

From value networks for

recorded music to music ecosystem



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Executive Summary

How has the growing influence of music streaming services reconfigured the value networks?

There is a lack of a systematic understanding of the central role played by Music Streaming Services (MSS) in the current industry configuration.

Our analysis based on a Systematic Literature Review, including academic and grey literature, has 4 key findings for value networks:

(1) Digitisation is reshaping the market. Lower barriers of entry for music creators, allow more creators to bypass traditional gatekeepers such as record labels to more directly interact with their audience while new gatekeepers entered the market (aggregators and platforms).





Executive Summary

(2) Major record labels are negotiating their position in this changing ecosystem, redefining their value proposition and their intermediation. Contracts with artists and catalogs are their key assets.

(3) MSS have evolved their value proposition from providing unlimited access to music to the curation of such access. Their playlists are stand-out features aimed at locking in end-users.

(4) Beyond economic value: not only do MSS give access at a lower cost, they are also more convenient in usage and experience.

We highlight two important, relatively new players, in the music ecosystem. Spotify is the most discussed among professionals. Although currently dominating the streaming market, it still struggles to be profitable.





Executive Summary

YouTube is mainly a user-generated content (UGC) platform whose value proposition revolves around its diverse content and free and open access. It gets criticized for the low revenues returned to creators.

The reconfigured music ecosystem revolves around distribution, in particular by MSS and UGC platforms. The various stakeholders are interconnected and power dynamics are restructured.

The shifting locus of power (with increased influence of recommendations), information asymmetries (notably against artists and songwriters) and skewed distribution of royalty payouts have led to the emergence of the issue of fairness

Approaches are being developed that need to be discussed such as the pro-rata model of remuneration or minimum threshold of streams.

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Background



Situation of our research

WORLDWIDE SCIENTIFIC INTEREST FOR (ONLINE) MUSIC BUSINESS

CONSOLIDATION AROUND MUSIC STREAMING SERVICES (MSS)

New ways for the music industry to relate to audiences

Value network analysis USED BY SCHOLARS

01.

To understand the dynamics of stakeholder interactions

03.

To comprehend how value is created/perceived by different stakeholders

02.

To address the increasing role of digital distribution in dismantling the barriers to access

04.

To integrate the influence of MSS into Leyshon's (2001) networks of music economy

Situation of our research

DYNAMICS OF THE SIGNIFICANT CHANGES

While there is a consensus that the industry has undergone significant transformations in the last **25 years**, there is a **lack of a systematic understanding** of the central role played by MSS in the current industry configuration

EVOLVING ROLE OF MSS

Latest research fails to acknowledge and position the transformation of MSS as producers of a branded musical experience through **playlist curations** and **recommender systems**, a crucial objective since 2013

Research Question

How has the growing influence of music streaming services reconfigured the value networks?

MENU

Our approach



Value network analysis

VALUE CHAIN APPROACH

How value is added to inputs through a chronological chain of company interactions within one industry



Value network analysis

01.

Parallelandinteractingvaluechains from severaladjacent industries

03.

Allows to take into account the differing and sometimes conflicting interests and motives of stakeholders

02.

Useful whenever the analysis moves above the single company level

04.

Correspondstohowroles,resourcesandcapabilitiesaredistributedandwhattherelationships are



IMPACT OF VALUE NETWORK ANALYSIS

The emerging use of value networks has contributed to focus the attention on new models of value creation and value capture

01.

Four distinct drivers of value creation (and capture) at the core of platforms' business model: transaction efficiency, complementarity, novelty and lock-in

02.

Online platforms act as intermediaries benefitting from cross-sided network effects between market sides



Some examples

of visualizations using the value network analysis

Figure 1. Digital music value networks



Source: Sun, H. (2019). Digital revolution tamed.

Figure 2. Stylised Value Chain for Music



Source: De Voldere et al. (2017). *Mapping the Creative Value Chains*.

Methodology

Systematic literature review (SLR)

01. IDENTIFICATION

Publications identified through academic databases (e.g. Web of Science, Scopus) and other sources to include trade presses, reports, etc.

02. SCREENING

Duplicates removed

03. ELIGIBILITY

Exclusion criteria applied to full-text publications

04. INCLUSION

Full-text publications included after several were excluded





METHODOLOGICAL BENEFITS

158 PUBLICATIONS

Academic

information

SLR ensures reproducibility, transparency, and minimises biases in article selection and interpretation, thus fostering a dependable assessment of existing knowledge on the subject

complemented with books,

book chapters, grey literature,

and other potentially relevant

sources to allow to triangulate

sources

THEMATIC ANALYSIS

Method based on repetitions, similarities, differences, linguistic connectors, and materials pertinent to the concepts of value networks

Two case studies

01. SPOTIFY

Hailed as the "saviour" of global recording, the service has dominated the streaming market (31% share in 2021) and is the most frequently discussed among industry professionals

02. YOUTUBE

Since 2017, the service has evolved from a simple distribution platform to a fundamental player in fostering direct engagement between performing artists and their audiences





Key findings for value networks



Four main themes

01. DIGITISATION RESHAPING MARKET STRUCTURE AND CHARACTERISTICS

High digitisation rate has fundamentally transformed consumption formats and distribution channels, lowered barriers to entry for songwriters and performers, and reduced control by traditional gatekeepers as well as intermediaries

03. FROM OWNERSHIP TO CURATED ACCESS

MSS shift the focus from ownership to curated access, with algorithmic and editorial playlists driving personalised recommendations for listeners and creating new opportunities for songwriters and performing artists

02. INCUMBENT STAKEHOLDERS NEGOTIATING THEIR POSITION

MSS prompt incumbent stakeholders, such as major record labels, to repurpose their value propositions by directly negotiating with platform operators and offering attractive deals, while independent labels increasingly have to rely on music aggregators

04. BEYOND ECONOMIC VALUE IN RECORDED MUSIC

MSS expand the focus from purely looking at revenues to emphasising the importance of value-inuse, as well as cultural value

Main theme #1 Digitisation reshaping the market

03.



