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# The digitization of music and the accessibility of the artist

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**A b s t r a c t**

This article uses case studies to explore two ways in which technology can impact on artist production. First, technological innovations could facilitate many things that are not new by rather making existing processes better or cheaper in ways that might alter the situation meaningfully. Second, technology can change art through the more profound revision of the role of artist and art-perceiver (Fineberg, 2006). This article examines several examples of how the music industry has been impacted by new technology: Radiohead Rainbows, slicethepie.com, Ditto Music, Music Rainbow, YouTube Orchestra, micro-chunking and LiveFi. The article examines the impact of new technologies on classical music.

Whilst the internet is established in the music industry as a distribution and selling tool, this paper suggests that technological advances have benefited the independent artist as well, given that the range of companies offering streaming access to music has grown.

## Impact on artist and fan

Science has developed further technological advances that the music industry has benefited from. Increased use of the internet in the music world and the potential it offers to the individual musician a range of ways to reach their fans is ably demonstrated in the *2014 International Federation of Phonographic Industries Digital Report*, as Frances Moore, Chief Executive of IFPI states: "The music

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music industry has become a mixed economy of diverse consumer channels and revenue streams. This has been an amazing transformation, dramatically expanding the way artists reach their fans across the globe," (IFPI, 2014).

The increased use of technology has facilitated new ways for consumers to access music and for artists to sell their music. Access allows the consumer to reach music in a number of ways, physical or digital purchase and/or streaming, full albums or individual tracks. This means the artist has to ensure their music is available on all carriers that their consumer is likely to purchase from or listen to. Additionally, the increasing capabilities of the internet now available to the artist by releasing product online has given them more control of their work, rather than having to rely on a record company or publisher. Artists have been able to get closer to their fan base through different models, which are outlined later. Being closer to the consumer provides the opportunity for an artist to take their followers with them. The same applies to a composer, who can now self publish and use online marketing tools to reach buyers.

The music industry has become a mixed economy of diverse consumer channels and revenue streams. This has been an amazing transformation, dramatically expanding the way artists reach their fans across the globe. It is an enabling process for artists, offering a tool kit to promote their music online. It has increased the potential of the internet as a marketing device and in so doing has given the artist the ability to manage his/her career through this technology. Most importantly, it has permitted the artist to be more available to consumers, through, for example their website, or via a blog or tweet. This process, discussed in more detail later, brings the artist closer to the fan — effectively their core market – essential in any commercial business. Anderton, Dubber and James (2013) suggest that: "The increasingly fragmented nature of audience profiles, and the focus on individuals as opinion leaders within social networking platforms, have seen the relationships between artists and their audiences become an ongoing conversation…" (Anderton, Dubber & Martin, 2013).

This is an impact of technology in the creative arts world, offering more choice to the consumer, enabling the fan (consumer) to feel part of their artist's world. In marketing terms this means a higher chance of the artist selling music.  This process of developing 'an ongoing conversation' is a natural progression from fanzines' newspapers whereby devoted followers of a particular band would write for and buy a specific newspaper on that particular band or singer. Perhaps the most famous one is the fanzine The Rolling Stone. In his essay "Create or be created: How the internet cultural renaissance is as

turning audience members into artists (O'Connor, volume 2 No.10 1997), William Butler O'Connor was suggesting as far back as 1997 that the internet would bypass traditional media in terms of quality and offer new ways of entertainment: "Real-time, interactive experiences; activities involving people over tremendous distances; virtual reality offerings; and many other whiz-bang capabilities…"(O'Connor, 1997).  In the 21st century this has translated into social media with Facebook and Twitter (the former's popularity demonstrated by data suggesting the consumers collectively spend 2.9 billion hours on YouTube per month ), streaming sites such as Spotify and Rdio, and internet radio such as Last.fm which recommends artists and genre specific stations.

# Radiohead's In Rainbows paradigm

The In Rainbows model of 2007 demonstrates clever use of internet technology in order to reach an existing fan base and encourage a new one through the (zero) price model. In Rainbows was Radiohead's seventh album and the first to be released after a four-year gap without the support of a major label. The group began its marketing campaign with the banner of 'pay what you want' to download the new album. This was followed by the opportunity to order a deluxe box in time for Christmas of that year. A standard CD was released in other countries at the end of December 2007. The release achieved worldwide media interest. Research by the UK's  (then) MCPS-PRS alliance revealed that there were 2.3 million downloads between October 10th and November 3rd 2007.  This is a very high figure, helped by the worldwide media interest – the fact that the band was well established in the market added to their success rate. In fact, figures from www.examiner.com show that 3 million purchases of In Rainbows were made from the band's website, disc boxes and the physical album release, a project that shows the breadth of sales tools now readily employed by consumers.

