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Saviours or Burdens? The Effects of Streaming Services on the Music Industry

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Abstract

This research essay provides an overview of streaming services and their effects on the music industry, and the tensions they have created between various stakeholders. The problem of the “end” of the music industry is addressed through discussing the transition of music from analog to digital, the history of music piracy, and the value of music as a commodity. Technological, institutional, and cultural tensions are highlighted, and revenue distribution is described and analyzed, as is the interplay of algorithmic and human curation of playlists. Legal issues are also raised involving the privacy of users and intellectual property rights of artists. A middle ground is sought, and possible solutions are proposed to reconcile these tensions, with the future of the music industry in mind.

Keywords: streaming services, streaming technology, music industry, Spotify

Introduction

Is the music industry in death throes, and are advanced information technologies to blame? Online streaming media is a vibrant example of information technology which has gained rapid momentum in recent history. The following is an examination of

the ways in which streaming music services have affected the way we listen to, collect, and consume music, as well as how the music industry at large has been impacted. This topic is rife with tensions: tensions between freedom and value, art and business, users and creators, digital and

analog, humans and machines, and old and new industries, to name a few. These tensions are explored through the lens of information – particularly music as information – and though resolutions may not always be possible, I aim to mediate the tensions through balanced examination and offer some possible solutions.

I begin my discussion at the end – the end of the music industry, that is. Just as many writers in today's information society continue to declare the death of personal privacy, the death of the music industry is similarly expressed. The pattern of "endist" rhetoric follows that once the end of something is declared, conditions for that end are belaboured and condemned, and yet some softly optimistic solution is finally proposed (John & Peters, 2017). The demise of the music industry has been proclaimed repeatedly, with many lamenting shuttered record stores and reduced artist signings by major and indie labels alike, among other tell-tale signs (Knapp, 2012). Most recently the conditions for the industry's collapse have been blamed on streaming music, described by some as "a death knell for a dying dinosaur" (Knapp, 2012, p. 42). This sentiment is perhaps most vividly expressed by Radiohead's Thom Yorke, who describes popular streaming service Spotify as "the last gasp of the old industry ... the last desperate fart of a dying corpse" (as quoted in Marshall, 2015, p. 177). However, amidst a sea of similar complaints and speculations about the future floats more

hopeful assessments, like the one offered by journalist Matthew Ball (2015), who believes, "the decline, which began long before the emergence of ad-based or subscription streaming models, doesn't need to be terminal" (para. 54). False ends have been predicted before, and despite the continued threats presented by technological advance, the finale has not yet arrived for privacy or for the music industry (John & Peters, 2017). If we work backward, perhaps new solutions may be found.

John and Peters (2017) offer three main causal categories of offending factors that have spelled the many ends of privacy: technology, institutions, and culture. These three perpetrators could also be applied to the various ends of the music industry, particularly in the context of streaming services. I have chosen to focus on Spotify because of its global dominance as a streaming service and its recent entry into the Canadian music market. As journalist Liz Pelly (2017) notes, Spotify is one of the world's largest streaming music companies, and "its network of paying subscribers has risen sharply in recent years, from five million subscribers in 2012 to more than sixty million in 2017" (para. 4). Music streaming services can actually be split into three types: streaming radio, cloud or locker, and on-demand (Marshall, 2015). Throughout this essay, particular attention will be paid to on-demand services, which include Spotify as well as its major competitors like Apple Music and Google

Play. On-demand services differ from their radio and locker counterparts because they are interactive (i.e., the user chooses what to listen to), and not limited to an individual's personally-owned collection. The listener can instead choose from millions of songs contained in massive online catalogues, making on-demand an impressive and lucrative revolution in streaming technology and the music industry at large (Marshall, 2015).