High digitisation rate is reflected through three main ramifications:

O1. Changing formats of consumption

From vinyls to CDs (1983-1999) and from CDs to MP3 files (1999-2003). Today, recorded music is distributed as **individual WAV files** and stored on cloud servers.

O3. Affecting the creation side of the value chain

Examples include further developments on music production (e.g., digital audio workstations, easier access to purchase plugins online)

O2. Development of online distribution channels

The distribution of MP3 formats was facilitated by the Internet, which led to more developments of **peer-to-peer (P2P) platforms** and **digital download stores**.

Today: music streaming services (MSS)



01.

Lower barriers to entry for songwriters and performing artists by internalising parts of the creative and production process

02.

While digital tools enable music performers to **bypass traditional gatekeepers** (e.g., record labels), they resort to **new intermediaries: the aggregators**

03.

The reduced barriers to entry has led to an **oversupply of recorded**, intensifying the competition

Market structure of the recorded music industry differs depending on the level of analysis and value chain processes





Exhibiting the characteristics of a monopolistic competition market with many songwriters and performers competing



Competing through **product differentiation** (e.g., unique lyrics, composition)

Based on the market share of content



Resembling an oligopoly where the big 3 exert significant control over distribution and promotional resources



By continuing to employ vertical integration strategies



Initially, major record labels were reluctant to embrace new distribution and pricing models, such as iTunes' à la carte pricing



IMPLICATIONS FOR THE DISRUPTION

Digital music distribution has not eliminated the gatekeeping role of record labels; it has **merely diminished their influence**



CIRCUMVENTING TRADITIONAL MEDIATION

Exemplified by how music performers can now establish **direct interactions with their audience**



They have an active participation through **sharing**, **uploading**, **and remixing**, which can contribute to better conversion for streaming numbers



Revenue streams are divided into: composition/songwriting, performance rights, and sound recording revenue



REVENUE UNDER DIGITAL DOWNLOAD

Former pricing structure for sound recording: similar industrywide, but the \$0.99 price per song **brought in little to no money** for music providers



IMPLICATIONS ON FORMER PRICING

Lack of financial compensation was set to **grow the market as a whole and the digital services**, while record labels were set to repurpose their business

Main theme #2 Incumbents negotiating their position

03.



INITIAL PERCEPTION ON DIGITISATION

The Internet was perceived as a **threat to majors' investments on manufacturing plants** and their intermediary role between performing artists and listeners



MUSIC CREATORS' CONTINUED RELIANCE

Songwriters and performing artists continued to rely on the expertise of major publishers and record labels, including for the latter their **cost coverage for production and marketing**



TURNING TO VARIOUS SOLUTIONS

For preventing piracy, major record labels turned to suing for copyright infringement, creating online distribution JV, and lobbying for new legislation

In return, performing artists were typically required to produce a specified number of recordings and agree to exclusivity





COMPLICATED ADJUSTMENTS

As the industry evolves, the advent of streaming models has necessitated an **adjustment of the majors' value proposition**

THE ROLE OF MUSIC AGGREGATORS

Handling transactions with numerous music labels to **maintain an up-to-date catalogue** on MSS



MORE COMPLEX LICENSING

One of the dissatisfaction expressed was the **involvement** of numerous intermediaries, including music aggregators and collective management organisations (CMOs)



EXAMPLES OF MUSIC AGGREGATORS

Initial value proposition of Distrokid and TuneCore: revolved around **streamlining metadata and distribution to MSS**



Major record labels and independent music providers have different ideas on how to leverage the disruption of music aggregators as an opportunity

Major publishers



Thanks to the cross-border nature of streaming services, they are able to **opt out catalogues from CMOs** and to strike a global deal avoiding the CMOs' commission.

Independent music PF

Independent labels are **using MERLIN** to negotiate their digital rights

Alongside their attempt to leverage the changing landscape of licensing content, major record labels also sought to offer attractive value propositions O1. INTRODUCTION 360-DEGREE DEALS

A notable development that offers **full-service deals** to performing artists, which include production, exploitation, and promotional services

OF

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leading to greater market concentration and limiting the performing artists' ability to seek other agreements after signing



O2. REDUCING ARTIST ROSTERS

Major record labels would focus on a few of successful performing artists since quick results are commonly expected

The focus has sometimes resulted in contracts ending abruptly



Mitigation strategies: (1) focus on contracting performing artists or acquiring independent labels only after they have a significant fan base, (2) talent scouting and development activities





EVALUATING MAJORS' STRATEGIES

Pinpointing the exact effectiveness is difficult especially since some performers have redirected their attention to live music

differentiated exploration A under multiple conditions of fragmented markets. changes, technological and small-scale proliferation of production models is needed

O1.

from Example the electronic music scene

Flexible and contextualised configurations of using different production tools and securing funds by engaging with fans

02.

