Written evidence submitted by Cognizant

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Economics of Music Streaming

Cognizant response to UK Parliament call for evidence

Who we are

Cognizant is one of the world's leading professional services companies, helping clients become data-enabled and data-driven in the digital era.

Our industry-based, consultative approach helps companies evolve into modern businesses. By leading clients in leveraging technologies essential to modern enterprises such as artificial intelligence, digital engineering, IoT and cloud, we enable new business and operating models that unlock new value in markets around the world.

Cognizant's unwavering focus on our clients is led by our nearly 300,000 associates, who deliver services and solutions tailored to specific industries and the unique needs of the organizations we serve.

Why we are responding

We work with clients across the media and entertainment industry including record labels and streaming platforms.

The media and entertainment sector is undergoing significant technology enabled disruption which is delivering increased value and upgraded experiences to consumers in ways that were simply not conceivable when industry value chains, regulatory frameworks and practices evolved.

We believe the best way to enable innovation and fair value capture across the value chain is to start by creating an environment where there is effective and efficient data sharing.

For artists and labels this will shine a light on what's driving their revenue and enable them to target their innovation and shape their negotiations.

What are the dominant business models of platforms that offer music streaming as a service?

Subscription and Ad supported models are common

Subscription and ad-supported models are dominant, however, even Spotify who has long operated an advertising supported offering derives only 7% of revenue from this [1], the rest coming from paid subscription [2].

Different subscription models are possible, artists or labels can go direct to consumer – technology barriers to this are low. However this is unlikely to pay for all except the most popular and established artists, in fact this is likely to be more useful in negotiating with mass market streamers.

According to Hu [3] there are four types of music subscription model ranging from niche, artist centric, where audiences are small but artist loyalty is strong, through to mass market where audiences are large but artist loyalty is negligible. In artist centric offers there is potential for artists to capture a larger share of value as they cannot be substituted however, volumes are small so revenue opportunities remain limited for all but the most successful artists.

The ability to bundle with other products and services or cross-subsidise from other activities is more likely to drive the dynamics of the market and obligate innovation.

Including music as part of a service like Amazon Prime or cross-subsidising music streaming from mobile or tablet device sales obligates competitors who do not benefit from these options to invest heavily in innovation. They need innovation velocity in areas such as user experience, quality and social features to ensure customers have a compelling reason to choose their services where they are likely to have to pay more than a service bundled elsewhere.

Data and AI may change business models

An interesting area for continuing innovation is Artificial Intelligence (AI) based recommendation systems to create unique tailored experiences for listeners. However, for a pure music streaming company, basing recommendations only on past listening behaviour may be limiting compared to companies who provide a broader range of services. The companies with broader services and more customer interactions can form more complete profiles of the individuals using their services which may enable better recommendations and related features. The additional data available to companies with broader services may therefore enable them to out-innovate the pure streaming companies and drive consolidation and concentration of the mass market streaming platforms.

Have new features associated with streaming platforms, such as algorithmic curation of music or company playlists, influenced consumer habits, tastes, etc?

Playlists and algorithmic recommendations strongly influence what audiences listen to

A compelling user experience is one of the most powerful things any streaming platform can invest in to differentiate. A significant proportion of listening is driven by curated playlists controlled by the streaming platforms, as long ago as 2016, 31% of all listening was driven by such playlists in the USA [4], at which point this had already surpassed album listening (artist controlled playlists).

This shifts market power from artists and labels to platforms

When listeners are choosing a platform playlist, whether curated by a human, or created uniquely for them based on an algorithm, they are empowering the streaming platform and commoditising the artists and record labels. Consider that in this case it's far easier for the platform to cover any gaps in their catalogue, thus the platform walking away from any rights negotiations can be a more credible threat. It also confers a king-making role for streaming platforms, allowing them to select which new or aspiring artists get prominence and which do not. According to the Guardian in 2017 [5], which was an eternity ago in digital platform evolution, "if you're not on them [playlists], you might as well not exist." Finally, being in control of what the audience hear is a useful tool for the streaming platform to optimise costs, driving more listening to tracks that cost them less or where they have a flat rate deal – the effect therefore being similar to payola [6].

