify have on its consumers when it comes to music? An article on Audioxide states that "With features allowing us to see similar artists people listen to, a 'Discover Weekly' playlist tailored to our existing music taste, and 'song radio' suggestions similar to a song we like, it's no wonder we are able to add a new song or two in our libraries almost every day." How Spotify Has Changed The Way We Listen To Music. R, (2020) With Spotify being able to recommend music just by seeing what we listen too, it introduces us to new artists which helps the music industry, however, does this put more pressure on artists to create a viral music video or song?



RISE OF SMART SPEAKERS

With the launch of Amazon's Alexa, a device which allows us to speak to the technology and make requests such as "Alexa, what is the time" or "Alexa, play music" you would have Alexa respond to you depending on your request. This is a newer way of listening to music in your home. It can be connected to different streaming services like Apple Music, Amazon Music or Spotify to name a few, this creates a new way of listening to music, having the ability to not get up and change the music, but by simply sitting down and asking for it to be played makes you wonder just how much further technology could take us. Companies like Google and Amazon have created these smart speakers in hopes to make our lives easier. But one thing you have to question is, is it safe? Recently a rise of people being able to listen in on your conversations from your Amazon Echo device has alarmed some customers.

Amazon has even admitted to this claiming that by listening in to conversations they can help improve the system. "This information helps us train our speech recognition and natural language understanding systems, so Alexa can better understand your requests, and ensure the service works well for everyone," Amazon said in a statement. "Amazon Admits Employees Listen To Alexa Conversations (A Cuthbertson, 2019) Can we trust companies words though? It is an invasion of our privacy, with the amount of money Amazon has surely they can create their own tests without having to invade their customer's privacy? Will we have to allow our privacy to be invaded to improve technology?"



EFFECTS OF SOCIAL MEDIA

Social media plays a big part in how we are influenced to listen to music. The app TikTok allows users to use a small section of a song to create videos that are only a few seconds long. Artists such as Doja Cat, Lil Nas X and Y2K have become popular thanks to this app.

The mixture of SoundCloud (a streaming service which allows users to upload their music and share it on social media) and record companies allow artists to reach a new audience with apps like TikTok. Lil Nas x is a great example, a young man who lived in his sister's basement that bought some beats for around \$30 allowed him to create the viral hit "Old Town Road" by uploading it on Soundcloud back in 2018 under the country category despite the song having some hip-hop routes. Eventually, it gained attention thanks to Tik-Tok and started to climb the billboard music charts

Lil Nas X's manager stated in a Rolling Stone interview "On SoundCloud, he listed it as a country record, On iTunes, he listed it as a country record. He was going to these spaces, gaining a little bit of traction on their country charts, and there's a way to manipulate the algorithm to push your track to the top. That's favourable versus trying to go to the rap format to compete with the most popular songs in the world" D, Kang (2019) Lil Nas X's 'Old Town Road' Was A Country Hit. Then Country Changed Its Mind. Eventually, through pushing the track up the billboard charts it reached number one, only for it to be taken off, why? because it had hip-hop elements, despite it having a country feel.



EFFECTS OF SOCIAL MEDIA

The reason why this song became so massive was thanks to apps such as Tik-Tok and SoundCloud allowing its listeners to share with their friends and by having the song be available on streaming services such as Apple Music and Spotify. In less than a year Lil Nas X became a superstar, allowing "Old Town Road" to have multiple remixes featuring bigger artists and to eventually have a record contract. A Video on Youtube states that "The songs hashtag has been shared over hundred million times on TikTok, and if that isn't enough, Old Town Road reached over one hundred and forty million streams after country star Billy Ray Cyrus jumped on the track" How Lil Nas X's 'Old Town Road' Took Over The Internet (Insider, 2019) The power of social media and streaming services do affect the way to communicate with music.

No more will people be waiting for new vinyl to be released and queue outside music shops to buy the latest song, we now have such easy access there is no wonder why the music industry is booming. When Lil Nas X "posted Old Town Road in December 2018 it was a perfect storm of viral ability, the released coincided with the Tik-Tok trend the YeeHaw challenge which gained popularity the following month...because there was no official release of Old Town Road, radio stations began ripping the track from Youtube to keep up with the songs demand" How Lil Nas X's 'Old Town Road' Took Over The Internet (Insider, 2019) This shows that with apps allowing users to create a short video using a song, could open up new horizons to ways to find new music.