Contracts for a limited transfer of rights

This type of contract reflects the adaptable and dynamic nature of allowing artists to renegotiate deals



Given the fragmented strategies and opportunities, MSS have become a crucial customer segments for record labels



INCREASE IN REVENUES FOR MAJORS

UMG's revenue increased in 2020. with €2.806 million of its coming from revenue subscriptions and streaming (52.8%)



Contracts with artists and their catalogs have become key assets in generating this revenue



CRITICISMS AGAINST **STREAMING**

Songwriters and performers claim that MSS have made it difficult for them to earn a sustainable income from music



WHAT END USERS ARE **EXPOSED TO**

IMPALA estimates that the three majors account for around 95% of the hits, while performers struggle to gain visibility

Main theme #3From ownership tocurated access

03.





When MSS were first introduced to the market, the overriding sales pitch relied on unlimited access to music



BIG BIG CATALOG. **CHALLENGES**

The overwhelming amount of music that became available on demand creates an issue of getting discovered



TIRESOME ATTEMPTS **TO DISCOVER**

With no intervention, it would take several humain lives to listen to every track for discovering new music on a single service



INDUSTRY'S RESPONSE TOWARDS DISCOVERY

At the end of 2012: MSS would henceforth compete by offering the best recommender systems



PLAYLISTS AS A

They repackage music into curation of products that are **designed to optimise consumption**



OBJECTIVE FOR END USERS ON MSS

Playlists are designed to fit into the end users' daily activities by guiding them towards curations that they will repeatedly listen to



PLAYLISTS AS A SOCIO-TECHNICAL TOOL

Playlists reveal the **politics of selection**, which is a key mechanism that governs **platform dependence**

TAXONOMY

OF

On MSS, there is a discernible classification of **algorithmic and** editorial playlists





DEFINING ALGORITHMIC PLAYLISTS

Curations that are initiated by using **unique computational methods** to perform specific recommendation tasks

STANDARDIZED

An example is Today's Top Hits on Spotify, which **displays the same repertoire of songs** that are popular for the day across all user accounts



PERSONALISED PLAYLISTS

These curations rely on individual traces of unique listening patterns, with notable examples like Daily Mix and Discover Weekly



DEFINING EDITORIAL

Editorial playlists are **initially curated by human editors** instead of computational methods (i.e. algorithms)



OWNERSHIP OF EDITORIAL PLAYLISTS

Editorial playlists can either be owned and **operated by the MSS themselves** or **third-party playlist businesses**



ONE

Part of the success of editorial playlists can be attributed to how they are **produced and promoted on a global, regional, national, and local basis**

NE

STRATEGY TO LOCK-IN END USERS

By wrapping them in approachable language and visual art, these playlists are able to evoke personal feelings and capitalise on its home-made feel
From ownership to curated access





Independent performing artists favour the attempts to expand editorial playlists because they are easier to figure out



MECHANISMS PITCHING

Songwriters performers and disclose metadata-related information and complete a free-form section to share the story of their songs



DRAWBACK OF THE **PITCHING FEATURE**

CONSEQUENCE OF THE

FAVOURITISM

Many performing artists center their efforts on getting included

on editorial playlists by engaging

with the pitching feature

Pitching is very competitive, with only around 20% of pitched songs getting playlisted, and the enlisted music performers are associated with major labels

From ownership to curated access





ALGO-TORIAL" NOT EDITORIAL

The songs curated on editorial playlists remain **susceptible to change** and the change itself is influenced by an **algo-torial logic**



DEFINING THE ALGO-TORIAL LOGIC

The curation of playlists combines **both human curatorial expertise and algorithmic mechanisms**



CONSEQUENCE OF ALGO-TORIAL

There is a **constant algorithmic evaluation** to improve each curation to fit into each user's unique listening patterns



PARAMETERS USED FOR EVALUATION

The parameters include frequency of plays, number of skips, total plays completed, and listening time among others

From ownership to curated access





FURTHER IMPLICATIONS FOR ALGO-TORIAL

By using parameters from unique listening patterns, the algo-torial logic allows for the delivery of **personalised playlists**

CURATED ACCESS

While almost all recorded music is now accessible anytime and anywhere, it is **narrowed down by curated recommendations**



PERSONALISED PLAYLISTS DELIVERY

Some personalised playlists are commonly shown first on MSS' home page, which communicates the strategy of **user retention through curated access**



TOWARDS A BRANDED MUSICAL EXPERIENCE

Most casual listeners appreciate the ease of curated access since it provides context-sensitive listening experiences

Main theme #4 Beyond economic value

03.

