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# The challenge of monetizing consumer behaviour via advertisements in a multi-sided music business environment

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## 1. Abstract

*Music is no longer a separate product in itself – songs and albums have become commoditized, and music is now considered by some as a means to an end. Today, it can be legitimately argued that it is consumer behaviour, delivery channels, and the experience of music rather than the tracks themselves that are monetized. This has led to the introduction of new business models, such as ad-supported music streaming and download services, in order to attempt to create value by taking advantage of the changing nature of music consumption.*

*Today's music industry is no longer represented by a linear value chain, but a complex, multi-sided network, with stakeholders that include artists, consumers, channel marketers, advertisers, and rights holders, among others. In this multi-sided, inter-dependent, networked environment, no single stakeholder has control over the monetization of music. Though consumers have substantial power and freedom in the network, they alone cannot singlehandedly influence its success or failure, because other participants such as rights holders form a crucial part of the network.*

*With disruptive consumer behaviour transforming linear supply chains into complex networks, the task of monetization has become increasingly challenging. This paper specifically considers the plight of the ad-supported music download service as the central platform of a multi-sided network. It introduces the concept of a multi-sided network, gives an overview of the economic and consumer behavioural relationships in the network, and comments on the viability of a network based around an ad-supported model, based on the findings of a study by Harris [7].*

## 2. Introduction

Large-scale illicit downloading has been taking place for nearly 15 years, and will never be completely eliminated. Such downloading has had a significant negative effect on music industry revenues in

Canada, the USA, and the UK (three of the world's top English-speaking markets for recorded music), with billions in value stripped away in the span of a few years [7,9].

Since the introduction of Napster in 1999, which facilitated large-scale global file sharing, record labels and industry associations had been focusing their efforts on restoring revenues to pre-file sharing levels, perhaps not fully realizing or appreciating how evolutions in technology and consumer behaviour had changed how people were now relating to and interacting with the traditional value chain for music [8,9].

More recently, evolving consumer behaviour has made it ever more clear that restoring revenues to where they were before file sharing took hold is somewhat of a utopian ideal. We now live in an age where music is commoditized, and record labels are 'competing with free', as consumers find alternative ways to obtain music at no cost. Young people in particular are increasingly used to getting content for free online, with the youngest consumers even considering this as socially acceptable behaviour [6,7,14,19,21]. Industry tactics to dissuade illicit downloaders, including threats of, and on occasion actual litigation, have met with negligible success over the years [3,4]. In the United States, where stories of attempts to combat illicit downloading via litigation have frequently featured in the media over the last decade, the reality was that only a very few people were ever actually charged with copyright infringement. The average settlement reached in Recording Industry Association of America lawsuits was around US$3,500 [13].

Content innovation, including new formats, bonus content, and value-added features (e.g. legitimate digital downloads being made available to consumers, buy the physical media and get a digital copy, buy the album and get access to music videos or other featurettes, etc.), has increased unit sales of media; however, even with enormously successful new media formats, what consumers are buying and how they are buying or otherwise interacting with it means that recorded music revenues are still not where they were pre-file sharing (see Figure 1 and Figure 2). For example, when singles were legitimately made available as digital downloads (i.e. every song in an album made available for purchase as a standalone track via label sanctioned channels), unit sales for recorded music increased enormously; but because customers were buying 99 cent singles to get the songs they wanted, instead of ten dollar albums, revenues were not increasing in the way that industry would have hoped. Even amongst consumers who pay for downloads, the way they now purchase music (i.e. appetite for purchasing specific songs rather than albums) has affected how labels sign bands, develop bands, and release albums. Said a label executive in 2007 [9]: '[W]hat we have a lot of now, is people who buy into a song. They're not necessarily artist loyal the same way...people are more song-based now than artist loyal, and that has changed how record companies deal with what we used to term 'artist development' […] that kind of thing has really changed. It's not quite to the point of signing them to three songs as an option, but it's kind of going in that kind of direction' (p. 194).

