

WHAT NOW

THE IMPACT OF DIGITIZATION ON THE NORWEGIAN MUSIC INDUSTRY ENGLISH SUMMARY

Centre for Creative Industries

BI



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HVA NÅ – DIGITALISERINGENS INNVIRKNING PÅ NORSK MUSIKKBRANSJE

Foreword

On behalf of the Norwegian Ministry of Culture, the Center for Creative Industries at BI Norwegian Business School (BI:CCI) together with Menon Economics has conducted a study of the impacts of digitization on the players within the ecosystem of the music sector. The main purpose of the study was to gather more knowledge about the economic development in the Norwegian music industry in recent decades, in the light of continuous technological and digital development. The study aims to chart the music sector and how digitization has affected its value system, market structures and the competitive situation, as well as to examine how economic values are created and distributed between the various players. This is the first study that provides a detailed analysis of cash flows in the Norwegian music industry, of how economic values are created and distributed between the various parts of the value chain, and how this has developed over time.

The study was led by associate professor Irina Eidsvold-Tøien (BI:CCI), in collaboration with senior economist Marcus Gjems Theie (Menon Economics), researcher Øyvind Torp (BI:CCI), senior lecturer Audun Molde (Kristiania University College and BI Norwegian Business School), associate professor Terje Gaustad (BI:CCI), musician and lawyer Harald Sommerstad (Minor Majority), partner Anne Espelien (Menon Economics) and professor and head of BI:CCI Anne-Britt Gran.

The present document is a brief excerpt of key parts of the original Norwegian-language report "HVA NÅ – Digitaliseringens innvirkning på norsk musikkbransje", which was prepared as a result of the study. A translation of key findings from the report into English will make it possible to share knowledge about the impact of digitization on the music industry with environments outside Norway. This could be of importance for their understanding and handling of challenges and opportunities similar to those the phenomenon has brought about in the Norwegian music sector.

May 2019,

Irina Eidsvold-Tøien,

Project manager BI Norwegian Business School (BI:CCI)

Main empirical findings

CONSUMPTION AND DIGITAL PLATFORMS

- Four out of ten Norwegians say that streaming services are their first preference when it comes to listening to music. YouTube and Spotify are the most popular streaming services. 4 percent state that their primary source of music are physical formats. Almost 30 percent of Spotify-users say that they always or often use Spotify's recommendations and/or playlists (Source: IFPI, Survey 2017). Streaming services thus exert great influence over consumers' listening patterns.
- The sales share for Norwegian recorded music went down in 2009, i.e. right after Spotify was launched in 2008 (Source: Hjelmbrekke 2017 and IFPI).
- The YouTube case in the study shows how data processing and administration of payments work in practice. Data processing works more efficiently for recording rights than for songwriter and lyricists' rights. Payment for the use of content which cannot be identified on YouTube, is distributed according to the market share of the content that can be identified (Source: Google and Tono, the Norwegian performing rights organisation).
- YouTube produces reports of use (and pays for use) to Tono only when video clips trigger advertisements to the viewer (Source: Tono).
- The case on the YouTuber PelleK shows that the platform also creates new markets for niche music, markets that are large enough for artists to build own careers on these.

SALES REVENUE AND STRUCTURAL CHANGES IN THE MUSIC INDUSTRY AS A WHOLE

- In the period from 2011 to 2017, the share of rights owners (creators, performers and record companies) of the total sales in the music industry has fallen from 39 to 33 percentage points. At the same time, streaming services have increased their share of total sales in the industry from 5 to 14 percent in the period, while the share of creators and performers is reduced from 29 to 24 percent (Source: Menon's proprietary database on accounting data for Norwegian companies and data from Statistics Norway on sole proprietorships).
- With regards to agreements between artists and record companies, the artists have stated that they receive approximately the same royalty rates from streaming as from the sale of physical and digital copies (Source: The study's survey of creators and performers, hereafter referred to as "Survey 2018").
- Traditional record deals where the record company owns the master are used less in 2017 than in 2007, while releasing music on your own label and striking distribution deals (and partially also license agreements) have become more common (Source: Survey 2018).
- The case Kirkelig kulturverksted (KKV) shows how lower market revenues from digital, force record companies to reduce costs and thus their own investments in new recordings.