TELEVISION

Which begs the question will music channels on television be dead soon? With the rise of apps and social media like youtube, it seems we now have easier access to watching and listening to music whenever and wherever. If we look back at when MTV (Music Television) doubted on your tv screens, people would stay up late in hopes to see their favourite Micheal Jackson song playing. An article by OkayPlayer stated that " Nowadays, the surge of music streaming platforms have completely taken over. There's no longer a need for CDs, and consequently, no longer a need for music videos." Has The Age Of Music Video Come To An End? (S,Ju, 2017) Yet music videos still get made? Why is this? Perhaps the answer is in hopes of going viral on Youtube?

An artist by the name of Hi-Tone said "“Even though there are more wack videos then good videos, in my opinion, the music video will never be dead. I personally believe that a creative quality video can make you like a song more than you already did, and that’s exactly why the top tier artists still spend a big chunk of their budget on video production...I think they are doing a good job ‘trying’ to bring that platform back, but I honestly do not think it will ever be the same as it was in the 90’s and early 2000’s, simply because television has changed. Back then, the internet was pretty much non-existent so you were forced to watch MTV or BET after school to see your favourite videos. And that was exciting. Nowadays, the consumer watches a video the exact minute it releases by one click of a button on any smartphone anywhere in the world”" Has The Age Of Music Video Come To An End? (S,Ju, 2017). In a way, the music video is still seen as an art form, with people wanting to create unique music videos. If Youtube is the way forward, how could we get closer to music videos?



FESTIVALS

I look back at iconic festivals such as Woodstock and Glastonbury people go to festivals to be part of an experience. The music, the people, the atmosphere. While some festivals have died, some are still standing and thriving. In fact, more festivals pop up now more than ever. Cities are now hosting their own festivals in hopes of an economic boost and for new hopeful visitors, there is no doubt that festivals do bring benefits to society. Festivals such as Victorious (a small festival hosted in Portsmouth) has only been around since 2011, each year the festival grows with bigger acts and now it offers off-site camping

It is interesting to see just how much the festival has done for the city, "Thirty-six per cent of visitors visited a pub, bar or restaurant and 31 per cent visited cafes...Overall, non-residents liked the city as a place to visit – 80 per cent rated it positively – with a quarter rating it as excellent." Victorious Festival Has Helped Rebuild Portsmouth As Up And Coming Uk Destination (The Newsroom, 2016)

This shows that from the power of having music and music festivals it does boost tourism. However, there is always a dark side to festivals or even concerts. Drugs being a heavy influence, every year we hear about people dying from taking certain drugs and people get angry asking why tragedies like this still happen, could this be solved with the future of technology?.





CONCERTS AND CLUBS

While going on nights out to clubs and concerts, you do experience music differently than you would when sitting at home. It is more engaging, you meet new people and become part of a small culture of dancing and losing yourself to music. I decided to go out and see different clubs to get an idea just how diverse the clubbing scene is. First I went to Pryzm on student night. It was considered cheap, a bonus to many students on a night out. The place was packed in all three rooms, each room played different types of music, for instance, one would play "disco" music in the disco room, the dancefloor was smaller in there but the atmosphere was better than the main room which was bigger but featured more songs to fit rave culture. The people were more friendly in the disco room, willing to dance with you even if you just met, everyone was out to have a good time. Whereas in the main room, I felt like I had to be careful who I accidentally bumped into, as people were not as friendly. The overall experience was fun, I would go again but just stay in that one room, the disco room.

My next place was at an event called Bedlam. Now at this event, it was much later than Pryzm and the building was not as big. It was a concert to see drum and bass acts. This meant that the overall vibes of the place were completely different from the student night. People were here to see an act, not to go on a cheap night out. The two rooms available were both playing drum and bass and were packed with students dancing away to the loud music being played. The clothes worn were a mixture of classic going out clothes and festival clothes. People were asking if drugs were available and were constantly bumping into one another. From going on these two nights out, it is fair to say that I did experience music differently.



CONCERTS AND CLUBS

The Pryzm night out allowed me to have fun but only in certain rooms, the only bonus was how cheap the night was, compared to this the night out in Bedlam, which was also busy but had a completely different feel, I still felt welcomed but also not as pressured to feel bad if I accidentally bumped into someone. One thing is for sure, I enjoyed both nights out, because of two factors, one being the music, a key factor on a night out. If the music is off then the night would not be as fun nor rememberable. The other factor being the atmosphere of that said place. I asked someone while I was at Bedlam why they decided to go to an event like this, to get a better understanding of how someone else experiences music.

