AI in the Music Industry

State of Play and Prospects for the Deployment of Artificial Intelligence in the Industry and Analysis of the Anticipated Impacts on its Professions

June 2025

BearingPoint®

The aim of the study, conducted by the Centre national de la musique and BearingPoint, is to produce a snapshot of the use cases for AI in music and the anticipated impact on the industry's professions.

CONTEXT & OBJECTIVE

Since the launch of Suno, an AI algorithm dedicated to music creation in December 2023, players in the music industry have found themselves confronted with new challenGes for sound design. Previously confined to data analysis, mastering automation functions and track recommendations, music professionals are now discovering systems capable of generating melodic lines, harmonic textures and autonomous rhythmic sequences. These advances are calling into question established creative and service processes, from writing in the studio to live performances, from conception to promotion, and are inviting us to rethink the division of roles between human inspiration and algorithmic intervention at every stage of the process.

This study does not address current legal issues relating to generative AI and is not intended to make recommendations. The CNM wanted to map out the current and potential uses of AI in the music industry across the recorded and live music value chain, and in particular the new use cases for generative AI (GAI), in order to help the industry understand the opportunities, limits and challenges associated with these technological developments.

METHODOLOGY

To carry out this study, BearingPoint combined an exhaustive literature search with around thirty interviews with professionals from the music sectors (see appendices).

- **Documentary research:** a variety of sources (specialised press, scientific articles, institutional and industry reports, conferences, etc.), together with the firm's sectorial and technological expertise, enabled us to identify a wide range of use cases, at varying stages of maturity and implementation.
- **Interviews with professionals:** the aim of the qualitative interviews was to gather the views of players in the various sectors, and to refine our assessment of the use cases identified (technological maturity, sectoral appetite, impact, etc.).

As technologies and uses are rapidly evolving, the results of this study should be considered as a reflection of the period March - May 2025, during which the study was carried out.

Potential for innovation across the value chain

AI is bringing new tools to every stage of the musical process, from creation to distribution and promotion, but with greater maturity and potential for adoption in recorded music, particularly standardised recording and creation.

Numerous opportunities for the entire music industry…

- Boost creativity by opening up new creative horizons thanks to access to sophisticated experimentation and GAI tools
- Improve productivity thanks to greater efficiency in tedious tasks and control of production costs for the same quality
- Facilitate and amplify distribution and promotion
- Optimise data management throughout the value chain
- Create new, more personalised or immersive listening experiences

… some of which require joint action by the market

For example, while industry professionals see AI as a tremendous opportunity to manage the complexity of rights management and remuneration more easily and efficiently, they are still taking a wait-and-see attitude, with scattered efforts or unsuccessful attempts at joint action for the time being.

Appetence and adoption still vary within the industry

There are different levels of adoption within the music industry, depending on the 'technophilia' and operational challenges of each player: some pioneering companies are experimenting massively with AI, while others are sceptical, either due to a lack of skills, resources or the precautionary principle in a legal framework that is still unclear, and ethical conditions not met for certain solutions.

Not all cases are at the same level of technological maturity

While there are powerful AI solutions for targeted tasks (audio recognition, automatic mastering), other areas are still under development or have tools that are poorly adapted to the needs and requirements of professionals in the sector. For example, AIs for music generation, whose legality is disputed, produce uneven results in terms of sound quality: already exploitable for certain uses, not yet up to standard for others.

Attention remains focused on the risks of valuing and remunerating human creation

While the panel surveyed was unanimous on the place that should be given to human creation, fears about the replacement of content created by artists by listening or image use of content generated entirely by AI - which would result in a drop in remuneration for rights holders and represent a risk to creative - were widely shared.

The expected impact of AI on employment in the music industry varies according to different criteria, specific to the profession or the individual:

Type of profession and tasks

The professions or parts of professions perceived as more at risk are generally those with a stronger 'technical execution' dimension, which do not have the role of adding artistic or service value and/or which apply standards.

Their tasks are therefore more easily automated by a trained algorithm or model.

Examples (from the most "technical" to the most "creative"): Digital distribution manager < Music arranger < Songwriter

Aesthetic specialisation and use of the works

The value attached to originality or interpersonal skills varies according to the type of work or its purpose, and the impact can therefore vary according to the professional's specialisation.

e.g. music for the screen < live performance

Certain aesthetics are more open to technological experimentation or are more often created by a small artistic team:

e.g. electronic music

Standardised projects with a limited budget are more tolerant of automation:

e.g. level of requirement in music for the screen: broadcast programmes < luxury advertising < film production

e.g. level of automation in artist services: self-distribution platform < contract with a major label.

Expertise and reputation

For the same profession, the recognition of the contribution, particularly the artistic contribution, can vary from one professional to another.

This notion is predominant in professions associated with artistic creation (e.g. composition, arranging, etc.), but can also exist for service professions (e.g. role of adviser to partners/labels) or technical professions (e.g. request for execution of a non-standard idea).

e.g. An arranger with a reputation for talent and artistic vision will be considered more indispensable than an arranger who is perceived as "executing" a third-party vision.

The spread of AI in the music industry requires training and an increase in general skills

In a context where the majority of projects are carried out within a constrained economy and with relatively small teams, the trend suggests that the music professions are not going to disappear, but rather **transform and adapt**, which means that the skills of the people working in these jobs will also have to evolve.

A redistribution of market share in favour of those who adopt it most effectively ……………………………………………………………………………..

- A gain in competitiveness for small structures and independent artists, traditionally limited by their resources but sometimes more agile in transforming themselves: increased productivity, lower production costs for the same quality, the ability to iterate rapidly on models to react to trends, the ability to identify talent and emerge thanks to data…
- Leading players able to draw on investment capacity and technological resources to develop differentiating tools - where the attractiveness of engineers and access to large volumes of data is key.

Fewer barriers to entry, for easier market access…………………..………

- New opportunities for neo-pro artists: disintermediation makes 'professional' music creation accessible and affordable, even without a label or studio.
- Tools available to complement their range of talents and promote themselves more effectively: a songwriter can generate a convincing demo for a singer/producer, without having any performance skills.
- Increased capacity to take on and expand the roster of artists (for a label, distributor, manager, etc.) thanks to internal productivity gains.

The development of new offers or economic positions …………………………………………………………………………………………………..

- The enhancement of the support and services offered to labels and other partners (e.g. distributors, managers and also teachers), to differentiate themselves from increasingly high-performance 'self-service' platforms.
- Unprecedented viability for catalogue restoration and exploitation projects, thanks to lower remastering costs and easier catalogue exploration.
- New forms of rights or exploitation: training licences, use of a performer's voice, etc., which may require contracts and rights collection methods to be adapted.

Questions about the balance between technological capabilities and human creation………………………………………………………………………………..

- How to promote and enhance human creation, to maintain its discoverability and the remuneration of artists and right owners?
- How to fight against the risk of musical aesthetics standardisation, due to the use of the same models or their training on automatic creations? Is a coexistence of standardised tracks and original human creations possible?
- What are the consequences for the artist-audience relationship?
- What is the environmental impact (use of models, storage of tracks produced, etc.)?

Gradual adoption, framed by ethical and environmental standards, would make it possible to reconcile efficiency gains with respect for musical diversity. AI frees up creative time, reinforces the autonomy of small structures and multiplies use cases across the entire value chain. If thought through collectively, this technological revolution can become a driver of growth, revenue diversification and audience expansion.

Contents

Forward

From the first musical algorithms in the 20th century to the current boom in generative models, AI in music has developed in successive waves of innovation

1950s - 1960s | Early algorithmic composition: the first computer programmes (Lejaren Hiller's *Illiac Suite*) generated scores using mathematical formulae and stochastic rules

1970s – 1980s| Computer-assisted music: specialised programming languages (Csound) enable real-time sound processing and granular synthesis, paving the way for interactive experimentation

1990s | Evolutionary algorithms: the application of genetic models and Bayesian networks to "evolve" melodies and textures from populations of musical motifs (*Experiments in Musical Intelligence* by David Cope)

2000s | Machine learning: the digital and MIDI revolution transformed music production (software assistance), with in particular the start of supervised learning (regression, decision trees) for genre classification, pattern detection or extraction of audio characteristics (BPM, key)

2010s | Deep learning : the adoption of deep neural networks (convolutional and recurrent) for the complex analysis of large music databases, enabled, for example, the refinement of recommendation algorithms or the identification of audios

2020s | Large-scale generation models: emergence of transformers and foundation models capable of producing entire tracks, instrumental textures and synthetic voices on prompt.

Recent illustrations

- *Automated mixing and mastering*
- *Audio restoration*
- *...*

- *Feeding recommendation algorithms*
- *Personalising playlists*
- *...*

- *Generating lyrics*
- *Generating music*
- *...*

Behind the legal and ethical challenges of AI, which are fundamental to the future of the music industry, there are opportunities to be explored.

Generative AI has been thrust into the spotlight from the angle of AI-generated content and copyright.

Musical deepfakes, usurping the style or even the name of established artists

In April 2023, a track named 'Heart on My Sleeve', generated by a creator called Ghostwriter with synthetic vocals by Drake and The Weeknd, racked up over a million streams on TikTok before being withdrawn for copyright infringement.

Viral trends in covers and remixes by AI

In France, producer Lnkhey posted a remix of 'Saiyan', a song by Heuss l'Enfoiré & Gazo, on YouTube and SoundCloud, using free voice conversion software to clone and integrate the voice of singer Angèle. After millions of plays, the singer shared her 'astonishment', before covering the version herself during a concert.

A tangible phenomenon creeping onto streaming platforms

In April 2025, Deezer announced that more than 20,000 tracks entirely generated by AI were being uploaded every day, representing almost 18% of the daily new releases on its platform. This leap, almost double the 10% reported in January, illustrates the speed with which these tracks are being integrated into streaming catalogues, and is giving rise to considerable debate.

Beyond the headlines and the legitimate concerns of music professionals, AI is undeniably becoming an integral part of the industry's practices, including beyond musical creation.
This study aims to provide a broader and more nuanced understanding of the contribution of AI to the industry.

Summary of the main findings

1. Practical applications for the industry

BearingPoint®

AI gives music creators a new arsenal of tools to innovate, collaborate differently and express their creativity

A tool to stimulate creativity

- Virtual assistants, including generic ones, can be used not as a substitute for human inspiration but as catalysts of the imagination, capable of **kick-starting the creative process by initiating proposals** based on a given request or theme, and thus helping to combat the blank page.

- Generative AI tools offer a creative companion, or sparring partner, with whom to test how well they work or **explore different versions of the same creation.** Generated by these tools, the arranged or declined versions enable the designer to test and refine different ideas more easily and multiply the creative iteration loops.

- By simplifying certain technical executions or generating interpretations on the basis of prompts, AI enables artists or creative teams to **free themselves from certain technical and financial barriers and bring to fruition ideas that were previously inaccessible** (budget to hire a sound engineer, mastery of the desired instruments, etc.).

Exploring new aesthetics and hybrid approaches

- AI tools incorporate algorithms capable of identifying samples and associating them with a variety of musical genres and influences, blending several musical influences, offering the possibility of **exploring new creative territories and aesthetics.**

- **The multiplication of AI tools and functionalities offers artists a modular palette** for composing, mixing or generating visual embodiments. By freely combining several solutions (different text-to-music tools, vocoders, image generators), they can free themselves from the biases specific to each model and adapt them to their workflows, at the service of their creativity.

Suggested lyrics based on a theme, providing a basis for authors to work on and iterate upon

Search for targeted samples to quickly enrich sound textures

Composition assistance based on the generation of melodic and harmonic ideas

Creation of innovative or immersive video scenography

BearingPoint®

Following on from the many digital transformations that the sector has undergone, the development of AI presents major opportunities for rationalisation and assistance, particularly in the production sector.

REFOCUSING ON CREATIVE TASKS

- **Increased efficiency for actions with 'low creative added value':** tedious administrative or technical tasks, which take up human or studio time, can now be carried out more quickly thanks to new automation capabilities, allowing professionals to concentrate on the most stimulating tasks.

> ➤ Automatic detection of the structure of a track and suggestion of a pre-cut to facilitate editing and focus on creative choices

QUALITY AT A LOWER COST

- **Greater fluidity and speed in the creative iteration phases:** the integration of artificial intelligence into music production tools gives artists and technicians access to a more agile production process, where ideas can be tested, refined and compared at lower cost, facilitating the preparatory work before the final recording.

> ➤ Automatic arrangement based on a prompt, to quickly 'preview' alternatives and prioritise the demos to be recorded

- **Reduced dependence on expensive equipment or services:**
  where previously you would have had to hire a high-priced studio to have access to the equipment and call on a technical or creative team, you can now obtain a satisfactory result at a lower cost using functions previously reserved for top-of-the-range studios or large teams.

> ➤ Extend a track by adding backing vocals in post-production without having to mobilise studio time or additional artists

An already established and accepted marketing practice, helping to promote artists and circulate works

Advanced targeting and segmentation

Enhanced hyper-personalisation of marketing to optimise promotional campaigns

By analysing fan data in greater detail (listening history, interactions, location, etc.), machine learning algorithms can identify unsuspected audience segments or recommend optimum communication actions to boost each audience segment.

Generating promotional content

The use of AI for design and promotional video is spreading rapidly

The creation of promotional content can be assisted or even semi-automated from text instructions, to produce a first version of coherent visuals for specific territories, channels or audiences in a matter of minutes.

Smart planning for music release

A more reactive musical promotion, piloted by data

Adjusting communication strategies in real time from an evolutive algorithm that learns which 'formulas' generate the most engagement and tests different scenarios and setups to understand and accentuate viral phenomena.

Managing social networks

A reinforced animation of social networks, indispensable tools for artists' promotion

The aim is to free up time for artists and their managers and to engage audiences in an innovating way, using AI to animate networks or artist's communities via prewriting or smart programming posts or mini chatbots.
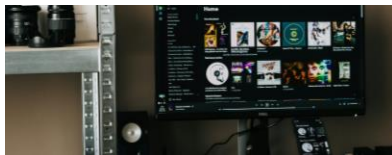
Highlighting musical extracts for targeted audiences: an up-tempo track for listeners of sports playlists, etc.
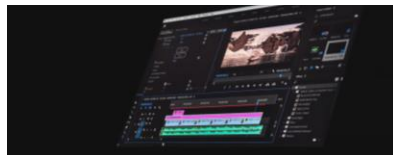
Almost instant video creation to accompany an artist's or a release's promotional campaign
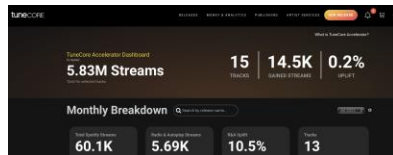
Developing technological programmes to develop an increase in artists

Setting up smart chatbots to answer fans' questions and advise them on what to listen to

Campaigns become subtler thanks to granular data analysis and more efficient thanks to an automated content production. For promotion professionals this is an opportunity to multiply initiatives (test more ideas, reach more niches) without blowing up costs or deadlines. This transformation requires maintaining an authentic discourse: as some have stressed, AI should serve to amplify an artist's voice, not to standardise it.

Towards an ever more personalised listening experience, immersive content and new services

Early adoption of tools recommended by DSPs

Among the first AI applications in the industry, personalised algorithms developed or set up by DSPs (Spotify, Deezer, YouTube Music etc.) have become essential to orient each listener in the ocean of available titles, by suggesting tunes that are likely to appeal to them.

Automated curation transforming how music is discovered in real-time

Algorithmic playlists (e.g. Discover Weekly, Radar) use machine learning to analyse listeners' tastes and to offer a tailored listening experience depending on their profile, on what they have asserted and on interactions.

On-demand playlist generation from natural language

LLM development creates possibilities for generating personalised content or playlists for users, using requests expressed through natural language (for instance, a request such as "*create a playlist for a party with different American jazz songs from the 1950s*" can be made to obtain a pertinent selection).

Exploring new modes of interaction with the works

The possibility for a fan to remix a song themself through an AI solution, while respecting the consent of the right holders (by changing the song's style, replacing the voice with another or playing with the stems) creates new forms of active participation in music, obtaining personalised versions for personal use.