- The companies have come to depend on project financing for recordings and releases, and public funding has become an important source of financing with considerable influence on terms and conditions.

FINANCIAL CONDITIONS OF CREATORS AND PERFORMERS

- The majority of musicians in our survey say they earned less than NOK 300,000 in music-related income in 2017 (Source: Survey 2018).
- There are fewer creators and performers with a high income (more than NOK 600,000) in 2017 than in 2007, despite the fact that we are measuring the income of the same musicians over this period (Source: Survey 2018).
- Freelancers and self-employed persons dominate the low-income groups in music-related activities, while permanent employees and part-time employees have a higher income level. The development from 2007 to 2017 also shows a more positive development for those musicians that are employed (Source: Survey 2018).
- For creators and performers, concert and festival activity is the decidedly biggest source of income from music-related activity; on average, this accounted for 40 percent of total music-related income in 2017 (Source: Survey 2018).
- In the ten-year period from 2007 to 2017, musicians' income share from concert and festival (live) has been reduced by 6 percent on average, while the income share from pedagogical activities, public funding and events has grown (Source: Survey 2018). Rambøll's annual report *Kunst i tall* from 2017 however shows that revenue from concerts in Norway has increased by 10 percent since 2012. This means that the revenue growth in the live sector does not benefit the majority of Norwegian musicians.
- The share of total music-related income from sales and streaming of recorded music and sales of musical works has stagnated at an average of 8 percent in the period 2007-2017 (Source: Survey 2018).
- Multiple findings indicate a growth in the number of creators and performers in the industry since 2000 (Source: Statistics Norway on the number of sole proprietorships in Norway, and a study of Norwegian artists' activity and income by Telemarksforsking from 2013). This growth helps to intensify competition among the actors.
- For performers whose music is played on the radio, payments have become less concentrated on the most frequently played recordings in the period from 2006 to 2015 (Source: Gramo, the joint collecting society in Norway for musicians, performing artists, and phonogram producers).
- The share of income from payments for recorded music (physical and digital) has fallen in the period 2010-2017. In 2010 and 2011, these stood for approximately a quarter of the creators' income. In 2016 and 2017, this has been reduced to approximately one fifth (Source: Tono's database).
- Amongst those Tono-members who had income from streaming services, the ten percent with the highest income stand for close to 80 percent of all revenues. In 2016, they accounted for approximately 60 percent of revenues. Those who have revenues from digital channels make up an increasingly smaller group that accounts for an increasing proportion of revenues; in other words, concentration in the income distribution has increased (Source: Tono's database).
- The case study on the «carve-out»-issue shows that the performing rights organization Tono is losing creators to competitors abroad, since these companies wish to license directly with

streaming services and other business partners. As it is the most commercially attractive creators that go over to foreign competitors, this has negative consequences for the remaining rightsholders in Tono, as the same administrative costs must be shared by fewer members.

DIVERSITY IN THE MUSIC INDUSTRY

- Gender differences are increased rather than reduced by digitization. More women are making it into the middle-income category (NOK 300,000-600,000), but there are considerably fewer in the income group NOK 600,000+ (Source: Survey 2018). Also in Tono, the income differences between the genders are large, and among those who earn the most (the top 1 percent), the proportion of women is only 10 percent (Source: Tono's database).
- Women and men also have somewhat different income structures. More men than women have music-related income from royalties, recorded music and sales of musical works, while among the women all other income categories dominate, such as for example pedagogical activities or lecturing (Source: Survey 2018).

Introduction

Mandate

Our mandate from the Norwegian Ministry of Culture was to map, analyse and assess the economic development in the Norwegian music sector in recent decades, as well as to evaluate and describe the opportunities and challenges facing the music industry as a result of technological and digital development.

The description of how technological and digital development have changed the terms and conditions for the various players in the music sector is at the core of this study. A central requirement for the study was to describe how economic values are created, managed and distributed between the various parts of the value chain, and how large the share of Norwegian music is in the Norwegian and international markets. The mandate further included taking a closer look at the financial situation of performers and creators, as well as looking into any differences related to genre, geography, and gender, and how this has evolved over time.