Technological Tension

The vast new capabilities of on-demand streaming music services present a technological threat to the "old industry." As Marshall (2015) observes, "one thing that the history of popular music tells us is that the introduction of significant new technologies is rarely uncontroversial" (p. 177). From the invention of the microphone, to the installation of eight-track tape decks into cars, to Sony's Walkman and Apple's iPod, "it's the same search for convenience and portability that continues to fuel innovations in the delivery and consumption of music" (Knapp, 2012, p. 42). Each new technology is initially challenged then subsequently adapted into the industry and into the everyday lives of music consumers. We are now witnessing that tension with streaming services. Wang (2017) notes that "streaming took off when cheap processing power, storage and bandwidth became widely available," and "has rapidly grown into an oligopoly dominated by a handful of major players" (p. 274; 278). This rapid growth is readily

apparent in global markets and particularly in Canada, where "in the first six months of 2016, Canadians streamed 18.6 billion songs through on-demand platforms, up from 10.5 billion a year earlier" (McConnell, 2016, para. 3). For some, the staggering success of streaming services is seen as the potential saviour of an industry in a downspin, while others within the industry remain sceptical.

Recent history has seen the overall shift of music from analog to digital, and even digital music itself has since shifted from static server storage to living in the "cloud." These shifts in location and format have had a significant impact not only on the way we access music but on how we define it. If we conceptualize music as a form of information, we might define it as "a unique social object, which unlike material objects, is non-rivalrous, reproducible, spreadable," and observe how "digital technology supercharges the propensity of information to spread" (Fisher, 2018, p. 40). While music's migration to the cloud may create new allowances for accessibility, storage, and dissemination, it also presents particular challenges and limitations. As Knapp (2012) points out:

music subscription services allow users to stream and download music from the metaphorical cloud, but that music can't be copied, ripped, or burned to an external source. Should your subscription run out, anything you downloaded will magically disappear from your phone. Instead of owning music you merely rent it. (p. 44).

The transformation of music from analog to digital has been mirrored in the transformation of its related information behaviours from ownership to access. Musical recordings, as information objects, “moved from tangible, high-priced albums to intangible, variably valued streams,” and many consumers changed their habits and preferences accordingly (Ball, 2015). These movements of value and behaviour have been felt across several media formats and can be traced back to the advent of the Internet and subsequently of online piracy. Wang (2017) identifies piracy as “integral to the shift in digital economy from an acquisition- and ownership-based consumption model ... to one that is access-based” (p. 278). The era where piracy ran rampant resulted in the distinctive “behaviour of a generation which had grown up with music being free and accessible” (Marshall, 2015, p. 184). The music industry has had to adjust to accommodate this dominant consumer behaviour, and as such, physical vendors have struggled while streaming services have thrived. Spotify in particular has “consistently presented itself as offering a platform which monetises existing consumer behaviour” (Marshall, 2015, p. 184).

Spotify's success in a marketplace formerly occupied by piracy sites may not be simply strategy or luck. Coincidentally, Spotify founder Daniel Ek was formerly the CEO of the peer-to-peer sharing platform uTorrent, and his new venture was built with the

mission of monetising an audience, “the large majority of whom were downloading illegally ... before Spotify was available,” by presenting a familiar but legitimised form of the same information transaction (Marshall, 2015, p. 184). An optimistic observer might interpret this platform makeover as a new and improved model for music consumption with the potential for solving many problems facing the music industry today. That being said, it is also important to remember that the minds behind Spotify and other “reborn” streaming services are also the same ones behind the file-sharing piracy networks that toppled the record industry in the first place (Knapp, 2012). In essence, these networks were able to “compete with legitimate businesses, serving the consumers’ demand for immediate low-cost access to on-demand content,” and it is how they still compete, just at a slight cost (Wang, 2017, p. 279). As a result, streaming services have redefined the value of music.