Experimenting artist-audience relations

During a concert, a DJ's setlist can be adapted to the audience's reactions in real time – via captors or social flux – with AI evaluating enthusiasm and suggesting the next tune like during Travis Scott's immersive concert in *Fortnite,* where the show evolved depending on the players' interaction, reinforcing the unique experiential dimension.

Opening to new, immersive content

We are witnessing the emergence of 'meta-artists', going from the model of Gorillaz and their virtual scenic avatars to entities whose appearance and tracks are completely AI generated, like FN Meka. Although these initiatives have raised debate and have sometimes been rejected, they attract part of the audience, curious about novelty.

An invaluable contribution to meeting the challenges of metadata management, which is necessary to inform editorial thinking, public experience and transparency within the industry.

The music industry has to process massive volumes of data: every day, tens of thousands of new tracks are posted online and billions of interactions (streams, downloads, radio broadcasts, etc.) are recorded. interactions (streams, downloads, radio broadcasts) are recorded. Managing these flows efficiently is beyond human capacity; that's why AI is increasingly being called upon to automate the processing of musical information and make it more reliable.

Precise content categorisation and data standardisation

The development of AI capabilities in terms of analysis and reprocessing is timesaving and improves quality: classify tracks to improve recommendations (genre, mood, tempo, etc.), complete and reformat the metadata needed to put tracks online, etc.

Analysing trends and identifying emerging artists

By cross-examining data from streaming, radio broadcast, requests for music recognition (e.g. Shazam) and social media, "weak signals" can be detected and consequent action can be determined: signing on new artists, original editorial focuses, etc.

Optimised catalogue management and marketing

Better categorisation of metadata simplifies internal searches and speeds up catalogue exploration, for example for the sale of synchronisation rights or the rapid enrichment of playlists according to trends.

Combating algorithmic confinement

Recommendation algorithms are sometimes criticised for their tendency to lock users into filter bubbles.

Platforms are banking on the development of AI to improve their tools and, by integrating multi-criteria analysis and diversity objectives, offer richer and more surprising selections.

Valorisation of creativity and priority diffusion of original works

Initiatives are underway to avoid playlists from being swamped by tracks that could be identified – through AI tools – as 'generated', so as to protect human created content and limit impact on artists' remuneration.

Improved metadata management for the rights chain

Automated and accurate management of metadata guarantees faster and more transparent distribution of revenues throughout the rights chain: identification of duplicates, correction of tag errors, more reliable royalties. The industry has high hopes for these capabilities.

A valuable contribution to meeting the challenges of metadata management: high expectations but scattered efforts to improve the performance of the rights collection and distribution chain

Industry professionals see AI as an opportunity to meet the challenges of rights management…

- **Reprocess and clean up databases to make them easier to analyse:** correct duplicates and errors, reduce 'blanks' in declarations, standardise names/spellings/formats via schema recognition, etc.
- **Improve database interoperability:** define common rules and automatically standardise sector-specific metadata to ensure consistency between different databases and improve data matching
- **Increase the speed of the entire collection and payment process:** reduce the time required for the various stages of declaring, identifying and distributing remuneration
- **Adapt the OGC technology base to new uses and forms of rights:** integrating new categories or deploying functions covering emerging uses more quickly and at lower cost
- **Identify undeclared uses:** combine different audio recognition and fingerprinting tools to detect broadcasts and associate broadcasts and associate key information with them (artist, type of use, etc.), including for remixes or covers
- **Identify AI-generated content:** developing analysis tools to recognise deepfakes and tracks composed by AI in order to classify them separately or assert its rights
- **Improve trust through transparency:** making interactive dashboards more readily available to rights holders, showing revenue flows and distribution, and responding to requests for information.

…but are still in the early stages of work, due to the size of the project and the diversity of the players to be mobilised.

While expectations are widely shared by the various links in the industry, the question of governance arises:
- **Should ambitious joint development be undertaken** to serve the industry, and how should it be coordinated globally?
- **Is it an individual investment, serving the industry's profitability and competitiveness** in a competitive music industry (e.g. differentiating CMOs or labels through quality of service and speed of processes)?
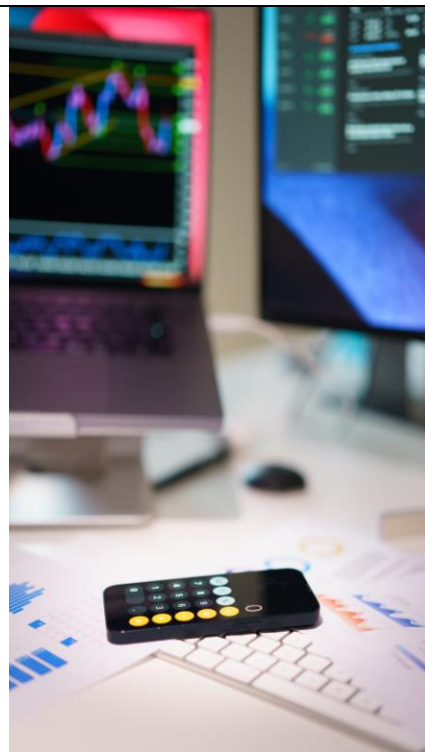
2. Current limits for the adoption of AI

BearingPoint®

Heterogeneous technological maturity and variable integration of new AI solutions into professional tools and industry practices

Generic tools

Innovative AI tools that were not designed primarily for the music industry ne only partially cover its specific needs. They do not always take into account the specifities of the audio or live formats, the sectors' workflows and practices, or the exhaustiveness of metadata, thus offering only an incomplete response and limiting their full adoption.

Quality of results

The majority of new music creation tools are aimed primarily at the general public, relying on simple inter-sides and rapid results for mainly recreational use. The modulation capabilities and quality of finish of the results still limit their commercial use: while they could be considered satisfactory for certain uses (e.g. ambient playlists, background music for a broadcast programme), they remain below professional standards for others.

Integration difficulties

Beyond the intrinsic quality of the tools, a major obstacle to the adoption of AI by professionals lies in their poor integration into music production workflows. These processes are often standardised, sequenced and based on a chain of specific tools (e.g. DAWs, plugins, sound banks, hardware consoles) with which AI solutions rarely interact smoothly, unless they have been developed as a feature by the sector's tool publishers.

Technical complexity

Some tools require advanced configurations, a good knowledge of programming environments, and sometimes access to specific hardware or computing infrastructures. This is particularly true of some of the most powerful AIs or those developed by academic research, where access to the most advanced results is de facto reserved for a small number of artists or professionals.

The maturity of AI in the music industry varies greatly, with consumer solutions unsuited to all professional requirements (background music vs. Music creation produced by a record company) and advanced models reserved for experts with specialised infrastructures. This heterogeneity hinders the smooth integration of AI into music workflows, requiring bridges between cutting-edge research and accessible business applications.

The current legal framework is out of step with the uses that are emerging, creating legal uncertainty and ethical questions, accentuated on a global scale by the differences in approach between copyright and authors' rights

Authorisation and remuneration for model training phases

The industry denounces the lack of remuneration for the use made of their works in the training databases and the absence of any means of confirming whether they have actually been used to develop models. More broadly, the cultural industries are calling for a more detailed framework, in view of the rapid advances made by the AI giants and the differing approaches adopted by different countries.

The legal status of works created with the help of AI

Copyright protects intellectual works created by a natural person, thus excluding automatic creations resulting solely from the learning of listening patterns. However, given the diversity of uses of AI as an assistance tool, case law remains embryonic and varies from country to country.

Consent and respect for artists' personal rights

Another major legal and ethical debate concerns voice cloning and, more broadly, the imitation of existing artists. The case of musical deepfakes such as Heart on My Sleeve (using the style and voice of artists The Weeknd and Drake) has crystallised these concerns - all the more so as the public, if not informed by clear labelling of AI-generated content, can easily be misled.

Proliferation of misleading or fraudulent covers

The growing use of AI simplifies and amplifies the creation of cover versions, generating covers that are increasingly close to the original, which opens up new debates on the framework of cover and sample rights. These imitations can be distributed in a misleading way, risking diverting legitimate remuneration from the original authors, performers and producers.

The intermediaries' responsibility in the production chain

Both the new production uses and the development of the capacity to analyse and identify the tracks broadcast, made possible by AI, raise the question of the responsibility of the various players in the chain (e.g. developer of the algorithm, distributor, platform, aggregator or music library), and justify a certain caution in the adoption of tools or the implementation of new rules (for monetisation, use).

Consideration of a reverse probation system

In the absence of transparency about the clear list of works used to train a model, some players are calling for the burden of proof to be placed on the AI publisher to demonstrate that it has not used the work. This would be tantamount to introducing a kind of presumption relating to the use of protected content when certain criteria are met, in particular similarities between pre-existing works and outpouts.

These elements reflect the questions raised by the industry and not a legal analysis

BearingPoint®

A need for resources and agility to identify, implement and adapt tools to each individual's needs and uses

Larger structures with more resources and means…

Access to large volumes of data: The size of the catalogues held or used by the larger players means that they have access to large databases on which they could train and develop high-performance in-house tools that are perfectly suited to their needs.

Investment capacity: Spending time on technology watch, developing a proprietary tool, and sometimes implementing an existing solution within an organisation, represents a significant cost (software licences, computing power, expert advice, time dedicated to the project, etc.) that not all organisations can afford - which explains why many players prefer to wait for market solutions to mature rather than clear the ground themselves at great expense.

Attracting expert profiles: Recruiting an AI engineer or a data scientist is a challenge for cultural industries, which are generally less competitive in terms of salary or less identified by these talents than digital giants or start-ups. This skills shortage is compounded by the need for in-house training to ensure that the new tools are used effectively.

…but with a potentially more measured and/or cautious approach

Organisational inertia: In complex structures, the introduction of new technologies requires the harmonisation of teams, processes, contracts and legacy systems. This often lengthy transformation phase requires gradual, coordinated deployment to avoid operational disruption.

Protection of catalogues and compliance: Among the large organisations, we are seeing caution linked to fears about the security of AI tools (risk of leakage, exploitation by the publisher of inputs for its own development) and legal uncertainties. Added to this is heightened regulatory vigilance and strict protocols for protecting sensitive data - slowing or blocking the adoption of AI until all the criteria have been met.

Less competitive pressure: Where medium-sized or small organisations might prioritise the implementation of AI tools to compensate for their current limitations, those with more resources or a firmly established position in the market might consider that they have more time to test and implement these new tools, without the pressure of an immediate return on investment.

Technology must come to terms with deeply rooted perceptions, fears and values among creators, professionals and the public

A lack of conceptual clarity surrounding AI and its capacities

Particularly in the professions closest to the arts (composition, production, directing, etc.), where practices are based on creative intuition, talent or developed experience, the arrival of algorithms that claim to assist or even supplant human judgement naturally arouses scepticism. **This mistrust is accentuated and maintained by a lack of knowledge and understanding of what AI really is, and therefore of what it can and cannot do.**

An attachment to traditional creation practices

Anxious to preserve a "craft" creation synonymous with quality and originality, or associating with it an image of "creative laziness," some players refrain from investigating the possibilities associated with AI. They fear potential infringements of rights (unauthorised copies) and, more broadly, a loss of identity, with AI ultimately standardising music.

A value judgement by the public and a reputational risk

The public is expressing positions that encourage the industry to be cautious. While some members of the public are curious about AI creations, the notion of authenticity is still highly valued The importance of authenticity in the artist-audience relationship encourages caution with regard to anything that might be perceived as breaking the bond of trust. This explains in particular the more cautious approach to live performance, where the relationship between the artist and the audience and between the artist and the technical team is central, and difficult to substitute technologically.

Worries about professional futures in the industry

The rapid advance of AI is giving rise to legitimate fears about the future of jobs in the music industry, fuelling caution among employers and internal resistance to change, with some employees fearing the disappearance or redefinition of their roles and skills. More broadly, there is a fear of the transfer of value from traditional players in the sector to digital giants, justifying a cautious approach.

A growing concern about AI's ecological impact

Although this concern still seems to be of secondary importance in adoption decisions, with the exception of those professionals who are most aware of the challenges of sustainability, it could in time slow down the adoption of certain AI solutions, by generating a critical discourse on digital sobriety and calling for more responsible tools.

3. Impact on professions and employment

BearingPoint®

The spread of AI in the music industry requires investment in AI training and acculturation

A new focus on technological skills and adaptability

This development is being accompanied by **growing pressure on certain key professions for the integration of AI**. Among the functions concerned are profiles that are more 'AI' and 'data' than 'music', such as data scientists, whose skills are at the heart of current needs.

The increasing integration of AI at different levels of the music industry is gradually redefining employability criteria, with **technical skills becoming central:**
prompt engineering (formulating the right instructions to generative AI) and data literacy (understanding statistics, interpreting recommendation algorithm analyses).

At the same time, certain professions are becoming hybrid, with **mixed profiles that are increasingly sought after** and competitive on the job market because they are able to navigate between artistic creation and technological mastery, and to self-train in the new tools that are emerging.

A need to adapt training programmes

Aware of the changes taking place in the industry, and in particular in creation in creation, some establishments are looking at **how to integrate AI into their teaching programmes, but also into their methods of transmitting knowledge**. This may take the form of a research and experimentation programme or the introduction of AI tools tailored to teachers.

The risk of a "generational divide" reinforces the need to **acculturate professionals through targeted, ongoing support** and clarification of the new expectations placed on them in terms of "traditional" technical know-how and mastery of new tools, whether generic (conversational AI) or dedicated to the sector.

The integration of AI and the evolution of its uses also require a **change of culture within organisations** that are currently less technophile. This can take the form of internal innovation laboratories or initiatives to monitor and share experience, promoting experimentation with new tools whatever the size of the organisation.

The expected impact of AI on employment in the industry varies according to different criteria, specific to the job or the person themselves

Nature of professions and tasks
see the prospective cartography on the following slides

- **Jobs with a stronger "technical execution" dimension** such as sound engineer, studio technician, distribution manager or royalties manager, are seeing their repetitive tasks gradually entrusted to algorithms - track cleaning, automatic balancing, tagging and metadata management, etc. These tools standardise and speed up operations, while requiring human supervision to guarantee quality.
- In contrast, professions with a stronger artistic component - composers, lyricists, arrangers - rely on creativity, emotion and collaboration between individuals. These intuitive and subjective dimensions escape current models, making AI a vector for amplifying the imagination rather than a substitute for human inspiration.

Specialisation, aesthetics and destination of the works

- **Sensitivity to originality and relationality differs according to the context and purpose of the work.** For example, creating background music for an audiovisual programme could be more tolerant of the use of generative AI than a film soundtrack. This logic is particularly true for live performances, where the human and scenic dimension remains primordial and less replaceable by AI. The impact can therefore vary according to the professional's specialisation.
- **Aesthetics influence technological adoption:** for example, electronic music, often produced in small groups and focused on experimentation, integrates AI more easily than a symphony orchestra.
- **Budgetary conditions influence usage:** a project with a tight budget lends itself more easily to the use of AI to meet constraints.

Expertise and reputation

- **Perception of added value, and in particular the artistic contribution, of the same profession can vary from one professional to another, depending on their reputation:** an arranger who is praised for his artistic sense and his contribution to collaborations will be perceived as irreplaceable, whereas an arranger who is perceived as limiting himself to the mechanical execution of orders will be more easily replaceable.
- **The same applies to service and technical roles:** a partner offering strategic advice and support will be seen as more indispensable than a distributor limited to logistical execution, just as a sound engineer providing creative solutions will be seen as different from a mere technical operator.

Some music professions are more likely to experience significant changes in their work process and tools

PROSPECTIVE EVOLUTION OF PROFESSIONS AND SKILLS

Job families that tend towards…

… project leadership

Show producers		Booking agents / Promotors	Labels' art directors and artist relations (A&R)
Managers / artist's agents	Press agents	Venue and festival managers	Administration & OPS *(OGC, edition, distribution)*

Heads of marketing

Graphic or visual designers

Rights managers *(pay, royalties)*

Data analysts

… technicality

Stage managers / Heads of production

Stage technicians *(light, sound)*

Arrangers / Orchestrators

Video editors *(clips, sync)*

Sound engineers (mastering, mixing, etc.)