The study was meant, as far as this is possible, to cover all forms and formats of music, as well as all platforms and arenas where music is disseminated. Only professionals whose main source of income derives from music-based activities were to be included.

The mandate consisted of three parts: mapping and analysis of players, economy and market; mapping and analysis of value creation, distribution and market share; and assessments and descriptions of future opportunities and challenges. In the report, the two first parts are discussed together in chapters 2-6, while the last part is considered separately in the last chapters.

The history of digitization in the music industry

Digitization in the music industry comprises a number of different aspects, not just the consumption of recorded music. In the production and recording of music, digitization began in the late 1970s, with digital synthesizers, samplers, sequencers and drum machines which all broke the analogue signal path through conversion to a binary digital numeric language using new computer technology. This equipment was very expensive, had little memory capacity and was not very user-friendly, something that gradually started to change. Throughout the 80s and 90s, the digitization of music production gradually opened new possibilities, changed ways of working, redefined what a musical instrument was, redefined the roles of creators and performers, and laid the foundation for new genres such as hip hop and house. The MIDI standard (1983) was a technological milestone for the communication between digital devices and is still in use. Digital audio tapes became standard in studio recording. The first entirely digital recording in Norway was recorded in 1987 and is still the bestselling Norwegian album ever.

Today, digital production equipment is available in the form of software in a variety of editions, levels, integrations and price ranges, with far more sophisticated capabilities in addition to improved user-friendliness and memory capacity. Around the turn of the century, hard disk recording replaced tape recorders and audio tapes as the industry standard for professional music production, which is now usually performed on a Digital Audio Workstation – DAW. Very widespread software such as ProTools or Logic helped to make the production of music on digital platforms gradually cheaper and easier. In addition, a simple music production software, GarageBand, became standard in Apple machines from 2004. This was not designed for the professional market, but to help amateurs produce music digitally in an accessible way.

In sales and distribution, digitization can in principle be traced back to the CD format (1982). CD is a digital storage format, but at the same time sold as a physical format in the form of physical copies. There was barely anyone who predicted that digital audio files stored and sold on a CD one day would be "ripped" by the buyers using a computer and then uploaded on the internet, regardless of the CD format as a physical format. In 1993, the world wide web was opened up to everyone, the mp3-format was standardized and published, and the first web browsers became available. The combination of these three technologies was exploited by Napster in 1999, a milestone in innovation. Napster made file sharing possible and implied the suggestion that music was available for free, could be shared, and was not attached to a physical format. From a copyright point of view, this was as illegal as much as it was a technological paradigm shift, giving rise to the controversies about piracy the next few years. Not until 2003 was a legally licensed download service established by Apple, with iTunes, which made physical CDs redundant. Earlier, the record industry had not only sold content, but also sound carriers and dedicated playback devices it had developed (gramophone records and gramophones, LPs and record players, cassettes and cassette players, CDs and CD players). This market control over both content and technology ended with digitization, just as the record industry had not developed the world wide web, the mp3 format, mobile music players or smartphones either. Apple and iTunes (from 2005 in Norway) became the market leader for digital music sales, but met competition from streaming services from 2008 onwards, especially from Spotify. Streaming was used as a technology by, amongst others, Microsoft (1996), by Internet radio providers such as Pandora (2000) in the US and by MySpace (2005). But it was Spotify (2008) that popularized streaming, and its launch coincided with the breakthrough for smartphones and apps. From then on, for the first time in history, recorded music was sold without the customer actually buying a physical entity and without the customer needing to own a dedicated music player. Neither the music nor the music player were associated with a physical product, as the music was played on a computer, tablet or smartphone, which was also used for other purposes. Streaming became the most important source of income for recorded music in Norway from 2013, and globally from 2017.