BEYOND LOOKING AT

Applied to the recorded music industry, an additional value that is prominently considered is **creative value**



DEFINING CREATIVE VALUE

The terminology refers more towards an industry's ability to **innovate and adapt to changes**

ABILITY TO ADAPT TO CHANGES

In recorded music, the changes include adapting to market dynamics that enable **value-inexchange** and **value-in-use**



USE

DEFINING VALUE-IN-

Value-in-use includes examples like convenient usage and experience



MORE ACCESSIBILITY FOR MUSIC

Exemplified by individuals in rural areas with internet access who can now access a more global music library



VALUE-IN-USE MSS have been found to make

OF

music consumption more convenient due to ease of access and frontline editorial playlists



MORE ACTIVITIES FOR PERSONALISATION

As evident in playlists, personalisation allows end users to increase the co-creation of experiences (value-in-use)





DEFINING VALUE-IN-EXCHANGE

This value focuses more on examples such as the **free or low cost** of music offerings

The importance of value-inexchange has led to **two identified consequences** for business activities

O1. TIME SPENT ON REPEATED LISTENING

This shift towards this focus is attributed to how songwriters and performers are **compensated based on the number of streams**



OPTIMISING USER INSIGHTS

Record labels now put more attention to better understand and communicate with audiences



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ECONOMIC SUCCESS **REMAINS IMPORTANT**

The value continues to depend its revenue-generating on ability, even when faced with obstacles like demand volatility



OBJECTIVE OF THE **ADAPTED ACTIVITIES**

To provide self-sustaining and profitable ways disseminating their musical works

of

Example: Jazzanova and Get Physical who went from cooperative or informal selforganization to formal business companies with internal divisions of labor

RATIONALE

The shift towards streaming was

seen as an opportunity to adapt

value-creating activities

THE

ON

CONTINUED ATTENTION

incumbents' economic





BROADER SCOPE OF VALUES

From a production and creation standpoint, value creation in recorded music also involves **cultural value**



CONVERGENCE OF VALUES

Economic value converges along with cultural values that rely on **conducive social relations and agents responding** to increasing global challenges



Shared meanings of new market categories, such as **aesthetic judgments and social contexts** of musical scenes among others



FLUIDITY IN HOW MUSIC IS VALUED

OF

The valuation system evolves within social, economic, and legal contexts, as the current one emerged from **power struggles**, **negotiations**, and conflicts



Case studies Spotify and YouTube





INITIAL OPERATION (PIRACY)

During its beta phase, Spotify was distributing music to invited users **without proper licensing**



A NEW FOCUS ON MONETISATION

Legalization allows Spotify to start **monetising through advertising**, especially for users of the free option

EGAL TRANSITION

The situation changed after securing deals with record companies and collecting societies



EVENTUAL FOUNDING PRINCIPLE

Intermediary for **two conflicting economic actors:** the music industry and nonauthorised file-sharers





STRATEGIES TO ATTRACT USERS

Influential Swedish musicians were invited to try out the application as **beta testers**



SERVICE

By early 2008, the hype intensified and its value proposition centered on **two key claims**



Result: **impressed musicians** as they helped in spreading the word



MAKING MUSIC "FREE"

Initially, by relying solely on advertising revenue

O2. SIGNALING A SHIFT TO ACCESS

Rendering ownership, including personal MP3 archiving, obsolete





EVOLUTION INTO A MEDIA COMPANY

By simultaneously **delivering content to users** and monetising those users through **advertising**



SPOTIFY AS A BROKER

Practices involve debt financing and continuous restructuring of assets



BOLSTERING FINANCIAL APPEAL

Through combining traditional American media operations with European tech regulatory benefits



SPOTIFY AS A GATEKEEPER

Centralisation of distribution, with **less transparency over algorithms** and asymmetries





Set Source Set Source OF INCOME OF INCOME

Spotify generates **91% of its revenue from subscriptions** and 9% from advertisements



ITS FINANCIAL

Unsustainable profitability attributed to the **financial maneuvering of managing data** from its users and its low price



An increase in free users over premium between 2019 and 2020 may also perpetuate the problem

It keeps 30% of the

revenue and splits the rest

labels

publishers,

and

between

CMOs,

aggregators





There are **three user-centric strategies** that have been suggested on how Spotify could eradicate its profitability challenge



O2. PROFILE

This tool captures every interaction (e.g., artists followed, songs skipped) to **build a musical identity** based on consumption

O1. TARGETING PROFITABLE USERS

As a starting point, Spotify should focus on retaining users who have a **higher willingness to subscribe**

03. PERSONALISATION

Ensuring **detailed data collection on playlists** like Discover Weekly and treating it as the most valuable asset







DEMOCRATIZING DISTRIBUTION

YouTube allows performing artists to **upload their content, bypassing labels**



As acknowledged by musician Amanda Palmer, who has extended the **participation of fans** as stars and content makers of her (music) videos



MAKING MUSIC A PRIORITY

Since 2015, YouTube has offered more specific features to ease distribution through **YouTube for Artists**



DRAWBACK OF THE DEMOCRATISATION

Expectation that performing artists must continuously engage in **self-promotion and audience engagement**





YOUTUBE AS A **PREFERRED CHOICE**

Users value the **diverse** content, which underscores its market versatility in shaping consumption



SIGNIFICANT PRESENCE

47% of music streaming in Western Europe and North America



YOUTUBE AS A KEY PARTNER

Music companies and independent artists managed to double their monthly revenues from music videos



OF

Over \$12 billion as of January 2020, including \$3 billion to rightsholders globally in 2019



GAP



VALUE GRIEVANCES

YouTube asserts that it was making returns, but record companies and publishers disputed



MORE COMPLEXITY ARISES

Contribution of revenues through **uploaded content from users** remains a discussion



Users can contribute by uploading videos from live performances or performing/streaming the songs in their own uploaded content







RECORD LABELS AND YOUTUBE

Labels find YouTube both a promotional boon and a disruptor of traditional revenue models