Roadies

Music producer

… artistry

Choreographers / Directors

DJs / Beatmakers

Authors / Songwriters

Performers: lead artists

Composers

Musical instrument makers

Heads of synchronisation

Performers: Accompanying artists

- Weak

Current volume and maturity of specific use cases

Strong +

This is a schematic and non-exhaustive representation that illustrates current trends.

Profession
Example of tasks likely to evolve

Low job evolution expected

Developing of tools for assistance, with no impact on expected skills

Needs for adaptation to new tools, practices and skills

BearingPoint®   26

The technical capacity for automation – and therefore the expected effects on employability – vary considerably from one job to another in the music industry
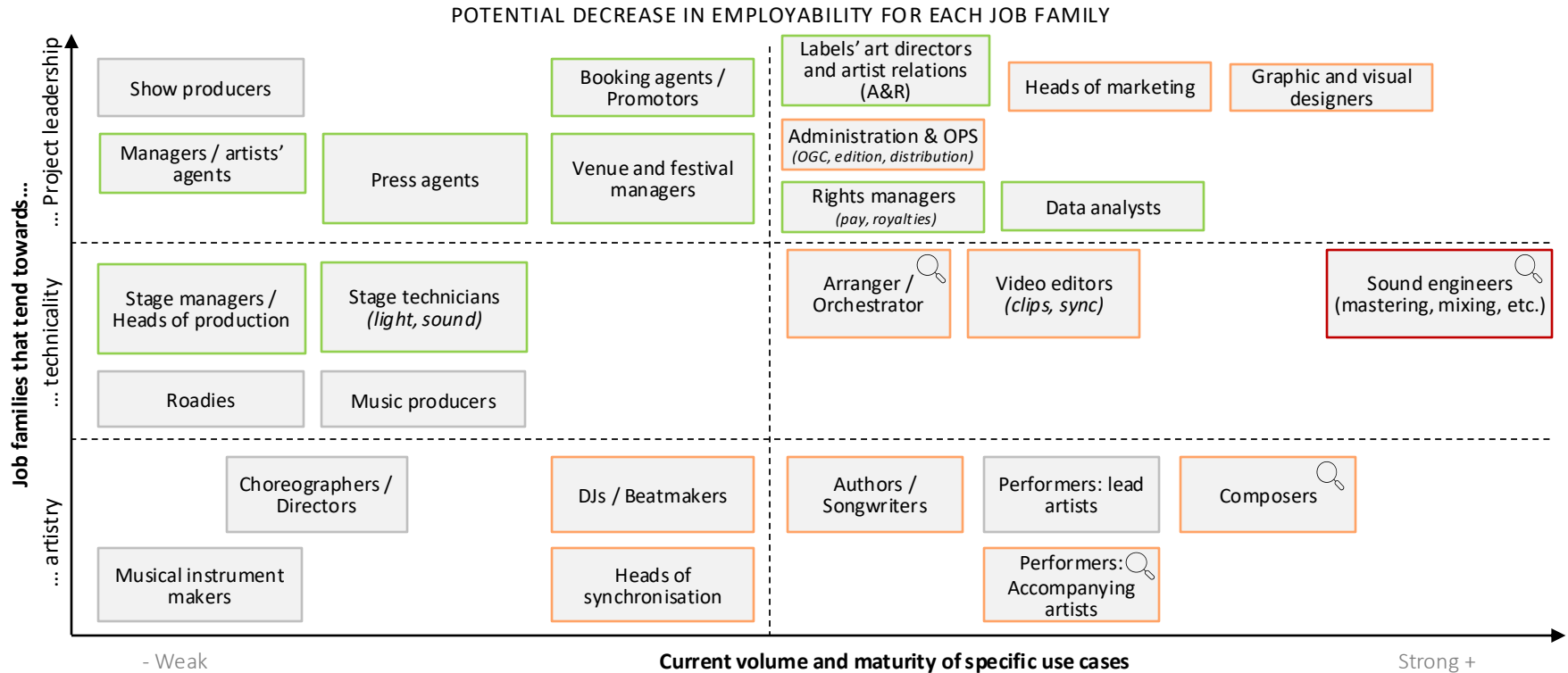
POTENTIAL DECREASE IN EMPLOYABILITY FOR EACH JOB FAMILY

Job families that tend towards...

... Project leadership
... technicality
... artistry

- Weak   **Current volume and maturity of specific use cases**   Strong +

This is a schematic and non-exhaustive representation that illustrates current trends.

Profession
Example of tasks likely to evolve

No job impact — Low job impact expected — Potential impact on the job — Strong risk of impact on the job

BearingPoint® 27

Prospects for music creation and production professions:

Composer: **From composing to prompt engineering, how is AI transforming music to image?**

The profession of image composer, particularly for standardised content (e.g. background music, atmospheric music), is confronted with the growing capacity of AIs to efficiently generate soundtracks in response to orders from audiovisual producers, formulated with emotional, visual or narrative parameters. To remain competitive and relevant, these composers now need to develop prompt skills to make the most of these generative tools. Their added value would then lie in their ability to supervise, select and finely edit proposals generated by AI, positioning themselves as guarantors of sound quality, consistency with the synchronised production and appropriateness with the initial intention and specifications.

Sound engineer, orchestrator: **Towards mastering and supervising AI tools for sound production?**

Sound engineers are seeing their profession transformed by the rise of AI tools capable of automatically performing mixing, mastering and acoustic processing tasks. Rather than rendering their function obsolete, these technologies are redistributing their roles: the engineer is becoming an expert in the control of automated solutions, providing artistic input on arrangements and a fine-tuned mastery of the tools. They must also know how to free themselves from these tools to create new treatments and arrangements, or intervene downstream to refine, correct and personalise the sound according to the needs of the project.

Performers: **Accelerating the decline in studio time for backing musicians?**

Accompanying musicians are seeing a decline in the frequency and length of time they spend in the studio - an age-old phenomenon that began with digitisation but is now being amplified by increasingly high-quality synthesis and sampling technologies. Background performances (e.g. doubling an instrument, choir) are particularly exposed to automation, which is sometimes added in post-production. On the other hand, their presence on stage during live performances continues to be valued for its importance in interacting with the audience and enhancing the performance of the main artist - the role of accompanying performers in live shows is therefore less questioned.

4. Impact on economical equilibrium

BearingPoint®

Possibilities for disintermediation and easier access to market

Disintermediation possibilities

Diversification and demonstration of talent

Expanding artist rosters

Benefiting smaller structures' competitiveness

AI is also seen as a vector for the democratisation of music production by providing low-cost tools for creation (composition, mixing, mastering, arranging, etc.) and distribution (distribution, marketing, etc.). Emerging artists are thus able to **create professional-quality tracks without going through a label or studio**, reducing the financial and technical barriers to entry and widening access to the market to a larger number of people.

AI's ability to generate vocals, instrumental lines or musical arrangements means that the final result can be previewed more quickly. This gives songwriters and beatmakers, for example, the opportunity to **produce increasingly convincing demos on their own,** and so win over publishers, performers or producer. Unique talents can thus be better promoted and protected, and their access to the market facilitated.

Internal productivity gains, for example through the automation of administrative tasks or the implementation of new analytical tools, would give labels, distributors, publishers or managers the capacity to **examine and integrate a greater number of artists**. This would both diversify catalogues and open doors to new talent.

Traditionally limited by their resources but sometimes more agile in transforming themselves, small structures and independent artists can **exploit AI to develop their capacities and cross a threshold of competitiveness**. This may be through AI's contribution to data mining and trend analysis, through reduced production costs enabling them to manage more creative cycles, or through internal gains in productivity, enabling them to approach the service levels of larger players.

Different leads for repositioning and developing new economical opportunities

DEVELOPPING NEW OFFERS: ....

Adapting to new uses and types of rights

The importance of the data on which AIs rely to produce varied, high-quality results opens up new opportunities: firstly for catalogue owners to grant training licences, but potentially also for performers to 'lend' their voices. On the other hand, this raises the question of adapting contracts and the rights collection chain.

Greater differentiation in the level of service and support

If artists can use platforms to promote and distribute themselves effectively without a traditional intermediary, the record company model could be challenged. The challenge then becomes to differentiate themselves through the level of support and service, and to provide non-substitutable human expertise.

Exploiting the catalogue and musical heritage

AI can be used to restore old recordings or to identify tracks in a catalogue that should be highlighted and added to playlists according to current trends. The example of the Beatles' unreleased track "Now and Then", completed thanks to AI and the isolation of John Lennon's voice, shows how technology can resurrect archives and open up new monetisation opportunities.

RESPONDING TO NEW VOLUMES OF PRODUCTION: ....

Sharing the environmental and economic impact of storage

The proliferation of titles produced or generated is raising the stakes in terms of bandwidth, algorithmic processing time and storage for all the players involved in broadcasting (global and local DSPs, distributors). The question of how these negative externalities are to be valued is increasingly being raised, with questions being asked, for example, about the appropriateness and implementation of an entry fee for broadcasting.

Platforms positioning themselves on the basis of their emphasis on human content

In the face of fears and debates about the dilution of artists' remuneration and audience fragmentation, DSPs could try to differentiate themselves by giving editorial content more prominence than algorithmic content, or by proposing to demonetise or limit the prominence given to content identified as being generated by AI.

New debates on remuneration methods and value sharing

The proliferation of AI-generated content is reopening the debate on remuneration models for streaming. Some players are debating the right listening thresholds for a track to be monetised, as a way of curbing the effect of industrial "micro-streaming", which floods platforms with content that is little listened to but distributed in very large numbers.

A number of prospective questions about the balance between technological innovation and human creation

Towards a standardisation of musical aesthetics?

One of the major long-term risks is the stylistic convergence of musical productions generated or optimised by AI. By relying on historical data and learning models based on past trends, AI could encourage repetitive patterns, calibrated to appeal to the greatest number, and thus harm musical diversity as well as reducing the very relevance of these tools.

What consequences for artist-audience relations?

In the near future, it may be possible for listeners to use prompt-to-music tools to order a single track sung in the voice they prefer, with a text adapted to their mood, generated in real time. To emerge, strengthening the embodiment and closeness between an artist and his audience becomes key.

Towards a two-speed creation?

On the one hand, certain players will be able to take advantage of the reduced costs and speed of AI generation to produce greater volumes for the same budget, or even by reducing the number of teams involved.

On the other hand, reputational issues and a commitment to creativity and collaboration will encourage artists, labels and show producers to continue investing in the human resources deemed necessary for quality.

This duality would widen the gap between 'industrial' and 'craft' positioning, redrawing the competitive landscape.

Towards a dependency on AI tools?

The increasing integration of AI tools creates a risk of technological dependency, where certain traditional skills - such as fine-tuning the mix or cleaning tracks by hand - could be lost to automated solutions. In addition, the industry is becoming vulnerable to fluctuations in the prices of these platforms and tools, exposing studios and independents to budget instability and reduced control over operational costs.

What environmental impact for musical AI?

Artificial intelligence, particularly in its generative forms, consumes a lot of water, of energy and computing capacity. Training complex models, such as those capable of producing high-quality audio, requires energy-hungry data centres. Incorporating this consideration into music AI strategies is essential to guarantee the sustainable and responsible development of the sector.

5. Conclusion

BearingPoint®

Faced with the ethical, legal and environmental challenges ahead, the gradual, controlled integration of AI into the music industry opens up promising opportunities

A forward-looking industry

By combining AI tools and human expertise, players in the music industry see opportunities to invent new creative and economic models. By regulating the use of these technologies and supporting responsible innovation, the industry can boost its attractiveness and dynamism. AI is thus becoming a lever for sustainable growth, offering tomorrow's music a range of unprecedented opportunities.

The need for sector-wide coordination

Despite the multitude of opportunities offered by AI tools, their adoption is not enough in itself: to reap real benefits, the entire chain - artists, labels, CMOs, distributors and technical service providers - needs to coordinate its efforts. This requires shared investment, the introduction of common standards and the development of training to take full advantage of the gains in productivity and creativity.

Ethical and legal issues to be addressed

Questions of intellectual property, attribution of author credits and algorithmic transparency are emerging. The risk of standardisation of production or a technological access divide requires safeguards. In addition, the carbon footprint of AI processing needs to be taken into account. These different issues call for industry standards and appropriate regulation to clarify the legal and contractual framework and preserve creative diversity.
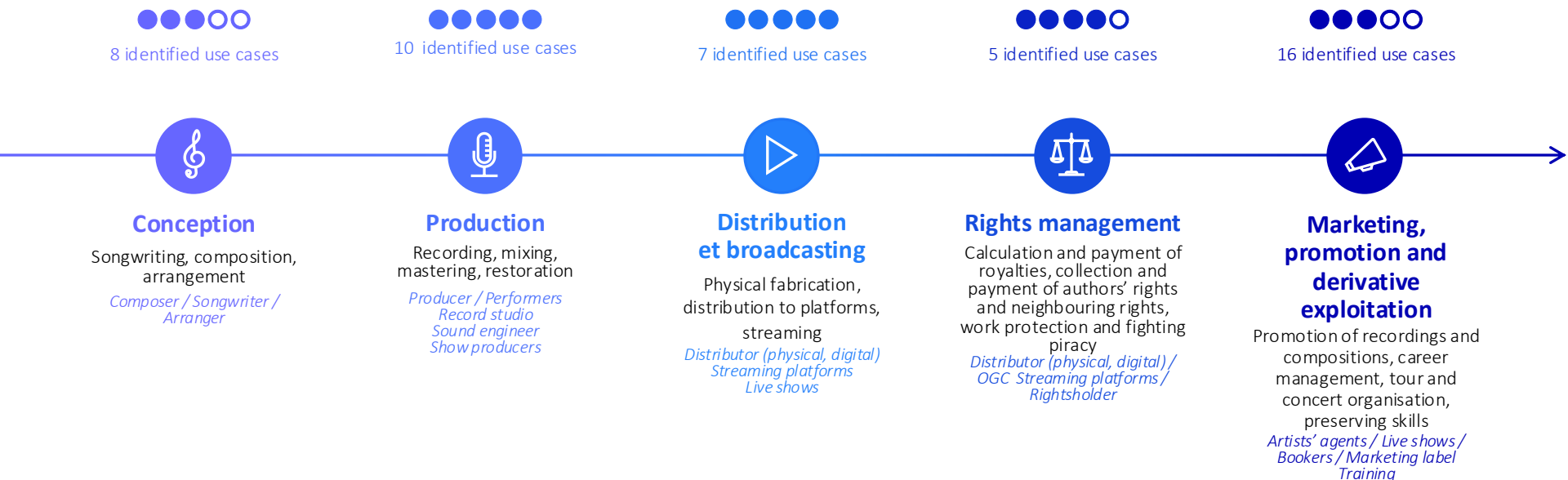
Cartography of AI use cases

Each stage of a musical work's life cycle presents opportunities linked to AI – firstly for tools specific to music during production and distribution stages

STAGES OF A WORK'S VALUE CHAIN – MUSIC

8 identified use cases

10 identified use cases

7 identified use cases

5 identified use cases

16 identified use cases

Conception
Songwriting, composition, arrangement

Composer / Songwriter / Arranger

Production
Recording, mixing, mastering, restoration

Producer / Performers Record studio Sound engineer Show producers

Distribution et broadcasting
Physical fabrication, distribution to platforms, streaming

Distributor (physical, digital) Streaming platforms Live shows

Rights management
Calculation and payment of royalties, collection and payment of authors' rights and neighbouring rights, work protection and fighting piracy

Distributor (physical, digital) / OGC Streaming platforms / Rightsholder

Marketing, promotion and derivative exploitation
Promotion of recordings and compositions, career management, tour and concert organisation, preserving skills

Artists' agents / Live shows / Bookers / Marketing label Training

●●○○○ : For information purposes, potential level of AI's impact independently of the amount of identified use cases

Around thirty thematic use cases have been identified, varying in the level of maturity of the associated technology and the number of users.

