

MBO0123: New Technology in Music and Creative Entertainment (BMTY7004)**Lecturer: Karma Bertelsen****Submission Element 1: Essay****Word count: 2,435**

As early as 22 years ago, Leyshon (2001, p.49) began analysing how newly emerging technologies would restructure the music industry in its entirety. The author also stated even then that there would be two very different reactions or sides when it comes to attitudes towards those "software formats and Internet distribution systems" – referring to those who were going to welcome the change with open arms and those who wanted to fight it (ibid.). Ultimately, he came to the point that it would take a while for the prevailing processes of the music industry to adjust to the new, crucial role that novel technologies would surely take (Leyhson, 2001, p.73). While these statements were still relatively vague, about a decade later Parry, Bustinza and Vendrell-Herrero (2012, p.330) were already talking about the infamous shift “from traditional product retail to online service-based music sales”, which allegedly “occurred simultaneously with a reduction in sector revenue.” Considering that Vaininen (2016, p.8) concluded just a few more years later that “digital transformation has revolutionized the whole music industry” and “consumers are now better served than ever before”, the core question with which the following essay deals inevitably arises: How did this drastic change come about and – more importantly – to what extent does it affect today’s music consumption, distribution as well as artist-fan relationships and, consequently, revenue generation?

However, before turning to today’s service-oriented business models, the traditional model of selling, distributing, and listening to music shall be reviewed. According to Tschmuck (2016, p. 15), before said digital revolution, the main source of income for the music industry was the sale of recordings in the form of vinyl records or CDs. Reportedly, all marketing and PR measures, as well as most concert activities, served primarily to drive up the sales figures of these physical recordings. This in turn meant that music publishers and record labels had taken on the central roles and basically acted as gatekeepers. In addition to this, Tschmuck (2016, p. 16) argues that it was de facto financially and structurally impossible for the average artist to operate or rent their own recording studio, manufacture, or distribute the products, or collect the various royalties. According to Wikström and DeFillippi (2016, p.1), while sales of physical products were still soaring when the switch from vinyl to CD happened, they started plummeting when the first peer-to-peer file-sharing platform “Napster” emerged in 1999. Moreover, the authors claim that with the implementation of the first comprehensive and legal online music provider, the iTunes Store, the concept of the inseparable album was loosened and new business models as well as organizational processes were established in 2003. Another decade later, however, streaming provider Spotify, with its again novel subscription model, allegedly became the most disruptive and dominant player in the changing music market (Wikström and DeFillippi, 2016, p.2). Dolata (2020, p.9) summarizes this development in the early 2010s as a shift “from purchased physical or digital products to a for-free temporary access to the entire repertoire.” When looking for the specific factors that have contributed to this development, Dolata (2020, p.5) mentions not only the fact that it has become technically easier to implement but also a social component, i.e., the fast implementation and acceptance of

streaming services in society. Tschmuck (2016, pp.16-17) adds that from an artist's point of view, the greater feasibility of a home recording studio, the emergence of digital distributors and various music download and streaming platforms also meant that upcoming artists had a much larger network of (potential) supporters at their disposal. This is said to have been further supported by the technical implementation of crowdfunding campaigns via platforms such as Kickstarter, IndieGoGo or Startest, for example. Other authors (Adam, 2020; Kirui, 2022) attribute the development from product to service orientation simply to the (further) development of new technologies and their increased speed, improved access, and lowered costs of usage.

According to Wikström and DeFillippi (2016, p.3), the most critical questions raised about "access-based music services" has been whether they "are able to generate enough revenues to be viable in the first place, and secondly how these revenues should be fairly and transparently distributed" to the original creators of the musical works. Two decades earlier, however, Leyshon (2001, p.49) suggested that the profitability of certain businesses in the music sector would only be threatened for a short time and that the industry was already beginning to adjust somewhat to these changes. Parry, Bustinza, and Vendrell-Herrero (2012, p.320) argue that there has indeed been a decline in revenue since the shift from product-based to service-based music offerings. Ten years ago, the authors also claimed that while digital "pay-per-unit" models seemed more successful at the time, models involving monthly payments would be the most profitable in the future (ibid., p.330). The successful music streaming service Spotify has exploited this idea and, according to Kirui (2022, p.2), is thus making use of the "platform capitalism" model progressed by Nick Srnicek, which allegedly means "bringing different groups of people together to exchange goods and services on a digital platform." In his discussion paper, Dolata (2020, p.16) adds the additional revenue stream of advertising, completing the model that makes music businesses like Spotify not only profitable but financially very successful these days, despite or rather because of their use of advanced technologies.

