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Counting what doesn't count: What AI reveals about the limits of algorithmic measurement

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Shreyansh DERIYA & Chang-Wa HUYNH
ESCP Business School

[Counting what doesn't count: What AI reveals about the limits of algorithmic measurement

Shreyansh Deriya*,
Chang-Wa Huynh**

ESCP Business School

Abstract

Generative AI has not created a new problem for the music industry; it has exposed an old one. The systems that decide what gets surfaced, paid for, and developed on streaming platforms were calibrated for a world in which competent output was scarce. AI has ended that scarcity and revealed that the metrics guiding signing, editorial, and investment decisions cannot see the relational capital: community, biography, cultural resonance, all the elements that turns listeners into fans and make careers. The same blind spot appears to be emerging across other industries exposed to generative AI. The organisations that reform what they measure before regulation forces them to will keep the talent their metrics cannot see. Beyond the economic loss lies a cultural one. A measurement system blind to relational value defunds the layer of any creative or knowledge industry where new forms are tested, scenes form, and craft is transmitted, namely the conditions under which culture renews itself.

Keywords: artificial intelligence, music industry, relational expertise, measurement systems, streaming platforms

*Student, ESCP Business School

**Assistant Professor, ESCP Business School

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Counting what doesn't count: What AI reveals about the limits of algorithmic measurement

The most expensive blind spot in any industry exposed to AI is no longer what its measurement systems cannot detect. It is what they were never designed to see.

The problem: we are measuring the wrong thing

In mid-2025, a band called The Velvet Sundown passed a million monthly listeners on Spotify. The algorithm promoted them. The verified-artist programme accepted them. Reddit users, not Spotify, figured out the band was not real. Independent analysis by Ircam Amplify flagged 10 of 13 tracks as AI-generated at 100% confidence, with 2 more at 98%, and identified the suspected model as Suno 4.5. Deezer added an AI content warning. The band's own accounts eventually conceded the project was “a synthetic music project guided by human creative direction”.^{1 2}

The Velvet Sundown is not a story about AI. It is a story about what happens when an industry measures only what it can count. Music is one of the first major industries where the collision between AI and an entrenched measurement system has widely played out. But the underlying pattern will likely recur wherever AI can produce competent commodity output cheaply, for instance, in journalism, consulting, design, and much of what businesses call “knowledge work.” **The organisations that do not change what they measure will reward what AI produces for free and ignore what it cannot. Those that wait will lose to whoever moves first. What is being hollowed out is not just careers but the conditions under which culture renews itself.**

What makes a creative or expert career matter over time is not only the output. It is also the web of relationships around the person, the community that claims them, the scene that shaped them, the biography or track record that makes the work mean something beyond itself. Pakarinen and Huising (2025) argue that expertise lives in relationships rather than in individuals, and that automation forecasts repeatedly fail because they assume otherwise. Durable value in any creative or knowledge field works the same way. Streaming platforms inherited measurement systems built for one kind of value, the kind they could count, in number of plays, saves, and skips. The same is true of newsrooms that ranked stories by clicks and consultancies that priced by deck pages. AI has not created the blind spot in any of these systems. It has made the cost of the blind spot impossible to ignore.

The Velvet Sundown was an outsider exploiting the vulnerability. The harder fact is that the same vulnerability was exploited from the inside. Liz Pelly's investigative reporting, expanded into the book *Mood Machine*, revealed that Spotify ran an internal programme called Perfect Fit Content, partnering with production companies to fill its biggest playlists: Deep Focus, Cocktail Jazz, Ambient Relaxation, with anonymous, low-cost music in order to stop paying royalties (Pelly, 2025).³ The logic that produced Perfect Fit Content is the same

¹ Dredge, S. (2025, July 4). *The Velvet Sundown may be the first breakout AI band from Suno*. Music Ally. <https://musically.com/2025/07/01/the-velvet-sundown-may-be-the-first-breakout-ai-band-from-suno/>

² Maimann, K. (2025, July 6). How a Canadian's AI hoax duped the media and propelled a 'band' to streaming success. CBC. <https://www.cbc.ca/news/entertainment/ai-band-hoax-velvet-sundown-1.7575874>

³ Pelly, L. (2025, January). The ghosts in the machine. *Harper's Magazine*. <https://harpers.org/archive/2025/01/the-ghosts-in-the-machine-liz-pelly-spotify-musicians/>

logic that failed to catch The Velvet Sundown. A system tuned to count engagement cannot tell the difference between a song that builds a lasting career and one that does not.