Widespread ↑ (Adoption potential by the industry)

Emerging technology, not yet adapted for professional use, with potential widespread adoption

- Automated transcription to sheet music / tablatures
- Forecasting ideal release dates
- Mixing and automated sound systems for concerts

Current technology undergoing improvement, with potential widespread adoption

- Assisted composition
- Generating lyrics and help with writing
- Automated arranging and orchestration
- Analysis of music trends and audience data
- Automated musical plagiarism detecting
- Detection of the use of a track
- Royalty management and revenue monitoring
- Detection of AI generated content
- Social media management

Mature technology with potential widespread adoption

- Automatically generating music
- Voice cloning and vocal synthesis
- Automated audio mixing
- Automated audio mastering
- Customised musical recommendation
- Automated musical distribution
- Catalogue indexing and musical documenting
- Creating marketing content

Emerging technology, not yet adapted for professional use, with limited adoption potential

- Legal analysis assistance
- Translation and multilingual adaptation of songs
- AI managers

Current technology undergoing improvement, with limited adoption potential

- Conception of new sounds
- Vocal and choir harmonies generated by AI
- Sound and sample research
- Audio restauration and remastering
- Forecasting programming and attendance for concerts, tours and festivals
- Preserving and transmitting skills

Mature technology with adoption limited to a reduced number of users

- Separating audio sources and creating stems
- Assistance for the creation and editing of music videos
- Media creations for scenography
- Automated promotional campaigns

- Weak ←——— **Underlying technological maturity** ———→ Strong +

Adoption potential by the industry: + / - Limited.

Each use case slide corresponds with a situational analysis from May 2025; a macro score was established in terms of technological maturity and the potential for industry application

The synthetic analysis of use cases are based on documentary research (press articles, editor communications or research articles available in May 2025) but also on interviews with professionals. The solutions and examples are non-exhaustive.

Main benefits

Support for inspiration and creativity
Stimulates creative inspiration

Cost reduction
Reduces costs of a given task

Saving time
Speeds up the duration of a task

Better quality
Improves the quality of a task's end result

Better user experience
Improves the user's experience

New income source
Constitutes a new source of income

Risk reduction
Reduces the risk of an investment

Technological maturity

○○○
Non existent or emerging technology, not at required level for industry use

●○○
Technology under development, which may already be producing some initial results but difficult to use

●●○
Usable technology in some cases, that still needs to be developed for widespread adoption

●●●
Current technology already in use, possibly already adopted by the industry

Prospective impacts

○○○
No expected impact on the profession, due to the nature of the use case or its adoption

●○○
Assistance for the profession for tasks, with an increase in production

●●○
Total or partial automation for given professions

●●●
Potential automation for the majority of professional tasks, with a need for supervision

BearingPoint®

List of studied use cases

Conception:
- Assisted composition
- Automatically generated illustrative music
- Generating lyrics and help with writing
- Automated arranging and orchestration
- Conception of new sounds
- Generating voices and choir harmonies with AI
- Sound and sample research

Production:
- Voice cloning and vocal synthesis
- Automated audio mixing
- Automated audio mastering
- Audio restoration and remastering
- Separating audio sources and creating stems
- Automated transcription to sheet music/tabs

Distribution & Broadcasting:
- Customised music recommendations
- Analysis of music trends and audience data
- Automated music distribution
- Catalogue indexing and musical documentation
- Forecasting programming and attendance for concerts, tours and festivals
- Forecasting ideal release dates

Rights management:
- Automated detection of musical plagiarism
- Automated detection of a song's use
- Detecting AI generated content
- Royalties and income management
- Legal assistance and analysis

Marketing, promotion and derivative exploitation:
- Mixing and sound system installation for concerts
- Enhanced musical performances
- Translation and multilingual adaptation of songs
- Assistance for the creation and editing of music videos
- Creating marketing content
- Creating media for scenography
- Managing social media
- Automated promotional campaigns
- AI managers
- Preserving skills and transmission

Note: use cases that were not conclusive, or for which the need could not be confirmed during the interviews have not been detailed

Assisted composition

Sector	Step	Professions concerned	Benefit of the use case	Technological maturity	Prospective impacts
Music	Conception 𝄞	Composers, songwriters, arrangers	Creative inspiration	●●○ Fast developing current technology	●●○ Partial automation of tasks

AI acts as a creative assistant for musical composition. Machine learning tools can suggest melodies, chord progressions or song structures based on vast catalogues of existing music.

AI does not write the piece for the composer, but it can:

- Provide ideas or variations that the creator can refine
- Overcome writer's block
- Explore new styles and combinations

Technological Maturity

- Several prototypes and tools exist that are capable of generating coherent musical sequences. However, they often require guidance and their results may lack finesse or clear artistic intent.
- Recent advances have improved the quality of the compositions proposed, even if the raw result generally requires human sorting and adjustments.

Examples of applications

- The tool MuseNet has demonstrated the capacity to demonstrate multi-instrumental hybrid tracks, for example *Chopin in the style of Lady Gaga*[1], giving composers ideas for unexpected musical genres.
- The French startup Aiva composes tracks in several formats, used as a work basis by creators of music for films and ambient music[2].

Adoption potential

- Professional composers show an interest for these new assistants, especially in the case of especially for commissioned music (advertising, sound design) where speed of ideation is essential.
- Nevertheless, a widespread adoption will depend on how easy it is to integrate into existing work environments (digital audio workstations, quality of interfaces, initiatives by major players, etc.) and on the confidence artists have in these suggestions.

Automatically generated illustrative music

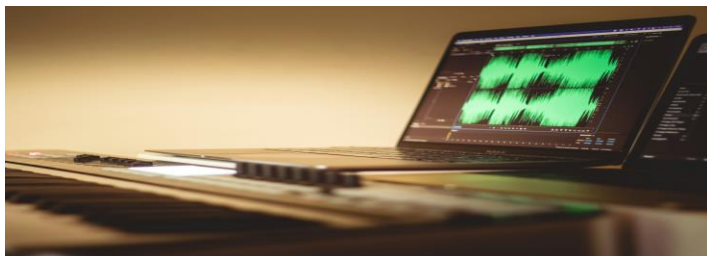| Sector	Step	Professions concerned	Benefit of the use case	Technological maturity	Prospective impacts
Music	Conception 🎼	Film music composers	⏱ Timesaving 🪙 Cost reduction	●●● Current technology	●●● High potential of automation

The aim is to quickly provide personalised, royalty-free illustration music, where previously a search in a sound library or a request to a composer would have been necessary. To accompany images and atmospheres, these systems make it possible to:

- Generate an original music track, adapted to parameters such as genre, duration, mood, etc.
- Analyse the video to automatically synchronise the music with the rhythm and visual intensity.
- Create several variations of the same musical theme.

Technological maturity
- Specialised start-ups have developed models based on thousands of music illustration tracks (background music, corporate, electro, etc.) and offer simple interfaces where, using a prompt and criteria, you enter the duration, the desired style and possibly a few indications (mood, tempo).
- The audio quality produced is now almost professional depending on usage. However, for sophisticated needs (e.g. film music), AI is reaching its artistic limits.

Examples of applications
- Tools such as Suno and Udio[3] can be used to quickly generate a track, giving users access to certain parameters to adjust tempo, harmony or structure.
- French start-up MatchTune[4] has developed an application that generates music tracks automatically synchronised with videos via partnerships with record labels.

Adoption potential
- Already being massively adopted by online content creators (YouTube, Twitch, TikTok) who appreciate being able to immediately obtain customised music for their videos without having to deal with about approval processes.
- Some professional composers and advertising agencies use these tools to generate demos that can be reworked to save time on simple compositions.

Generating lyrics and help with writing

Sector	Step	Professions concerned	Benefit of the use case	Technological maturity	Prospective impacts
Music	Conception ♪	Lyricists, songwriters, singers	Creative inspiration	●●○ Fast developing current technology	●●○ Partially automated tasks

As well as melodies, AI is now capable of generating song lyrics or assisting with the writing of texts. The aim is not to delegate all the writing, but to obtain a lexical and semantic framework on which to iterate to stimulate creativity and save time in the lyrical brainstorming phase.

Given a theme or instructions, the AI can provide suggestions for verses, complete a rhyme, or suggest several variants of the same passage. Its adaptability to different styles of language means it can help a lyricist to write in a genre that is not originally their own.

Technological maturity
- Text generation models have been proven to produce coherent, rhyming lyrics on demand, respecting song structures.
- However, the literary quality remains highly variable: while AI meets the demand for prosody (rhyming, respecting a metre), it may come up with lyrics that are a little generic or clichéd for lack of any real intention or emotional understanding.

Examples of applications
- Songwriters have experimented with models such as ChatGPT or Claude for writing songs by providing a theme (love, sadness) and a structure (4-line verses, repetitive chorus, etc.).
- We are also seeing the emergence of dedicated applications such as These Lyrics Do Not Exist, which take into account the genre and mood required to provide an initial result ready to be reworked by the artist[5].

Potential for adoption
- Many artists are open to using AI as an intelligent thesaurus or idea generator to explore new themes or styles.
- However, adoption will depend on the creation of an ethical use framework and on the future performance of the tools and their acceptance by the general public: artists are keen for lyrics to remain an expression of their personality and may be reluctant to claim its use publicly.

Automated arranging and orchestration

Sector	Step	Professions concerned	Benefits of the use case	Technological maturity	Prospective impacts
Music	🎼 Conception 🎤 Production	Arrangers, orchestrators, CAM programmers	💰 Timesaving 🪙 Cost reduction	●●○ Fast developing current technology	●●○ Partially automated tasks

Arrangement consists in taking a composition (melody, basic harmony) and developing it into a finished version: choice of instruments, rhythms, backing vocals, etc. AI can assist at this stage by automatically proposing complete orchestrations or arrangements from a draft, with the benefit of:
- Translating a musical skeleton into a fleshed-out piece
- Creating complex arrangements for composers who do not have the technical skills to do so
- Quickly adapting a piece to different genres

Technological maturity
- Research has shown promising results, with projects that could orchestrate the same melody in different styles (classical, jazz, pop).
- AI is good at filling the musical space with plausible accompaniments but can make mistakes in arrangement (writing unplayable parts for an instrument, overloading the sound spectrum).

Examples of applications
- The Flow Machines project (Sony CSL) has been experimenting with AI capable of orchestrating melodies. In 2016, it co-generated the pop song 'Daddy's Car'[6] in the style of The Beatles: the AI proposed a complete instrumental and harmonic structure from given melodic fragments.
- A tool like Band-in-a-Box can take a user's chord progression and transform it into a piece arranged with several instruments in a chosen style.

Potential for adoption
- Arrangers and producers see value in it for low-resource projects or demos, to help present projects to artistic directors or to quickly generate alternative tracks of the same theme.
- However, at the top end of the market (albums by established artists, prestigious film music), arranging is still a highly valued art, which limits the adoption of AI to the preparatory stages.

Conception of new sounds

Sector	Step		Professions concerned	Benefit of the use case	Technological maturity	Prospective impacts
Music	🎼 Conception 🎤 Production		Sound engineers, sound designers	Creative inspiration	●●○ Fast developing current technology	●●○ Partially automated tasks

AI can be used to innovate the sound itself, i.e. create new timbres, textures or sound effects:

- Creation of new 'hybrid' sounds by combining or extrapolating sources
- Designing original presets for virtual synthesizers using simple language
- Analysis of an existing sound (e.g. natural noise) and proposal of a stylised or musicalised variation

Technological maturity
- Prototypes such as NSynth work and succeed in combining the characteristics of several instruments to create totally new hybrid sounds[7].
- However, precise control over the result remains difficult: the space of sonic possibilities is immense and audio quality requires optimisation. The potential is there, but ergonomics and predictability are still being developed.

Examples of applications
- In 2022, startup Emergent Drums launched a plugin that uses AI to generate original drum samples on demand, giving beatmakers an infinite source of new kicks, snares and electronic percussion to incorporate into their tracks[8].

Potential for adoption
- For sound designers or experimental musicians, AI can offer access to unique sounds to set them apart.
- In the audiovisual sector, sound designers of science fiction films could use AI to invent the cry of an imaginary creature or the sound of a futuristic spaceship.
- Historically, sound engineers have always welcomed new technologies as tools to be integrated into their toolbox to raise the level of sound mastery.

Sound and sample research

Sector	Step	Professions concerned	Benefit of the use case	Technological maturity	Prospective impacts
Music	🎼 Conception 🎤 Production	Composers, producers, beatmakers	Saving time Creative inspiration	●●○ Fast developing current technology	●●○ Partially automated tasks

AI tools make it possible to explore huge soundbanks to quickly find specific timbres or loops. These systems analyse audio characteristics (spectrum, envelope, rhythm) to identify similarities. IA thus becomes a creative assistant by:

- Speeding up sound digging
- Helping to overcome writer's block by offering ideas
- Suggesting musical elements based on a target sound universe

Technological maturity

- The audio similarity algorithm is well mastered and already deployed in commercial tools (e.g. Cyanite[45]) which compare tracks according to timbre, atmosphere, period…
- Search engines based on similarity are available from major publishers (Universal Production Music offers to instantly find similar tracks using a search powered by AI[46]).

Examples of applications

- The Splice platform has deployed an AI called Similar Sounds[47]: by clicking on a loop it is possible to obtain a list of loops that are similar in terms of texture and mood, thanks to a model trained on the Splice library.
- In 2023, Splice launched the Create a Stack[47] function, which automatically assembles compatible samples to form an original loop.

Adoption potential

- These tools democratise access to cutting-edge sounds without requiring an encyclopaedic knowledge of sound, saving time and inspiration for music production.
- Adoption is facilitated by the development of these functions in already popular platforms, without disrupting users' habits.

Sources are detailed in the appendices to this document

AI generated vocals and choir harmonies

Sector	Step	Professions concerned	Benefits of the use case	Technological maturity	Prospective impacts
Music	Conception Production	Singers, chorists, vocal arrangers	Time saving Reduction of costs	●●○ Fast developing current technology	●●○ Partially automated tasks

Vocals are a central element of much music, and AI now makes it possible to generate or assist vocal elements without immediately calling on a human performer. In concrete terms, an AI can listen to a melody line sung by the lead singer and automatically suggest complementary vocal harmonies or synthesise a sung voice that matches the style. For the creator, this means that vocal ideas can be tested instantly and integrated into the final production or refined before potentially being recorded by real voices.

Technological maturity
- Automatic voicing algorithms have been around for some time, for example the iZotope Nectar software already offers real-time AI voicing of the lead voice[9].
- Singing voice synthesis has taken a quantum leap with neural networks such as WaveNet and others[10], and it is now possible to produce a credible singing voice with relatively few artefacts.

Examples of applications
- The Antares Harmony Engine software uses intelligent algorithms to instantly generate up to 4 harmony voices from a main voice [11], in particular to thicken choruses.

Adoption potential
- Use is already underway in music production, where many producers are using auto-harmonisation plugins to quickly test backing vocals, make demos and for background vocals or vocal effects that are difficult to achieve.
- In urban and electro music, where the vocal effect is often stylised, synthetic voices can even be used as they are to create vocal samples, artificial choirs, etc.

Voice cloning and vocal synthesis

Sector	Step	Professions concerned	Benefit of the use case	Technological maturity	Prospective impacts
Music	Production	Singers, performing artists, voiceovers	Time saving / Reduction of costs / Creative inspiration	●●● Current technology	●●● High potential of automation
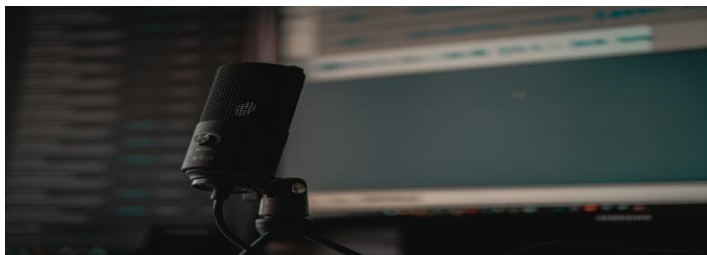
One of the developments that raises the most ethical and legal issues is the ability to clone the voice of an existing singer to generate new interpretations. There are many possible applications:

- Producing ultra-realistic demos to present to a singer
- Localising songs in other languages
- Enabling fans to generate cover versions in the voice of their idol
- Digitally reviving the voice of a deceased artist

Technological maturity

- In 2023, numerous viral examples were circulating of 'fake' songs by Drake, Michael Jackson, etc., generated by AI and convincing enough to fool the untrained ear[12].
- In China, Tencent Music declared in 2022 that it had released more than 1,000 tracks with virtual voices (clones or synthesizers)[13], some of which have exceeded one million listens, in particular to feed virtual idols on their platforms.