A second important issue besides the impact of service-focused music offerings on business or revenue models is that of the new artist-fan relationship and the expectations of today's audiences. In addition to the crowdfunding campaigns already mentioned, where fans can financially support their artists, the shift to service-based models has opened even more opportunities for active participation. In their research paper published more than ten years ago, Parry, Bustinza, and Vendrell-Herrero (2012, pp.330-331) talk about "value co-production", meaning that the service-based music market lends itself to the active involvement of fans through collaboration. In addition, end consumers are said to provide feedback much more quickly and easily, which in turn benefits the industry as a whole. In addition, fans can get in touch and interact with artists much more quickly, easily, and directly, especially on social media, and digital communities often form as a result (Cool, 2011, cited in Adam, 2020, p.28). At the same time, the continuing or still rising popularity of platforms such as YouTube and TikTok, which are largely based on user-generated content, in particular, shows how great the interest is in being an active participant rather than just a consumer of musical products and services (Duranton, 2020, cited in Adam, 2020). In addition to building closer relationships between artists and their fans via social networks and distributors, which enable direct sales,

Adam (2020, p.29) takes her thesis a step further, leading to even more intensified and closer contact between fans and their favourite music with even newer technologies. Especially the increased use of augmented or virtual reality or the popularity of smart speakers, which, according to the author (*ibid.*, p.47), “delete the entire chain of intermediaries between the music and the consumer”, indicates that it is more and more about serving fans with very personal experiences. However, the expectations of the fans have now also adapted to this. Bringing another disruptive technology into play, namely artificial intelligence, it can reportedly be observed that in addition to experiences, fans also want a reduction in complexity in music selection and therefore expect to have playlists and suggestions tailored to their individual listening habits and environments (Chodos, 2019, cited in Dolata, 2020, p.16).

The above examples of the different new technologies indicate once again that these very technologies play a decisive role in the development of product- to service-focused music offerings. Dolata (2020, p.9) also refers to this as a “primarily technology-driven process of socioeconomic change”, which is why it is worth taking a closer look at how new tech came to take on this crucial role. As already indicated, the original determining factor was the rapid development of and global access to the internet “with high data transfer rates and high transmission speeds” and various related aspects such as “growing storage capacities for data-intensive media products” as well as “rapid advances in the processing, structuring and algorithmic control of large volumes of data” (Dolata, 2020, p.8). For the music industry, this means that thanks to ICT (Internet Communications Technologies), virtually anyone can consume and publish music at any time, anywhere, and via various devices and platforms (Vaininen, 2016, p.8). According to Vaininen (*ibid.*), it was therefore even possible for “the recording industry to reach markets that it could not monetize before through physical retailing.” Thus, not only has the choice of music become much greater (Parry, Bustinza and Vendrell-Herrero, 2012, p.320), but also the potential audience that can be reached by artists themselves and not just by traditional media houses (Tschmuck, 2016, pp.23-24). In her thesis, Adam (2020, p.iv) also speaks of an “immediate and interconnected service, supported by the progress of ICT.” The widespread use of mobile phones and optimisation of the corresponding applications have reportedly also contributed to making (especially service-based) music much more accessible and convenient (Kirui, 2022, p.2).