The case of singer Chappell Roan shows why detecting AI is not enough. In 2020, Atlantic Records dropped her. This was a decision about which artists to sign and develop, made on the basis of signals that did not yet exist on the surface. (The music industry calls this judgment “A&R,” for artists and repertoire; every creative field has an equivalent, the editor commissioning a writer, the partner deciding which junior to invest in.) She went on to work a series of odd jobs, generating negligible revenue streams. Her debut album, released in September 2023, initially went nowhere. And yet, throughout these silent years, she was building exactly the kind of capital streaming cannot read: themed concerts where fans dressed up, drag queen openers at every stop, a sustained presence in queer community spaces, a biographical narrative of Midwestern queer identity that made her music mean something specific to a specific audience.⁴ By mid-2024 she drew the largest daytime crowd in Lollapalooza history, took six Grammy nominations, and won Best New Artist in 2025. None of it showed up in her metrics. Atlantic had her numbers. They missed the artist.

Detection and recognition are different problems. A platform that perfectly labels every AI track has still not learned to see what Atlantic missed. Relationships are not signals, and any number that we try to substitute them with will be partial and gameable. This is not a story about bad actors. It is what happens when judgement is delegated to a system that rewards what can be counted and treats the rest as noise (Supiot, 2017). A track produced at near-zero marginal cost and a track built over three years of community presence arrive on the platform as identical signals. The same is true of an article generated in seconds and a piece reported over months. The organisations that depend on those signals to allocate investment inherit the blindness and pay for it twice, in the talent they fail to identify and in the talent they sign but cannot develop.

Why it matters: The pipeline is at risk

AI has not disrupted the music industry evenly. It has split it. On one side, a commodity market: infinite supply, near-zero cost, adequate for filling background slots and algorithmic playlists. On the other, a relational economy built on biography, community, and cultural meaning that accumulates over long periods of time. These two markets are now diverging, whereas the infrastructure of the music industry, including how labels decide which artists to sign, was built for a world in which they were the same. The same split is now appearing elsewhere. In journalism, AI-generated content fills aggregator feeds, while the writers whom readers actually pay to follow build subscriber relationships off-platform, through Substack newsletters and Patreon communities that are paid for precisely because the person behind them is known and trusted. In professional services, AI generates competent first drafts while clients increasingly distinguish between deliverables and the judgment behind them. This pattern is not unique to music. Music is just the place where it appeared first.

The numbers on the commodity side are no longer marginal. The IMS Business Report 2025 found that roughly 60 million users engaged with AI music creation apps in 2024, with 10% of consumers reporting they had used generative AI to create music or lyrics.⁵ By November

⁴ Martoccio, A. (2024, September). Chappell Roan: The anti-popstar of 2024. *Flood Magazine*. <https://floodmagazine.com/183325/chappell-roan-the-anti-popstar-of-2024/>

⁵ *International Music Summit*. (2025). *IMS Business Report 2025*. <https://www.internationalmusicsummit.com/news/ims-business-report-2025>.

2025, Deezer was flagging roughly 34% of daily uploads, about 50,000 tracks per day, as fully AI-generated, up from 10% at the start of the year.⁶

The numbers about the relational side tell the same story from the other perspective. For the first time in the streaming era, MIDiA Research documents, streaming revenues grew slower than the total music market in 2025. The fastest-growing category was income from touring, merchandise, and brand partnerships, up 21.5% in a single year.⁷ The industry itself is now confirming this. MIDiA's 2024 independent label survey, published in 2025, found that over half of labels agreed streaming is no longer where artist fandom is built, and three in four said the industry needs a new model alongside it.⁸ Their analysis is sharper than the headline figures suggest: streams have become a symptom of fandom built elsewhere, not a way to generate it.