The video games industry and "gaming" are an important part of digitization, and this has also opened up new opportunities for the music industry. Platforms such as PlayStation, Nintendo and Xbox sold large amounts of game consoles and video and computer games from the early 2000s. From sheet music sales, the music publishing business shifted towards rights management and creating commercial opportunities not only in television, film and advertising, but also online and in popular games such as World of Warcraft or Grand Theft Auto. In addition, music-based games have also enjoyed great popularity, not least among children and teenagers. Internationally, for rightsholders in

the music industry the video gaming industry therefore became an important source both for back catalogue administration and exploitation and for reaching out to a new and young audience. Not least, this was the case in the intermediate phase when CD sales were falling, and the new streaming services had not yet proved to be a reliable income source. In May 2004, the karaoke game SingStar was launched. The launch included special editions licensed by ABBA and Queen, and in 2005, there also came a version called "SingStar Norwegian Hits". In 2005, Guitar Hero came on the market, with special editions licensed by Metallica and Aerosmith. In 2007, Rock Band was released, which two years later also came out in an edition licensed by The Beatles, with broad attention from the media.

In Norway, there have not been any similar projects, even though there are Norwegian creators and performers with music licensed to a number of different video games. For most Norwegian creators and performers, the value of the video gaming market is very small. According to IFPI, the total size of the synch-market¹ in 2017 was USD 400 million, and a "significant share" of this came from the market for games (IFPI *Global Music Report 2017*).² In its report on the Norwegian video games industry, "*Den Norske Spillbransjen*" (2018), p. 5, Oslo Economics writes: "The global gaming industry is a billion-dollar industry which has experienced strong growth in recent years. The industry had sales of approximately USD 109 billion (ca. NOK 850 billion) in 2017. There are about 2.2 billion active gamers in the world. On a global basis, it is estimated that households' consumption related to video games is significantly higher than consumption related to both music and films. The video games industry in Norway has also grown in recent years, but this growth has been modest compared to both the global market and neighbouring countries".³ In an increasingly internationalized media world, there is reason to believe that there may be an unexploited potential here, also for Norwegian creators and performers of music.

Television has been digitized through online providers such as Netflix and HBO Nordic, TV apps from providers such as NRK and TV2, VOD services from Altibox and Get, Telenor's efforts to establish T-We, and more. This contributed to blurring the distinction between the TV medium in the traditional sense (linear TV) and the internet. Some TV providers have also had or still have a collaboration with digital music services that are integrated into the service (so-called "bundles"). An example is Altibox's collaboration with Beat, which is the only Norwegian-owned music streaming service today.

Radio as a medium has also been digitized. In 2018, the FM network for radio was extinguished for national channels in Norway, and the DAB+ format was introduced. Norway is the only country in the world that has done so. However, the FM network is still in use for local radio stations. The nation-wide DAB+ channels are owned by three companies, of which NRK (the Norwegian public broadcasting company) is one. For the other two, the shift entails changes to the licensing requirements, including how much Norwegian music they need to play. There has therefore been a debate about whether the introduction of DAB+ will negatively affect Norwegian music in the form of less Norwegian music being

¹ *Synch*: short for synchronization, this means combining music with another creative product – most often a film or a TV-program.

² IFPI (International Federation of the Phonographic Industry) is a global organization that represents the record industry.

³ <https://www.regjeringen.no/no/dokumenter/utredning-den-norske-spillbransjen/id2589634/>

played on radio channels, which in turn will reduce Gramo and Tono revenues for Norwegian creators and performers. We also do not know whether the DAB+ conversion will reduce music listening on radio, which is still the most important medium for music consumption, both for the general audience and the rightsholders.

In addition to the DAB+ format, radio and internet are in the process of merging together in different ways, not least through NRK's radio and TV apps for the web and for smartphones. This means that listening to linear radio may in future be reduced in the same way as linear use of TV. Radio appears to consumers almost like two different media: linear DAB+ radio and non-linear online radio. For the consumer, streaming services such as Spotify and radio services through web and mobile apps may appear quite similar to each other; both are places where you can find music, and both make extensive use of playlists. The development of the relationship between traditional "ether media" and pure web-based music services will be interesting to follow in the future, both in terms of power structures, rights and technology development.