They wished to remain anonymous, to which I have complied " I come because it is so fun! I can dance and laugh while listening to amazing music. It is a culture, staying up till five in the morning listening to drum and bass is something else. It is difficult to get someone to fully understand what it is really like without them experiencing it themselves. There is a mixture of atmosphere, visuals, music, it can be dependent on the MC of the night, they can get you hyped up for the next act. Some people feel the need to take drugs to get them pumped up and to get a different feel of the night, but I feel like I don't need that. I would rather just keep hydrated and enjoy myself with my friends" (2020)



THE DANGERS

Along with drugs we now have to worry about terrorist attacks, the worst one being Ariana Grande's Manchester concert back in 2017 a terrorist attack accorded which led to innocents losing their lives, many being children. At the time of the attack, security was taken more seriously, "Are concerts safe? Yes and no. We can't definitively say there's no risk involved, obviously; but it's also not fair to say that every concert is dangerous, because many (most, really) go off without a problem. It is fair to say that security is increasingly being taken more seriously, and will hopefully help make concerts and festivals joyous celebrations for music lovers, as they always have been." Are Concerts Safe? The Manchester Bombing Leaves Concert Goers Wary of Large Gatherings (M, Grant. 2017).

Since then, nothing has changed dramatically, sure security may have doubled but only in a few areas. If someone was to come in with a bomb, could technology prevent this and help security create a more safe environment? Could we create a safe environment for people to sit and listen to music without worrying about an attack happening? Shootings happen over in America, some being at concerts. Many artists have been killed while performing. While we may not be able to make them completely safe, we could create machines that could capture dangerous objects such as guns, bombs and knives to make concerts better.



AR AND VR

To go back to augmented reality and virtual reality, could these be used with music to create an entirely new experience? Looking back at how we have and still do experience music in a day to day basis (concerts, clubs etc) could the future of technology be within augmented reality or virtual reality? When Youtube and Facebook launched the three hundred and sixty-degree video posting platform in 2015, it allowed people to post and create new videos in this format. Artists such as Gorillaz used this to their advantage leading to them breaking a record of reaching over 3 million views in over 48 hours on Youtube. Already companies are launching apps which allow users to be put right there in a music video with their favourite artists. Amplify VR allows its users to do just this "audiences can watch any music video in an amazing reactive immersive virtual reality environment. During the experience, users are able to interact with the content – applying audio effects, manipulating environments through movement and remixing their own experience." Ways VR Is Changing The Music Industry (Mbryonic,2019) With this idea we could take it one step further, could we be placed into clubs or venues?

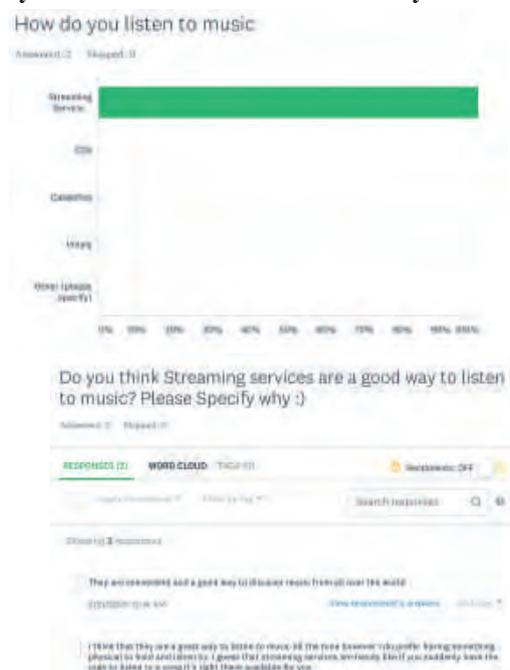
It could help those who are disabled who wish to see acts closer or even get out of the house to be transported into the event that they were originally unable to attend. People who can't afford or even missed out on the opportunity to see their favourite acts live now have the chance to see them without leaving their home. The possibilities of this technology are huge. Festivals such as Coachella have already taken advantage of using virtual reality, in 2016 they teamed up with Vantage.TV to give those who missed out on tickets and festival-goers a chance to enjoy the event in a new and exciting way. "Attendees with wristbands received a cardboard VR headset, while those that did not attend could purchase one online or use their own. The headset is paired with the Coachella VR app to watch videos by the artists performing that year and walk around the festival grounds in 360°" Ways VR Is Changing The Music Industry (Mbryonic,2019) It is a great idea to allow people who can't attend the event to at least experience the event in a modern way.



EDUCATION AND SURVEYS

Within the educational field, virtual reality could also help. Apps are already in development to help people learn new skills in a more shareable and exciting experience. Students studying at New York University's Shanghai Campus have already begun to develop an app which allows students that study drums and piano be able to learn or play those instruments in virtual reality. (Mbryonic,2019) "Using Google Cardboard, users can play virtual instruments and interact with others in the same virtual space. Not everyone has the time or money to learn in a traditional setting with a teacher." Ways VR Is Changing The Music Industry. Again like with the festival virtual reality, this allows people who generally can't afford to have real lessons, to have that ability available to them. Something that would not be possible without virtual reality, in the next twenty years the next line of artists within the music industry might have learnt their skills from apps such as this.