Music as Information with Value

Stewart Brand describes a tension between “what is and what ought to be,” in that information wants to be expensive because it is valuable, but also free, because its cost decreases as it becomes more widely accessible (as quoted in Fisher, 2018, p. 40). Music suffers the same tension as it struggles to retain economic value while simultaneously becoming universally available. Knapp (2012) succinctly summarizes the issue: “People still enjoy

music; they just don't enjoy paying for it" (p. 42). Ball (2015) adds that "audiences can now enjoy more music, more easily, and in more places – yet the amount they spend is at an unprecedented low." All streaming aside, there has never been more music in the world than right now, and while that incredible level of creativity and production is to be lauded, saturation points of the market should also be seriously considered. Issues of supply and demand are at play here, and as Wang (2017) notes, "when supply outstrips demand, and much content is free and instantly accessible, traditional distribution and pricing practices become irrelevant" (p. 281). The vast supply of music may be beginning to overtake public demand, and while that may be an aspect of competition aided by wider digital markets, it still does not bode well for dispelling the "death knell" of the industry and of the value of music as a commodity. Artists may be reluctant to embrace these changes in the value of their music, but the drastic structural shift in supply and demand within the industry is undeniable (Ball, 2015).

Streaming services like Spotify had a strong influence on this structural shift, and on music's value as a commodity. Spotify's business model for users resembles that of a "freemium" service, often seen in mobile gaming, where the core service is free to use but the revenue is generated through sales of additional products and premium services (Hamari, Hanner & Koivisto, 2017). As a subscription service, Spotify's revenue

"relies mainly upon the number of subscribers it has, plus a little extra from advertising" (Marshall, 2015, p. 182). As such, a balance must be struck between providing a high-quality service and creating steady demand for further premium content (Hamari et al., 2017). Users of Spotify's free service have access to all the same music as subscribed users, but their service includes commercials, limited skip options, and disabled track selection. To generate increased revenue, Spotify focuses on expanding its paid user base by offering attractive premium features. While profit depends on an inherently limited revenue generated through subscription and advertising, "the number of times music can be streamed is effectively limitless" (Marshall, 2015, p. 182). In other words, even if a user listens to a thousand tracks in a month, the subscription revenue that that individual user paid to Spotify remains the same. The payout structure is bleak upon such close inspection, and best reflects the 'value' of music in an era of abundant supply. Any song 'hired' to entertain is 'worth' the same as another" (Ball, 2015). This business model reduces music to a low value or even free commodity, and threatens its uniqueness through exploitation (Marshall, 2015).

The freemium business model combined with Spotify's subscription-based revenue further complicates the way music is valued economically. A common misconception is that Spotify artists are paid "per stream" in

a unit-based manner, more akin to traditional methods of payment. In reality, Spotify “has repeatedly argued that it does not sell streams, but access to music ... One must look at the overall revenues that Spotify is generating” (Marshall, 2015, p. 181). The more money Spotify makes overall, the more their artists make. Pelly (2017) expands this point, explaining that “Spotify’s ‘pro-rata’ payment model means artists are paid a percentage of the total pool of royalties relative to how their stream count stacks up in the entire pool of streams, meaning the tiniest of payouts for the most independent musicians” (para. 25). All of this represents an institutional, fundamental restructuring of how music is valued and, in turn, how artists are paid. As Marshall (2015) states:

the nature of what is being sold is qualitatively different than in the past and, therefore, artists need to reconsider how they are paid: in the “old” model of music-buying/owning, consumers paid (and artists therefore received) a one-off payment; in the new model of music-renting, consumers continually pay for access to music. (p. 181).

This shift in structure and revenue has created new tensions within the industry that are struggling to be reconciled.

Thus far we have seen how technology triggered the shift of music as information from analog to digital, and how that shift changed information behaviours and value structures. We have also encountered tensions between free and valuable

information, free and valuable music, old and new industries, Spotify and its users, and Spotify and its artists. According to Marshall (2015), these tensions could, in a broader sense, be reflecting “more deep-seated uncertainties regarding the changing nature of the music commodity and its impact upon the perceived value of music, as well as more long-standing issues regarding the dominant power relations within the industry” (p. 178). Power relations are an important aspect of this scenario, as the giants of old industry struggle to maintain power against new industry mavericks like Spotify.