The internet as a marketing tool was also instrumental in the band's next album, The King of Limbs (released in February 2011). In a three-pronged marketing campaign, there was an initial download opportunity in mid-February, traditional CD along with vinyl release a month later, and a special edition (the so called 'newspaper album'), two months later. These are two excellent examples of technology expanding business models within music organisations – in this case, the record industry. Using thoughtful marketing campaigns, the band has leveraged the internet to reach its core audience and then a wider community attracted by the offer of an initial download. The

band's understanding of the potential of reaching their fans, and driving consumer and seller closer together is re-enforced by Radiohead's co-manager Brian Message's description of the UK music industry as a "living, breathing and evolving relationship over a long period between artists and fan," (Pakinkis, 2012a).

Coldplay, who achieved 2 million downloads of their single Violet Hill, within one week of release is another example of leveraging the internet to reach consumers. Taken from their then new album Viva La Vida, the single was available for free download for seven days on the band's website, which again would primarily be for their core following. The band subsequently pursued the policy of 'something for nothing' by giving three free concerts in June 2008 ("Coldplay wanted," 2008). In October 2011, Coldplay's Mylo Xyloto spearheaded a successful digital campaign by selling 50,000 units in its first two days of release by Amazon offering a £3.99 price tag for the first week of release. The significance is seen in that this marked 42.0% of its total sales to date, a contribution significantly above the percentage of digital distribution within the overall share of the albums market at the time (typically around 25-27% ["Big digital," 2011]).

# Crowdfunding

The emergence of crowdfunding as a business model is the result of the ability via the internet of bridging closer ties between artist and fan base. Crowdfunding is a platform from which an artist requests money for a specific project. The artist decides the amount needed for the project and then – through their fan base, social media and their gig audience – present their project and explain why they need the funds, justifying the amount requested. Kickstarter and PledgeMusic are two successful crowdfunding services (a current campaign that illustrates this model is http://www.pledgemusic. com/artists/sarahjanemorris). Jazz and folk singer Sarah Jane Morris has set up a PledgeMusic campaign to raise money for her next recording, entitled Bloody Rain. Donors will be invited to an exclusive concert in London during which the artists will preview the new album. The donor receives a range of incentives for corresponding to different amounts pledged. In this case pledging between £8 and £2000 qualified donors for incentives such as: a private concert, dedication on the new CD, a handwritten lyric sheet or a backstage meet and greet at UK concert. This is a clear example of using internet promotions as a business tool for the artist that achieves financial goals, certainly,

but also allows the artist to reach the fan – and the potential fan – directly.

## Slice the pie

From a fan's perspective, David Courtier-Dutton's business Slicethepie is worth mentioning. Slicethepie was established in 2007 in order to support unsigned musicians in reaching a market and ultimately for the music lover to explore new bands and new music. Music is reviewed by interested music lovers who are paid, and then is returned to the registered Slicethepie band. The better the review, the greater the chance that Slicethepie will recommend that group to a record company or radio station. The company has a sister network: www.soundsout.com. This matches the music that the band writes and performs to what the Slicethepie perceives to be the most suitable market – a useful tool for the record companies themselves who wish to gauge the reaction of music fans to new material being written. This process could be described as innovative creativity. Flew (2012) cites Leadbeater's view that innovation is "part of a larger paradigm shift in 21st century market economies, driven by collaborative impulses that are enabled by the Internet and digital media technologies…" (p. 171) and goes on to identify social media tools Wikipedia and YouTube. Slicethepie is one such example of collaboration.

## Ditto Music

If Slicethepie is a model of independent fan engagement, then Ditto Music is one for the artist. Ditto is a digital distribution service that provides help for new, unsigned bands. Their album packages include such services as the artist keeping 100% of their royalties or getting their tracks onto digital stores such as iTunes and Spotify. They work on a fee basis and are in effect a facilitator to unknown musicians. Their success is shown in 11 UK top 40 singles starting in 2007 with the first unsigned artist to reach Top 40 (Koopa). Ditto Music also has a partnership with online music video distributor Vevo, which increases the visibility of their artists and places them on the same platform as Vevo's more established musicians.

## *Music Rainbow*

Ditto Music is one model of artists providing uploaded material and allowing a third party to be responsible for its distribution to the market. Another very different model is the use of an audio interface which colour codes the genre of music the artist has provided (Pampalk & Goto, 2006). Not simply reliant on track music definition, the system also incorporates information from the web that is associated with the performer. Instead of using collaborative or community-based data such as a recommendation model often used by, for example, allmusic.com or myspace.com, Music Rainbow's model works in the opposite way. A circular rainbow of colours match different music genres. Genres are labelled inside the rainbow circle and non-genre terms positioned on the outside, such as male, female, trance, club, blues, orchestra. Turning the knob rotates the rainbow and the options for accessing specific types of music.