LABELS ADAPT

By leveraging YouTube's vast audience for marketing purposes and creating visually appealing content



ROLE OF CONTENT ID

Helping rights owners monitor, remove. and monetize unlicensed uploaded content

CONTENT ID

HOW

OF **IMPLICATIONS**

Testing the limits of copyright infringement, transforming identified content as potential commodities



OF

ON



ROLE ADVERTISING

The **backbone of YouTube's revenue model**, creating a symbiotic relationship between performing artists and monetisation



For performing artists: opportunity to monetise their content through ad revenues



IMPLICATION RELIANCE

Artists must optimize their content for maximum viewer engagement to attract advertisers

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Leading to a **compromise** of artistic integrity while overshadowing the music's artistic value





BEYOND MERE ACCESSIBILITY

YouTube's role is **amplified by its algorithms** that influence what music gets heard and promoted



Its ability to generate personalised recommendations based on user behavior **shapes listening habits and industry trends**



A CHALLENGE FOR DIVERSE CONTENT

The recommendation system **benefits popular and trending content**, often at the expense of niche genres



Demonstrates how YouTube controls the music distribution landscape by **subtly directing user choices**





STREAMLINED MUSIC NAVIGATION

Through assistive playlists, collaborative playlists, personalised playlists, and mood and genre playlists



MORE CONVENIENCE

The open access, requiring no login, enhances its convenience and widespread use among users



SOUNDTRACKING CONFIGURATIONS

Users often favour using YouTube on a computer while working, while MSS on a phone during commutes









MUSIC CREATORS REMAIN INTEGRAL

This includes songwriters (composers or lyricists), performers or performing artists, and producers



OTHER IDENTIFIED STAKEHOLDERS

Based on the findings, other key stakeholders include **record labels, music aggregators, MSS, UGC platforms, third-party playlisters, and end users**

PageOUTSIDEOFPageRECORDED MUSIC

Collecting societies, advertisers, and data intelligence companies influence the evolving interconnected dynamics

H

Necessitate an ecosystem perspective





RATIONALE FOR AN ECOSYSTEM

Understanding the new dynamics from the widespread adoption of MSS is crucial to identify opportunities for value creation



This process is **aided by incumbents' collaboration** with new 'translating' actors, such as music aggregators



FURTHER JUSTIFICATIONS

The ecosystem approach recognizes that the recorded music industry is not organized in a linear fashion, but a network of interdependent entities



DIVERSITY CONSIDERATIONS

The need for an ecosystem approach is also underscored by the diversity of agents with different strategies, goals, and actions

UNDERSTANDING INTERCONNECTEDNES May help in identify overlooked cooperation and potential cocreation of value



LEVERAGING INTERDEPENDENCY

The increased interdependency has motivated firms like BMG and Kobalt, for example, to leverage proprietary technologies from outside of the music sector



THE APPROACH OFFERING BENEFITS

As exemplified by the Music Modernization Act of 2018

Collaboration from cross-industry stakeholders led to the modernisation of mechanical licensing, while expanding protection



Fairness discussions





HOW THE ISSUE EMERGED

Through **the restructuring of power dynamics** that transcends beyond the traditional gatekeepers

that

In the wake of playlists, **curatorial power** emerges to govern how music is distributed, and consumed

Fairness discussions are implications from:

- 1. shifting locus of power
- 2. cultivation of information asymmetries
- 3. skewed distribution of royalty payouts

Information asymmetries appear due to the **lack of transparency** in how music reaches users, while strategies that foster these asymmetries contribute to **unfair royalty payouts**





SHIFTING LOCUS OF POWER

Increased influence of **personalised**



recommendations and their role in creating platform dependence

Gatekeeping power no longer solely rests with major labels, as **curatorial power assumes a more dominant role**



Because of this, users who rely on personalised playlists can be easily trapped in a **filter bubble** that **limits their exposure** to **diverse** content





CURATORIAL POWER DILEMMA



Algorithms for playlists rely heavily on **user feedback** and the consequences of a **cold-start problem** Even on playlists that are monitored by in-house curators, **certain items** would always be prominently featured due to the constant readjustments of ranks



If the practice continues to persist, it will **imperil the visibility** of music and exacerbate **information asymmetries**



Information asymmetries are intricately linked to concerns surrounding transparency



SE TRANSPARENT

Stands out as many concerns are directed towards the **unfair negotiating conditions**



EXCLUDED STAKEHOLDERS

Songwriters and performers are often excluded from negotiations, which has led to an ongoing issue of a lack of transparency **how their music is recommended**



Response: resorting to optimisation strategies





OPTIMISATIONSTRATEGIES

Approaches that involve strategic **adaptation to suit the demands** of specific platforms



P ■ IMPLICATION OF ■ IMPLEMENTATION

Reflects a trend that resembles the **exploitation** of digital platforms for economic gains



EXAMPLES OF OPTIMISATION

Shorter songs, cramming attention-grabbing devices into the first 30 seconds, hiring companies to inflate the play counts, and altering the sonic features for inclusion in popular moodbased playlists



Optimisation strategies have the potential to **skew the distribution of royalty payouts** due to the pro-rata model PRO-RATA MODEL OF REMUNERATION Based on how many plays a track has in relation to all other tracks that are played simultaneously



When taking this model into account, the calculation of payouts for providers with relatively lower capital for engaging in optimisation strategies might be affected





