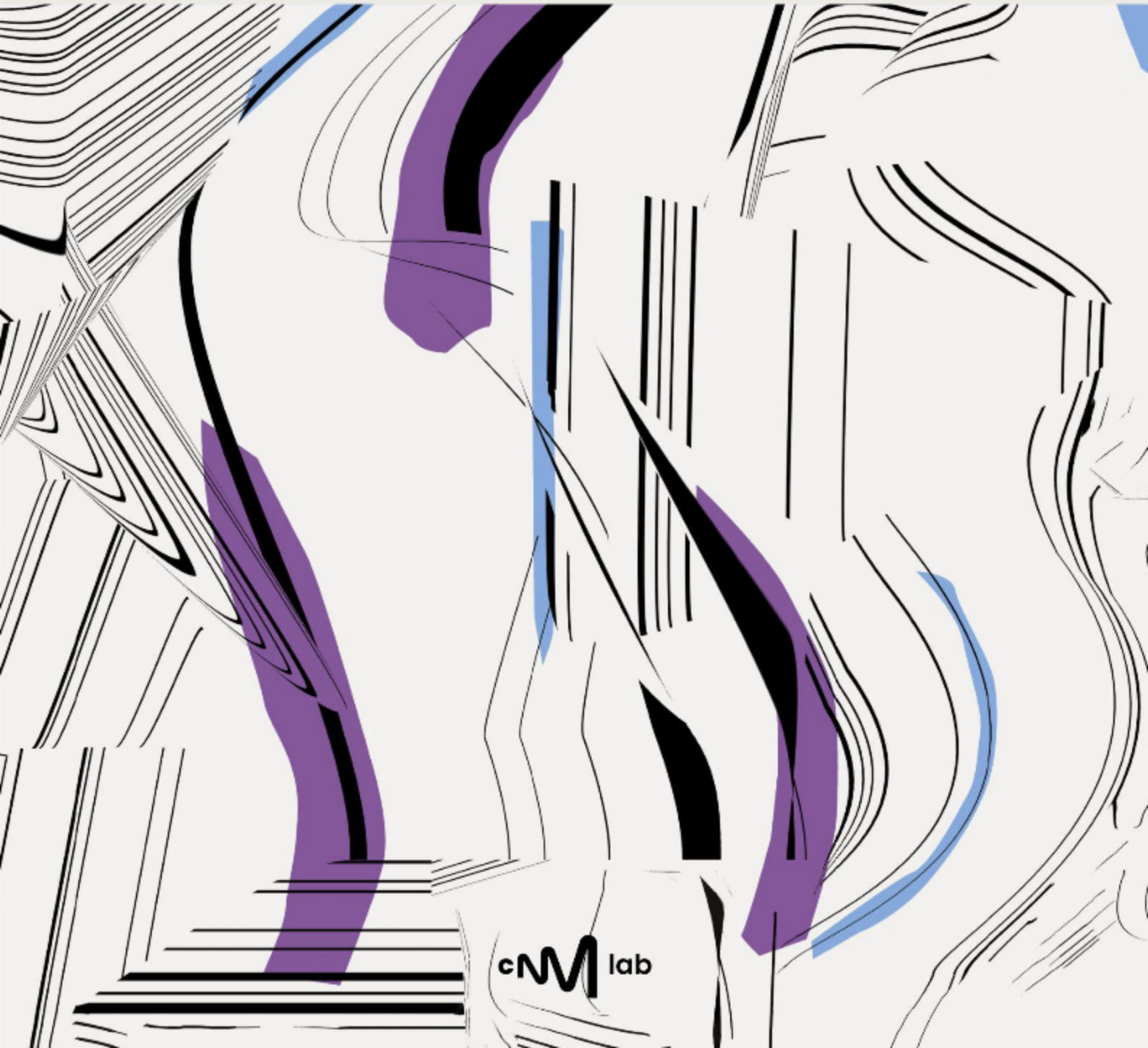
Digital Data in Music Export

A matter of rationality, creativity, and diversity

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2. Introduction

Even though the existence of digital platforms makes instantaneous worldwide distribution possible, building an international career requires efforts that are as yet poorly understood, with public authorities playing a key role. [1] The term "export," originating in the fields of economics and logistics, refers in the music industry to professional practices aimed at establishing an artist's reputation beyond national borders. [2] Working in music export means contending with several significant challenges, including the fragmentation of domestic markets, a high volume of content, the highly technical nature of digital environments, and the balance of power with the platforms. To help them meet these challenges, export professionals now have access to data that concretize geographically distant elements, such as a stream of a track, a subscription, a listener profile, etc. These elements are among the "assets" tracked by digital platforms and provided to artists and the professionals who work with them. In this article, we will observe how digital data are prompting export professionals to engage in new rational approaches while still maintaining a certain sense of creativity. These data are also being integrated into the existing music globalization process, in which concepts of nationhood and diversity still play an important role.