Institutional Tensions

Spotify and its streaming service counterparts represent powerful institutions within the modern music industry, but the titans of the old industry must also be taken into account. As Ball (2015) notes, “for nearly half a century, the major labels (and therefore their artists) have held a de facto monopoly on the music industry and its output – all by controlling distribution”. When peer-to-peer file-sharing appeared, the subsequent decline in physical album sales impacted record labels gravely, along with the livelihoods of their signed artists. One might assume the label suffers equally with its artists, but that may not always be the case. In fact, Marshall (2015) suggests that the “consumption-based logic of streaming services actually fits the logic of the pre-digital record industry quite well,” and so the larger labels are able to stay afloat on

the revenue from a handful of successes while their less successful artists suffer (p. 184). While Spotify has influenced how artists are paid in the streaming market, “for many artists, the amount they receive from Spotify reflects their contract with their record label and not the amount that Spotify pays out” (Marshall, 2015, p. 181). Old industry maintains its control over contractual rates. Ball (2015) adds that:

what makes this distribution particularly problematic is its resilience. Over the past 15 years, the music industry has been transformed in almost every way, yet the rates paid by labels to their artists remain largely unchanged. (para. 49).

Contractually the labels share the blame for miniscule monetary returns for artists’ streams.

Beyond the institutions of Spotify and record labels is the institution of music business itself. Deep-rooted tension has long existed between art and business, and the values between these aspects of the music industry are naturally at odds. In a digital context, Pelly asks, “how can artists distribute and sell their work in a digital economy beholden to ruthlessly commercial and centralized interests?” Indeed, behind editorial facades, Spotify’s aims are financially driven, just as Apple Music’s bottom line involves selling more hardware, and Amazon Music opts to move more Alexa devices and Prime subscriptions (Pelly, 2017). These external financial goals further serve to cheapen and devalue music. Pelly (2017) describes Streaming Services and the Music Industry

Spotify as a hybrid “hypercommercial webspace” that surrounds music with shameless advertising, and leaves artists in a difficult position “where they’re unable to outwardly criticize their corporate overlords without risking total irrelevance” (para. 24). The capitalist institution of the music business, in partnership with ambitious companies like Spotify, effectively enacts “deliberate commoditization of music by those who have no respect for the craft or its artists – only a desire to serve up ads, build a digital empire or hawk hardware” (Ball, 2015). While these views may be from biased arts-affiliated sources, the evaluation and criticism of how institutional influence can affect the dissemination of music and of information is important to consider.

Cultural Tensions

If we take institutions out of the equation, we are left with creators and users, and this is arguably where true cultural exchange occurs in a music transaction. In 1996, Bill Gates stated that “for the internet to thrive, content providers must be paid for their work,” and predicted micropayments would help link users and creators financially (as quoted in Krukowski, 2018, para. 22). What he could not have predicted, however, was “massively capitalized platforms monopolizing access to content, with no interest in encouraging those micropayments” (Krukowski, 2018, para. 22). While artists and consumers may be prey to these overpowering institutional influences, there are still alternative ways

that technology can be used to disseminate music purposefully. Enhanced reaches of social media allow artists to create their own brand and communicate with their audiences, thus subverting “hypercommercial webspaces” and corporate mass marketing (Ball, 2015). Falling technology costs have enabled mass production and subsequent mass devaluation of popular music, but they have also provided independent artists with more affordable options for self-production. Additionally, as live music remains one of the last genuine sources of revenue for artists, thankfully the concert industry continues to thrive and streamline its growth, providing further means of self-sufficiency (Ball, 2015). Through these avenues, artists can still retain subversive power for self-promotion, self-production, and self-generated revenue in order to distribute their own music to their potential audiences. As Wang (2017) notes, “multi-linear and multi-channel access have fundamentally changed the relationship between users and content” (p. 277).