REFINING PAYOUT MODELS

Spotify, for instance, has implemented a revised approach to **prevent attempts for "gaming the system**" (among others) New requirement: a minimum threshold of 1,000 streams within the preceding 12 months for a given track to begin generating royalties and be factored into the royalty pool calculation



Its contributing consequence on fair distribution of royalty payouts remains elusive


Thank You

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Aguiar, L., & Waldfogel, J. (2018). Platforms, Promotion, and Product Discovery: Evidence from Spotify Playlists (Working Paper 24713). National Bureau of Economic Research. <u>https://doi.org/10.3386/w24713</u>

Ali, M. M., Karlsson, J., & Skålén, P. (2021). How Has Digitalisation Influenced Value in the Music Market? International Journal of Music Business Research, 10(2), 53–63. https://doi.org/10.2478/ijmbr-2021-0007

Amos, J. (2024). The Music Business for Music Creators: Industry Mechanics for Contemporary Creators (1st ed.). Focal Press. https://doi.org/10.4324/9781003452119

Anderson, A., Maystre, L., Anderson, I., Mehrotra, R., & Lalmas, M. (2020). Algorithmic Effects on the Diversity of Consumption on Spotify. Proceedings of The Web Conference 2020, 2155–2165. https://doi.org/10.1145/3366423.3380281

Baracskay, I., Baracskay Iii, D. J., Iqbal, M., & Knijnenburg, B. P. (2022). The Diversity of Music Recommender Systems. 27th International Conference on Intelligent User Interfaces, 97–100. <u>https://doi.org/10.1145/3490100.3516474</u> Barata, M. L., & Coelho, P. S. (2021). Music streaming services: Understanding the drivers of customer purchase and intention to recommend. Heliyon, 7(8), e07783. <u>https://doi.org/10.1016/j.heliyon.2021.e07783</u> Baskerville, D., & Baskerville, T. (2020). Music business handbook and career guide (12th edition). SAGE. Besseny, A. (2020). Lost in spotify: Folksonomy and wayfinding functions in spotify's interface and companion apps. Popular Communication, 18(1), 1–17. https://doi.org/10.1080/15405702.2019.1701674

Beuscart, J.-S., Coavoux, S., & Garrocq, J.-B. (2023). Listening to music videos on YouTube. Digital consumption practices and the environmental impact of streaming. Journal of Consumer Culture, 23(3), 654–671. https://doi.org/10.1177/14695405221133266

Bockstedt, J. C., Kauffman, R. J., & Riggins, F. J. (2006). The Move to Artist-Led On-Line Music Distribution: A Theory-Based Assessment and Prospects for Structural Changes in the Digital Music Market. International Journal of Electronic Commerce, 10(3), 7–38. <u>https://doi.org/10.2753/JEC1086-4415100301</u>

Bonini, T., & Gandini, A. (2019). "First Week Is Editorial, Second Week Is Algorithmic": Platform Gatekeepers and the Platformization of Music Curation. Social Media + Society, 5(4), 205630511988000. https://doi.org/10.1177/2056305119880006

Bonini, T., & Magaudda, P. (2024). Platformed! How Streaming, Algorithms and Artificial Intelligence are Shaping Music Cultures. Springer Nature Switzerland. <u>https://doi.org/10.1007/978-3-031-43965-0</u>

Buccafusco, C. J., & Garcia, K. (2021). Pay-to-Playlist: The Commerce of Music Streaming. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.3793043

Bürkner, H.-J. (2016). Exploring the "360 Degree" Blur: Digitization, Sonic Capital, and the Strategic Orientations of Electronic Indie Labels. In The Production and Consumption of Music in the Digital Age. Routledge.

Chodos, A. T. (2019). What Does Music Mean to Spotify? An Essay on Musical Significance in the Era of Digital Curation. INSAM Journal of Contemporary Music, Art and Technology, 2, 36–64. <u>https://doi.org/10.51191/issn.2637-1898.2019.2.2.36</u>

Reconfiguring the value networks for recorded music

Coelho, M. P., & Mendes, J. Z. (2019). Digital music and the "death of the long tail." Journal of Business Research, 101, 454–460. <u>https://doi.org/10.1016/j.jbusres.2019.01.015</u>

Colbjørnsen, T., Hui, A., & Solstad, B. (2022). What do you pay for all you can eat? Pricing practices and strategies in streaming media services. Journal of Media Business Studies, 19(3), 147–167. https://doi.org/10.1080/16522354.2021.1949568

Commission, E., Directorate-General for Education, S., Youth, Culture, Hoelck, K., Engin, E., Airaghi, E., Romainville, J., Knotter, S., Kern, P., Le Gall, A., De Voldere, I., Durinck, E., Ranaivoson, H., & Pletosu, T. (2017). Mapping the creative value chains – A study on the economy of culture in the digital age – Final report. Publications Office. https://doi.org/doi/10.2766/868748

Cooke, C. (2020). Dissecting the digital dollar (Third edition). Music Managers Forum.