Examples of applications

- From a creative point of view, some artists see this as an opportunity: singer Grimes, for example, has publicly offered her fans the use of her AI voice clone to create songs, with a revenue share if the tracks are successful[14].
- Open source models such as So-Vits-SVC[15] are available to the general public for training voice clones.

Adoption potential

- On the one hand, some producers and labels see a commercial opportunity (multiplying language versions, keeping an artist's catalogue alive beyond their lifetime).
- On the other, many artists are uncomfortable with the idea that their voices can be imitated without control using these musical deepfakes and are calling for strong regulation and protection of their voices.

Automated audio mixing

Sector	Step	Profession concerned	Benefits of the use case	Technological maturity	Prospective impacts
Music	Production	Sound engineers	Time saving Cost reduction Better quality	●●● Current technology	●●○ Partially automated tasks

Audio mixing is a technical art where human experience is essential, but where AI provides invaluable assistance via intelligent mixing tools:

- Analysis of a multi-track session and suggested initial settings (e.g. track levels)
- Correction of obvious problems (e.g. clarifying the voice, homogenising reverb)
- Learning a reference style to obtain a mix with a similar sound colour

Technological maturity
- Already integrated into market tools, these systems have been trained on a multitude of successful mixes and know how to detect typical problems and remedy them.
- Mixing remains a matter of taste and context, and an AI cannot guess at emotional intent, anticipate unconventional creative choices or completely correct a poorly produced recording[16].

Examples of applications
- iZotope's Neutron plugin offers a Track Assistant which includes mixing assistant functions that rely on intelligent algorithms to suggest appropriate settings[17].
- For hobbyists, online platforms such as BandLab offer free assisted mixing, making it easier to access suitable sounds for their demos[18].

Adoption potential
- For professionals, AI represents a way of 'easing their workload' on technical aspects, enabling them to spend more time on the creativity of the mix and to work more easily on high-volume projects with tight deadlines.
- Their role is declining in terms of basic settings and evolving towards a repositioning towards more supervision and access to additional tools to diversify their palette.

Automated audio mastering

Sector	Step	Profession concerned	Benefits of the use case	Technological maturity	Prospective impacts
Music	Production	Mastering engineers	Time saving Cost reduction	●●● Current technology	●●○ Partially automated tasks

These systems compare the incoming mix with thousands of commercial track references to apply the appropriate treatments:

- Equalisation to correct an excess or lack of bass/treble
- Multiband compression to homogenise dynamics
- Limiting to achieve the right volume
- Adaptation to the identified style

Technological maturity
- Mastering is one of the first areas where music AI has been adopted in large-scale commercial production, with services such as LANDR in existence since the mid-2010s.
- Feedback shows that in the majority of cases, the rendering is comparatively very close to what a specialised human engineer would produce, and that the quality of AI mastering is deemed sufficient for standard operation[19].

Examples of applications
- LANDR is one of the pioneers and market leaders: according to communications, several million tracks have been mastered using their AI since its launch, with a high satisfaction rate, particularly among non-expert users[20,21].
- As with mixing, iZotope's Ozone suites incorporate AI-assisted mastering to enable engineers to check their work or save time[20].

Adoption potential
- For many self-produced musicians and small labels, the use of these tools has become almost a reflex to ensure compliance with the technical standards of streaming platforms and radio stations.
- Major productions tend to call on the big names in human mastering for the final rendering, but this does not preclude the use of AI as a starting point or to save time on alternative versions.

Audio restoration and remastering

Sector	Step	Professions concerned	Benefits of the use case	Technological maturity	Prospective impacts
Music	🎤 Production 🪨 Derivative exploitation	Mastering engineers, music editors	🏅 Better quality 🎧 Better user experience	●●● Current technology	●●○ Partially automated tasks

AI is proving invaluable for restoring old or degraded recordings and giving new life to music archives using techniques such as:

- Recognising and attenuating various audio faults: background noise, vinyl crackle, distortion, etc.
- Convert and upmix mono or stereo content into multichannel versions (5.1, Dolby Atmos) by separating the different sound sources
- Scale quality for live recordings

Technological maturity

- Software such as Izotope RX[22] already incorporates noise reduction, click and de-reverb modules, and has been used in consumer projects.
- The ultimate benefit is to make the sound cleaner and more faithful, while retaining the authenticity of the original performance.

Examples of applications

- In the documentary *The Beatles: Get Back* (2021)[23], engineers used a machine learning algorithm to demix and clarify the audio of the Beatles' rehearsals on the roof of Apple Corps in 1969. The tool rendered intelligible conversations and instruments that were inaudible in the old takes.

Adoption potential

- In the heritage music and reissue sector, companies with vast archive catalogues are already using it to supply streaming platforms with enhanced quality, for example, or to prepare anniversary boxed sets with restored sound.
- AI is being adopted across the board because it enables us to achieve results that no previous technique has come close to, and to enrich the musical heritage available by resurrecting archives.
- The challenge for engineers is to find a balance between improving and altering the original, so as not to remove legitimate sound material.

Separating audio sources and creating stems

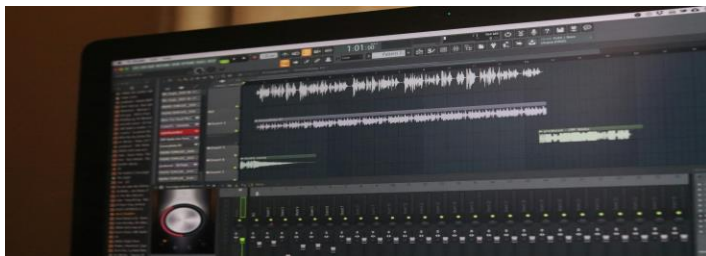| Sector	Step	Professions concerned	Benefits of the use case	Technological maturity	Prospective impacts
Music	🎤 Production 🔊 Derivative exploitation	Sound engineers, music editors	🏅 Better quality ⏱ Time saving	●●● Current technology	●●● High potential of automation

Source separation consists of isolating the different components of an audio-stereo mix, such as extracting the vocal track alone from a mixed song or isolating an instrument to obtain 'stems'. This opens up a wide range of possibilities:

- Create instrumental or karaoke versions instantly
- Rebalance a mix without the original tracks
- Supply DJs and remixers with samples and material

Technological maturity

- Tools such as Spleeter[23] (Deezer) in open source, or professional services such as Audioshake[25] or Moises.ai, achieve a sufficiently clear separation for professional use from the majority of standard tracks.
- On very harmonically dense music, separating each layer will remain difficult and may prove less easy on rare instruments or atypical synthesised sounds.

Examples of applications

- Independent labels, such as Rough Trade Records for the reissue of The Libertines' "Up The Bracket", are working with Audioshake to prepare the Dolby Atmos release of certain albums, based on the isolation of each stem[26].
- On the DJing side, the djay software (Algoriddim) has integrated Neural Mix technology, enabling live separation of vocals, beats and instruments on any song in the catalogue, to enrich transitions and mashups[27].

Adoption potential

- For publishers and labels, this represents a commercial opportunity to exploit works in more forms, with potentially more synchronisation, more official remixes…
- On the whole, the industry is aware that the train has left the station, and that separation by AI is here to stay. This is a textbook case where AI has lifted a barrier long thought to be insurmountable.

Automated transcription to sheet music / tablatures

Sector	Step	Professions concerned	Benefits of the use case	Technological maturity	Prospective impacts
Music	Production Derivative exploitation	Musicians, music editors, music teachers	Time saving	●○○ Technology under development	●●○ Partially automated tasks

Today's AIs are capable of listening to an audio recording and automatically producing the musical score. Such a system analyses the frequencies and temporality of the sound to deduce the notes played by each instrument, their duration and any nuances. For example, for a piano solo, the AI can produce a score with the corresponding notes in the treble and bass clef. In short, this is the musical equivalent of speech recognition, applied not to words but to musical notes.

Technological maturity
- The automatic transcription of a single melody line (for example, a monophonic voice or violin solo) is fairly reliable, although there are sometimes rhythmic errors that need to be corrected manually.
- On the other hand, complex polyphony (several simultaneous instruments) is a challenge where AI is making progress but is not yet equal to a trained musician. Similarly, when faced with musical ambiguity, the AI struggles to choose conventional writing and does not always understand the tonal context[28].

Examples of applications
- The Music Key offers a function called Piano Convert, which automatically transcribes piano pieces into scores from a YouTube link or an audio file (MP3, WAV, etc.)[29].

Adoption potential
- For musicians, this represents an assistance tool and a potential time-saver, but it should not replace the educational value of knowing how to decipher by oneself and training one's ear.
- Professional transcribers might see it as competition, but their know-how is still needed for difficult pieces, and they can also use it to increase their productivity.

Customised music recommendations

Sector	Step	Professions concerned	Benefits of the use case	Technological maturity	Prospective impacts
Music	Broadcasting ▶	Playlist curators, editorial/marketing executives	🎗 Better quality 🎧 Better user experience	●●● Current technology	●●● High potential of automation

One of the most visible uses of AI for the general public is music recommendation on streaming platforms (Spotify, Deezer, Apple Music, etc.). Machine learning algorithms analyse personalised preferences based on each user's listening habits. These systems, based on collaborative filtering and deep learning models, are able to predict which tracks, albums or artists are most likely to appeal to a given person.

Technological maturity

- This is one of the most mature areas of music AI. Recommendation algorithms have been in production for years and are continually being enhanced. They combine audio signal analysis (to understand the genre/style of a track) and user behaviour analysis (to identify similar listening profiles) to deliver a personalised model.
- One criticism is the risk of algorithmic lock-in[34]: AI could end up recommending only things that are very similar to what we already know, reducing the diversity of discovery and encouraging a standardisation of tastes.

Examples of applications

- On Deezer, the Flow function also uses AI to play music that matches the listener's preferences, mixing familiar tracks with new ones[35].

Adoption potential

- This use has been adopted by all the major streaming players, with Deezer, Apple Music and Spotify all having their own AI recommendation systems, as well as by some traditional radio stations.
- Human curators have had to evolve to work alongside AI, but they still play a predominant role in defining and discovering editorial content.
- From the artist's point of view, this changes the promotional landscape: you have to appeal not only to the public, but also to the algos (which involves engagement strategies, releasing regular singles, etc.).

Analysis of music trends and audience data

Sector	Step	Professions concerned	Benefits of the use case	Technological maturity	Prospective impacts
Music	▶ Broadcasting 📢 Promotion & Marketing	Marketing analysts, labels, programmers	Risk reduction	●●○ Fast developing current technology	●●○ Partially automated tasks

AI also can also help to deconstruct vast data sets (social media, charts, playlists, etc.) in order to deconstruct emerging trends in musical taste and to cross-check them with cultural factors. Labels and producers have access to data driven indicators to identify correlations and direct their efforts : for example, signing with more artists of a rising genre, amplifying the phenomenon of a track trending on social media, or identifying a strong boost of plays in one genre by a specific audience.

Technological maturity
- Several solutions for AI trend forecasting and talent scouting are in use since the end of the 2010s[36] and are continuously developing with the increase of available data.
- However, predicting with certitude the success of a track, of an artist or of a tour remains partially conditioned by the existence of exogenous factors: AI gives insights, probabilities, but the luck/viral factor remains.

Examples of applications
- In 2018, Warner Music bought the start-up Sodatone with the aim of detecting emerging talents. The results are tangible: In 2020, Warner announced that they doubled the number of signed artists identified through Sodatone in comparison with the previous year[37].

Adoption potential
- Confronted with musical information overload[38], labels and managers recognise the added value of an algorithmic alert to draw their attention to a rising phenomenon that they could have otherwise missed. AI automates the first phase of sorting, but human judgement remains present in order to evaluate potential and to assist development.
- These technologies also distribute to independent labels and booking agencies that use shelf-mounted solutions like Viberate[39], Soundchart or Chartmetric to consolidate market data without having a data department.

Automation of music distribution

Sector	Step	Professions concerned	Benefits of the use case	Technological maturity	Prospective impacts
Music	▶ Distribution & Broadcasting	Live musicians, labels, digital distributors	🕐 Time saving	●●● Current technology	●●○ Partially automated tasks

Distributing a track on dozens of platforms and online stores is currently and largely automated process, on top of which AI adds a layer of efficiency. Intelligent systems are given the task of uploading, formatting and broadcasting music on all of the relevant music channels, with a minimum of human intervention. AI can manage metadata, verify formats, chose optimal dates and times for releases, and potentially detect an anomaly (corrupt file, predistributed duplicate).

Technological maturity
- Digital distributors (DistroKid, TuneCore, Believe...)[52] have been working on automated systems where AI has been added to optimise several steps for years (e.g.: automatically filling in metadata, detecting non conform content before submitting).
- AI supervision is becoming more precise, avoiding erroneous files or non music (e.g.: white noise uploaded as fraud) from filling platforms.

Examples of applications
- Services such as *Social Platforms by* TuneCore provide solutions for artists in order to distribute and monetise their work directly through music libraries on social media[53].

Adoption potential
- Complete automation of distribution is particularly attractive to self-produced artists who have neither the time or the expertise to deal with multiple platforms.
- For labels that have vast catalogues or managing many artists, AI offers the possibility of scaling distribution without increasing the number of staff, although the quality of input data remains a key issue.
- On the other hand, this easy access to distribution has led to abuse: Spotify had to remove roughly 7% of tracks uploaded via Boomy, a service for AI generated music and automatic distribution, due to fraudulent streams[54].

Catalogue indexing and music documentation

Sector	Step	Professions concerned	Benefits of the use case	Technological maturity	Prospective impacts
Music	▶ Distribution & Broadcasting	Editors, documentalists	⏱ Time saving 🎧 Better user experience	●●● Current technology	●●● High potential of automation

The important mass of musical content to organise can surpass human manual capacities. AI is therefore used to analyse tracks and to generate descriptive metadata. There are many benefits:

- Facilitating internal research
- Improving user recommendations
- Identifying uses for synchronisation
- Cleaning up and standardising data

Technological maturity

- Genre and instrument recognition models have achieved high accuracy, thanks to progress in audio deep learning. These tagging AIs are now integrated in the workflow of major platforms or aggregators[55].
- AI is no longer limited to traditional tags (genre, BPM). It can generate finer or subjective descriptors, whose reliability may depend on training.

Examples of applications

- SoundCloud acquired Musiio in 2022 to better understand the music on the platform and extract tags and characteristics to improve navigation, spot trends and moderate certain content[56].
- The Epidemic Sound library uses AI-driven auto-tagging to facilitate search for creators looking for specific tracks[57].

Adoption potential

- The majors and large music libraries are massively adopting these solutions to digest their tens (or even hundreds) of thousands of titles with heterogeneous metadata, which can represent a competitive advantage over independent publishers for whom the cost of these services can be an obstacle.
- Streaming platforms use this metadata to make recommendations, describe certain titles or detect duplicates.
- These AIs are indispensable co-pilots in managing musical information overload, but do not rule out human supervision to ensure the quality and accuracy of classifications.

Programming and attendance forecast for concerts, tours and festivals

Sector	Step	Professions concerned	Benefits of the use case	Technological maturity	Prospective impacts
Music	▶ Broadcasting 🔊 Promotion	Bookers, tour managers, concert venues	📊 Risk reduction	●●○ Fast developing current technology	●●○ Partially automated tasks

Anticipating the right number of spectators is crucial for picking the right venue, calibrating local promotion and avoiding cancellations or overcapacity. AI can help professionals estimate the audience for an event or define a tour plan based on huge datasets: ticket sales history, artist's popularity on social media, local streaming, competition with other events the same day, weather forecast etc.[58]. Experiences booking is now completed by advised by data.

