

Evaluating the Future of Streaming & Content Discovery

As Jim Lucchese mentions, the technology is available for “complex” music discovery features; it’s a case of supply and demand when prioritizing buildout. Here are some potential solutions to consider:

Partnerships: A platform may not be all things to all people which means that the 10% not catered to may start to look for or develop other platforms that do meet their needs, and that eventually connect with Spotify offering another layer to the user experience. This means Spotify doesn’t have to invest as much in an area they don’t see as much value comparatively but potentially strike a mutually beneficial agreement with a partner who does. Of course, since Spotify is so large, a risk factor is that they may believe they are beyond partnering and want everything proprietary.

Charge. Spotify has already developed Spotify for Artists which was thinking of a user experience for a different persona than just listeners, so the 10% becomes another persona with their own area to engage. If they charge for it as an add-on feature, it perhaps becomes more worth their while to develop. Obviously, Spotify saw some value in providing for artists so some of the selling point may be in framing how this meets artist’s needs, not just music head needs. I would rather have music heads who could become superfans finding my music than cater to a large base of passive listeners who will not convert because streaming in their mind is more for passive listening. Now one can pull in number of artists using Spotify to add on to that 10%, perhaps making it a more favorable percentage worth addressing.

ML/AI with User Participation. With advanced machine learning and AI, the lift may not be as much as one thinks. It starts with ensuring those tags/fields are even available to use that maybe the average listener wouldn't think of and requiring that those uploading include something in those areas – which one should easily be able to input if it's their song or someone they manage. Granted the training will be limited to the 10% that search whom validate or not, and training happens with public use as opposed to trying to make the perfect delivery before release to save on hiring additional team members. Maybe one can opt into whether they want to be part of this beta process in return for getting more extended search/result capabilities as that would obviously impact user experience if it wasn't already primed and ready to go.

Diversity in Radio. As far as radio programming, this is a larger issue with the industry being “broken,” in my opinion, and the systematic bias that exists in it as a whole. As long as labels are in bed with radio, the only way there is more diversity on radio is if there is more diversity in label artists represented and those artists are getting the same attention or chance as other artists on the roster. If anything, platforms like TikTok that enable artists to build up some clout before a label deal might allow them to be taken more seriously once on the roster and the label invest in pushing them for radio play. Thankfully, we still have Pandora's hand-curation which will become even more favorable with time for listeners who want more diversity. It also brings into play a discussion of diversity in hiring¹ because the lens of a white person choosing Chinese music for a playlist is going to be different than a Chinese person providing their recommendations of Chinese music.

¹ Lee, L. (2018, April 4). What we do: Two years of diversity work at Pandora - Lisa Lee - medium. *Medium*.
<https://rrrlisarr.medium.com/what-we-do-two-years-of-diversity-work-at-pandora-68cea63e0bc8>

Diversity in Streaming. Streaming services also cut deals with labels, so unfortunately some of the same issues above apply here as they do in radio. And a lot of the aforementioned issues regarding streaming crosses over into the discussion of diversity in programming. At first, it seems simple – adding gender and race fields/tags because as a supplier of music, I want my music to be found and thus if the fields are provided, I am inclined to fill them in. One issue we run into is that a model has already been trained without this information. Without going into too much detail, one can overfit/overtain a model² so it doesn't perform as well (or accept) additional queries on new data as well as previous ones, even if the questions are similar other than the specific field/tag one is referencing. In my footnote, there are some solutions mentioned for this.

Equity & Fairness In General. Wrapping up with the fair end equitably visibility, from a previous discussion we had in this course where I outline how streaming favors major artists, the models will be trained on what users engage with and search the most. And because groupthink exists and general consumers are like sheep with a herd mentality that seem to just accept what is served up to them rather than make their own mind up, this is more of a public shift in support for indie music that needs to happen to change that game that I am not sure will ever happen at the scale we want it to. This is why platforms are now popping up that only have indie artists on them for those who want a different experience and to serve the indie artist community. They may not get the same critical mass so it starts with the mission of the platform; are they in it just to make money or social change. Maybe it's a matter of letting Spotify remain this mass scale passive listening platform and developing new platforms for direct-to-fan or for those who truly want to support artists instead of trying to blend two worlds that may not mesh well together.