For a deeper exploration of the role of digital data in export professionals' practices, we conducted a series of exploratory talks, between September and December 2022, with French and Spanish labels and distributors specializing in popular music. While they are certainly not the only export specialists, [3] labels and distributors have the most direct connection to the flow of data provided by the platforms on which they distribute their music. Live music professionals are also affected, both because their investments are data-driven and because they generally work in conjunction with labels and distributors. However, they still play a less influential role than labels and distributors in the management of their artists' metrics, hence our choice of methodology. Moreover, in the interest of conciseness, we are not dealing in this article with the technical and political

issue of metadata (the data used to describe a piece of digital music), even though metadata represent a crucial step in the process of distributing music on the platforms. [4] By the same token, we will not address the matter of royalty collection based on international platform distribution, as the complexity of that issue extends well beyond the scope of this article due to the poor interoperability of metadata and the particular practices of UGC platforms. [5]

3. Music Export Data: History and Major Players

Following a long period of "velvet" European imperialism [6] marked by an elitist view of culture, [7] cultural globalization has taken on a more market-oriented form through the US hegemony of the twentieth century. This commodification accelerated the use of metrics and charts tracking the global flow of music, [8] which had already been established in part by government entities. The charts, or rankings of record sales, have become not only a descriptive tool but a promotional one as well. [9] Over the second half of the twentieth century, these data were televised on programs such as *Top of the Pops* in Great Britain or *Hit Parade* and *Hit Machine* in France, representing an additional incarnation of the popular music industry's turn toward the quantitative. Indeed, the image we have today of the way music is circulated at an international level is largely quantitative–based, for example, on the lists of the most listened-to artists on digital platforms–although more qualitative types of distinctions, such as awards ceremonies, persist. With the development of digital platforms, international music distribution is no longer measured solely by sales of physical copies but also by streams. A number of platforms have normalized the role of metrics in the experience of musical content–for example, by displaying the number of views or streams–thus intensifying focus on certain artists. This phenomenon, which is not exclusive to the field of music, is known as datafication, and it is resulting in new power dynamics. [10]

The digitization and geolocation of streams and users by the streaming platforms (Spotify, Deezer, etc.) are now at the core of the digital economy. Indeed, platforms are accumulating massive quantities of data on their users, not only for advertising and marketing purposes [11] but also with a view to positioning themselves as intermediaries at the service of producers and their economy, in the context of controversy surrounding the fair distribution of streaming revenues. [12] In this way, the platforms provide some of the data that make it possible to measure the performance–and in particular, the media performance–of artists at an international scale and, in some cases, to launch marketing campaigns via social media (Facebook, Instagram, etc.), all within a generalized entrepreneurial approach. [13] Following a 2015 beta version called Fan Insight, Spotify for Artists was launched in April 2017. This B2B interface allows artists and associated professionals to consult statistics (plays as well as details of listeners' preferences, networks, locations, and demographic data) in real time. Apple Music for Artists, launched in August

2019, integrates data from the music recognition app Shazam as an exclusive feature of the platform. Other examples include Deezer for Creators, Amazon Music for Artists, and Pandora AMP. All of these platforms offer the same types of information, such as the number of streams, listeners' location and sociodemographic profiles, and the playlists associated with each artist.

Datafication affects the vast majority of contemporary music production companies, from self-produced artists to major labels. In addition, there are companies that specialize in processing and editorializing these data. These are data aggregators that provide visibility over large quantities of data drawn from various platforms (playlist adds, streams filtered by geographic area or type of platform, listener profiles, etc.) on a single dashboard. Incidentally, Soundcharts, one of the main aggregators, was founded by David Weiszfeld, formerly the head of international development at Universal, with the goal of optimizing and automating the production of reports within labels. [14]

The other dominant figure in the datafication of the music industry is the data analyst. The significance of that role is demonstrated in this comment made to us by an international digital distribution specialist: "If I had to start a label tomorrow, the first thing I would do would be to hire a data analyst." Production/distribution companies in the audiovisual sector are hiring an ever-growing number of data analysts. [15] The same is true of major labels—which, incidentally, have their own aggregators. Warner Music Group, for example, bought the start-up Sonatone in 2018 with a view to further automating the process of scouting new talent. [16] However, relatively little is known at this point about the new professional subgroup that these data analysts constitute. [17] Kobi Abayomi, the data specialist hired by Warner Music Group, offers a mixed view of the role of data within labels. [18] On the one hand, he maintains the (almost incantatory) notion that data can predict success, even to the degree of predicting the next popular genres at an international scale. This approach is in evidence at the aggregator Chartmetric, a Soundcharts competitor, which offers a predictive model within its dashboard. Chartmetric, designed for use by labels' A&R teams, predicts the popularity levels that an artist is expected to achieve in the week ahead. In other words, it deals with the short term, unlike the longer-term planning of A&R teams, whose value system is based on notions of instinct or "feeling." On the other hand, Abayomi describes his work in far more pragmatic terms, as being similar to the functioning of a GPS: processing as much information as possible in real time in order to suggest the shortest route to a chosen destination. The data are then primarily used in support of marketing teams, which are more familiar than their A&R counterparts with methods of rationalization. In the next section, we will see how these artistic and marketing aspects are more concretely interwoven with the digital data. First, however, we must address the evolution of export and participants in the export side of the music industry.