Marketing has been digitized by the spread of the internet in general and the growth of social media in particular. Where the record industry at the turn of the century used big marketing budgets on newspaper ads and TV commercials, resources are now spent on digital platforms such as Google and Facebook. Social media has also led to a situation where performers engage in self-marketing to a much greater degree than before and are in direct contact with the audience, and the audience "promotes" music through sharing and recommendations. The digitization of marketing has coincided in time with the breakthrough for streaming services.

Concerts and festivals have been growing in recent years, and this is an important part of the overall picture in the music industry, besides the digital, screen-based consumption. Digitization has so far had little impact here, except in terms of marketing and in that streaming services and concerts / festivals have some market effects that coincide with each other. In addition, the sale of physical concert DVDs used to be a source of income for a certain period. Today, we also see that the relationship between the "analogue" concert and digital consumption is changing and developing in innovative ways, through live streaming, VR projects or hologram-based concerts. Internationalization has also had an effect on the live music market, and over the past couple of years, important Norwegian players have been bought up and merged with major international companies: Friction and Atomic Soul (booking) have been acquired by the Dutch private equity fund Waterland and merged with Danish ICO Concerts and ICO Management and Touring and Swedish Blixten & Co and Maloney Concerts in the new company All Things Live. Øyafestivalen has been acquired by the US private equity fund Providence Equity Partners, through the investment venture platform Superstruct Entertainment.

Finally, it must also be pointed out that rights management has been digitized, and internationalized. This has happened, among other things, through digital analysis tools, metadata, registers, databases offering licensed and authorized music that have been carved out of collective rights management, and a new kind of international competition between collecting societies representing rightsholders has emerged.

Digitization of the music industry - conclusions and main findings

Our mapping and analysis of the Norwegian music industry over recent decades confirms many known observations and assumptions about the impacts of digitization, but our work with this study has also uncovered some unexpected and more surprising effects. Digitization is indeed full of paradoxes: never has it been easier to convey music, but never has the concentration among the players that convey and distribute music been greater; never have we been able to listen to such a broad range of music, while the proportion of people listening to the same music is growing; and never have the opportunities for specialization been better, but at the same time it is becoming more common for stakeholders to take on more and more different roles and functions themselves. These and similar paradoxes can make it difficult to predict and understand the consequences of digitization. Here, we summarize and conclude briefly about our main findings.

Strengthened globalization and new balance of power

Digitization has created a far-reaching internationalization of the music industry, in all areas. This is apparent in almost all parts of the industry's ecosystem: production and distribution, publishing and rights management, artist management, social media marketing, and the live and festival sector. The effects of digitization and internationalization are closely linked and can be difficult to comprehend separately, and they have resulted in, among other impacts, shifts in power and roles, both between the stakeholders in the industry's value chain and between national and international industry stakeholders and authorities.

Overall, our findings show that the relative strength in the value chain for recorded music has shifted from record companies and distributors in favour of streaming services, especially YouTube and Spotify. Competition among creators and performers has increased and made conditions tougher in this part of the industry, while at the same time internationalization offers great opportunities for those who succeed.

In the end market, the streaming services have to a very large extent taken over the role record stores used to have. This is due to significant changes in the nature of the end market. Firstly, we now have unlimited storage capacity. While the record shops had limited shelf space, the digital services' offerings are virtually unlimited. An obstacle in the value chain has thus been removed in the transition from physical to intangible formats, and the threshold for making recorded music available to an audience is lowered. Similarly, the new players, and especially YouTube, have taken over the role music TV channels like MTV earlier had as a channel for marketing. In addition, the transition from linear broadcast schedules to play-on-demand has removed the limitations posed by the 24 hours round-the-clock and provided us with unlimited capacity here as well. The diversity of what is being offered to the audience has become much larger.

Furthermore, the audience's music consumption has shifted from physical copies to accessing music from a virtual library. The streaming services offer the audience access to "everything" right away, but

require continuous cashflow either directly in the form of subscription services or indirectly in the form of ad supported services. The time horizon for the revenue stream has been extended radically and now follows the audience's actual music consumption instead of their purchases of physical copies.