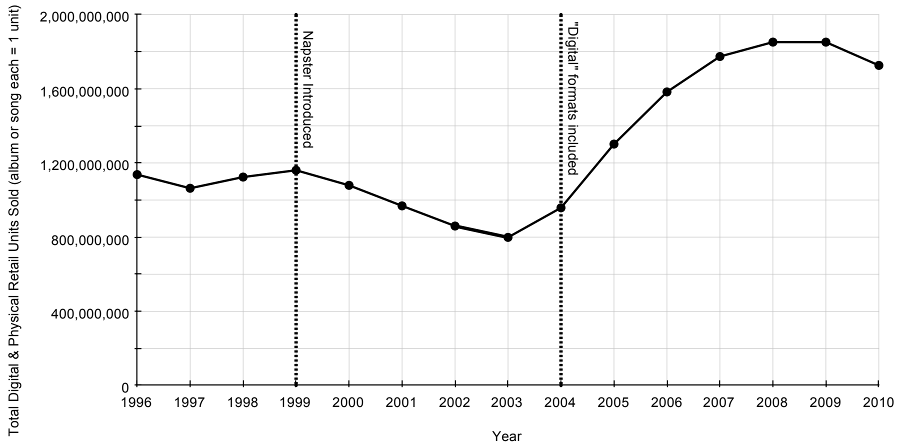


Figure 1: Total physical and digital unit sales in the USA, 1996-2010 [15,16,17]

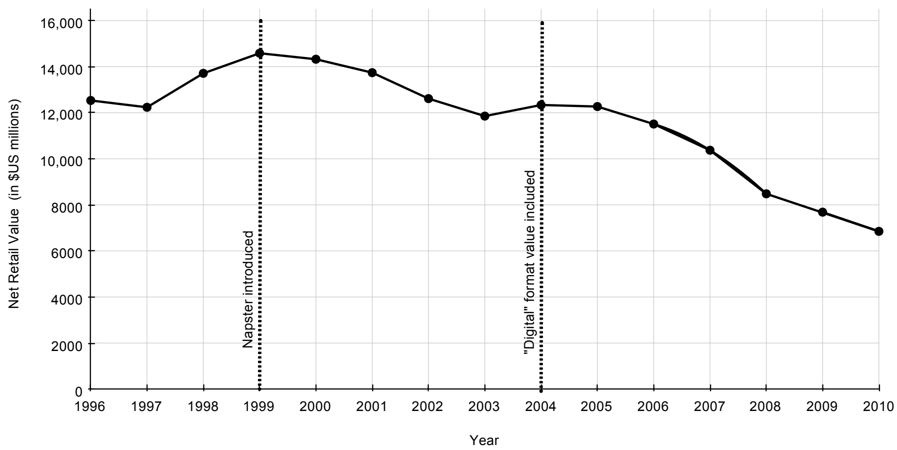


Figure 2: Total retail value of physical media and digital format sales in the USA, 1996-2010 [15,16,17]

The music business is no longer a simple, closed value chain where music is recorded and then a physical piece of media is manufactured and shipped to a store where a customer can buy it – the music business is now a complex, multi-sided network, with myriad stakeholders and complex interactions that create two-way value between individual network participants (to be addressed later in this paper). It is thus important for industry to focus on securing revenues and preventing further revenue erosion, rather than striving for financial targets last reached 15 years ago in an environment that has completely transformed.

Around 2007, revenue generation themes at music industry conferences moved from 360-degree deals (monetizing all aspects of an artists' potential revenue streams, such as recordings, tours, endorsements, and merchandise) towards monetization of consumer behaviour and music distribution channels – specifically, unlocking perceived value in music and the music consumption experience via ad-supported business models. Since then, monetizing experiences and cross-promotional opportunities have increasingly been explored as revenue generation tools – most popularly via ad-supported streaming services (e.g. Spotify, Pandora). The premise of the ad-supported model is that if some people are going to take music for free anyway via illicit downloading (i.e. people who have no intention of ever paying for their music), then industry might as well make the music available for free, but monetize the acquisition/consumption behaviour. This has been explored via completely free services, and more commonly, 'freemium' models. In the case of freemium services, a paid upgrade option is available to users, which provides them with additional features and benefits, and generates additional revenue for the service provider.