Traditionally, most labels were constrained to a national territory for cultural, legal, and logistical reasons. This rule applied even to multinational record companies, which were made up of national divisions and numerous imprints. The development of digital platforms enabled many labels to diversify their business and operate internationally. The

French major labels, for example, have stepped up and insourced their digital distribution efforts while also establishing interdisciplinary departments focused on international development. In more concrete terms, this means that they have increased the international distribution and royalty collection for their artists who were successful primarily in France, while simultaneously equipping themselves with new tools to integrate the international pop circuits and produce hitmakers abroad, rather than settling for the negligible profits that a successful French act would typically earn internationally. At Universal, for example, the international development department is organized as follows: [19]

- a "business and development" branch (continuous monitoring of territories, development of new markets, and exploration of new practices);
- a "promotion and marketing" branch (project and strategy development, promotional tracking, and coordination among territories);
- and an A&R branch (collaborations, artist introductions, and talent scouting).

At Sony, that same department works in an interdisciplinary fashion, contributing to artistic management, marketing, and promotional efforts. Its goal is to optimize the international potential of an artistic project at any stage of its "normal" development—which is to say, at the domestic level first and foremost. [20] However, this interdisciplinarity also allows it to act at the first sign that an artist is going viral on an international scale on one or more platforms, thanks to the monitoring of digital data.

Moreover, an increasing number of independent labels are engaging in export strategies with support from digital data. For those that do not have their own data analyst or aggregator, a significant portion of their work with the data is conducted with the digital distributor, which reports back on data (including financial data) stemming from platform activity. As privileged intermediaries with the digital platforms, distributors effectively play a major role in labels' export strategies. For example, the French distributors IDOL and Believe have opened offices in different parts of the world, not only to develop relationships with the editorial teams of the platforms that distribute playlists but also to solicit new foreign partners rather than limiting themselves to French catalogs. While the modes of remuneration related to digital remained unstable in the 2000s and early 2010s, it was the distributors who demonstrated that a substantial portion of labels' revenue was coming from export, especially in the case of the independent labels. [21] Distributors' expertise regarding the platforms led them to offer international promotion services to the labels so that new artists (whether self-produced or signed to a label associated with the distributor) could stand out from the masses and find suitable partners abroad (press agents, tour organizers, physical distributors, etc.).

Several recent international successes fit this pattern, such as L'Impératrice (produced by the independent label microqlima but supported by the distributor IDOL) and Petit Biscuit (self-produced but supported, particularly in the United States, by the distributor Believe). These artists are identified as "French pop," which is to say that they are part of the international music circuit, but on the basis of a malleable, surface-level "Frenchness" that gives depth to export strategies based on digital data. As it happens, the Centre national de

la musique (CNM) bases its export strategy not on a French aesthetic but on the characteristics of business models and the originality of international investments in the digital context. Indeed, while digital data have arguably produced a relative democratization of export, the implementation of an international strategy does require significant financial means: "If you don't have money to invest internationally, the data won't do you any good." [22] The support policy for music export is aimed at compensating for precisely that issue, by supporting structures in which artists demonstrate a degree of potential through digital data. [23]

Despite these structural transformations, the adoption of digital data-guided strategies among professionals remains highly variable. [24] Maasø and Hagen's studies of Norwegian music professionals [25] show that they do draw from a growing volume of data in deciding what music to promote, but most of the interview subjects focus on relatively simple metrics, such as dramatic spikes that are noticeable "at a glance." [26] Such a superficial reading of the data can be misleading, [27] pointing to deeper questions about professionals' literacy [28] with regard to data [29] and about potential forms of dependency, especially in the case of self-produced artists. [30]

4. Data-driven Strategies and Professional Expertise

In this section, we will explain in more concrete terms how data are used in export strategies, with particular attention to the professional skill sets required. These days, most pop music artists have international ambitions and a cosmopolitan aesthetic from the earliest stages of development. As a result, there is no shortage of candidates for export. Given that data are indicative only once a certain threshold has been reached, the choice of which artists to promote on the international stage is still made largely on the basis of subjective and aesthetic criteria. These criteria refer to the artist's perceived international potential, known in the industry as "export readiness". [31]

Alongside traditional approaches to development at a local level, primarily through concerts, [32] some independent music professionals, following the "360-degree artist development" model, [33] invest in marketing campaigns that are not differentiated by geographic areas. These days, several platforms, particularly social media platforms, offer promotion options with variable pricing. While their effectiveness is often debated, [34] the professionals interviewed for this article report meaningful results. For example, one respondent described the following results for a global advertising campaign for a Caribbean pop artist produced in France (on Facebook and Instagram, with a budget of approximately 600 euros over a period of several months): an increase of 13,000 followers on Facebook and 2,500 on Instagram; 5,500 new listeners on Spotify/Apple/Deezer; an 800% increase in streams over the average monthly volume from the previous year; an increase of 1,000 subscribers on Spotify and 500 on YouTube; 5,800 Facebook shares and

850 comments on Facebook or Instagram. The professional in question noted a "trickle-down" effect from Facebook and Instagram toward other platforms, such as YouTube and Spotify. These campaigns rely on sociodemographic data gathered by the platforms, incorporating unrelated markets, a process that serves the advertising interests of a wide variety of organizations and strengthens the Google/Facebook duopoly. [35]