At this point, it would be important to take a closer look at the personal or individualised aspect of service-based music consumption, largely made possible thanks to machine learning and AI. Dolata (2020, p.12) argues that when the first peer-to-peer music file-sharing networks emerged at the beginning of 2000, these “offered music listeners the new possibility of anonymous and decentralized, free and non-time-bound access as well as of discovering and sharing larger music repertoires.” Streaming services, on the other hand, were also supposed to offer unlimited access to music, but listeners had to register and pay for this – in other words, they had to provide various data and accept terms of use and similar requirements. Anonymity has been abolished and, in addition, users must be satisfied with the features, algorithms, and other requirements of the owning companies. The latter, in turn, continuously gain insights into the individual behaviour of the listeners, which they can use for their commercial purposes. (Dolata, 2020, pp.12-13) However, this does not seem to bother users too much, considering that they are used to and expect better and more individual service these days and long for a reduction in

complexity (Chodos, 2019, cited in Dolata, 2020, p.16). It is no surprise that streaming services have managed to become the daily companion of their listeners thanks to personalised musical suggestions and advertisements, curated “one-to-many playlists” or song compilations specially adapted to certain moods, occasions, or times of day (Dolata, 2020, pp.14-15). The use of machine learning systems to optimise listening behaviour could also be called “smart playlisting” in this case (Aquino and Glagowski, n. d. and Wino, 2020, cited in Adam, 2020, p.47).

At this point, it should be mentioned that one could of course also claim that the music industry has definitely changed a lot during the past two decades and beyond due to technical progress and the correspondingly adapted structures, but in the end, it is still about the end product “music”, behind which there is still a file. According to Dolata (2020, pp.6-7), this would be especially applicable for “iTunes and the establishment of further commercial download retailers” since this allegedly was “an extension of the old distribution model on a digital basis.” In addition, it can be argued that music magazines, radio, or record labels themselves have always influenced listener behaviour and continue to do so with their music selection and offerings (ibid., p.114). Accordingly, one could say that the shift from a product focus to a service focus in this sense contributes to more artistic freedom, as artists can now much more easily create and release their music independently and free of any constraints from labels or similar institutions (Husin and Hidayanto, 2018, p.47). Adam (2020, p.26) also supports this claim, stating that the “artist profession is also reinventing itself as more and more of them self-produce or bypass links in the value chain.” The question that remains is, if service-focused music offerings are so convenient, accessible, and popular, why are the royalties paid to the creators of the streamed songs still so low? Indeed, in her thesis, Adam (2020, p.46) concludes that the legitimate payment of artists seems to be the biggest gap in the whole system. Kirui (2022, p.8) puts it even more drastically, claiming that there are now even more intermediary institutions “exploiting” the creators of musical works, even though the “technological advances were meant to break the barriers of intermediaries, who had exploited the artists, but this is not the case.”

In summary, it can be said that the rapid and extensive technological developments as well as the rapid acceptance by the masses have ensured that the music industry has increasingly shifted from a product-oriented to a service-oriented offering. This in turn has led to the emergence of new revenue models, of which Spotify’s monthly subscription or ad-supported freemium model has currently proven to be very successful. The fact that listeners can now be served much more comprehensively and reached more directly by artists does not seem to be fundamentally wrong for all the groups involved, as there is more involvement and direct participation. Tschmuck (2017, pp.26-27) sums it up well by stating that the “increasing participation of music fans in music production and distribution indicates the change from push music culture [...] to a pull music culture, in which consumers decide what they want.” In addition to this, with the help of artificial intelligence and machine learning, the listening behaviour and expectations of users can not only be better measured but also met, for example, in the form of customised music recommendations or curated playlists. Since the music industry is already very often talking about the latest developments in the direction of the metaverse and blockchain, one could now speculate whether the next step from the service orientation might be to move, even more, in

the direction of experience orientation or even ownership orientation, which in this case refers to digital possessions, but could to a certain extent be seen as some sort of “product” again. Regardless of the direction the music industry will eventually take, Dolata (2020, p.9) argues it is clear that its focus will continue to change and justifies this with “the continuing high level of technological innovation dynamics, accompanied by a permanent and gradual socioeconomic change” which allegedly has had an impact on “all of the sector’s essential pillars: the product itself, the markets and business models, the forms of organizing, the configurations of actors, the institutional framework and the consumer behaviour.”

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