In this paper, the concept of an ad-supported download service is examined rather than a streaming service, because a free, legitimate streaming service is not considered to be the closest substitute to an illicit download service, given that a user gets to keep music that is downloaded for later use, but cannot keep music that is streamed.

To date, there has been scant academic literature relating to the understanding of consumer attitudes towards not just ad-supported music services, but ad-supported media content services in general (both streaming and download). This is despite a number of ad-supported music download services having been launched (e.g. SpiralFrog, Ruckus, We7, QTrax, Guvera, Free All Music), only for many of them to be forced to change their business models, and/or end up defunct [7]. In a multi-billion dollar, multi-national industry where large incumbents have faced continually declining revenues and third party companies have the potential to generate significant value, it is important to have an understanding of what consumer attitudes are towards such services, what characteristics they consider important enough to evaluate in their choice to try or continue using a service, and how these aspects contextually align with the concept of a multi-sided network.

This paper specifically considers the plight of the ad-supported music download service, and the multi-sided economic and consumer behavioural relationships such a service is dependent upon. Key aspects of consumer behaviour are introduced for consideration, as are the concept of a multi-sided network, the ad-supported music download service as the core of a multi-sided network, and a discussion of the nature and importance of each relationship in the network, based on the findings of Harris [7].

## 3. Consumer behaviour and ad-supported services

It is important to have an understanding of consumer attitudes towards ad-supported services in order to understand what would attract a person to use such a service, and where an ad-supported platform and user base fit into a multi-sided network.

Harris' mixed methods study [7] focused on users of music services in Canada, the USA, and the UK. The qualitative phase used in analysis consisted of ten face-to-face group interviews of users between the ages of 15 and 34 (four groups in Toronto, four in New York, and two in York). The quantitative phase yielded 239 valid survey responses from users in those same countries, with 74% of participants falling within the 15 to 34 age range, and the remaining participants being 35 or older. The gender breakdown was approximately 60% male and 40% female in both phases. 74% of survey participants had paid for downloads in the previous 12 months, and 67% had used illicit services within the same period.

Participants in Harris' research readily identified positive and negative experiences with many different types of music services, from free to paid, legitimate to illicit, and streaming to downloading. The perceived trustworthiness of a service, the nature of advertising on a service, perceived time delay in obtaining music, perceived adequacy of a service's music catalogue, freedom of use of downloaded files, and ease of using a service were found to be key factors that affect attitudes toward a free, ad-supported music download service.

The perception a person has of a service's trustworthiness (in the context of the format, perceived quality, and content of advertisements, provision of personal information, and perceived safety) is important, but interestingly, not a deal breaker for service usage.

Although many people say they dislike online advertising in general, most people will tolerate it if it is deemed to be of reasonable length and not excessive in relation to the free content received in return. However, the aesthetics of an advertisement affect a user's attitude toward the site and service provider, particularly advertisements that are of questionable quality, presented in an intrusive way. Even so, consumers are still willing to engage with a service that features suspicious advertising that calls the service's veracity into question, though they will tend to develop a lower opinion of the service, and be less trusting of it [7]. Similarly, a service's request for personal information such as date of birth or mobile phone number without reasonable justification affects users' opinions of the trustworthiness of the service and security of their personal data, with many users opting to provide false demographic information as a means of protecting themselves [1,7]. While illicit service users would rather not feel vulnerable to viruses, malware, and breaches of privacy, many have come to expect that they will suffer from such incidents as part of the normal course of using such services, and feel that the reward of free music is worth the risk [7].

While value is a relative and subjective concept, consumers like to feel that the outcome of an endeavor was worth the cost [10,11]. In other words, people want to feel that the time and effort they've invested in a task or transaction was worthwhile, whether the cost is measured in money, time, effort, or by some other means. For a legitimate free, ad-supported service, the main cost to the user is the time they invest in finding and downloading music, and waiting through any forced advertising if applicable (e.g. waiting through pre-roll video versus not having to wait if interacting with a branded page or window). Video advertisements perceived as disproportionately long, or advertisements that get in the way of what the user is trying to do (e.g. pop ups, poorly placed mouse-overs) are seen as particularly frustrating and intrusive, increasing the perceived cost to the user, even when the music being downloaded is provided for free by the service. Similarly, ease of navigation is a characteristic that consumers place importance on, even if music is being provided for free, because an unintuitive interface increases the time and effort a user must invest [7].