By creating a survey it gave a better understanding just how people use music and how they do on a day to day basis. Although it didn't get many responses, it did provide me with some small feedback. The survey found that most people relied on streaming services to listen to music, but also enjoy listening to vinyl. They tend to listen to music every day using their smartphone. This wasn't surprising, as the age group that answered were 18-24 an age which is currently thriving with streaming services but wanting to be trendy with the comeback of vinyl.



References

R, (2020) "How Spotify Has Changed The Way We Listen To Music". Audioxide
<https://audioxide.com/articles/how-spotify-has-changed-the-way-we-listen-to-music/>

E, Leight, D, Kang (2019) "Lil Nas X's 'Old Town Road' Was A Country Hit." Rolling Stone,
<https://www.rollingstone.com/music/music-features/lil-nas-x-old-town-road-810844/>

(Insider, 2019) "How Lil Nas X's 'Old Town Road' Took Over The Internet",
[youtube.com/watch?v=SG_CvPFpeAI](https://www.youtube.com/watch?v=SG_CvPFpeAI)

A Cuthbertson (2019) "Amazon Admits Employees Listen To Alexa Conversations",
Independent <https://www.independent.co.uk/life-style/gadgets-and-tech/news/amazon-alexa-echo-listening-spy-security-a8865056.html>

S,Ju (2017) "Has The Age Of The Music Video Come To An End?"
<https://www.okayplayer.com/originals/is-the-music-video-dead-opinion-shirley-ju.html>

M,Grant (2017) "Are Concerts Safe? The Manchester Bombing Leaves Concertgoers Wary Of Large Gatherings" Bustle <https://www.bustle.com/p/are-concerts-safe-the-manchester-bombing-leaves-concertgoers-wary-of-large-gatherings-59767>

The News (2016) "Victorious Festival 'has helped rebuild Portsmouth as up and coming UK destination'" <https://www.portsmouth.co.uk/business/victorious-festival-has-helped-rebuild-portsmouth-and-coming-uk-destination-1263201>

Photographer Unknown (2018) Prodigy, [https://www.victoriousfestival.co.uk/info/media/#!-jig\[1\]/https://www.victoriousfestival.co.uk/wp-content/uploads/2018/11/Prodigy-1024x684.jpg](https://www.victoriousfestival.co.uk/info/media/#!-jig[1]/https://www.victoriousfestival.co.uk/wp-content/uploads/2018/11/Prodigy-1024x684.jpg)

Mbryonic(No Date) "Ways VR Is Changing The Music Industry" <https://mbryonic.com/music-vr/>

References

M Á, <https://www.pexels.com/photo/black-record-vinyl-167092/>

S. knop, <https://www.pexels.com/photo/black-cassette-tape-on-top-of-red-and-yellow-surface-1626481/>

M. Garrett, <https://www.pexels.com/photo/man-wearing-yellow-jacket-holding-black-dj-turntable-2332413/>

SkitterPhoto, <https://www.pexels.com/photo/vintage-music-antique-radio-9295/>

A.Piacquadio, <https://www.pexels.com/photo/photography-of-a-woman-listening-to-music-783243/>

E.Buzmakova, <https://www.pexels.com/photo/women-wearing-a-headphone-2751115/>

C. Resende, <https://www.pexels.com/photo/white-and-gray-bluetooth-speaker-on-brown-wooden-surface-1279107/>

Sound On, <https://www.pexels.com/photo/woman-in-knitTED-long-sleeve-shirt-holding-black-mobile-phone-3756791/>

Pixabay, <https://www.pexels.com/photo/apps-business-cellphone-cellular-telephone-533446/>

<https://www.pexels.com/photo/low-angle-view-of-lighting-equipment-on-shelf-257904/>

<https://www.pexels.com/photo/abstract-blackboard-bulb-chalk-355948/>

Mtv, <http://www.mtv.com/live-tv>

M. Dampe, <https://www.pexels.com/photo/group-of-people-having-neon-party-1684187/>

G. Piceli, <https://www.pexels.com/photo/woman-facing-feris-wheel-while-making-heart-hand-sign-1405422/>

References

W. Wei, <https://www.pexels.com/photo/purple-fireworks-effect-1190298/>

D. Bartus, <https://www.pexels.com/photo/person-playing-dj-turntable-844928/>

A. Shvets, <https://www.pexels.com/photo/medication-pills-isolated-on-purple-background-3683116/>

Mentatdgt, <https://www.pexels.com/photo/man-in-grey-dress-shirt-using-brown-cardboard-vr-glasses-936575/>