Having discussed music distribution models that leverage the internet, we will now examine several case studies of innovative use of technology within the music sector that have a direct impact on the relationship between artist and fan.

# Mobility and the mobile phone

Music on the move is not new to the music consumer: we have seen portable CD players in the 1980s, mp3 players in 1990s and iPods in 2000s. It is the technological ability to access music whilst on the move that is uppermost in mobile phone manufacturers' minds. This is confirmed by the increase of value in the UK market for music online sales which moved from 616.1million to 663.8 million between 2012 and 2013, giving it 63.6% of the market (Bayley, 2013).

The growth of possibilities in mobile music was exhibited at the 2006 International Conference on New Interfaces for Musical Expression. In one of the presented papers, the authors suggested that there is a tension created between music and place as well as new relationships between musician, listener and music. The focus is on "location [which] can become a "sensor" input to music systems, people nearby become part of an ad hoc networked musical performance…mobility allows musical engagement beyond eye to eye contact" (Gaye, Holmquist, Behrendt & Tanaka, 2006). For the artist/fan relationship, this offers a deeper involvement than just participation and backstage queuing at gigs, the traditional relationship prior to the internet.

The authors continue presciently, highlighting a range of music with mobile phones including ringtones, recordings and sound art, all common techniques in the current industry (Gaye et al, 2006).

The ultimate in the use of a mobile phone for musical purposes is the mobile phone orchestra (MoPhO) established in 2007 at Stanford University in California. This prototype comprised over a dozen mobile phones with the goal of fusing technological artefact and human musicianship, feasible through technological advances in both mobile phone software and internet peer-to-peer sharing. Another example can be found in a laptop orchestral experiment, the Stanford Laptop Orchestra (SLOrk) in which more than 20 laptops with accompanying performers controllers and multi channel speakers were used to produce music. This experiment had less to do with mobility and more to do with linking several laptops with multi-channel speakers including six car audio speakers, amplifiers and audio jacks. Its goal was to marry laptop performers with their own localized sound and how to overcome potential problems such as performing outdoors and the need for wireless connectivity.

Schiemer has investigated the mobile phone as a music instrument by creating his Pocket Gamelan. This invention used data interactively in a compositional environment and was experimented with by non-expert performers. The conclusions offered included the potential for using programs such as MaxMSP to develop new musical applications for mobile phones (Schiemer & Havryliv, 2005).

This could be regarded as a natural development from the use of electronic music in composition exemplified by Karlheinz Stockhausen's piece Song of the Youths, which combined electronic sound with a recording of a boy singing. Stockhausen is by no means the only composer to experiment in this manner. In fact, the use of electronics spawned a music genre in 1950s, elektronische musik, in which oscillators and filters to construct new sound were developed by through applied scientific. The examples of MoPho, SLOrk and Pocket Gamelan describe above are a logical extension of this early application of electronics to music making.

## Locative music

I have detailed some examples of mobile music experiments. Part of their configuration includes location as a feature of the project. Music apps are a step further along the path of exploring mobile music. The use of location

technology can take a number of forms such as users tagging a location with a song. The result can be the creation of a crowd-sourced playlist, adding a different perspective to the discovery of a new song. These apps can even be used as a way to find concerts and live shows. Other apps flip it around a bit by letting users in the same area determine what the venue should play (Bruno, 2011). An exponent of locative music is Atau Tanaka. His project Malleable Mobile Music developed passive music sharing into an active one. Tanaka's installation net_dèrive demonstrates this idea. The installation was split into two parts: one placed in a gallery and the other using mobile phones positioned at each end of some scarves. These were then given to audience members who were given instructions through headphones whilst the phones recorded the sound and visuals for the event. The results were transmitted wirelessly to the gallery where part of the installation was situated and displayed.