Covington, P., Adams, J., & Sargin, E. (2016). Deep Neural Networks for YouTube Recommendations. Proceedings of the 10th ACM Conference on Recommender Systems, 191–198. <u>https://doi.org/10.1145/2959100.2959190</u>

Cusumano, M. A., Gawer, A., & Yoffie, D. B. (2019). The business of platforms: Strategy in the age of digital competition, innovation, and power (First edition). Harper Business, an imprint of HarperCollinsPublishers.

de-Miguel-Molina, B., Boix-Doménech, R., & Rausell-Köster, P. (2021). The Impact of the Music Industry in Europe and the Business Models Involved in Its Value Chain. In B. de-Miguel-Molina, V. Santamarina-Campos, M. de-Miguel-Molina, & R. Boix-Doménech (Eds.), Music as Intangible Cultural Heritage (pp. 9–25). Springer International Publishing. https://doi.org/10.1007/978-3-030-76882-9_2

Dolata, U. (2020). The digital transformation of the music industry. The second decade: From download to streaming (SOI Discussion Paper 2020–04). Universität Stuttgart, Institut für Sozialwissenschaften, Abteilung für Organisations- und Innovationssoziologie. <u>https://hdl.handle.net/10419/225509</u>

Eriksson, M. (2020). The editorial playlist as container technology: On Spotify and the logistical role of digital music packages. Journal of Cultural Economy, 13(4), 415–427. <u>https://doi.org/10.1080/17530350.2019.1708780</u>

Eriksson, M., Fleischer, R., Johansson, A., Snickars, P., & Vonderau, P. (2019). Spotify teardown: Inside the black box of streaming music. MIT Press.

Espinoza-Rojas, J., Siles, I., & Castelain, T. (2023). How using various platforms shapes awareness of algorithms. Behaviour & Information Technology, 42(9), 1422–1433. <u>https://doi.org/10.1080/0144929X.2022.2078224</u>

Freeman, S., Gibbs, M., & Nansen, B. (2024). Stories and Data: Australian Musicians Navigating the Spotify for Artists Platform. Popular Music and Society, 47(1), 22–44. <u>https://doi.org/10.1080/03007766.2023.2286569</u>

Gomes, I., Pereira, I., Soares, I., Antunes, M., & Au-Yong-Oliveira, M. (2021). Keeping the Beat on: A Case Study of Spotify. In Á. Rocha, H. Adeli, G. Dzemyda, F. Moreira, & A. M. Ramalho Correia (Eds.), Trends and Applications in Information Systems and Technologies (Vol. 1366, pp. 337–352). Springer International Publishing. <u>https://doi.org/10.1007/978-3-030-</u> 72651-5 33

Hawkins, G. (2018). The skin of commerce: Governing through plastic food packaging. Journal of Cultural Economy, 11(5), 386–403. https://doi.org/10.1080/17530350.2018.1463864

Heuguet, G. (2024). How music changed YouTube (1.). Bloomsbury Academic.

Hracs, B. J., & Webster, J. (2021). From selling songs to engineering experiences: Exploring the competitive strategies of music streaming platforms. Journal of Cultural Economy, 14(2), 240–257. <u>https://doi.org/10.1080/17530350.2020.1819374</u> Jensen, F. J. (2022). The Impact of Article 17 – A Study into its Effects on the Music Industry's Innovation Processes. International Journal of Music Business Research, 11(1), 3–17. <u>https://doi.org/10.2478/ijmbr-2022-0001</u>

Kasap, O., & Yalcintas, A. (2021). Commodification 2.0: How Does Spotify Provide Its Services for Free? Review of Radical Political Economics, 53(1), 157–172. https://doi.org/10.1177/0486613420924163

Kist, J., & Verboord, M. (2018). The Diffusion of Music Via YouTube: Comparing Asian and European Music Video Charts. In N. Kawashima & H.-K. Lee (Eds.), Asian Cultural Flows (pp. 197–214). Springer Singapore. <u>https://doi.org/10.1007/978-981-10-0147-5_12</u>

Knees, P., Schedl, M., Ferwerda, B., & Laplante, A. (2023). 11 Listener awareness in music recommender systems: Directions and current trends. In M. Augstein, E. Herder, & W. Wörndl (Eds.), Personalized Human-Computer Interaction (pp. 279–312). De Gruyter. <u>https://doi.org/10.1515/9783110988567-011</u>

Kühn, J.-M. (2013). Focused Ethnography as Research Method: A Case Study of Techno Music Producers in Home-Recording Studios. Dancecult, 5(1). <u>https://doi.org/10.12801/1947-5403.2013.05.01.10</u>

Lamprecht, D., Strohmaier, M., & Helic, D. (2017). A method for evaluating discoverability and navigability of recommendation algorithms. Computational Social Networks, 4(1), 9. <u>https://doi.org/10.1186/s40649-017-0045-3</u>

Lange, B., & Bürkner, H. (2013). Value Creation in Scene-based Music Production: The Case of Electronic Club Music in G ermany. Economic Geography, 89(2), 149–169. <u>https://doi.org/10.1111/ecge.12002</u>

Leurdijk, A., & Nieuwenhuis, O. (2012). Statistical, Ecosystems and Competitiveness Analysis of the Media and Content Industries: The Music Industry. LF-ND-25277-EN-N. https://doi.org/10.2791/796

Liikkanen, L. A., & Salovaara, A. (2015). Music on YouTube: User engagement with traditional, user-appropriated and derivative videos. Computers in Human Behavior, 50, 108–124. https://doi.org/10.1016/j.chb.2015.01.067

Luck, G. (2016). The psychology of streaming: Exploring music listeners' motivations to favour access over ownership. International Journal of Music Business Research, 5(2).