A study conducted by Terry Tompkins, Ulf Oesterle, and Charles Alexander shows similar results. [36] The authors tested a digital marketing campaign on Facebook and Instagram for a sample of eleven "folk" and "Americana" artists, using sponsored posts that redirected to each artist's Spotify playlist. This campaign was conducted in two phases: first, by targeting audiences in a specific age group who like similar artists, then by retargeting those users who engaged with the campaign by clicking on the first post. The average click-through rate was 1.46%, well above the average Facebook click-through rate (0.90%). The rate was significantly higher in certain countries, including Brazil, the Philippines, and Mexico, as well as Japan, Finland, and Spain. Developing artists attracted the most clicks (2,986), compared with mid-level (1,614) and established artists (1,729). Overall, the number of playlist followers for the artists in question grew by 350% on average, with rates of growth for individual artists ranging from 2.5% to 2,500%. This automated marketing campaigns are among the new tools, specific to the digital data economy, that are now available to export professionals. While many doubt the effectiveness of these tools, it is becoming the norm to diversify marketing techniques (radio, TV, press, social media, relationship marketing, etc.) and to modify these techniques to each artistic project, given the increasingly close relationship between music and promotion. [37]

Once a certain threshold is achieved, a more specific strategy can be implemented. This strategy is generally based on the following steps:

- identification of relevant territories;
- strategy building and implementation;
- evaluation of results.

Over time, and with promotional efforts that may be more or less localized, [38] certain foreign territories stand out in the streaming statistics provided by the platforms, indicating a real presence of fans. This calls for greater and more targeted investments as the artist pursues their career. This geographic consistency is all the more important for export professionals because data from the platforms can be misleading. "It varies enormously, depending on the publishing support in each country. If a big playlist in Germany includes an album track, that is enough for Germany to suddenly represent a disproportionate share of the revenue, but that won't necessarily be the case when the album is released." [39] Likewise, a localized audience may seem large at first glance, yet represent a negligible proportion of the total population of the area in question.

More generally, Spotify listens or YouTube views may be of significant volume in a territory while engagement remains relatively low. [40] Professionals call this a "funnel-shaped" system, referring to a certain hierarchy of data. Indeed, many professionals consider streams from algorithmic playlists, to which listeners are not particularly

attentive, to have very little intrinsic value. What really counts for a 360 independent label, for example, is selling records on Bandcamp [41] and selling concert tickets. These are signs of fans' genuine attachment, as well as substantial revenue sources. It is therefore imperative for export professionals to know how to contextualize, classify, and interpret the data provided by the platforms, calling upon a specific skill set that remains unevenly distributed within the industry. For this reason, a number of aggregators incorporate more comprehensive and contextual analytic tools, differentiating, for example, between passive and active listening behaviors (engagement). [42] For the same reasons, public authorities and professional organizations are warning against the risks associated with purchasing "fake streams," which damage, among other things, the ability to mobilize data strategically.

In a second phase, after analyzing the impact of their music in different territories, professionals can implement more specific strategies. At that point, the data are used as a persuasive tool in dealing with foreign partners, especially tour organizers, with a view to "actualizing the export" via concerts and contact with fans. In other words, platforms and data are used not to enable a remote-controlled approach to international development but instead as sparks, catalysts, and informative tools that usually require the involvement of local partners. "Data do not replace everything, but they do save you time in understanding a territory. Having input, people on the ground for development, is crucial. At the start, when you have no one, data make it possible to take the first steps." [43] To flesh out this work, data aggregators and public programs that support music export offer "country guides" that provide additional contextual and qualitative data. [44]

For example, the Paris-based electronic pop-funk group L'Impératrice was quickly circulated on international streaming playlists and soon had listeners scattered all over the world. Despite that global element, the process of building a more solid reputation and an audience willing to travel to concerts was conducted on a country-by-country basis, as microqlima, the group's independent record label, has a small staff. After a virtual tour during the Covid-19 pandemic, followed by support from CNM and from its distributor (IDOL), the group has successfully established itself in the North American market, winning accolades for its performance at Coachella. This model of concentric circles—very different from the image of instant global success triggered by the algorithms—is found even among the French major labels. [45] One example is Sony France and the Congolese-Belgian singer Lous and the Yakuza, whose "export readiness" is based on her danceable, Francophone, hip-hop-infused "urban pop." [46] After she achieved a degree of success in the French-speaking world, she was the subject of specific development efforts from the teams at Sony Italy. The local teams noticed a spike in streaming statistics in their country and wanted to support her through targeted marketing and a collaboration with the Italian rapper Sfera Ebbasta in 2021, leading to her performing in more concerts, opening for international artists (Coldplay, Gorillaz, etc.), and especially playing at European festivals. In both cases, while the international development models do rely on data provided by the platforms, they are based above all on organizational risk-taking and marketing efforts that are ultimately quite similar to the strategies that previously worked for "the French touch."