Another example of user and content interaction is the curation and consumption of playlists. Music lovers have been creating mixtapes and burning custom CD mixes for decades, and digital playlists have become the new dominant form of music curation. Spotify has made a cultural impact with its promotion of the almighty playlist. Its sophisticated algorithms are largely responsible for the curation of thousands of playlists that make up some of the most-

listened-to content on the platform. Algorithms are pervasive and powerful, especially now as more of our everyday activities are conducted online (Willson, 2017). Spotify has seized the power of the algorithm and used it to commodify music and its curation in new ways. As Pelly (2017) describes:

Spotify's worth is more ephemeral. Its value – what makes it addictive for listeners, a necessity for artists, and a worthwhile investment for venture capitalists – lies in its algorithmic music discovery “products” and its ability to make the entire music industry conform to the new standards it sets. This means one thing: playlists are king, and particularly the ones curated by Spotify itself (para. 7).

Technological influence on digital music services is nothing new. Software like iTunes has relied on “music information retrieval” focused on “signal processing for audio files,” and is “integral to playlist generation in online streaming services” (Riley, 2017). The difference here is that algorithms take that influence a step further from information retrieval to behavioural prediction.

In addition to replacing humans with algorithms, Spotify has also been criticized for further devaluing music through the creation of “chill” playlists that serve more as background music than cultural material. Pelly (2017) again explains that “Spotify loves ‘chill’ playlists: they’re the purest distillation of its ambition to turn all music into emotional wallpaper. They’re also tied

to what its algorithm manipulates best: mood and affect" (para. 9). Through playlists, music is being valued more for its blanket effect than its singular impact. Artists have better chances at being played on popular playlists if their music caters to the dominant mood of listeners, and right now that mood is "the chiller, the better." This emphasis on "chill" may indicate a larger cultural shift in lifestyle where people listen to music differently, and for different purposes. In other words, "these algorithmically designed playlists ... have seized on an audience of distracted, perhaps overworked, or anxious listeners whose stress-filled clicks now generate anesthetized, algorithmically designed playlists" (Pelly, 2017, para. 11).

Pelly puts humans and machines at odds, with overtired populations submitting to algorithmic influence, resulting in mindless background music for the masses. Alternatively, however, there has also been a renewed effort among major streaming services to reintroduce human influence into playlist curation. Algorithms may be king, but as Willson (2017) observes, "the interplay of human emotions, decisions, and inputs alongside the sorting, analytical, and manipulative capacity of the technologies becomes more complex and reveals an iterative, multilayered exchange" (p. 147). Algorithms are effective, but they are not perfect, and the tensions between human and machine may be resolved through collaboration. Doug Ford, Spotify's global head of curation and North

American programming, says the company "looks at the process as 'man loves machine' instead of algorithm versus human curation" (as quoted in McConnell, 2016, para. 11). There has always been an art to playlist curation, whether it was recording the latest hits from radio onto a tape deck or choosing the perfect mp3s to burn to a CD and give to someone special. That art is not completely lost through algorithmic curation. Instead, major streaming services are now arguing that it is in curation "where human instinct should kick in, as opposed to just mathematics," adding that "people have a better sense of which song transitions smoother to another, or how different songs might relate to each other in less obvious ways" (McConnell, 2016, para. 29). If humans and algorithms can work together, the music industry may not be as doomed as we thought.