This is where the pipeline actually breaks. Distinctiveness used to be the entry ticket into the music industry: a genuinely new sound earned algorithmic surfacing, which earned playlist placement, which built the audience a label could then spot and sign. AI has removed the entry ticket. When any sound can be replicated at near-zero marginal cost, uniqueness is no longer rare, and the platform has no reliable way to distinguish a developing artist's track from the tens of thousands of AI uploads that flood the platform the same day. The genuinely new sound that once earned discovery now drowns in a statistical ocean. The same dynamic is now visible in journalism, where distinctive reporting competes for visibility against AI-generated copy that mimics its surface form, and in early-career professional work (such consulting, law, etc.), where the analytical tasks juniors used to do to learn the craft are exactly the tasks AI now performs.

Platform economics complete the breakdown precisely for the artists labels need to find early. Spotify's 2024 policy is to stop paying royalties on tracks that get fewer than 1,000 plays a year. Spotify disputes the precise impact, but the structural effect is not in dispute: tracks below the threshold earn nothing.⁹ The artists most exposed sit in the middle, generating enough to invest in careers, not enough to absorb declining per-stream rates. The platform removes them from the royalty system at the exact moment their relational value is most fragile: when a scene is forming and when a community is starting to claim them. The structural pattern, measurement systems that systematically squeeze the developing tier just as it most needs investment, recurs in adjacent industries: freelance journalists below the algorithmic threshold for ad revenue, designers underbid by AI-assisted commodity output, junior analysts whose work is now done by a model.

What is at stake is way more than a purely economic matter. The overwhelming majority of talent rendered invisible by these signals is comes from specific communities: queer, regional, non-Anglo, working-class, whose value emerges from local belonging that the metrics ignore. This is not only an economic loss. It is a failure of recognition, organisations

⁶ Wendel, J. (2025, November 13). *Deezer/Ipsos survey: 97% of people can't tell the difference between fully AI-generated and human made music – clear desire for transparency and fairness for artists*. Deezer Newsroom. <https://newsroom-deezer.com/2025/11/deezer-ipsos-survey-ai-music/>. Figures updated from Deezer's April 2025 disclosure of ~20,000 tracks/day (18% of uploads).

⁷ MIDiA Research. (2026, March 16). *Global recorded music revenues up 9.4% in 2025*. <https://www.midiaresearch.com/blog/global-recorded-music-revenues-up-94-in-2025>

⁸ MIDiA Research. (2024). *Independent Label and Distributor Survey 2024*. Figures cited in MIDiA Research. (2026, February). *What is the value of a stream in 2025?* <https://www.midiaresearch.com/blog/what-is-the-value-of-a-stream-in-2025>

⁹ Bonilla, A. (2025, April 17). *Spotify Responds: Did the 1000 Stream Rule cost Artists \$47M?* Hypebot. <https://www.hypebot.com/did-the-spotify-1000-stream-rule-cost-indie-artists-47-million-spotify-responds/>
Underlying data: Luminate, 2024 year-end report.

making decisions about people without seeing them. And what begins as a reputational issue is becoming a regulatory one: the EU AI Act's labelling provisions take effect in August 2026, and US litigation around AI training is escalating. These regimes will set the standard for every industry, not just music.

The shift from product to performance

The shift we are calling for has already begun, as evidence from the market confirms. In 2025, Bad Bunny performed a 31-show residency at the José Miguel Agrelot Coliseum in San Juan, Puerto Rico. *The New York Times*, citing Moody's Analytics, put total associated spending at roughly \$400 million.¹⁰ The number is not the argument; what the residency produced beyond it is. Analysis by the AMW Group documented large spillovers across local cultural producers: artisans reported a 340% increase in sales of traditional *vejigante* masks in the city of Ponce, bookstores reported a 280% increase in sales of Puerto Rican authors, and local salsa, bomba, and plena artists reported an average 65% income increase during the residency period.¹¹ Artists who shared the stage with Bad Bunny, including Chuwi and Los Pleneros de la Cresta, are now touring internationally as a direct result of this appearance.¹² Fans flew in not for the concert alone but for the island, booking tours of Bad Bunny's hometown and buying locally made goods tied to his identity. They were not consuming a product. They were taking part in a relational experience tied to a specific place, a specific community, a human being whose belonging to that community is real and reciprocal. No AI artist can produce this kind of impact for a geographic community, because no AI artist belongs to one.