The perceived size of a free service's catalogue affects the perceived utility of the service. While this is only a relative, subjective concept (i.e. dependent on an individual's musical preferences), generally, a free music download service is perceived as useful if it has at least some of the songs a user wants to download. If a service only has very few songs that a user wants, even if the music is free, the cost of using the service may outweigh the reward, and discourage regular or repeat usage. Similarly, if a service has a large catalogue of free music but rations the number of downloads a user is entitled to (e.g. as Guvera, Free All Music do), then the perceived utility of the service is reduced, and the cost to the user increases. Harris found that even the youngest participants interviewed felt that independent artists were not well represented on legitimate music services [7], and that it was difficult to find music considered more niche, even on market-leading services with substantial catalogues. One high school student from Toronto commented that, 'iTunes has a lot of mostly just mainstream music. If you want more obscure bands, it's really difficult to get that off iTunes' (p. 191).

Users expect to be able to transfer their downloaded songs to all their personal listening devices, and will tolerate limits on the number of devices a song can be transferred to, so long as the limits are perceived as fair and reasonable. The current industry 'standard' of 5 devices appears to be adequate for the vast majority of users [9], with Harris finding most research participants had between 2 and 4 devices they used to listen to music downloads, including a computer [7].

Interestingly, if an illicit downloader was presented with a choice between using a legitimate service or an illicit service with near identical features, a service simply being legitimate would not be reason enough for a person to switch over from an illicit one, despite the legitimate option being free from legal issues and computer viruses. Illicit downloaders said they would not be motivated to switch platforms unless the legitimate service they would be switching to was as at least as good as the service they currently used to obtain free music [7]. This presents a challenge to monetizing consumer behaviour via legitimate channels, given that for an ad-supported music download service to survive, it must have a large enough user base to be able to serve its purpose in a multi-sided network.

## 4. The traditional value chain for recorded music on physical media

Figure 3 shows a simple illustration of a traditional, label-dominated value chain for pre-recorded physical media. In the traditional value chain, the record label functions as the bridge between the artist and the consumer, typically managing or coordinating the recording, marketing, licensing, publishing, manufacturing, and distribution of recorded music [9]. Major labels in such an environment were able to maintain a position of relative dominance and control amongst peers and new entrants, based on their substantial financial resources and international marketing and distribution networks [9].

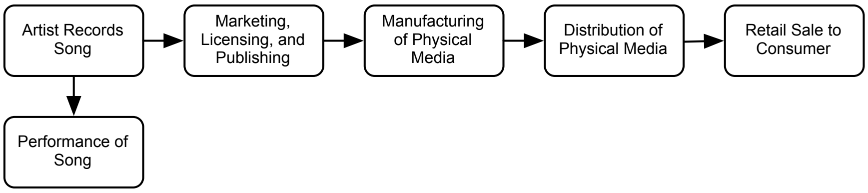


Figure 3: Traditional, label-dominated value chain for pre-recorded music on physical media

As technology improved, internet penetration rates increased, file sharing software became more widely available, and internet connections reached ever greater speeds, consumers were able to disrupt the traditional value chain, bypassing retail outlets and traditional methods of distribution by simply going online and downloading songs straight to their computers.

While the traditional value chain could be represented in some form as a two-sided or multi-sided network, the point that this paper makes is that what used to be a clearly linear value chain has now transformed into a networked environment. Disruptive consumer behaviour has provided an opportunity for third parties to form economic networks that include consumers and labels, albeit not without challenges when it comes to the task of generating value within the network. Note that these third parties do not need to be ad-supported networks, though that is the type of third party discussed in this paper.