² Gupta, R. (n.d.). *Cracking the code: Understanding and avoiding model overtraining*. <https://www.c-sharpcorner.com/article/cracking-the-code-understanding-and-avoiding-model-overtraining/>

Streaming Service Frustrations. Many of my own frustrations with streaming services were already mentioned above but to be a bit more explicit about it, I will list off a few:

- Recommendation algorithms often lead to repetitive or predictable suggestions, failing to introduce truly new and diverse music.
- While algorithms aim to personalize, they sometimes miss the mark, offering suggestions that don't align with a user's evolving tastes or moods.
- Streaming platforms prioritize popular and mainstream music over lesser-known or independent artists, making it hard to discover niche or underground tracks.
- I often encounter the same songs across multiple playlists, leading to a sense of fatigue and a desire for fresher, more varied content. Curated playlists can be hit-or-miss in terms of quality and relevance.
- The sheer volume of available music can be overwhelming, making it difficult for me to sift through and find new favorites or develop true superfandom.
- Search and discovery interfaces are cluttered or unintuitive, which can hinder the discovery process, or the metadata is not being collected for more granular searches.
- Geographic limitations on music availability can be frustrating if trying to explore international music scenes.
- I often desire more contextual information and storytelling around new music, such as background on artists or the creation of specific tracks.
- The integration (or lack thereof) with other social media or music-related platforms can affect how users discover and share music.
- For free-tier users like myself, frequent ads can disrupt the discovery experience.

Though I also realize that the platform has to make money somehow.

The Ideal Streaming Platform. There are platforms like GreyMatter.fm and Traklife Media³ – both of which I have worked with in full transparency – who are already trying to resolve some of these issues. I have included reference links to my podcast⁴⁵ where I interview both founders. In short, both are trying to tackle the personalization, social and contextual elements missing from Spotify. Traklife Media gets indie artists from its platform on a personalize iHeartRadio radio station. Side note: a platform called Radiolize⁶ enables one to create their own radio stations.

With players such as Pex who are involved in deep graph interlinking and tracking of out social, digital and streaming footprints, being able to bring that in an all-in-one platform that really then becomes more than just an ideal streaming platform but more of an overall engagement platform is where we need to be. This is a larger discussion than what this paper will allow because what I am suggesting is then something that replaces current social media and streaming platforms by no longer having them be separate platforms.

What does this look like? While Spotify does let me know what my friends are listening to, I should be able to contextually search across multiple connections and types of engagements in a graph historically. Rather than the platform clustering for me, I am able to choose the combination of clustering I want – not just mood or genre but even activity based. I imagine conversations in threads as one is listening to music, seeing where placements of the music might be like in a game I may want to play so that cross medium engagement with the music can take place, direct messaging the artist while listening to their music or being able to set up livestream sessions in the platform. I find it interesting that the Spotify Live app was not a success but I think it also comes down to execution and the fact it was a separate app that

³ <https://traklife.com/music/>

⁴ <https://open.spotify.com/episode/5TaQQY4gwEVFZIUURLXRCm?si=8793fe1cfadf4574>

⁵ <https://open.spotify.com/episode/7wNZtzm8Sv5zfh5l6cCLJi?si=420cf3876a464d0f>

⁶ <https://radiolize.com/>

probably needed to be more integrated⁷. The final piece that would make it all worthwhile is a truly decentralized blockchain platform that has no corporate gatekeepers.

While the potential is there, adoption tends to be the hardest part because there is a transfer cost like if I have already invested all my time creating playlists and liking artists on one platform or I have all my social media posts and connections already on one platform to then ask me to start afresh on another platform. But I leave the reader to ponder: what if the sheep were no longer fed content and told what to like so then they actually had to start exploring on their own again? We have this assumption that most people probably want to be told what to like, but maybe we just trained them to be this way and can retrain them. Think of how music in games has been so popular in part to active listening because they are carrying out an activity while the music plays rather than the lean back approach – maybe we need more of that.

⁷ <https://www.engadget.com/spotify-is-shutting-down-its-standalone-live-audio-app-211056429.html>