## YouTube Orchestra

The experiment of the YouTube Orchestra is a further illustration of location technology. The global reach of Youtube is a powerful instrument for the music industry. It is ahead in the UK of Google and Facebook in attracting the youth 16-24 year old market (Farmer, 2014). And more significantly the same survey found that 77% of that age group (so a prime market for the music industry) listened to music on YouTube (Farmer, 2014). This has led to an initiative being launched in 2013 by the BPI and music media company LoveLife called Transmitter — a music channel on YouTube offering daily programmes for UK artists on a 24 hour basis. It is also niche markets who are also experimenting with the format too, one beign the classical music field. Players were chosen via videos uploaded onto YouTube for a premiere performance of a new work by Tan Dun suitably entitled Internet Symphony, in April 2009. The live feed of the second one in 2011 achieved the feat of being the 21st most viewed event on the Musicians Channel on YouTube. The live stream of the Grand Finale concert at the Sydney Opera House was the largest live stream YouTube ever made, connecting 33 million times around the world to 189 countries. This included 2.8 million mobile live-streams, making it one of the biggest-ever streaming events to date, on mobile and desktop ("33 Million," 2011). This is a different example of mobile music, with live music and technology working together.

## *Classical sector*

Classical violinist Tasmin Little is an excellent example of a paradigm of the In Rainbows model for the classical music sector. The violinist released a new recording after a gap in 2007. Entitled The Naked Violin, the recording was initially made available as a free download. There were three pieces on the recording that could appeal to a broad (classical) consumer.  The release was made available in an easy to access format on the artist's website, which contained links to a range of music organisations and media outlets along with a personal introduction about the new recording. The bespoke site, in marketing jargon a 'micro site', extended an invitation to burn the CD free of charge at the top of the site. This is a prototype of how professional classical musicians can embrace technological developments in order to communicate with existing fans and attract new ones. The fact that three years later she released a second album, Partners in Time, using similar tactics is an indication of the success of this format.

Another impact is the way artist management companies present their information. Pre-internet, music agencies and press offices created a press pack. This would include a press release on the relevant artist or most recent project, a calendar of performances and, where relevant, recordings, pictures and CDs. Today the material is very different. One of the largest artist agencies, IMG, offers a useful case study. If one analyses the web page of one of their major artists, the pianist Hélène Grimaud, one can see that within one page an entire online press pack (along similar lines to the traditional pre-internet one cited above) can be instantly downloaded with a link to her individual web page as well. Each artist represents a case study of technology being employed to good effect in a niche market segment. Whatever music genre an artist belongs to, the innovative use of technology has its place in the career development of that musician.

# Microsites

These campaigns not only use the artist's own website, but take the technology a stage further by using a microsite within the main website as did Tasmin Little, mentioned earlier. Another model includes a digital campaign around the theme of pop singer Christina Perri's debut single Jar of Hearts. A microsite was developed which enabled users to post stories of their own heartbreak in a virtual jar whilst others could offer personal advice and if they

helped set the hearts free. Users directed their friends to the site via Facebook and Twitter in particular and Perri added the microsite to her own website and online social networks (IFPI, 2014). This is one case study of artist and company, Warner Australia, successfully employing online marketing devices to draw in their fan base.

Another model is offered by The Smashing Pumpkins who have used internet technology, including microsites, to re-develop their brand for the 21st Century. A Chicago based Alternative Rock band, The Smashing Pumpkins toured heavily during 1990s and in doing so created a solid fan base. After splitting up in 2000, they re-formed in 2006 and then had a new lineup in 2010, consolidated by touring. Their album Teargarden was a concept album, therefore different in outlook than their 1990s sound. As such it made sense to distinguish it from the group's traditional genre, hence the formation of a new label Kaleidyscope. Using the internet as the basis of their campaign, a series of 44 songs were released gratis via MP3 downloads, one at a time, as they were recorded; the final release proposed exclusive content. To ensure they encouraged their existing fan base as well as develop a new one, the first 10 songs were released via their official website for free as downloads.

# Micro-chunking

Aligned to the microsite concept is how the industry's corporate actors are expanding on what are now regarded as traditional ways of online distribution: streaming, mail order, downloading tracks and mobile access. All these can be labeled *microchunking* (Haque, 2011). Microchunking allows the consumer to choose which segment of the market or which distribution channel through which to buy music. The options can include buying one or more of the following: album, individual track, ringtone, free 30 second sample, music video, remix, sample of someone else's remix, streaming or downloading, amongst others. What has now occurred is:

> The media industry is changing. Radical technological, management, and business model innovation is reshaping all segments of the value chain. This is the result of nothing less than a fundamental inversion of mass media economics, as well as the strategies that dominated those economics. (Haque, 2011)

These elements give a choice to both consumer and artist about how to

access a particular piece of music. For many artists one goal is naturally to sell as much of their music as possible. The internet allows the potential for musicians to reach a mass market by employing mass media tools, some of which are listed in the previous paragraph. If we look at the music industry as part of a country's economy, then the significance and growth potential of mass consumption, becomes important in relation to the development of the internet as a commercial tool. Wikström's (2009) definition of 'industry' as having grown from a traditional definition to being "used to refer to the production, marketing, and distribution of most commodities" (p. 46) is equally relevant to the influence of the internet on the music industry in music being exploited as a commodity. This is a natural progression on Adorno and Horkeimer's view of development in the music industry in 1940s. In their treatise Dialektik der Aufklärung (Dialectic of Enlightenment, 1944) they state that culture as a business becomes industrialised and that culture is moving towards being a commodity (Wikstrom, 2009, p. 12). In other words music becomes products, which are tailored for the consumption by the masses (Adorno, 1991). And developments in what the internet is able to offer has increased access to the mass market.