As for "viral" international successes set off through algorithms and peer-to-peer exchanges—emblems of the digital age, first via YouTube and now through TikTok—they remain the exception to the rule. When viral hits do happen, converting them into a lasting career is a real challenge, requiring an export strategy that is ultimately very similar to that described above. This is the case for artists such as Petit Biscuit, Myd, and Kid Francescoli, all of whom work in danceable electronic genres. Once the territories have been identified, data-based export strategies call upon more traditional A&R and promotion skill sets. "Based on data from Chartmetric or elsewhere, I see which foreign artists are closest to me or to my target audience. That can point us toward doing a feature or looking into a remix. Where it used to be a matter of pure intuition and artistry, now it is more objectivized. The timing of international feature credits is very important. There has to be some authenticity to it; if it is too 'marketed,' fans realize that. We provide leads, but the artist is king; the artist decides." [47] In other words, no lasting international success happens in a vacuum. It always involves intensive work from teams of professionals who are skilled not only in working with digital data but also on the artistic and marketing sides. These teams are generally in-house at the major labels, while independent labels usually outsource this work.

Regarding the evaluation of results, streaming platforms and aggregators prove highly useful to professionals, as they show the impacts of a given marketing measure in real time and facilitate the process of evaluating progress at interim steps and revitalizing a promotional strategy where appropriate. Moreover, easier access to data makes it possible to publicize export efforts by, for example, posting good results on social media. This amplifies the international aura of the artist, label, or distributor in question.

Whether the development of an international reputation is achieved through algorithms or word of mouth, an aspect of it is described by professionals as "organic." This is a testament to a kind of normalization of the role of technology in the always-unpredictable encounter between an audience and an artist. Some commentators go over the top in singing the praises of data (and specifically algorithms), claiming that they are rendering reputation-building skills obsolete. [48] Others view data supremacy as a threat, not only to their skills but also to the historical values of uniqueness, excellence, and merit in democratic systems. [49] The professionals we interviewed nevertheless maintain a considerable degree of autonomy in their relationship to digital environments. They emphasize the role of relationship building, creativity, and the skills needed to "activate" data, leading Thomas Morenne, head of international development at Sony France, to say, "The beautiful thing is, you're at the crossroads of creativity and tech." [50] This means that the data-dependent optimization of international career development is aligned with, rather than a departure from, the historical models used by the music industry, in which risk and unpredictability remain dominant factors. [51]

5. "Trigger Cities": The Datafication of Relations Between the Global North and South

One of the particularities of digital data availability is that it has altered the geography of music export. Indeed, many artists previously concentrated their export efforts on the centers of the global music industry, particularly England and the United States. These days, however, data point to other pathways. It is no longer rare to see certain artists developing audiences in Germany or other European countries first. Export strategies in general are increasingly fragmented, progressive, and targeted to data in a given territory, although as we have seen, these strategies sometimes target the world as a whole, without differentiation.

Moreover, the gradual adoption of streaming services around the world complicates this geography, particularly in the case of countries with massive populations, such as India, Brazil, and China. [52] While the implementation of export strategies in these countries is still in its infancy, the digital data on which those strategies rely offer a glimpse into new types of international relationships, particularly between the Global North and South. This is evident in interest shown by professionals from the Global North in exporting to markets in the Global South as well as in the gradual popularization of artists from various parts of the world, most notably South Korea and Latin America. [53]

In professional digital data circles, these new relationships between the Global North and South are more precisely illustrated by the concept of "trigger cities." According to the aggregator Chartmetric, some developing music markets have the power to influence the algorithms, thus helping expand an artist's audience all over the world. These markets were identified in 2018 by Chaz Jenkins, Chief Commercial Officer at Chartmetric, based on a study of forty emerging pop, R&B, electronic music, and hip-hop artists enjoying success in several countries of the Global North. [54] By analyzing the geolocation of streams, followers, and comments on various platforms, this study revealed the preponderance of certain territories generally neglected by music export professionals: "trigger cities." Their main characteristics include a wide range of musical tastes (not limited to local or national repertoire) and high music consumption via streaming, which in turn is linked to high population density and high rates of cell phone and social media use. The top trigger cities, in order of impact according to the study, are Mexico City, Lima, Bogota, Santiago, Jakarta, Bangkok, Guayaquil, Istanbul, São Paulo, and Ankara. Indeed, many trigger cities are located in the so-called "emerging" countries of Latin America and Southeast Asia, regions where technology has recently accelerated the population's access to Western popular music.

The average age in these regions tends to be lower than in the Global North. In addition, the combined effect of colonization, trade, migration, and tourism would seem to favor

multilingualism in these countries and their diasporas, making their populations receptive to a broader range of cultures, media, and entertainment. [55] Finally, users in these regions appear to share and engage with music on social media far more freely and frequently than do users from Europe or North America. By comparison, traditional markets such as the United States, the United Kingdom, Western Europe, and Australia are presented as saturated. Chartmetric then converted these findings into a marketing concept that it made available to the industry. In particular, it detailed the behaviors and tastes of trigger cities' populations on various platforms (Spotify, YouTube, Instagram, and Shazam).