Technological maturity
- Solutions are beginning to be proposed by start-ups or developed in-house using proven techniques (regressions, random forests[59]).
- The reliability of predictions depends on the data available, and ticketing data is often segmented between several players.
- Models attempt to integrate exogenous variables, but the complexity of the real world means that forecasts remain an aid to decision-making, not an exact science.

Examples of applications
- To help program artists, Dour Festival programmer Alex Stevens has designed software that aggregates data from music platforms (Spotify, Soundchart), social networks, media and concert dates (BandsinTown, Songkick) and issues a recommendation for each festival[60].

Adoption potential
- The first candidates for adoption are the major festivals and tours, for whom the financial stakes are crucial, and who already have advanced analysis services at their disposal.
- Eventually, if solutions mature, independents could benefit from shared tools based on a shared database of past concerts.
- The perception is that these AIs will be strategic assistants but will not replace the on-the-ground experience of tour managers and programmers, for whom music involves an element of irrationality and risk.

cNM   BearingPoint ®

Forecasting ideal release dates

Sector	Step	Professions concerned	Benefits of the use case	Technological maturity	Prospective impacts
Music	▶ Broadcasting 📢 Promotion & Marketing	Marketing executives, strategy planners, artists	📊 Risk reduction	●○○ Technology under development	●●○ Partially automated tasks

Choosing the best release date for a single or an album has become a headache: avoiding competition from headliners, sticking to the times when the target audience is most receptive, aligning with trends. AI helps simulate and optimize the calendar, with algorithms that:

- Identify the schedule of announced releases and pinpoint a clear slot
- Extract a pattern from vast historical data sets
- Determine when and how to launch various promotional actions

Technological maturity

- Time-series prediction and multi-variable optimisation techniques applied to the music calendar are beginning to be integrated into tools for marketing use.
- One difficulty remains translating the correlations found by AI into usable information, which may require human hindsight or need for the AI to be capable of justifying recommendations with understandable indicators.

Examples of applications

- The results of TuneCore Accelerator, a service that selects tracks for promotion and identifies the best algorithmic opportunities, speak for themselves: over 110,000 artists have benefited from Accelerator, and nearly 10,000 have seen their streams increase by an average of 143% quarter-on-quarter[61, 62].

Adoption potential

- Artists without a dedicated marketing team are in great need of guidance on when to release their music. Optimising release and promotion strategies meets a real need for support.
- Labels generally have experienced marketing experts who can integrate these tools as a decision-making aid to identify an "ideal" release window according to criteria, but before their use becomes standard they will be tested by making comparisons with initial plans on a few campaigns.

Automated detection of musical plagiarism

Sector	Step	Professions concerned	Benefits of the use case	Technological maturity	Prospective impacts
Music	Rights management ⚖	Editors, copyright lawyers	Risk reduction Time saving	●●○ Fast developing current technology	●●○ Partially automated tasks

AI can assist by automatically comparing melodies and musical patterns on a large scale, to point out potentially contentious similarities.

In concrete terms, a music editor can use a melodic-harmonic analysis algorithm that transforms songs into simplified sequences of notes and compares them with each other. If a new track has a certain number of notes identical to those of an existing standard, the tool will detect this and issue an alert. This enables rights holders to act quickly before plagiarism causes financial or moral damage.

Technological maturity

- Prototypes and proprietary solutions exist among some of the major players in the[40] sector, using sequence recognition and approximate similarity techniques (to tolerate changes in tonality and tempo).

- The technology is still being perfected, and faces a number of challenges, such as distinguishing between what is plagiarism and what is mere coincidental resemblance or the use of turns of phrase common to a genre.

- The main challenge is the very definition of plagiarism: legally, there is no clear mathematical threshold; it remains a matter of judgement.

Adoption potential

- For major publishers and international labels, a reliable tool represents a safety net, saving time and money in the management of their catalogues of several thousand works.

- For smaller rightsholders, adoption will be limited by cost and technical expertise, but we could imagine mutualised plagiarism detection services for independents.

- For composers themselves, such AI could be used upstream to analyse new compositions and prevent unconscious plagiarism.

Detecting the use of a track

Sector	Step	Professions concerned	Benefits of the use case	Technological maturity	Prospective impacts
Music	Rights management	Editors, catalogue director, artists	Time saving Better Quality	●●○ Fast developing current technology	●●● High potential of automation

Every time a musical work is used (on the radio, streaming, online video, in concert, etc.), there are potentially royalties to be paid to the rights holders. AI makes it possible to automate the detection of these uses so that nothing is missed. The principle is based on audio fingerprinting technologies: the AI extracts a unique signature from the track, then scans streams or files to find matches. This enables rights holders to identify uses that previously flew under the radar, so they can collect the corresponding royalties more effectively.

Technological maturity

- For several years now, audio recognition has been tried and tested and has been deployed on a large scale (e.g. Shazam[78]). Some current systems are capable of achieving >99% accuracy in recognising an identical or slightly modified track in a mix[79].
- However, there is also a downside: the volume of data detected is enormous, and this creates a logistical challenge in terms of processing.
- There are also some concerns about possible errors: the systems can sometimes make false positives and still struggle to identify covers & alt versions with any certainty.

Examples of application

- One emblematic example is YouTube's Content ID: every video uploaded to YouTube is screened by AI, which compares its audio to a database of fingerprints provided by the rights holders[80].

Adoption potential

- Organisations such as Sacem in France have already invested heavily (e.g. the URights project with IBM) to improve the monitoring of online usage[81].
- Smaller publishers or producers use external service providers (Pex[82], BMAT[83]...) to benefit from these detections. There has been a strong take-up of these services because, at a cost, they enable publishers to recoup money that they would otherwise miss out on, if they didn't know where their music was being played.

Detecting AI generated content

Sector	Step	Professions concerned	Benefits of the use case	Technological maturity	Prospective impacts
Music	▶ Distribution ⚖ Rights management	Distributors, editorial executives, artists	⏱ Time saving 🏅 Better quality	●●○ Fast developing current technology	●●● High potential of automation

With the proliferation of AI generated music, a new need is emerging: the ability to distinguish whether a track has been created by a human or by AI. This is to guarantee transparency for the public, but also to protect artists. Tools are being developed to analyse audios files and detect artificial signatures[84]. This can be done through voluntary markers (e.g. inaudible watermarks inserted into AI works) or through statistical clues: certain musical AIs leave fingerprints (absence of human errors, etc.) that a classifier can detect.

Technological maturity
- To detect properly, you need data to train the models on a multitude of known cases. However, the banks of confirmed AI music are relatively recent, even if the more time passes, the greater the maturity of these datasets.
- On the other hand, generative AI is improving and the response from detectors needs to keep pace. At the moment, the detectors seem to be ahead of the game, because the AI content still has detectable flaws. But in the medium term, this could be more difficult and will require increasingly sophisticated approaches.

Examples of application
- At the beginning of 2025, Deezer announced its new AI tool, capable of detecting music generated by generative AI models such as Suno or Udio, and declared that every day it received more than 20,000 tracks entirely generated by AI, i.e. 18% of the content uploaded daily on the platform[85].

Adoption potential
- Faced with the deluge of AI content, streaming platforms are integrating or seeking to integrate an AI detector, either internally or via a third party (e.g. Ircam Amplify's AI-Generated Detector for labels, publishers, distributors and streaming platforms[86].
- Artists are pushing for these tools to be generalised in order to protect them and avoid a dilution of remuneration on the platforms. The hoped-for end result is a tool capable of detecting which work a model has been trained on.

Managing royalties and monitoring income

Sector	Step	Professions concerned	Benefits of the use case	Technological maturity	Prospective impacts
Musique	Rights management ⚖	Accountants, royalties manager	⏱ Time saving 🏅 Better quality	●●○ Fast developing current technology	●●○ Partially automated tasks

The distribution of music revenues is a complex process (flow of micro-payments from thousands of sources) where AI comes into play to make it more reliable, to accelerate and anticipate. Firstly, in the distribution process itself: the aim is to ensure that each rights holder receives what they are entitled to, and to detect any errors or anomalies[87]. Similarly, it can cross-reference different databases (management company, label, publisher) and identify disparities. Finally, it can also assist with contractual distribution (contracts with multiple authors and territories) and detect income fraud.

Technological maturity
- Publishers and labels have integrated royalty analysis solutions that use data coupled with rules and are beginning to incorporate machine learning to detect anomalies.
- One of the current obstacles to perceived maturity is the fact that the tools are not always user-friendly for rights holders and still mostly provide raw data that is difficult to read. Another obstacle is the dependence on the quality of the input data and the lack of interconnections between the tools and the databases.

Examples of application
- Across the Atlantic, start-up Paperchain is using AI to predict an artist's daily Spotify royalties, enabling them to get paid in near-real time rather than waiting 2-3 months[88,89].

Adoption potential
- Artists and direct beneficiaries are expressing a desire for greater visibility and control via dedicated dashboards that would enable easy monitoring[90].
- For the majors and major publishers, any tool that makes it possible to improve accuracy and reduce processing costs in revenue tracking represents a major differentiating advantage.
- Pressure from members for greater transparency is encouraging collecting organisations to equip themselves with explicit analysis AI, but adoption is gradual due to the inertia of the systems.

Sources are detailed in the appendices to this document

Legal assistance and analysis

Sector	Step	Professions concerned	Benefits of the use case	Technological maturity	Prospective impacts
Music	Rights management	Music lawyers, legal experts	⏱ Time saving	●○○ Technology under development	●●○ Partially automated tasks

In the music industry, contracts (artist, publishing, licensing, live performance, etc.) are often long and technical. AI brings two benefits: the generation of standard legal documents and the assisted analysis of existing contracts[91]. In terms of generation, language processing tools are capable of producing a draft contract from a few pieces of structured information. In terms of analysis, a legal AI can reread a contract and extract the key points or risky clauses. We are also seeing AI used as a legal research assistant, to popularise legal terms.

Technological maturity
- There are templates (such as GPT-4) that are very good at generating or summarising generic legal text. However, music has contractual specificities (e.g. reversion clauses, complex royalty calculations) that these models are not trained to deal with in detail[91].
- Maturity is more advanced in terms of contractual analysis to summarise a contract or answer questions. However, these answers do not exclude verification to prevent the tool 'hallucinating'.

Examples of application
- Without replacing professional expertise, the Legal tech application musiclawyer.ai enables artists to upload their contracts and royalty agreements and analyse them to extract and flag up missing clauses, unilateral obligations or risks of compensation, for example. Users receive suggestions for corrections or points to watch out for before signing[92].

Adoption potential
- Those without a dedicated legal team (independent labels, self-produced artists) could use a generator to quickly draw up a standard contract, then have it validated by an external legal expert.
- On the other hand, for structures with in-house legal experts (majors, publishers), this assistance tool will be used to save time, check consistency on voluminous contracts or to quickly produce a standard amendment.

Automated mixing and sound systems for concerts

Sector	Step	Professions concerned	Benefits of the use case	Technological maturity	Prospective impacts
Music	Derived operations	Live sound engineers, stage managers	Better quality / Better user experience	●○○ Technology under development	●●○ Partially automated tasks

In the field of live performance, AI is currently being considered as an aid to real-time concert sound reinforcement. "Audio intelligence" systems can constantly monitor the sound emitted in an auditorium and make automatic adjustments to ensure the best possible experience for the audience.

Future-oriented functions would involve predictive mixing, capable of learning the structure of the show and anticipating any changes.

Technological maturity
- Fully autonomous solutions are not yet widely deployed on major tours, with research and prototypes focusing mainly on AI-enhanced live mixing consoles capable of managing real-time sound feedback and controlling certain automations.
- Real-time confidence is crucial, and the variability of conditions (every performance is different, and so is every venue) makes the task more complex than in a controlled studio environment.

Examples of application
- An algorithm could analyse audience reactions and adjust the soundscape to maximise audience engagement or modify the acoustics to ensure that every seat gets the best audio experience[30].

Adoption potential
- The live culture, which is essentially organic and unique, is refractory to the adoption of AI tools, where the relationship of trust between human and machine needs to be built up. Initially, these tools will work in advisory mode to help monitor performance.
- In the long term, if they are applied, they will relieve the live sound engineer of certain stressful tasks in real time and ensure constant quality even in changing conditions (different room acoustics, audience that absorbs the sound to a greater or lesser extent, etc.).

Enhanced musical performances

Sector	Step	Professions concerned	Benefits of the use case	Technological maturity	Prospective impacts
Music	🎼 Conception 🎤 Derived operations	Live musicians, show and festival designers	Creative inspiration	●○○ Technology under development	○○○ New uses without business impact

Beyond the technical aspects of sound, AI can also be invited on stage alongside the artists to enrich the performance with an additional artistic dimension: improvisation in duet with an AI, analysis of interaction with the audience, holograms of artists or performances by fictitious virtual artists. These augmented performances seek to push back the boundaries of live creativity and explore new aesthetics. They often remain in the experimental or avant-garde circuit (digital arts festivals, etc.), but little by little these processes could inspire the big show.

Technological maturity
- Technically, many elements exist separately (generative musical AI, holograms, etc.) but combining them into a fluid performance is complex and requires robustness in the face of the unpredictability inherent in live performance.
- To date, the use of this technology seems marginal and "gadgety." Beyond the "wow" factor, its artistic and technological added value remains yet to be proven.

Examples of application
- At Printemps de Bourges 2025, Édouard Ferlet created a dialogue between two pianos using a generative AI system from Somax2 (Ircam)[31] and tools co-developed with Sony CSL[32].
- Experiments are being carried out with an AI DJ capable of mixing tracks live, detecting the mood of the crowd and adjusting the playlist in real time[33].

Adoption potential
- In the short term, use is more likely to be reserved for electro and contemporary artists, or for specific technological events with certain resources. AI on stage is seen more as an avant-garde curiosity, confined to one-off media or artistic stunts.
- Aside from the technical aspects, there is also the question of public acceptance, which some might see as a lack of authenticity or as an artifice. If it is adopted, it will be through AI serving the artist and not the other way round, while maintaining a central human presence.

Translating and adapting songs into various languages

Sector	Step	Professions concerned	Benefits of the use case	Technological maturity	Prospective impacts
Music	Marketing & Derived operations	Songwriters, performers, translators	Cost reduction New source of income	●○○ Technology under development	●●○ Partially automated tasks

With the globalisation of music releases, the ability to translate a song and even have it reinterpreted in another language is an asset for reaching new markets. AI comes into play on two levels:

Intelligent translation of the lyrics, preserving as far as possible the meaning, rhyme and metre

Then, via voice cloning, generating the performance of the original artist's voice, but in the new language.

Technological maturity
- General machine translation (such as DeepL, Google Translate)[41] is very effective, but adapting lyrics requires more finesse (keeping the rhymes, respecting the rhythm).
- On the voice side, multilingual synthesis has already been demonstrated with cloning AIs such as Meta's Voicebox, which is capable of re-using a voice timbre in different languages[42]. Coupled with singing, this is more complex but can be achieved by combining several tools, although it is not yet possible to use this for professional purposes.

Examples of application
- Amateurs have already made AI covers, where Frank Sinatra's voice sings in Spanish[43], demonstrating that the accessible technology allows for curiosity.
- Spotify announced in 2023 that they were testing for podcast translations using the original voice of the podcaster. Songs could be the next step[44].

Adoption potential
- For high-budget productions, offering a song directly in several main languages represents a lever for internationalisation and maximising the audience without necessarily calling on a duet with a local artist.
- However, from an artistic point of view, this raises the question of the 'loss of soul' of a song and could lead to generic or 'forced' versions. If the technology is refined, it is likely to see tests on a textbook case to test audience reaction.