Last, but not least, the end market has become much more global. While record shops were local, or local branches of international chains, the digital services are primarily global. This globalization is a natural consequence of the economies of scale resulting from digital formats. The cost of producing and distributing physical copies has disappeared, and thus it has become most profitable to serve a global audience. These economies of scale are further enhanced by the platform format of the new services, which means that services with a larger number of users are also perceived as more valuable. The result is that we end up with an end market for recorded music that is dominated by a few global players.

The combination of strongly increased concentration and unlimited capacity in the end market has weakened the record companies' position as gatekeepers for the artists' access to and position in the end market. The record companies have continued to merge in the 21st century as they did in the 20th, and the concentration in this part of the industry has also moved from a low to a high level, despite the fact that several smaller record labels and DIY record companies have established themselves in the market since distribution was digitized.

At the same time as the threshold for making music available to the audience has been lowered, we see an increase in the number of Norwegian creators and performers. As a result, more and more creators and performers are competing for the revenue streams from recorded music generated by a handful of global players, each of which has tremendous capacity for the dissemination of music. Digitization has given creators and performers access to a global market, but in fierce competition with each other, and with only a handful of global players determining the terms and conditions.

The current structure can be summarized as follows:

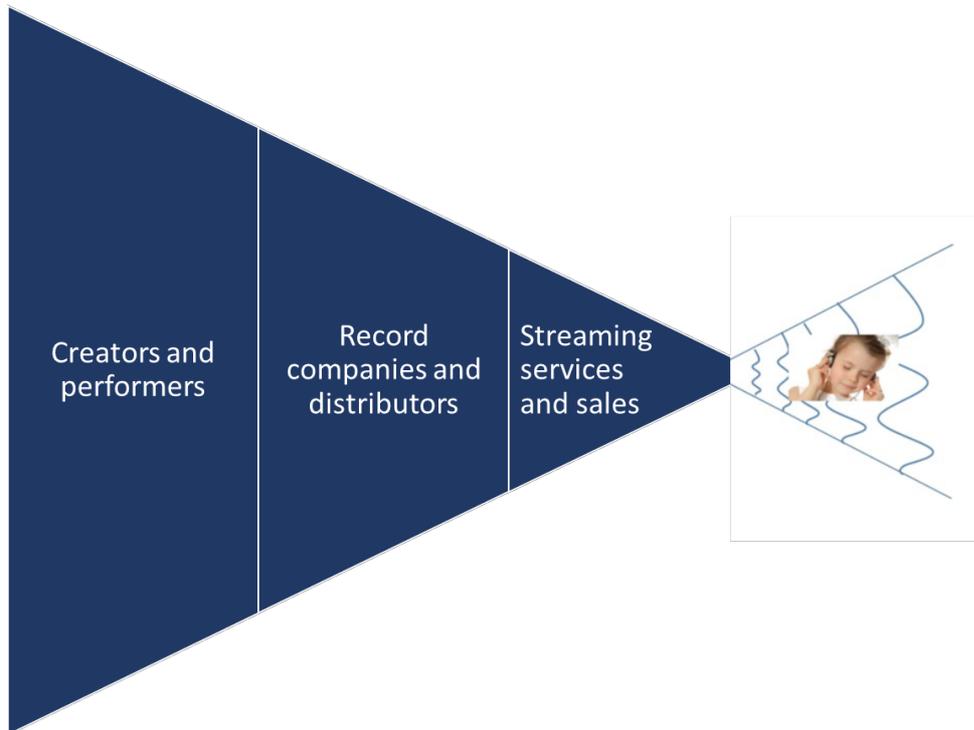


Figure 1.1: Simplified illustration of the value chain for recorded music after digitization

In the value chain for recorded music, digitization has moved the role of gatekeeper from the record companies to the end market, which is dominated by a few international streaming services. In combination with a growing number of creators and performers, this results in strongly increasing concentration from creators and performers in the one end of the value chain to streaming services and sales in the other.

The tendency towards concentration in the end market continues all the way to the listeners. In the digital channels for recorded music, use of music is more strongly concentrated around the most popular releases by the most played rightsholders. A smaller share of rightsholders is being paid more from the digital sources, while the majority now receives a relatively smaller share of the revenues.