By way of illustration, the experts at Chartmetric use the example of Western artists of Asian descent, who are ideally situated to benefit from the trigger-city effect. [56] The idea is to encourage music professionals to take an interest in these metropolitan areas, particularly given that advertising costs there are very low, making it possible to develop a fan base more quickly. Due to trigger cities' socioeconomic status and lower subscription rates, streaming activity there does not generate as much revenue as in the Global North. However, the high volume of streaming activity in trigger cities could have an impact on the algorithms, ultimately influencing total streaming numbers and, consequently, global revenue. Here, the recommendation algorithms are presented as the primary triggers causing a track to be streamed (via playlists or autoplay), even as doubt is frequently cast on the power of algorithms. [57]

While the professionals surveyed for this study attest to relatively high streaming statistics in certain countries, such as Mexico and Brazil, they remain cautious about implementing export strategies. Not only might these streams prove to be relatively insignificant in relation to the total population of the countries in question, but the expense of a touring production remains just as high as (if not higher than) in Europe, for example. They are keeping an eye on the digital data from these countries, but their export practice is still primarily geared toward the markets they know the best—which is to say, the North American and European markets. Moving into new territories can only be accomplished empirically, step by step, according to export professionals' (necessarily limited) means and skills.

While there is certainly an element of marketing prophecy in the trigger-cities concept, intended to entice professionals into taking a greater interest in data and making use of the aggregators' services, a more critical reading is possible. Trigger cities are presented as territories that are as yet unexplored, or even ripe for "conquest." This interest in the Global South is not new. It owes as much to cosmopolitan curiosity as to the neocolonial preconceptions of certain artists and music industry professionals. [58] While Chartmetric's experts appear to be concerned with artistic diversity, they are primarily contemplating the opportunities for artists from the Global North, but with ethnic ties to the Global South, to succeed. Moreover, their concept reduces the large urban centers of the Global South to listener pools at the service of multinational music labels, thus exploiting the concept of diversity. [59] While those metropolitan areas are described as influential, the primary purpose is to stimulate the dominant cultural industries by means of algorithm usage rather

than to create more balanced, circular forms of exchange. In other words, the "trigger cities" concept is first and foremost a demonstration of the datafication of historic power relationships between the Global North and South. The perpetuation of these relationships in discussion of the data compounds the perpetuation of gender and racial stereotypes through the supposedly neutral work of algorithms. [60] Thus an ethics of music export remains to be developed, especially at a time when public policies, which are meant to be more sensitive to social justice concepts, are contributing so much to supporting music export.

6. Conclusion

While the public at large may imagine that international music distribution is a matter of fluidity and disintermediation—a perception reinforced by the user-friendliness of streaming interfaces—the sheer quantity of data requiring analysis and of possible marketing levers makes it a highly specialized business and the subject of significant investments. This work is carried out by export professionals with the aid of new industry players, such as digital distributors and data aggregators. Contrary to the notion that data is all-powerful, this work is based on a combination of rational and creative thinking. In fact, the digital data provided by the platforms serve as a tool to make geographically distant streaming behaviors visible. In this way, the data inform strategic decision-making about music export. However, under no circumstance do these data constitute an assurance of international success. Concerning export professionals and the balance of power with the platforms, digital data occupy a particularly ambivalent role; these data are meant to optimize artists' development in a context of abundance that the platforms themselves created. While digital data constitute a tool, the discernment and creativity with which that tool is used remain a significant differentiating factor.

Moreover, in structural terms, while access to the platforms' data has democratized export for a number of independent labels, with the help of specialized intermediaries such as distributors or aggregators, the major labels retain their dominant position. This phenomenon, known as "the streaming paradox," is explained by the habits of music consumers, the affordances of the platforms, and the major labels' historical power. [61] In spite of everything, this relative democratization lends a new dimension to the geography of music export, now dispersed among countries with high consumption of streaming media, the music industry's historical centers (Great Britain and the United States), and other countries of varying proximity (Germany and Italy for French music professionals, for example). This dispersion itself is qualified, as the discourse centered on marketing and digital data in part perpetuates Global North/South relations, as demonstrated by the example of "trigger cities."

This means that a music export policy must be sensitive to both the technical and the cultural dimensions of global music distribution and must consider the imbalances not only within the industry (between major and independent labels, for example) but also between countries. It is to be hoped that the gradual (albeit recent) institutionalization of music

export at the European level will continue to take these issues into account, both through partnerships between European countries and through more lasting relationships with the industries of the Global South. [62]