Curated playlists are one thing but personalised algorithmic recommendation is another

Curated playlists that listeners can choose to listen to which are published and available for all to see are analogous to published news from a trusted source and feasible for all industry participants and interested parties to scrutinise. Algorithms that are delivering uniquely curated experiences on an individual level are more like social media and enable platforms the ability to shape what is heard with much less scrutiny.

AI can be bias – and can lead to harm if not properly managed.

When every audience member is receiving a unique experience it is particularly challenging to ensure that the experience is as intended. Consider that AI algorithms learn based on human feedback – if there is any bias of any kind in this feedback it will be captured and form part of the algorithm. Without the right management and controls, algorithms can lead to harm. As an example, a listener accidentally selects a track with violent lyrics, but this is recognised by algorithms which embedded similar content with potentially more violent lyrics in the individual's experience. This can translate in to increased levels of aggression in the listener [7], proper governance is therefore essential.

What has been the economic impact and long-term implications of streaming on the music industry, including for artists, record labels, record shops, etc?

Piracy disrupted physical sales then streaming disrupted piracy

As of 2018 in the USA, according to the RIAA, 75% of recorded music revenue came from streaming. Among other substitutes, streaming has displaced piracy which was rampant in the early 2000s [8].

Consider the early 2000s piracy ‘value proposition’ – easy access to a large catalogue, quick and easy download, no marginal cost for trying a new artist, curate your own library.

In many ways subscription simply monetised parts of this value proposition – arguably making it easier to consume music legally than to pirate, which was not the case before.

How can the Government protect the industry from knock-on effects, such as increased piracy of music? Does the UK need an equivalent of the Copyright Directive?

Piracy remains a threat

While piracy may not be an existential threat to the extent that it was perceived in the early 2000s it has not diminished entirely and will act as a substitute for legal consumption in case consumers are not satisfied with streamers features, quality or price.

Piracy will therefore, for the foreseeable future, place an upper bound on the price the market will bear for music.

Technology alone has not provided a piracy magic bullet

While many technologies such as digital rights management, encryption, fingerprinting and watermarking exist, they have not been able to systematically remove piracy. It's our view that this will remain the case.

Technologies that allow us to match content and identify pirated music on various platforms are a useful tool but only when these are deployed as part of a broader strategy that includes actions to disrupt pirates such as managing takedowns and working with law enforcement agencies.

Ensuring legislation evolves with the threat is critical

Piracy does not respect international boundaries and music is, by its nature, a global industry. Excess complexity in diverging regulatory frameworks in different territories supports pirates as it makes enforcement activities of intellectual property owners more challenging, slower and more costly.

Critically, copyright law contemplated prior to social networks, video sharing platforms, and widespread use digital technology cannot have foreseen the challenges faced by copyright owners today.

Do alternative business models exist? & How can policy favour more equitable business models?

Digital business models move quickly – can policy keep up?

Digital business models evolve rapidly. Reactive interventions based on specific features of a model or industry arrangement are destined to lag market driven innovation, displace problems or inflict unintended consequences now or in the future. It should not be forgotten that technology, disruption and innovation in the music industry has resulted in a vastly improved value proposition for consumers.

Transparency is key – and can level the playing field across the value chain.

Data is a great equaliser – when participants across the music value chain can all perceive what is happening and base their decisions on facts they are best able to compete and capture a fair share of value.

Creating a regulatory or policy environment that enables and ensures transparent data sharing across the value chain, such that record labels, agents and artists can see not only how many plays they are getting but what is driving these plays, for example playlists and algorithms, they will be in a stronger negotiating position if they are currently undervalued.

Integration and Automaton drive efficiency, reducing friction and cost.

Where data is being transparently shared between industry participants it is vital this is done in real time and via machine readable methods such as public facing APIs (Application programming Interfaces). This will enable systems at each participant to automatically receive and process the information they need and enable them to make business and creative decisions to rapidly capture market trends.

Clean, machine readable data will allow all participants to invest in automating their systems and processes, improve their operating efficiency. Improved operating efficiency across the industry can support a greater investment in artists and content creation.

Public Interest

The logic of data transparency could be further extended such that anyone can observe the performance of music on streaming platforms and what has been driven by playlists or artificial intelligence. This would enable proper scrutiny and potentially reduce the impact of issues similar to payola or harmful bias in algorithms.

References

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