Record companies' steep fall from a top level

The decrease in the record companies' sales revenue over the last two decades, which has followed the transition from physical to digital formats, and from buying products to accessing services, has been discussed widely. Those who sold recorded music in the 1990s may interpret the current state as a low point. However, the end of the 1990s and the beginning of the 2000s stood out as a period with particularly high sales figures. From such a perspective, one could say that sales are not particularly low now, but have returned to a more normal level.

Norway is way ahead in the use of streaming services

The streaming services have spent considerably less time establishing themselves as the record companies' most important source of revenue for recorded music in the Norwegian market than they did internationally. The international market is still in rapid development, and in combination with estimates for the future development of the use of streaming services for music purposes worldwide, there is reason to assume that the share of streaming services in the international market is about to catch up with the Norwegian streaming share. It also seems very likely that the international music industry has now caught up with, or is about to catch up with, the advantage with regards to streaming expertise that the Norwegian and Nordic music industry gained from its early start.

But Norwegian music is becoming less visible

The international streaming services pose a particular challenge to Norwegian music, because Norwegian listeners listen less to Norwegian music and more to foreign music through these global services. The Norwegian share of sales in the Norwegian market for recorded music has declined significantly since the launch of Spotify in 2008. Due to this, in the Norwegian market the value of Norwegian music has fallen since 2010, even though total sales have increased. Thus, the revenue base from recorded music has also decreased for Norwegian rightsholders. The majors, which possess both Norwegian and foreign catalogues, have, however, increased their revenues since 2010, but a large proportion of these revenues leave the country and return to the companies' international headquarters, where they are distributed among foreign rightsholders.

New opportunities and roles for Norwegian creators and performers

But the streaming services also provide opportunities for Norwegian creators and performers by giving them access to a global market, and through the SoMe platforms they have greater opportunities of communicating directly with their audience than before. The most obvious examples of Norwegian artists who have made use of these opportunities and are reaching an international audience are to be found in the popular music segment, such as Kyrre Gørvell-Dahl (Kygo), Aurora Aksnes (Aurora), Alan Walker and Sigrid Solbakk Raabe (Sigrid), and songwriters such as Ina Wroldsen or Caroline Ailin. But the possibilities are also exploited within niche genres, which naturally will be very small within a national market but become interesting on a global scale. While algorithmic control of music consumption steers a greater majority of listeners towards the most popular content, it also improves access for listeners in the niche genre. The streaming services are thus also platforms for subcultures that become interesting music markets on a global scale. Our case study of PelleK's YouTube-based success shows how a Norwegian artist has exploited such opportunities.

The fact that artists communicate directly with their audience on SoMe platforms and use these to promote themselves and their music is also a good example of how roles and functions have been redistributed. Where artists earlier might have been entirely dependent on record companies' marketing resources to break in their home market, we now see examples of artists who are using global platforms to build their own brand and breaking internationally using their own resources. It

does not cost anything to promote your own releases and concerts in social media, although it requires resources in terms of time and expertise, and it costs relatively little to advertise and get an accurate market segmentation. In the qualitative interviews that we carried out with players in the music industry for this study, it emerges that this opportunity for promotion is regarded as very important and that the majority of artists make use of it.

There is also a tendency that artists more often own and pay for their own recordings, completely or partly. We see this for example in the development of what categories of contracts they sign with a record label or distributor. Possible explanations for this may be limited resources of the record companies compared to the expanding pool of new artists, opportunities for less expensive recordings, and lack of other options. One tool the internet has made available to artists is crowdfunding, but our surveys show that this is little used.

When the artists themselves take over these functions, it also means that they retain ownership of their own rights to a greater extent than before. From this perspective, digitization and globalization have given the artists greater control over their own career opportunities.

It is primarily the younger generation that exploits such opportunities – those who simply take the digitized music market for granted. We see a generational shift in attitudes and working methods, across genres. The new generation also expects relevant expertise and resources available in the industry for their ways of doing business, and when they do not find this in Norway, the step to international business partners can be short.