Taylor Swift's Eras Tour shows the same logic at industrial scale. The tour grossed over \$2 billion across 149 shows with an average of 68,000 attendees per night, the first tour in history to pass that mark. That is what relational experience commands above the streamed product. AI cannot replicate that.¹³

But AI has created a logic that could almost be expressed in terms of scarce resources: abundant commodity output versus the durable, unique relational experience that AI cannot reproduce. In the music industry, sound has become an infinitely replicable product, whereas presence, community, and the live moment — the relational aspect — is unique. The same logic may be reshaping other industries exposed to generative AI. The journalism subscriptions that endure may follow the writer, not the headline. The clients that stay pay for the relationship and the judgment, not the deliverable. What is being decided in each industry is not who captures the next decade's revenue but whether the slow-built work through which culture renews itself still has somewhere to grow.

¹⁰ Kulkarni, S. S. (2025, September 1). It's usually Puerto Rico's slow season. This year, Bad Bunny's in town. *The New York Times* <https://www.nytimes.com/2025/09/01/business/bad-bunny-puerto-rico-economy.html>. Moody's Analytics estimated \$250 million in direct impact and \$400 million in total associated spending.

¹¹ Diaz, V. (2025, December 28). How much did Bad Bunny's residency actually generate for Puerto Rico? *Rolling Stone*. <https://www.rollingstone.com/music/music-latin/bad-bunny-economic-impact-residency-puerto-rico-1235490958/>

¹² Watch Bad Bunny's extended interview with Willie Geist. (2025, September 15). [Video]. NBC News. <https://www.nbcnews.com/news/latino/bad-bunny-residency-ends-puerto-rico-boost-economy-rcna230833>

¹³ Willman, C. (2024, December 11). Taylor Swift's Eras Tour ends as history's first \$2 billion tour. *Variety*. <https://variety.com/2024/music/news/taylor-swift-2-billion-eras-tour-gross-1236243254/> Final tally: \$2,077,618,725 in ticket sales across 149 shows with total attendance of 10,168,008 (~68,000 per show).

Recommendations: what organisations must do

The first instinct in every industry exposed to AI has been to treat the problem as a detection problem: flag AI content, require disclosure, build better filters. Deezer launched an AI detection tool in January 2025. Grammy eligibility rules now require human authorship. These responses are necessary. They are not sufficient. Detection tells an organisation what an output is not. It says nothing about who is worth investing in.

If you make signing or commissioning decisions in any field where AI now floods the supply, A&R for a label, editing pieces for a publication, partner-track decisions in a firm, the question to ask before committing has changed. It is no longer just what the surface metrics say. It is what the surface metrics cannot say. Three shifts make that question answerable.

Reshape the platform deal so it pays for depth of relationship, not volume of output. In music, this means the artist-centric royalty model. The current system pools all subscriber revenue and pays it out by share of total platform-wide streams, favouring the most-streamed artists regardless of how deep their relationship with fans runs. Deezer and SoundCloud have already pioneered an alternative in which each user's subscription flows directly to the artists they listen to. Universal Music Group CEO Lucian Grainge has declared the arrival of "Streaming 2.0" centred on the same principle.¹⁴ Make this kind of distribution a standard term in new platform deals, not a concession negotiated case by case. And it rewards exactly the kind of audience that signals an artist is worth developing.

Build a direct relationship with your most loyal audience, rather than waiting for the platform to surface it. In music, this means superfan tiers. Tencent Music's Super VIP tier, priced at roughly five times the standard subscription, surpassed 20 million subscribers by the end of 2025, reaching approximately 16% of their paying subscriber base.¹⁵ Goldman Sachs Research had projected superfan monetisation could generate roughly \$4 billion in incremental annual revenue by 2030, on the assumption that 20% of subscribers would pay double.¹⁶ Spotify rolled out a three-tier Premium structure, including a higher-priced Premium Platinum, in five emerging markets in November 2025, with a dedicated superfan tier reportedly in development.¹⁷ The relationship between a creator and their most ardent fans is precisely the asset platforms have failed to capture, and the organisations closest to the creator are best placed to monetise it directly.