Tensions of Privacy and Copyright

Whether or not humans are reintroduced into playlist curation, the use of algorithms involves Spotify's monitoring of user activity and harvesting of that data for strategic purposes. If terms and conditions are not transparent enough, this can mean serious privacy issues for users. Willson (2017) identifies the "rise of surveillance capitalism tied to the capture and commodification of users' behavioural data for persuasive and predictive application" (p. 147). While listening preferences may not be the most important privacy concern for the average streaming user, they are still victim to surveillance. Spotify harvests

"an unprecedented amount of data," and where playlists are concerned, "skip rates and completion rates determine whether a song survives," aiding the curation of "perfect" playlists (Pelly, 2017, para. 7). Though many users fail to glance over the terms and conditions where they sign away their listening privacy, it could be generally assumed most users know their actions are being monitored. As with many current information interactions, "users attempt to weight the identified or assumed privacy risks of a transaction against its benefits" (Lutz, Hoffman, Bucher, & Fieseler, 2018, p. 1477). In the context of Spotify, users weigh the identified or assumed privacy risk of their listening habits being monitored and harvested against the benefits of catered content curation. In this problematic manner, "human-machine technologies are deployed to quantify your tastes. This is what lies behind the 'magic' of Spotify" (Pelly, 2017, para. 7). In the risk versus benefit transaction, this "magic" often prevails.

Surveillance and privacy are not the only legal and moral tensions within streaming culture. Considering the fact that streaming descended from piracy traditions, it is important to note the copyright issues involved in peer-to-peer file sharing and how those illegalities were resolved (or loopholes found). Historically, Canada has had "an extremely well-developed system for the payment of copyright obligations of all kinds to copyright owners," and as the digital age speeds and expands distribution,

it is integral but far more difficult to ensure rights holders are paid (CIMA, 2010). Through streaming services, artists are still technically being paid as rights holders – an improvement from piracy culture – but those pay-outs are still vastly reduced compared to physical sales. Wang (2017) explains that "consuming copyrighted material online is no longer an anomaly, it is a norm aligned with users' desire for immediate access to new content" (p. 271). Here we return to a supply and demand framework. With on-demand services like Spotify, the "value proposition is based on having all (or roughly all) the music a user might want," which has gravely affected how artists are credited and paid (Ball, 2015). For every competing service to attempt to acquire licenses to individual catalogues or titles "would be both contractually impractical and analytically infeasible" (Ball, 2015). Consequently, the consumer demand for instant access to all the music they could ever want has corrupted the structure of copyright regulations initially intended to protect creatives.

Playlists present even further copyright and intellectual property tensions. Spotify-curated playlists, including branded playlists by commercial conglomerates such as Nike or Victoria's Secret, often feature artists' work without their knowledge. To make matters worse, "the band receives no additional compensation beyond the usual streaming royalties sent to labels and rights-holders" (Pelly, 2017,

para. 14). Artists become “automated sell-outs,” falling prey to corrupted licensing structures in the new dominant and often oppressive framework. Pelly (2017) further argues:

Brand playlists are advertisements, even if Spotify strives to imbue them with so-called editorial integrity. Such uncompensated advertorial playlists are harmful in that they offer artists no option to opt-out, but also because they undercut what can sometimes be a valuable source of revenue for artists. (para. 17)

Sources of real revenue for artists are quickly diminishing, especially with the rise of streaming culture. In past decades, many artists were faced with the difficult decision of “selling out” to support commercial enterprises, but at the very least they were reasonably financially compensated. In this new institutional structure created by streaming services, artists are not even given the chance to decide whether or not to “sell out.” They are not notified when they are placed on playlists (Spotify-curated, branded, or otherwise) and they do not receive any additional revenue. This coerced endorsement of capitalist entities presents a seriously problematic corruption borne of copyright and intellectual property tensions within this new era of the music industry.

Conclusion and Possible Solutions

After close and comprehensive examination of the effects of streaming services on the ways we listen to, collect, and consume

music, it is easier to see why many predict the music industry’s demise, alongside privacy. Still, so-called passé privacy exists and so does the business of music. Some solutions may be had yet, but they must be based in solving the variety of tensions I have highlighted. First and foremost, the tensions between artists and their labels, and artists and Spotify must be addressed. Ball (2015), offers a possible solution here when he hypothesizes that “record companies and publishers could pressure Spotify to reconsider its focus on user maximization at the expense of revenue optimization by adjusting contract terms” (para. 46). If streaming services begin to privilege their artists over their users, positive change could be affected. Marshall (2015) echoes these insights, positing that “independent and less popular artists would benefit from an alternative system of payment that directly distributed an individual’s subscription to only those artists to which the individual had actually listened” (p. 185). This solution most closely mirrors the revenue system generated by physical sales but is also reliant upon a major shift in Spotify’s business model, which is unlikely given its wild success.