1. Stephen Chen, Shane Homan, Tracy Redhead, and Richard Vella, The Music Export Business: Born Global (London: Routledge, 2021).
2. Some professionals draw a distinction between export and international development, with the former term referring to a finished product being marketed for sale abroad, while the latter deals more with the gradual construction of a global reputation. For the sake of simplicity, however, we are including all of this in the category of "export," as the term is used by public authorities.
3. The critical role played by producers of "showcase" festivals and performances is particularly noteworthy.
4. Guillaume Heuguet, "Vers une micropolitique des formats : Content ID et l'administration du sonore," Revue d'anthropologie des connaissances 13, no. 3 (2019): 817–848.
5. User-generated content (UCG) platforms include YouTube, TikTok, etc.
6. David Todd, Un empire de velours : L'impérialisme français au xixe siècle (Paris: La Découverte, 2022).
7. Danièle Pistone, "La musique comme ambassadrice ? L'Association française d'action artistique (1922-2006) : bilans et enjeux," Relations internationales 156 (2013): 21–35.
8. Ernest A. Hakanen, "Counting Down to Number One: The Evolution of the Meaning of Popular Music Charts," Popular Music 17, no. 1 (1998): 95–111.
9. Richard Osborne, "At the Sign of the Swingin' Symbol: The Manipulation of the UK Singles Chart," in Richard Osborne and Dave Laing (eds.), Music by Numbers: The Use and Abuse of Statistics in the Music Industries (Bristol: Intellect Books, 2020).
10. Ulises A. Mejias and Nick Couldry, "Datafication," Internet Policy Review 8, no. 4, https://policyreview.info/concepts/datafication.
11. Philippe Astor, "Les big datas musicales, une question de souveraineté culturelle qui n'est pas posée," Music Zone (2022), https://musiczone.substack.com/p/les-big-datas-musicales-une-question.
12. Lee Marshall, "Do people value recorded music?" Cultural Sociology 13, no. 2 (2019): 141–158.
13. Peter Tschmuck, "From Record Selling to Cultural Entrepreneurship: The Music Economy in the Digital Paradigm Shift," in Patrik Wikström and Robert DeFillippi (eds.), Business Innovation and Disruption in the Music Industry (Cheltenham: Edward Elgar Publishing, 2016): 13–32.
14. David Weiszfeld, "How project management SHOULD work in the music industry," LinkedIn, September 25, 2016. https://www.linkedin.com/pulse/how-project-management-should-work-music-industry-david-weiszfeld-1/.
15. The notable difference from the audiovisual industry is that platforms such as Netflix save all data on the performance of their content, while Spotify's "gatekeeping" plays out primarily in playlist curation. This difference can be explained by Netflix's status as a content producer.
16. Murray Stassen, "Warner is Signing Double the Number of Artists via AI-driven A&R Tool Sodatone than It Did Last Year. Now, It's Hired a Global Head of Data Science," Music Business Worldwide, November 24, 2020: 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.
17. Violaine Roussel, "Quand Hollywood produit aussi des données," AOC, December 12, 2022: https://aoc.media/analyse/2022/12/11/quand-hollywood-produit-aussi-des-donnees/.
18. Kobi Abayomi, "The Sound of Data Science," AUC Data Science Initiative, YouTube, March 13, 2022: https://www.youtube.com/watch?v=Pri4SWAxqHo.
19. "'Les projets sont davantage pensés dès l'origine pour l'international' (Florian Abessira, Universal)," News Tank Culture, May 12, 2022: https://culture.newstank.fr/article/view/250908.
20. Indeed, even French groups that became well-known abroad before the internet broadened their reach, such as Phoenix and Daft Punk, are considered fringe cases. In the industry, the saying "no man is a prophet in his own country" still applies.
21. That portion could reach as much as 20–30% for artists considered idiosyncratic to one country (for example, French chanson artists) and could exceed 50% for more global genres, such as electronic music, according to comments made by an employee at a French digital distributor.
22. Comment made by the head of a French independent label.
23. The minimum threshold, as determined by CNM in agreement with export professionals, is 1,000 subscribers on a streaming platform and another social network.
24. See, for example, the 2021 Music Tomorrow study based on a sample of 72 respondents from the music industry.
25. The study is based on a questionnaire distributed via the Norwegian professional associations (N=555) and 7 interviews. It is worth noting that in Norway, streaming revenue has exceeded revenue from physical sales since 2011.
26. Arnt Maasø and Anja Nylund Hagen, "Metrics and Decision-making in Music Streaming," Popular Communication 18, no. 1 (2020): 18–31.
27. For example, in the case of an increase in subscribers on a platform that is weaker than the overall increase in users on that same platform, that would be considered a relative increase.
28. Defined as "the ability to access the media, to understand and to critically evaluate different aspects of the media and media content and to create communications in a variety of contexts."
29. Anja Nylund Hagen, "Datafication, Literacy, and Democratization in the Music Industry," Popular Music and Society 45, no. 2 (2021): 184–201.