Lyons, F., Sun, H., Collopy, D. P., Curran, K., & Ohagan, P. (2019). Music 2025 – The Music Data Dilemma: Issues Facing the Music Industry in Improving Data Management. SSRN Electronic Journal. <u>https://doi.org/10.2139/ssrn.3437670</u>

Maasø, A., & Spilker, H. S. (2022). The Streaming Paradox: Untangling the Hybrid Gatekeeping Mechanisms of Music Streaming. Popular Music and Society, 45(3), 300–316. https://doi.org/10.1080/03007766.2022.2026923

Marshall, L. (2013). The 360 deal and the 'new' music industry. European Journal of Cultural Studies, 16(1), 77–99. https://doi.org/10.1177/1367549412457478

McKelvey, F., & Hunt, R. (2019). Discoverability: Toward a Definition of Content Discovery Through Platforms. Social Media + Society, 5(1), 205630511881918. <u>https://doi.org/10.1177/2056305118819188</u>

Meisel, J. B., & Sullivan, T. S. (2002). The impact of the Internet on the law and economics of the music industry. Info, 4(2), 16–22. <u>https://doi.org/10.1108/14636690210435767</u>

Miller, L. S. (2023). Record Labels and Value Creation in the Streaming Economy: How Labels Amplify Talent in the Modern Music Marketplace. In S. M. O'Connor (Ed.), The Oxford Handbook of Music Law and Policy (1st ed.). Oxford University Press. <u>https://doi.org/10.1093/oxfordhb/9780190872243.013.27</u>

Morris, J. W., & Powers, D. (2015). Control, curation and musical experience in streaming music services. Creative Industries Journal, 8(2), 106–122. <u>https://doi.org/10.1080/17510694.2015.1090222</u>

Morris, J. W., Prey, R., & Nieborg, D. B. (2021). Engineering culture: Logics of optimization in music, games, and apps. Review of Communication, 21(2), 161–175. <u>https://doi.org/10.1080/15358593.2021.1934522</u>

O'Dair, M., & Fry, A. (2020). Beyond the black box in music streaming: The impact of recommendation systems upon artists. Popular Communication, 18(1), 65–77. <u>https://doi.org/10.1080/15405702.2019.1627548</u>

Parliament, U. (2021). Economics of Music Streaming. UK Parliament, The Digital, Culture, Media and Sport Committee, July, 15.

Potts, L. (2012). Amanda Palmer and the# LOFNOTC: How online fan participation is rewriting music labels. Participations, 9(2), 360–382.

Prey, R. (2018). Nothing personal: Algorithmic individuation on music streaming platforms. Media, Culture & Society, 40(7), 1086–1100. <u>https://doi.org/10.1177/0163443717745147</u>

Reconfiguring the value networks for recorded music

Prey, R. (2020a). Locating Power in Platformization: Music Streaming Playlists and Curatorial Power. Social Media + Society, 6(2), 205630512093329. <u>https://doi.org/10.1177/2056305120933291</u>

Prey, R. (2020b). Performing Numbers. The Performance Complex: Competition and Competitions in Social Life, 241. Seaver, N. (2022). Computing Taste: Algorithms and the Makers of Music Recommendation. University of Chicago Press. https://doi.org/10.7208/chicago/9780226822969.001.0001

Siles, I., Ross Arguedas, A., Sancho, M., & Solís-Quesada, R. (2022). Playing Spotify's game: Artists' approaches to playlisting in Latin America. Journal of Cultural Economy, 15(5), 551–567. <u>https://doi.org/10.1080/17530350.2022.2058061</u>

Siles, I., Segura-Castillo, A., Solís, R., & Sancho, M. (2020). Folk theories of algorithmic recommendations on Spotify: Enacting data assemblages in the global South. Big Data & Society, 7(1), 205395172092337. https://doi.org/10.1177/2053951720923377

Singer, H., & Rosenblatt, B. (2023). Key changes: The 10 times technology transformed the music industry. Oxford University Press.

Sun, H. (2018). The times they are a-changin': Digital music value in transition from piracy to streaming. In Digital Piracy. Routledge.

Sun, H. (2019). Digital Revolution Tamed: The Case of the Recording Industry. Springer International Publishing. https://doi.org/10.1007/978-3-319-93022-0

Tofalvy, T., & Koltai, J. (2023). "Splendid Isolation": The reproduction of music industry inequalities in Spotify's recommendation system. New Media & Society, 25(7), 1580–1604. https://doi.org/10.1177/14614448211022161 Oxford Van Dijck, J. (2018). Platform Mechanisms (Vol. 1). University Press. https://doi.org/10.1093/oso/9780190889760.003.0003 Vonderau, P. (2019). The Spotify Effect: Digital Distribution and Financial Growth. Television & New Media, 20(1), 3–19. https://doi.org/10.1177/1527476417741200 Vroom, G., & Sastre Boquet, I. (2014). Spotify: Face the music. IESE Case Study IES473. Waldfogel, J. (2010). Music file sharing and sales displacement in the iTunes era. Information Economics and Policy, 22(4), 306-314. https://doi.org/10.1016/j.infoecopol.2010.02.002

Werner, A. (2020). Organizing music, organizing gender: Algorithmic culture and Spotify recommendations. Popular Communication, 18(1), 78–90. <u>https://doi.org/10.1080/15405702.2020.1715980</u>