Assistance creating and editing music videos

Sector	Step	Professions concerned	Benefits of the use case	Technological maturity	Prospective impacts
Music	Promotion & Marketing	Directors, film editors, graphic designers	Time saving / Cost reduction	●●○ Fast developing current technology	●●○ Partially automated tasks

AI can streamline and speed up the production of music videos, either by generating videos from the music or by assisting with editing via a number of concrete applications:

- Automatically synchronising images and music by analysing the rhythm, sound atmosphere and structure to insert the relevant visuals
- Faster de-rushing and creation of short formats (e.g. automatic spotting of highlights for a viral video for social networks, cutting into short clips)
- Designing animations, visuals or stylised effects

Technological maturity

- For editing assistance, AI is capable of detecting the highlights of an audio track to automate cuts and create a synchronised edit, although creative refinement remains manual.
- Automated or text-based music clip generators produce decent results at low resolutions for simple videos, but the visual quality remains inferior to that of a professional shoot.

Examples of application

- The start-up Rotor Videos lets users upload their song and a few video clips, before automatically editing a clip: the tool analyses the audio track to match transitions to tempo and changes in intensity, and outputs a video in just a few minutes[48].

Adoption potential

- A way of providing low-cost promotional video content for independent artists or small labels where a traditional video clip would be out of their budget.
- Even for established artists and structures, AI can quickly generate content variations adapted to social networks (teasers, vertical formats).
- It will not replace the vision of a director for a scripted, original clip, acting more as an assistant for repetitive tasks (sorting rushes, synchronising cuts) or for producing accompanying visuals (stage visuals for concerts, elements for videos).

Creating marketing content

Sector	Step	Professions concerned	Benefits of the use case	Technological maturity	Prospective impacts
Music	📢 Promotion & Marketing	Communication officer, marketing designers	⏱ Time saving 💰 Cost reduction Creative inspiration	●●● Current technology	●●○ Partially automated tasks

Generating visuals, promotional texts and even teaser videos are all marketing tasks that AI can take on in part, making it possible to produce more promotional content at a lower cost[63]:

- Creating visuals for social media, alternative covers, event banners, etc.
- Writing or drafting an album description, publishing on social networks, or even a press release
- Prompts for ideas and concepts

Technological maturity

- In terms of image and video generation, the generative models (DALL-E[64], Midjourney[65]) have achieved near-professional quality for many visual styles. There are still limitations when it comes to text in images (logo, typography) and the modification of certain content where AI is unreliable and requires the intervention of a human creator.
- Language models (Le Chat[66], ChatGPT[67]) are sufficiently powerful to optimise copywriting and produce coherent texts, subject to proofreading.

Examples of application

- Hannah Diamond, hyperpop artist on the label PC Music, used AI to accelerate the creation of artwork for her promotional visuals, namely on her album *Perfect Picture*[68].

Adoption potential

- Labels and promotion agencies are progressively integrating these tools into their workflow, either directly or as commissions. For independent musicians, this allows to produce content without conceiving entirely themselves.
- Large volumes are the first to be adopted, while for showcase content (official sleeve, main clip), handmade work or collaboration with visual artists is usually chosen over AI to guarantee originality.
- Nevertheless, there is a need for ethical and qualitative vigilance to preserve the integrity of artistic identity.

Creating media for scenography

Sector	Step	Professions concerned	Benefits of the use case	Technological maturity	Prospective impacts
Music	Marketing & Derived operations	Scenographers, creative agencies, stage managers	Creative inspiration	●○○ Technology under development	●○○ Assistance with existing tasks

Artificial intelligence can also be used on stage to enhance traditional creation and design evolving, interactive visual worlds. Upstream of a show, it can facilitate the creation of images and videos for an artist's set design by integrating into the creative process and studio tools:

- Generation of visual concepts and 3D models of the set
- Exploration of ideas
- Partial creation of elements to be incorporated

Technological maturity

- On the design side, AI is already integrated into certain software (e.g. set generation plugins in Unreal Engine, or Adobe Firefly for designing scenic elements) and designers are adapting their practices to integrate video generation tools[49].
- On the other hand, for adaptive set design, with visuals created on the fly by an AI in real time in response to an atmosphere, the technology is expensive for real time HD and requires human control[50] to avoid inconsistent visual results.

Examples of application

- For the production of The End of Genesys at the Las Vegas Sphere, AI-powered generative tools, including Stable Diffusion and custom machine learning models, played a crucial role in creating dynamic, evolving visuals that reacted to the music in real time[51].

Adoption potential

- In the process of creating a tour, the ability to create content more easily and explore numerous alternatives can enable set designers and show creators to bring a fresh touch to visual differentiation.
- Smaller productions could benefit from visual content crafted or pre-generated by AI to enhance their concert without exploding costs.
- On the other hand, in the short term, the adoption of more advanced technology will mainly be on large-scale tours where the budget allows for the availability of appropriate equipment and skills.

Managing social media

Sector	Step	Professions concerned	Benefits of the use case	Technological maturity	Prospective impacts
Music	Promotion & Marketing	Community managers, self-produced artists	Time saving	●●● Current technology	●●○ Partially automated tasks

AI helps manage social media for artists in the most subtle and efficient way possible. Partly through the intelligent automation of advertising: preparing a schedule for posts, automatically generating variable captions and publishing at optimal times. Also, AI keeps an eye on trends on social media, as to alert in case of a trend going viral. Some tools go further, using chatbots that interact with the community, for example a virtual assistant that can answer questions asked by fans in a DM[69].

Technological maturity
- Platforms like Meta, X and TikTok integrate AI for optimisation, as do many external suites that have added AI functionalities (Hootsuite, Sprout Social)[70].
- The conversational AI behind chatbots is in progress thanks to LLM, with more fluid exchanges with a fanbase, but this needs a specific configuration with precautions taken to control the tone[69].

Examples of application
- In spring 2024, Mark Tuan, ex-member of Got7, launched a conversational avatar called "Digital Mark", developed with Soul Machines and supported by GPT by OpenAI. This AI twin responds 24 hours a day to fans, shares backstage information and strengthens commitment without direct human intervention for each interaction[71].

Adoption potential
- For artists without a team, the tools enable them to professionalise their communications and self-supervise part of their networks.
- Community managers within larger organisations are also adopting these solutions, mainly to manage the multiplicity of platforms and interactions and to amplify their presence.
- Some artists or labels want to retain total human control over the voice that expresses itself on their official accounts, for fear of a clumsy AI. They might adopt only the analytics aspects, but not the publication automation.

Automated promotional campaigns

Sector	Step	Professions concerned	Benefits of the use case	Technological maturity	Prospective impacts
Music	Promotion & Marketing	Marketing executives and CRM	⏱ Time saving 💰 Cost reduction	●●● Current technology	●●○ Partially automated tasks

AI can manage complex promotional campaigns from start to finish, optimising parameters in real time[72]. In music, this means that instead of manually configuring dozens of ad variants (by territory, by age group, by fan interest in a particular artist), we can entrust AI with the task of testing all these combinations and converging on those that generate the most clicks or listens. The aim of all this automation is to increase the conversion rate of campaigns (more tickets sold, more streams, etc.).

Technological maturity

- The age of AI driven platforms is upon us[73], with very advanced tools, that are used in every commercial sector. In the music industry, they have the specificity of undergoing soft exchanges (listening on Deezer) as well as monetary exchanges (sales).
- In CRM, software (HubSpot) exists to control marketing email intelligently (right visual, correct timing)[74].
- Technically, one limit is privacy: AI could theoretically do more with personal data, but regulations impose safeguards, that are unequal depending on each territory.

Examples of application

- Spotify Ad Studio, the advertising network, relies on AI to automate optimization of channels and when to emit adverts, thus maximising the outreach and efficiency of campaigns without human intervention for each configuration[75].

Adoption potential

- Already committed users, majors and labels have the budget and data volume to use these tools for certain stages. For example, a major managing[50] ad campaigns a month cannot micro-optimize them all manually.
- In the absence of more advanced tools, self-promoted artists benefit indirectly from these AIs, as advertising platforms integrate them by default. An artist who "boosts" a publication on Facebook sometimes unknowingly uses Meta's AI to find the audience.

AI managers

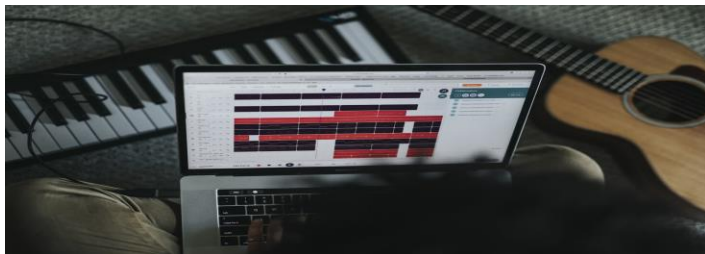| Sector	Step	Professions concerned	Benefits of the use case	Technological maturity	Prospective impacts
Music	Promotion & Marketing	Artist managers, agents	Saving time	●○○ Technology under development	●●○ Partially automated tasks

A virtual agent capable of supporting artists in the day-to-day management of their careers: this is the ambition of "AI managers". Such an agent (in the form of an application or voice assistant) could combine several of the functions mentioned above and orchestrate them coherently[76]:

- Create customised release plans
- Advise on strategic decisions based on data
- Manage a schedule and automatically answer certain enquiries

Technological maturity
- There is no finished product to date, and the technology is mainly at the stage of separate bricks. No AI performs all these functions in an integrated, reliable way. Maturity is low and remains a horizon towards which experimentation is moving.
- However, the technical building blocks do exist (LLM for dialogue, recommendation systems for strategic choices, automatic planning): the challenge is to combine them and give them access to the right data to achieve a very high level of contextualisation and respond to the variability of careers.

Examples of application
- With just a few pieces of information about an artist and their music, MNGRS.AI is able to draw up a calendar of content and promotional actions, with the declared aim of becoming a genuine artist management platform[77].

Adoption potential
- The first to benefit from this sort of tool would be self produced artists without a human manager, possibly overwhelmed by the organisational workload.
- Paradoxically, some managers in charge of several artists could ask the AI to monitor indicators and act as an in-house assistant so that they can focus on aspects that are difficult to replace, such as negotiations.
- Management has a strong emotional and empathic aspect that AI cannot reproduce, which is an undeniable obstacle.

Preserving skills and passing them on

Sector	Step	Concerned professions	Benefits of the use case	Technological maturity	Prospective impacts
Music	Derived operations 📢	Music teachers, researchers	🏅 Better quality 🎧 Better user experience	●○○ Technology under development	●○○ Assistance with existing tasks

AI and associated technologies (data capture) offer the possibility of digitally preserving musical skills for future generations, going beyond the simple score or audio recording. An AI can analyse hundreds of hours of recordings by an instrument maker or conductor to create a 'technical fingerprint'. The aim of all this active preservation is to ensure that skills are not lost over time, and AI acts as an intelligent trustee: it stores, analyses and can even help to relearn this knowledge at a later date.

Technological maturity

- Capture technology (360 video, motion capture) has been perfected for making 3D recordings, but has yet to be developed for connected gloves that could record the precise way in which an artist or postman performs gestures (speed, pressure).
- Combining elements of musical know-how into teaching tools and transmission platforms is still in its infancy, as it requires customised engineering and ergonomics adapted to training and transmission.

Examples of application

- Kouyou in Morocco is an AI project that archives Gnawa songs and rituals and can answer questions from musicians or researchers about this heritage[93].
- Immersify recorded Luxtorpeda live with an ambisonic microphone and a 360° camera at the edge of the stage, recreating the immersion of the audience and the group to archive the concert and its atmosphere[94].

Adoption potential

- Being able to revive the methods of great musicians or have interactive archives is an enormous educational asset for music schools and conservatoires. Adoption will depend on the cost and availability of these tools.
- Heritage institutions are already pushing for archiving (e.g. 360° capture of concerts, ethnomusicological archiving projects with AI[95]).
- Artists, depending on their sensibilities, may embrace the idea of passing on their knowledge in this way.

Methodological appendices

Between March and May 2025 around thirty interviews were conducted with music industry professionals in order to collect their expectations and operational needs as well as their perspectives on AI, whether they are currently using these technologies or not.

Benjamin Sauzay, Director of Strategy and External Relations for ADAMI	20/03/2025
Kevin Moignoux, Secretary General of SIRTI	21/03/2025
Philippe Gautier, Secretary General of SNAM-CGT, and **Laurent Tardif**, lawyer at SNAM-CGT	24/03/2025
Benoît Carré, singer, composer and musician	26/03/2025
Gérald Olivon, Head of Production at bSHARP	26/03/2025
Laurent Cabrillat, President and co-founder of HEY! Studios, and **David Gana**, Managing Director and co-founder of HEY! Studios	26/03/2025
Stéphane Krasniewski, Director of Les Suds festival and President of SMA, and **Lizon Renard**, Public Relations Officer	27/03/2025
Thomas Jamois, Managing Director of Wise Music France	31/03/2025
Suzanne Combo, Delegate General at GAM	01/04/2025
Jack Aubert, Managing Director of AFDAS, **Jean Condé**, Director of Outlook and Observatory at AFDAS, and **Cédric Pellissier,** Culture Counsellor at AFDAS	02/04/2025
Hughes Vinet, Director of Innovation and Research Means at Ircam	02/04/2025
Cécile Rap-Veber, Managing Director and Office Manager of SACEM, and **David El Sayegh**, Deputy Managing Director of SACEM	03/04/2025
Emily Gonneau, CEO Unicum Music and nüagency, founder of Causa	03/04/2025
Julie Knibbe, founder and Chief Product and Technology Officer at Music Tomorrow	04/04/2025
Juliette Metz, Managing Director at Merci	04/04/2025
Joëlle Farchy, university professor and scientific director	08/04/2025
Aurélien Hérault, Chief Innovation Officer at Deezer, and **Ludovic Pouilly**, SVP Institutional & Music Industry Relations at Deezer	08/04/2025

Stéphane Henninot, Music Manager at FNAC, and **Alexandra Redin**, Press Relations and Public Relations Manager	09/04/2025
Geoffroy Soler, Managing Director at Henri SELMER and Secretary General of CSFI, and **Caroline Baroux-Desvignes**, Delegate General of CSFI	09/04/2025
Maïa Bensimon, Delegate General of SNAC, **Siegfried Canto**, composer, **Sylvain Morizet**, composer, and **Christophe Heral**, composer	10/04/2025
Amandine Pras, Head of Research and Innovation at CNSMDP, and **Alexis Ling**, Head of the Audiovisual department at CNSMDP	15/04/2025
Thomas Held, Managing Director of Fimalac Entertainment	18/04/2025
Eric Denut, General Manager Universal Music Publishing Classics & Screen France, Senior GM Classics & Screen Group	24/04/2025
Alexis Metaoui, Chief Digital Officer at Because Music, and **Benjamin Falk**, Head of Data at Because Music	25/04/2025
Émilie Trebouvil, Secretary General of SNEP, and **Karine Aubry**, SVP People, Inclusion & Culture at Universal Music Groupe	28/04/2025
Mathias Leullier, Deputy Managing Director at Live Nation France	29/04/2025
Romain Becker, Chief Marketing Product & Operations chez Believe, and **Antoine Jacoutot**, Chief Technology Officer at Believe	29/04/2025
Yvan Boudillet, co-founder of Music Tech Europe	30/04/2025
Denis Declerck, Delegate General of La Scène Indépendante, and **Rina Seegolam**, Event Coordinator and Head of Live Projects	13/05/2025
Céline Lepage, Delegate General of FELIN, and **Pierre-Alexandre Gauthier**, Managing Director of Z Production, President of In Ouïe Production, Manager of PAG Éditions and founder of Palmier Rouge	15/05/2025

and others who did not wish their names to appear here but who are equally thanked