30. Stéphane Costantini, “Compétences communicationnelles et pratiques numériques des ‘musiciens connectés,’” tic&société 14, no. 1–2 (2020)” 131–157.
31. This concept refers to a set of values attributed to artists and their work, fluctuating between aesthetic attributes (type of music, language sung, etc.) and professional considerations (sufficient English proficiency to give interviews, ability to tour continually, etc.). For example, one of the archetypes of “export readiness” in France is Christine and the Queens, given that she sings in two languages, has a danceable electro-pop aesthetic, and speaks English fluently.
32. It is especially important to note the central role of showcase festivals (such as South by Southwest in the United States, Eurosonic in the Netherlands, Reeperbahn in Germany, and BIME in Spain) in this type of development.
33. This term refers to an integrated service including record production, live performance production, publishing, and management.
34. Alison Munsch, “Millennial and Generation Z Digital Marketing Communication and Advertising Effectiveness: A Qualitative Exploration,” Journal of Global Scholars of Marketing Science 31, no. 1 (2021): 10–29.
35. Thomas Guignard, “Données personnelles et plateformes numériques : sophistication et concentration du marché publicitaire,” tic&société 13, no. 1–2 (2019): 43–69.
36. Terry Tompkins, Ulf Oesterle, and Charles Alexander, “Indie Folk and Americana Triggers: An Analysis of Streaming Music, Audience Behavior, and Global Opportunity,” Journal of the Music and Entertainment Industry Educators Association 21, no. 1 (2021): 91–125.
37. Leslie M. Meier, Popular Music as Promotion: Music and Branding in the Digital Age (Hoboken: John Wiley and Sons, 2017).
38. In some cases, artists may have a desire to explore a particular territory on the basis of their affinities or origins.
39. Comment made by an employee at a French digital distributor.
40. The term “engagement,” which originated in the English-language digital marketing space and is also used in French, refers to a user’s degree of involvement with a piece of content. It is measured using metrics such as viewing time.
41. A physical and digital music sales platform on which most profits are paid to the rightsholders.
42. Dave Roberts, “Why Soundcharts, Used by All Three Major Record Companies, Is ‘Not Your Typical Music Data Aggregator,’” Music Business Worldwide, February 3, 2021: https://www.musicbusinessworldwide.com/why-soundcharts-used-by-all-major-record-companies-is-not-your-typical-music-data-aggregator.
43. Comment made by an employee at a French digital distributor.
44. For example, “Mexique : étude de marché”: https://cnm.fr/international/ressources-internationales/mexique-etude-de-marche.
45. Pascal Bertin, “L’export dopé au big data,” Libération, April 17, 2020: https://www.liberation.fr/musique/2020/04/17/l-export-dope-au-big-data_1785596; Laurent Carpentier, “TikTok, l’algorithme qui secoue la culture,” Le Monde, January 14, 2023: https://www.lemonde.fr/culture/article/2023/01/14/tiktok-l-algorithme-qui-secoue-la-culture_6157833_3246.html.
46. Other factors, such as the selection of the Spanish producer El Guincho for her album Gore (2020) and Canadian director Wendy Morgan for several music videos, also played a role.
47. Comment made by a head of international development at a major French label.
48. For example, Chris Robley of the distribution company CD Baby states that “The algorithm IS your audience” in “The Spotify Algorithm: What Musicians Need to Know,” DIY Musician, June 14, 2022: https://diymusician.cdbaby.com/music-career/spotify-algorithm/.
49. Nathalie Heinich, L’élite artiste : Excellence et singularité en régime démocratique (Paris: Gallimard, 2005).
50. “#14: Thomas Morenne, Responsible du développement international chez Sony Music,” October 24, 2022, in Les rencontres de Janis, podcast: https://www.deezer.com/fr/show/3491857.
51. David Hesmondhalgh, The Cultural Industries (London: Sage, 2018).
52. Note, however, that the use of local platforms limits access to data, especially in the case of China.
53. For the example of K-pop in France, see Vincenzo Cicchelli and Sylvie Octobre, K-pop: Soft power et culture globale (Paris: PUF, 2022).
54. “6MO: Music Industry Trends from H2 2020,” Chartmetric (2021): https://chartmetric.com/music-industry-trends/6mo-report-2020-h2.
55. Michelle Yuen, “dhruv Proves the Globalization of Music Can Break New Artists,” Chartmetric, November 9, 2022: https://blog.chartmetric.com/dhruv-globalization-music/.
56. Michelle Hyun Kim, “How Asian Artists from Western Countries Find Global Audiences,” Chartmetric, December 15, 2022: https://blog.chartmetric.com/asian-artists-global-audiences/.
57. Jean-Samuel Beuscart, Samuel Coavoux, and Sisley Maillard, “Les algorithmes de recommandation musicale et l’autonomie de l’auditeur : Analyse des écoutes d’un panel d’utilisateurs de streaming,” Réseaux 213 (2019): 17–47 ; David Hesmondhalgh, Raquel Campos Valverde, D. Bondy Valdovinos Kaye, and Zhongwei Li, “The Impact of Algorithmically Driven Recommendation Systems on Music Consumption and Production: A Literature Review,” UK Centre for Data Ethics and Innovation Reports, 2023.
58. Steve Waksman, “Les arènes de l’imagination : tournées mondiales et concerts de heavy metal dans les années 1970,” in Gérôme Guibert and Guillaume Heuguet (eds.), Penser les musiques populaires (Paris: Éditions de la Philharmonie de Paris, 2022).
59. Tristan Mattelart, “Enjeux intellectuels de la diversité culturelle : Éléments de déconstruction théorique,” Culture prospective 2 (2009): 1–8.
60. Ann Werner, “Organizing Music, Organizing Gender: Algorithmic Culture and Spotify Recommendations,” Popular Communication 18, no. 1 (2020): 78–90; Jonathan E. Schroeder, “Reinscribing Gender: Social Media, Algorithms, Bias,” Journal of Marketing Management 37, no. 3–4 (2021): 376–378.

61. Arnt Maasø and Hendrik Storstein Spilker, “The Streaming Paradox: Untangling the Hybrid Gatekeeping Mechanisms of Music Streaming,” Popular Music and Society 45, no. 3 (2022): 300–316.
62. European Commission, Directorate-General for Education, Youth, Sport and Culture, Jacquemet, B., Le Gall, A., Saraiva, N., et al., Music Moves Europe: A European Music Export Strategy: Final Report, Publications Office (2019): data.europa.eu/doi/10.2766/68347.