Experienced digitization and diversity

The experience of what digitization means for diversity in the music industry is ambivalent. On the one hand, musicians agree that consumers have received a more diverse offering of music, while on the other hand they agree that the algorithm-based way in which the digital services present the content *reduces* diversity in their own genre. The answers to a number of statements in our survey are a fairly precise expression of the phenomenon: Never have consumers been able to listen to so much *different* music, while the proportion listening to *the same* content is growing. That as much as one third of the musicians in the genres of pop / rock and jazz agree with the statement "My income level from the streaming services contributes to me releasing less recorded music now than before" can be considered a threat to diversity in the Norwegian music scene. As in some other areas on the Internet, the role of the algorithms is important in how listeners orientate themselves within the streaming services and on social media. The owners of the digital platforms have great (all) power to steer users in the directions they earn the most money from. Lack of transparency in how these companies use algorithms, and new self-learning algorithms, affect the music industry in ways we do not have any insight into and which we do not see the whole extent of. That this contributes to the falling Norwegian share in consumers' listening preferences is not a bold hypothesis.

Revenue and gender

Generally, gender differences are large in the music industry. Most creators and performers are men, and it is the men who earn the most. Digitization does not seem to be changing these structures. It looks as if more women are making it into the middle-income category (NOK 300,000-600,000), but there are far fewer of them in the income group NOK 600,000+. For both genders, the share of artists who belong to the highest income group has decreased from 2007 to 2017, but most of this decline is experienced by women. Also in Tono (the Norwegian performing rights organisation), the income differences between the genders are large, and among those who earn the most (the top 1 percent), the proportion of women is only 10 percent.

Women and men also have somewhat different income structures. More men than women have music-related income from royalties, recorded music and sales of musical works (i.e. mere musical activity), while among the women all other income categories dominate, some of which are not closely related to core musical activity (such as pedagogical activities or lecturing).

The digitization and globalization of the industry does not strengthen diversity in the music industry, either in terms of income level or income structure. One light at the end of the tunnel is that the proportion of income from collective remuneration has increased for women in the period 2007-2017.

Revenue and genre

A comparison of the income structure (the different revenue sources' share of total music-related income) in 2007 and 2017 shows some interesting changes. The results from the survey of musicians, carried out as part of the study, show that the revenue share from the live and festival sector is going *down* in all genres. The greatest decrease is in pop/rock, where the live share decreases from 52 percent of the musicians' income in 2007 to 41 percent in 2017. At the same time, we know that revenues from concert and festival make up a larger and larger share of the total sales revenue in the industry (57 percent in 2017, Ramboll 2018). In other words, these revenues are not distributed in a way that benefits all musicians in the industry. Live is weakened as a source of income during this period, compared to other income sources, although it still makes up the largest share of the music-related revenues.

Which sources of income have grown then in the same period (total music-related income = 100%, so when one revenue share decreases, others necessarily need to increase)? In pop/rock and folk/traditional music, the business event market as a source of income has increased considerably. The income share from public funding has also grown in these genres. Pop/rock has a wider spread of income sources in 2017 than in 2007, when the live and festival sectors accounted for more than half of the revenue mix. The importance of revenue from collective remuneration and recorded music, measured as a share of total music-related income, has neither weakened nor significantly strengthened during this important ten-year period in the music industry. Only the percentage of live and festival revenues is falling in the income mix, which is compensated for by larger income shares from event, public funding, educational activities and more.

Globalization and competition for resources

When Norwegian artists start utilizing foreign expertise and resources, Norwegian record companies, publishers and businesses such as management and promotion companies become more exposed to international competition, too. There are very few examples of Norwegian artists who have achieved international success with a Norwegian label – which shows how challenging it can be for Norwegian industry players to keep attractive Norwegian talent in Norwegian hands in competition with strong international networks. For example, when Norwegian artists end up under foreign management, they are also likely to end up with foreign record companies and publishers from the circle of the manager's professional connections and partners. This creates exciting opportunities for the artists in question, but does not necessarily bring back a lot of international expertise and networks to the rest of the Norwegian community. If these artists, or other Norwegian players, invite international talents and expertise to cooperation projects in Norway, this may have a greater positive effect on Norwegian access to international partners.