1. ActuIA - Muzeek : https://www.actuia.com/actualite/decouvrez-muzeek-la-startup-lancee-par-andre-manoukian-et-philippe-guillaud/
2. France Orchestres - Aiva : https://france-orchestres.com/actualites/lintelligence-artificielle-compositrice-de-musique-symphonique/
3. Orange (Hello Future) - Udio, Suno : https://hellofuture.orange.com/fr/audio-suno-la-musique-generee-par-ia-deja-competitive-sur-les-commandes-a-faible-valeur-ajoutee/
4. Bpifrance – Synchronisation audio/video : https://presse.bpifrance.fr/matchtune-facilite-le-quotidien-des-createurs-de-contenus-grace-a-lia-et-leve-35-millions-deuros#:~:text=,d%C3%A9j%C3%A0%20avec%20plusieurs%20content%20creators
5. DataScientest – Lyrics generation : https://datascientest.com/comment-devenir-lyriciste-agree-grace-au-deep-learning
6. Makery - Flow Machines : https://www.makery.info/2016/10/14/comment-l-ia-de-sony-flow-machines-se-prend-pour-les-beatles/
7. ActuIA – Experimental AI instrument : https://www.actuia.com/actualite/google-presente-nsynth-super-instrument-utilisant-lintelligence-artificielle/
8. Gearnews – AI Synthesizer : https://www.gearnews.com/ai-synthesis-synth/
9. Audiofanzine – Synthetic voices : https://fr.audiofanzine.com/autre-bundle-d-effet-ou-multieffet/izotope/nectar-4-advanced/editorial/tests/test-d-izotope-nectar-4-advanced.html
10. ZDNet – Vocal synthesis : https://www.zdnet.fr/actualites/wavenet-google-repousse-un-peu-plus-loin-les-limites-de-la-synthese-vocale-39841800.htm
11. MusicRadar – Vocal correction : https://www.musicradar.com/reviews/antares-auto-tune-pro-11-review
12. Le Monde – musical deepfakes : https://www.lemonde.fr/culture/article/2023/10/11/quand-l-intelligence-artificielle-cree-des-deepfakes-musicaux_6193851_3246.html
13. Music Business Worldwide - Tencent Music & AI generated tracks : https://www.musicbusinessworldwide.com/over-1000-songs-human-mimicking-ai-vocals-have-been-released-by-tencent-music-in-china-one-of-them-has-100m-streams/
14. Forbes - Grimes (AI voice) : https://www.forbes.com/sites/antoniopequeno/2023/06/12/grimes-helps-artists-distribute-songs-using-her-ai-voice-if-they-pay-royalties-heres-how-it-works/
15. Courrier international – Artist voice simulator : https://www.courrierinternational.com/article/intelligence-artificielle-les-fans-chinois-d-une-pop-star-fabriquent-son-grand-retour-grace-a-l-ia
16. Music Insiders - Mixage audio : https://www.music-insiders.com/blog/limpact-de-l-ia-sur-le-mixage-audio-dans-l-industrie-musicale
17. MIDiA Research – Impact of AI tools on production : https://www.midiaresearch.com/blog/ai-will-transform-music-the-question-is-how
18. MIDiA Research – Assistance for music production : https://www.midiaresearch.com/reports/the-state-of-music-ai-the-consumer-opportunity-lies-in-modification-not-generation
19. Ars Technica – Automated mastering : https://arstechnica.com/ai/2024/02/mastering-music-is-hard-can-one-click-ai-make-it-easy/
20. Water & Music – Creative tools : https://www.waterandmusic.com/left-to-our-own-devices-the-state-of-creative-ai-tools-for-artists/
21. MusicTech - Mastering AI : https://musictech.com/features/trends/ai-mastering-artists-engineers-music/
22. Arsonor – Audio production : https://arsonor.com/lintelligence-artificielle-ia-dans-le-studio-de-production-audio-5-6/
23. Blast - Beatles AI : https://www.blast-info.fr/articles/2023/ia-beatles-beatles-martyrises-ou-beatles-liberes
24. Deezer – Separating audio sources : https://deezer.io/releasing-spleeter-deezer-r-d-source-separation-engine-2b88985e797e
25. Radio World – Separating voices : https://www.radioworld.com/tech-and-gear/products/audioshake-unveils-ai-voice-separation-tool
26. Forbes – Contextualising audience data : https://www.forbes.com/sites/andreazarczynski/2023/07/31/how-ai-music-startup-audioshake-is-expanding-content-localization/
27. MusicTech – Separating stems for DJs : https://musictech.com/news/gear/algoriddim-free-update-djay-pro-improved-stem-separation-audioshake/
28. Towards Data Science – Multi-modal transcription : https://towardsdatascience.com/exploring-music-transcription-with-multi-modal-language-models-af352105db56/
29. SkillenAI – Multi-modal transcription : https://skillenai.com/exploring-music-transcription-with-multi-modal-language-models
30. Flux Magazine – AI & Live entertainment : https://fluxmagazine.com/ais-next-move-into-live-entertainment/
31. Forum Ircam - Somax 2 : https://forum.ircam.fr/projects/detail/somax-2/

29. Maddyness – Transcribing sheet music: https://www.maddyness.com/2023/07/19/touche-musicale-intelligence/
30. Flux Magazine – AI & Live entertainment : *https://fluxmagazine.com/ais-next-move-into-live-entertainment/*
31. Forum Ircam – Musical improvisation tool: https://forum.ircam.fr/projects/detail/somax-2/
32. Le Monde - Pianos IA : https://www.lemonde.fr/culture/article/2025/04/17/pianos-ia-et-moments-magiques-au-printemps-de-bourges_6596913_3246.html
33. Medium (Innovation Machine) - AI DJ : https://medium.com/innovation-machine/ai-is-the-dj-6160142ccc9
34. L'Éclaireur – Innovations on streaming platforms : https://leclaireur.fnac.com/article/589352-deezer-se-reinvente-pour-appater-un-nouveau-public/
35. Cairn.info – Recommendation algorithms: https://shs.cairn.info/revue-questions-de-communication-2023-1-page-241.htm
36. The Telegraph – Identifying talent: https://www.telegraph.co.uk/music/news/talent-scouts-music-industry-demise/
37. Music Business Worldwide – Identifying talent: https://www.musicbusinessworldwide.com/warner-is-signing-double-the-number-of-artists-via-ai-driven-ar-tool-sodatone-than-it-did-last-year-now-its-hired-a-global-head-of-data-science/#:~:text=Sodatone%20uses%20machine%20learning%20to,waves%20online%20to%20WMG%E2%80%99s%20team
38. Digital Music News – Consolidating audience data: https://www.digitalmusicnews.com/2025/01/13/chartmetric-year-end-review-music-data-2024/
39. Music Business Worldwide – Discovering artists: https://www.musicbusinessworldwide.com/viberate-publishes-research-on-how-music-industry-professionals-use-streaming-services-for-artist-discovery/
40. Music Business Worldwide – Detecting lyrics plagiarism: https://www.musicbusinessworldwide.com/spotify-just-invented-ai-technology-that-will-police-songwriter-plagiarism/
41. PR Newswire – Automated translation: https://www.prnewswire.com/news-releases/deepl-annonce-le-lancement-de-sa-fonction-clarify---une-interactivite-revolutionnaire-pour-des-traductions-de-qualite-superieure-302391484.html
42. L'Éclaireur – Generative model for vocal synthesis: https://leclaireur.fnac.com/article/312321-meta-devoile-voicebox-un-modele-dia-generatif-pour-la-synthese-vocale/
43. SoundCloud – AI Covers: https://soundcloud.com/how-do-you-fly-this-thing/sets/frank-sinatra-ai-covers
44. Newsroom – Automated vocal translation: https://newsroom.spotify.com/2023-09-25/ai-voice-translation-pilot-lex-fridman-dax-shepard-steven-bartlett/
45. MusicTech – Catalogue classification: https://musictech.com/news/cyanite/
46. Universal Production Music – Audio matching : https://www.universalproductionmusic.com/en-us/tools/similarity-search
47. Audiocipher – Sample reseearch: https://www.audiocipher.com/post/splice-ai
48. Music Business Worldwide – Automated video editing: https://www.musicbusinessworldwide.com/lyricfind-acquires-rotor-videos-and-partners-with-cd-baby/
49. Moon Event – Concert scenography: https://www.moon-event.fr/ia-une-precieuse-source-dinspiration-pour-la-scenographie-evenementielle/
50. Belphégor (OpenEdition) – Scenic creation: https://journals.openedition.org/belphegor/6038
51. Y.M.Cinema - Anyma at the Las Vegas Sphere: https://ymcinema.com/2025/01/30/the-making-of-anymas-the-end-of-genesys-at-the-las-vegas-sphere
52. Inside The Industry - DistroKid vs TuneCore: https://insidetheindustrycom.wordpress.com/2023/03/24/which-music-distributor-is-better-distrokid-or-tunecore
53. Music in Africa – Automated music distribution services: https://www.musicinafrica.net/fr/magazine/tunecore-devoile-social-platforms-un-service-de-distribution-de-musique-sur-les-medias
54. Les Échos – Deleting AI tracks: https://www.lesechos.fr/tech-medias/medias/spotify-supprime-des-dizaines-de-milliers-de-morceaux-generes-par-lia-1941857
55. IRCAM – Musical indexation: https://www.ircam.fr/projects/pages/indexation-automatique-de-morceaux-de-musique

56. Music Ally – Musical indexation: https://musically.com/2022/05/04/soundcloud-acquires-ai-music-tagging-startup-musiio/
57. Le Monde – Royalty free music library: https://www.lemonde.fr/economie/article/2019/02/15/les-fausses-notes-de-la-musique-libre-de-droits_5423764_3234.html
58. CNM Lab - Data & music: https://cnmlab.fr/en/short-wave/data-in-music/
59. IBM (Think Blog) – Random forest: https://www.ibm.com/fr-fr/think/topics/random-forest
60. La Scène – Programming festivals: https://www.lascene.com/infoscenes/logiciel-programmer-festivals
61. PRWeb – Developping careers: https://www.prweb.com/releases/tunecore-publishes-first-ever-tunecore-accelerator-report-showcasing-artist-development-and-growth-through-the-pioneering-program-302037263.html
62. Music Ally – Building audience: https://musically.com/2024/01/18/tunecore-says-its-accelerator-grew-tracks-us-streams-by-16/
63. Indie Montréal – Musical marketing: https://www.indiemontreal.ca/fr/blog/lintelligence-artificielle-en-marketing-musical
64. LeBigData – Graphic creativity: https://www.lebigdata.fr/dall-e-3-quand-l-ia-redessine-les-frontieres-de-ta-creativite
65. LeBigData – Image creation: https://www.lebigdata.fr/midjourney-6-0-avancee-majeure-creation-images-ia
66. Franceinfo - Mistral AI: https://www.franceinfo.fr/internet/intelligence-artificielle/intelligence-artificielle-lapplication-le-chat-du-francais-mistral-ai-telechargee-plus-d-un-million-de-fois
67. Le Monde - OpenAI: https://www.lemonde.fr/idees/article/2024/12/09/avec-orion-openai-prend-le-risque-d-une-perte-de-controle_6438897_3232.html
68. Wired – Artist using AI for their album: https://www.wired.com/story/hannah-diamond-has-cracked-the-code-ai-music/
69. France Numérique – Managing social media: https://www.francenum.gouv.fr/guides-et-conseils/communication-et-publicite/reseaux-sociaux/comment-ameliorer-la-gestion-de-ses-reseaux-sociaux
70. LeBigData – Social media: https://www.lebigdata.fr/meta-ai-google-tiktok
71. AP News – Digital avatars: https://apnews.com/article/mark-tuan-kpop-digital-avatar-25d8bcbbc551fab42de876b4b8210327

72. Novecore (Blog) – Automated marketing: https://blog.novecore.com/automation-in-music-marketing-the-future-of-promotion/
73. Merca2.0 – Optimising campaigns: https://www.merca20.com/meta-introduces-new-advantage-ai-features-this-is-how-you-can-optimize-your-campaigns/
74. Bpifrance (BigMedia) - Marketing & AI: https://bigmedia.bpifrance.fr/nos-dossiers/lintelligence-artificielle-au-service-du-marketing
75. Sprinklr – Automated marketing: https://www.sprinklr.com/blog/ai-in-marketing-automation/
76. Lucide8 – AI manager: https://magazine.lucide8.com/a-quoi-sert-un-agent-ia-dans-la-musique/
77. Music Ally - AI manager : https://musically.com/2024/01/25/can-an-ai-be-a-music-manager-two-ex-midem-execs-are-finding-out/
78. Le Monde (Pixels) - Shazam : https://www.lemonde.fr/pixels/article/2017/12/13/trois-copains-un-genie-de-la-musique-et-des-sms-aux-origines-de-shazam_5229082_4408996.html
79. arXiv - Audio fingerprinting: https://arxiv.org/abs/2402.13957
80. AIR Media-Tech - Content ID: https://air.io/en/common-misconceptions-about-youtubes-content-id-system/
81. Music Business Worldwide – Tracking royalties: https://www.musicbusinessworldwide.com/sacem-teams-with-ibm-to-build-transparent-online-royalty-system/
82. Music Business Worldwide – Copyright protection: https://www.musicbusinessworldwide.com/pex-acquired-by-copyright-protection-and-content-monetization-company-vobile/
83. BMAT – Tracking use: https://www.bmat.com/music-operating-system/
84. Libération - Deezer & AI generated content: https://www.liberation.fr/culture/musique/deezer-ouvre-les-hostilites-contre-ia-pour-mieux-remunerer-les-artistes-20250124_OG6RS4DRZ5CXRIQSXQWSQVFMRI/
85. Ouest-France - Deezer & AI generated content: https://www.ouest-france.fr/high-tech/intelligence-artificielle/info-ouest-france-deezer-30-000-titres-generes-par-ia-arrivent-chaque-jour-18-pourcent-des-contenus-970a7a60-19e1-11f0-a759-74724e64dd56

86. Music Business Worldwide – Détecting AI generated content:
https://www.musicbusinessworldwide.com/ircam-amplify-unveils-ai-tool-to-detect-ai-generated-music/
87. Copyright Insights – Interview of UniteSync CEO:
https://copyrightinsights.com/interview/carlos-palop-ceo-unitesync/
88. Music Business Worldwide – Innovation in royalty payment:
https://www.musicbusinessworldwide.com/unitedmasters-is-now-offering-1m-advances-to-indie-artists-and-real-time-streaming-royalties/
89. Hypebot - Innovation in royalty payment:
https://www.hypebot.com/hypebot/2019/10/paperchain-advances-60k-spotify-royalties-in-30-minutes.html
90. Xposure Music (Blog) – Royalty prediction: https://info.xposuremusic.com/article/ai-and-royalty-forecasting-how-machine-learning-is-helping-musicians-plan-their-earnings
91. Loeb & Loeb – LegalTech: https://www.loeb.com/en/insights/publications/2023/10/a-look-ahead-ai-in-the-music-industry
92. DJ Mag – Legal analysis of artists' contracts: https://djmag.com/news/ai-powered-platform-helps-artists-music-contracts-and-royalty-agreement-issues
93. L'ODJ – Preserving Gnawa heritage: https://www.lodj.ma/Kouyou-l-intelligence-artificielle-au-service-du-patrimoine-Gnawa_a263871.html
94. Immersify – Recording 360° concerts: https://immersify.eu/wp-content/uploads/2020/05/Guidelines-Ambisonic-audio-production-1.0.pdf
95. L'Opinion – Preserving musical heritage: https://www.lopinion.ma/L-intelligence-artificielle-au-service-de-la-musique-arabo-andalouse-preserver-transmettre-et-innover_a263871.html
96. Unsplash – Royalty-free photos: https://unsplash.com/fr

Thank you

Contacts at BearingPoint :

Nicolas Reffait
nicolas.reffait@bearingpoint.com
+ 33 6 21 01 07 23

Claire Di Felici
claire.difelici@bearingpoint.com
+33 6 18 25 21 01

Arthur Thiré
arthur.thire@bearingpoint.com
+33 6 71 18 41 21

Contacts at CNM :

Séverine Morin, Counsellor to General Direction for Transitions and Innovation
severine.morin@cnm.fr

Xavier Tumminello, Head of innovation projects
xavier.tumminello@cnm.fr

Translation from French to English:

Matilda Holloway
Bonella Holloway

BearingPoint ®