## 5. Multi-sided networks

Multi-sided networks are a form of non-linear value chain, where the central platform creates value by enabling interactions between participants in the network. Participation by one or more parties in the network, and the magnitude of participation, affects the willingness of others to participate in the network [5,18]. The concept of a multi-sided market/network has been discussed with increasing frequency in academic literature over the past decade [22,23], and is useful in describing the key structural and economic relationships related to ad-supported music services.

Figure 4 shows an ad-supported music download service as the central platform in a multi-sided economic network that uses such a service as a basis for generating revenue in the network.

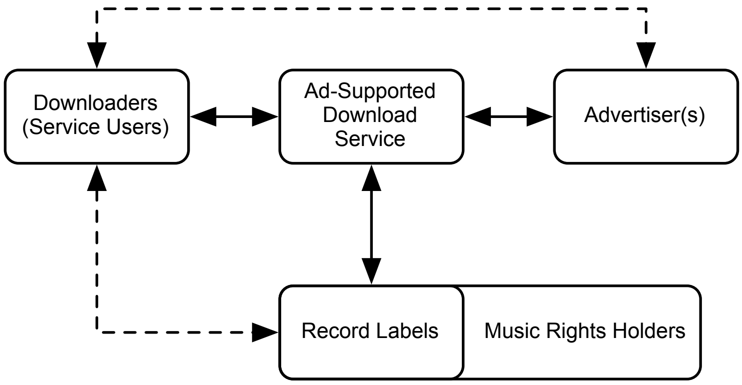


Figure 4: A multi-sided network illustration of key challenges to the viability of an ad-supported download service [7]

The remainder of this paper will discuss the relationships in the multi-sided network shown in Figure 4, and the economic viability of an ad-supported music download service in such a network.

### 5.1. The relationship between the service, advertisers, and users

In order for an ad-supported service to be financially viable, it needs to be able to generate enough revenue from in-service advertisements to cover its costs, such as employees, technology development, administrative and operating overheads, capital investments, and payments to rights holders. An in-service advertisement means any advertisement that is presented on the service's website or user interface, or in the case of in-audio advertisements, commercial audio featured at the beginning or end of a downloaded song.

Advertisers want their advertisements to get the widest possible exposure with their target demographic, and can use an ad-supported music download service as a means to reach their target audience. They therefore have a keen interest in ensuring that any service they pay to place advertisements on will have a sufficiently high volume of users to justify their investment (e.g. a company looking to advertise in a newspaper would want to know the target audience demographics and the paper's circulation, and be satisfied that they will reach their target audience and that the circulation volume justifies the price paid for the advertisement).

The perceived trustworthiness of an advertisement, as well as the format, perceived quality, relevance, and intrusiveness of an advertisement affect a user's attitude toward the service the advertisement appears on, and also the user's willingness to engage with the advertisement and the service [7]. It is imperative that the right balance is struck between the advertiser's wants and consumer tolerances if a service is to retain users (i.e. by keeping the user's perceived costs acceptably low) and if the advertiser is to benefit from user engagement. Different ad-supported services have used different advertising formats, such as pre-roll video (i.e. video a user must watch before they can download or access a downloaded song), in-song audio advertisements (equivalent to audio pre-roll, but after a user has downloaded the song), and branded music players (i.e. skins, which do not impose a wait time on the user). If the perceived cost of engaging with the service's advertising outweighs the benefit of receiving free music, it will be difficult for the service to maintain a sufficient user base for monetization.

Perceived trustworthiness and security of a service are also important. If users do not trust a service and thus provide fake demographic information, the value of the service to advertisers is negatively affected, thereby reducing the service's ability to maintain a stable revenue stream.

### 5.2. The relationship between record labels, rights holders, the service, and users

While record labels are major rights holders, it is important to note that the term 'rights holder' includes financial stakeholders such as labels, artists, and publishers (and on occasion other parties) collectively, with each party receiving payments based on contractual and/or regulatory agreements.

Record labels license music to ad-supported services, which is a critical factor in a service being able to secure a large catalogue of attractive music, and thereby more users.