## Streaming and bundling

One of the clearest ways of witnessing the impact of technological change has been the streaming of music. The rise of live streaming has meant that consumers can participate and also be reached or accessed directly via the internet whilst they watch a live performance. This change has moved the argument on from Adorno (1990) and Horkheimer with Adorno (2002) where by they see the consumer as passive in listening and rejecting of unfamiliar music. Instead, if anything, the process of listening and consuming music online has manifestly changed this perception.

The internet has provided musicians with the opportunity to have their music listened to (streamed), through sites such as Myspace (www.myspace.org), Bebo (www.bebo.com), YouTube (www.youtube.com) and Facebook (www.facebook.com). These media outlets allow musicians to post music tracks and video clips onto their own web page and make them available to others online. This sphere of personal marketing has completely altered the music landscape. ERA's review of 2012 (2013 Yearbook: March 2013) confirms the importance of this area of the music industry, stating that in 2012 audio steaming services such as Spotify, Deezer, Rdio, Rara, Napster and We7

delivered at least 3.7 billion streams, a rise of 40% on 2012 (Bayley, 2013).

A further expansion in this field is bundling, where internet companies offer different types of products or services combined into one package. One model of this sort of service is represented by the French-based Internet music service Deezer that has had a partnership with mobile phone provider Orange since 2011. Its reach was in no doubt by 2012, when it launched in the UK, it had already reached 20 million registered users and 3 million paying customers (Qasim56, 2013). Further integration of social media was enacted in Autumn 2012 with Facebook, this offering this huge potential of accessing three different areas of subscriber (Premium+, Premium and Disovery).

Orange, which is now part of the EE with T-Mobile, offers 4G, along with a raft of new developments in 2013. One is a free, ad supported streaming service available for a year and for its Premium+ members, 2 hours for free (after a 30 day trial) for life on tablets, smart phones, desktops and laptops (Pakinkis, 2012b). Significantly, Deezer is also taking the previously mentioned closer forging of contact between artists and fans more seriously. In December 2012 the company launched Deezer for Artists (D4A). This initiative enables users to subscribe tor real-time feeds from artists (through their social feeds); artists can also upload demos, interviews and live concerts allowing a sense of exclusivity for both fan and Deezer itself. This is a form of what Anderson (2009) calls the "three-part market" whereby the online business can serve listeners and artists with advertisers, the two key customers of a steaming service (Anderson, 2009). From a marketing perspective, Deezer Analytics offers the opportunity to know your market by providing tools that can adapt to consumer needs; for example a 'trending songs' feature for towns and cities that will aid people to plan their tours with a characterization of the types of people listening to the artists' music.

# LiveFi model

From a company's perspective, this is significant because it creates an environment for advertisers to reach potential customers. One company that has taken the technology involved with streaming a stage further is LiveFi. This is an artist-led service that aims to provide content delivery, planning, production, and rights clearance for recordings and broadcasts for live streaming. This is a logical development of existing streaming models, such as Vevo and YouTube. Both models allow for advertising opportunities, which should in turn lead to potential increased revenue.

# Conclusion

The internet has had a major impact on the composition, performance and distribution of music. Artists are able to record, produce and distribute music independently of a label. Music has become digital, when composed, recorded or released. Digitization has also made it possible for artists and consumers to be closer to each other, through social media tools. In effect, both consumer and business now relate to each other in the closest of terms. For the artist, technology is there to bolster the marketing plan. King (2009) defines the importance of the plan to target your primary customer-your fan-as directly as possible (p. 5). This sentiment is reflected in commentary by Kusek and Leonhard: "technology is empowering artists to communicate directly with their fans" (2005).

Wikström suggests that "dramatic shifts in the dominant technologies of production, and consumption are central to the economics of media and creative industries" (2009, p. 122) have occurred. Internet growth has fuelled creative industries and also changed the way major actors work within it.

Advances in music technology, the emergence of new software formats and the increased use of social media, have converged to allow businesses to partner commercially through online output thus creating a new model for the music industry. All examples point to the significance of the internet as a platform from which privileges consumer choice.

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