Recognise relational labour as a signal at the moment of decision, and as a development priority afterwards. This is the shift that goes furthest. People building careers do not only produce outputs. They show up in communities, work in regional or

¹⁴ Stassen, M. (2025, February 4). Read Sir Lucian Grainge's 2025 memo to Universal Music Group staff: 'Streaming 2.0 will represent. *Music Business Worldwide*. <https://www.musicbusinessworldwide.com/read-sir-lucian-grainges-2025-memo-to-universal-music-group-staff-the-streaming-2-0-era-has-arrived/>

¹⁵ Stassen, M. (2026, March 17). Tencent Music now has 20M+ 'Super VIP' subscribers. Here's what that means for China's. *Music Business Worldwide*. <https://www.musicbusinessworldwide.com/tencent-music-now-has-20m-super-vip-subscribers-heres-what-that-means-for-chinas-largest-music-streamer/>. Super VIP tier at ~15.7% of TME's 127.4 million paying music subscribers as of Q4 2025, at approximately RMB 40/month versus RMB 8 standard.

¹⁶ Music in the Air: Focus on monetisation, emerging markets and AI; updating global music industry forecasts. (2024, May 3). *Goldman Sachs*. <https://www.goldmansachs.com/insights/goldman-sachs-research/music-in-the-air--focus-on-monetisation--emerging-markets-and-ai>. The \$4 billion projection assumed 20% of streaming subscribers would pay roughly double for a superfan tier by 2030.

¹⁷ Stassen, M. (2025b, November 13). Welcome to Spotify Supremium: Higher-priced 'Platinum' subscription tier arrives in India. *Music Business Worldwide*. <https://www.musicbusinessworldwide.com/welcome-to-spotify-supremium-higher-priced-india/>

specialist venues, mentor newer entrants, and accumulate the track record and biographical specificity that wins over the loyalty of audiences or clients. Current decision practice, for instance in A&R, in editorial commissioning, or in partner-track evaluation, treats this work as marketing, as something an organisation gets credit for once it has signed someone, not as input about whether the signing makes sense. Organisations that systematically scout for this kind of signal — sustained presence in a community, specific resonance with a defined audience, depth of repeat engagement across a body of work — rather than virality on a single output will identify talent that metrics will not surface for years, if at all. Again, Atlantic in 2020 had Chappell Roan’s streaming numbers. They had no way to see the artist.

These three shifts are not charitable concessions to the people on the receiving end of the decision. They are the rational response of any organisation that has identified where its future value lies and has not yet built the infrastructure to capture it. What they ultimately require is judgement — the willingness to act on value-based commitments before metrics validate them, especially when value emerges from work that does not fit standard categories (Cudennec & Huynh, 2023). Recognition is not a softer category than measurement; it is the harder one, because it requires organisations to commit to a view of value before the data arrives. What remains is the will to measure the right thing, and the discipline to act on what cannot be measured at all.

What happens if organisations do not act on this themselves? Regulation eventually will. EU AI Act labelling provisions take effect in August 2026, and similar frameworks are being prepared in the US and UK. These regimes will eventually force AI disclosure on platforms, publishers, professional services firms, and educational institutions alike, but disclosure does not solve the problem we have described. It tells consumers what an output is not. The organisations that wait for regulation before they act will find themselves bound by rules designed to capture only the most visible part of the problem, while the people whose value cannot be regulated into visibility will join whoever spotted them first.

References

- Cudennec, A., & Huynh, C. W. (2023). In the mood for odd? The role of affective factors in the evaluation of categorical atypicality. *Poetics*, 101, 101838.
- Pakarinen, P., & Huising, R. (2025). Relational expertise: What machines can’t know. *Journal of Management Studies*, 62(5), 2053–2082. <https://doi.org/10.1111/joms.12915>
- Pelly, L. (2025). *Mood machine: The rise of Spotify and the costs of the perfect playlist*. Atria/One Signal Publishers.
- Supiot, A. (2017). *Governance by numbers: The making of a legal model of allegiance* (S. Brown, Trans.). Hart Publishing. (Original work published 2015).