In the 1990s, six major labels dominated the global market for recorded music. By 2005, four major labels were left, controlling 72% of the global market for recorded music [12]. By 2012, the number of major labels had reduced to just three. According to a senior label executive with 30 years' experience in the music business [7], a service needs about 95% of available content to be considered useful, which means a service needs deals with all three major labels, as well as independent labels, so that both hit music and locally relevant music is available to users (p. 289).

In order to hedge labels' risk exposure, ad-supported services typically must make upfront payments (i.e. deposits) to labels to secure licensing agreements, which can present a substantial barrier to entry [7]. Harris interviewed senior label executives who got 'dozens of requests a week' from people claiming they had the 'next big thing' for an ad-supported service. Labels would then typically make investments in the six-figure range for due diligence, including fees for lawyers, account managers, and supply chain setup, only to see some companies never make it to launch. Said one executive [7]: 'We don't want to put companies out of business before they start', but as a result of relatively high risk exposure, pre-payments became 'global policy' for major labels, serving as method to weed out proposals that were not capable of securing enough outside financing to get them through due diligence (p. 297).

While in theory record labels and rights holders can benefit financially from an ad-supported service, the reality is that there is much concern from rights holders over the amount of royalties they receive. Indeed, it is somewhat difficult to clearly understand just what individual rights holders earn from ad-supported services, as the world of royalties is complex, and varies by aspects such as nation, distribution channel, individual contracts between certain parties, and level of user interaction with the service/music, to name a few. For example, in 2010, news broke that the international superstar Lady Gaga (one of many rights holders for her own music) allegedly received a royalty cheque for US$167 based on her song being played over one million times on Spotify [2]. By early 2014, Spotify on its website published that it paid 'rights holders' anywhere 'between $0.006 and $0.0084' per stream, based on a formula that takes into account the service's monthly revenue in a country and the popularity of the artist's streams on the service (which the company refers to as 'market share'). Spotify also claims on its website that the most popular album streamed on the service in July 2013 earned royalties of US$400,000 [20].

## 6. Conclusions on the economic viability of an ad-supported music download service

The music business faces an increasingly complex operating environment, and participants in the multi-sided network outlined in this paper influence the network in different, yet significant ways.

Consumers constitute a vital part of the viability of the network, given that the service platform can only create value in the network if it has sufficient users to attract advertisers to generate revenue for the service and rights holders. A senior industry executive noted [7] that advertisers gravitate towards services with scale, and, as such, well-known companies continue to place advertisements on illicit services because of the scale such services are able to achieve (even if that is achieved unfairly by such services not having to make payments to rights holders) (p. 296).

Rights holders have a significant role in the network. The magnitude of payments due to rights holders depends on the nature of the service. On a streaming service, typically, the more choice and interactivity a user has, the higher the royalty rates. For example, in the USA, a service that allows users to choose individual songs in their playlist must pay higher rates per song than a service that chooses what songs the user gets to listen to. By extension, a service that allows its users to download music pays much higher rates than a streaming service, and thus requires significantly more advertising revenue to stay solvent (hence why some services ration music to users, so that they can control the level of payments that must be made to rights holders, and ensure that those payments can be covered by advertising revenue).

For some services, maintaining equilibrium between users, downloads/streams, and advertising revenue is a particularly complex, if not futile exercise. For example, a legitimate service catering to a niche musical genre may have a small but avid user base. This user base may be too small to generate sufficient advertising revenue to cover payments to rights holders for the number of tracks downloaded or streams played by the users.

All of the senior industry players interviewed by Harris [7] expressed skepticism about a legitimate service's ability to stay solvent via an ad-supported model, given that successful ad-supported streaming services such as Pandora (which generates hundreds of millions of dollars of annual revenue) and Spotify typically pay out two-thirds of their revenues to rights holders [7,20]. The industry players did not see any way for an ad-supported music download service to be viable when faced with substantially higher rights payments than a streaming service.

While streaming services such as Pandora and Spotify appear to be successful (not least by fact of still being in existence), these services must constantly maintain a delicate network equilibrium to survive, even with royalty rates that are substantially lower than those of ad-supported download services.

Thus, the challenge of monetizing consumer behaviour via ad-supported download services may be insurmountable given the current network configuration and music business environment.

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