For the time being, external solutions may be required. Krukowski (2018) suggests that “adjusting our purchases to the scale that makes sense for what we’re really after is one way to work around the Spotify/Apple Music model” (para. 11). This means making physical purchases to support the artists you really care about. As mentioned

earlier, the falling costs of production technology paired with the streamlining of the live music circuit means that “music, itself, may be commoditizing – but as concerts have shown, there are opportunities to expand musical content into new experiences and products” (Ball, 2015, para. 51). As also previously discussed, tensions continue to persist between both information and music wanting to be free versus wanting to be expensive. As the structures surrounding both commodities continue to evolve, Fisher (2018) posits that in “Web 2.0 capitalism, information is both free and expensive,” referring to the vast variety of digital platforms that allow users to interact and engage with the creation and collection of user-generated content that is both free and uniquely valuable (p. 41). This resolution of tensions presents renewed opportunities for artists to become self-sufficient and supported. If artists survive, so does the music industry.

Just as the end of privacy is often prophesized but never realized, I believe the music industry will continue to live on and evolve in this new information society. Music is constantly influenced and frequently aided by technologies, institutions, and culture, despite their initial appearance as the three horsemen of the music industry apocalypse. For instance, in the context of film piracy, Wang (2017) observes that the “highest growth film markets are also the countries with the highest piracy rates,” and on a connected

note, “high pirate media consumption has likely seeded and grown large new generations of film viewers and music lovers” (p. 279). Having matured in the age of piracy, I can attest to the illegitimate fueling of legitimate passions for culture and can attest that “heavy downloaders” are also bigger legitimate media consumers (Wang, 2017, p. 279). For the industry and its artists to survive, however, these passions earned through piracy need to be translated into new forms of revenue for creators.

My personal vision for the future of the industry involves the embrace of information technologies paired with careful attention to the ways revenue is disseminated throughout the system. Knapp (2012) says the people who still buy physical LPs are “the same sorts that enjoy writing letters with pen and paper and shaving with a badger brush and double-edge razor” (p. 44). While I may have misplaced my badger brush, I did write a few letters to friends this month. I may be a cartoonish exception to the rule, but all jokes aside I believe we are overdue for a renewed appreciation of the beauty, history, and tactility of physical music collections. I have offered several arguments for the demise of the music industry, along with some possible solutions, but let me close with some additional arguments for its revival.

Trent Reznor, founding member of Nine Inch Nails, states that “if I wanted a vinyl record, I could go on Amazon if I know

what I want, and it will show up. Or I could go down to a record shop, surrounded by people who love music, and see it presented in a way that is inspiring" (McConnell, 2016, para. 19). There is still a definitive argument to be made for physical music. As former college radio DJ and music journalist Drew Millard (2017) points out, much of the music exclusively available on vinyl is "exceedingly rare or otherwise inaccessible online" (para. 6). Behind the romantic and nostalgic notions of physical music collections, there is still concrete value. Music is rooted in the fundamental gesture of sharing and in those special relationships between creators, listeners, and the music itself. The methods of sharing may have changed from handwritten scores and harpsichord concerts to digital downloads and stadium tours, but the value and the experience remains the same. Ultimately:

Does it really matter how fans consume music? Who cares if they play it on old-school turntables, stream it online, download it to a mobile device, or hard-wire a chip directly to their brains? A musician's job isn't to control how much music fans interface with technology; it's to make a connection, and if you write a truly great song, people will want to hear it. (Knapp, 2012, p. 46)

If technology, institutions, and culture can all work together to examine, criticize, and adjust existing structures to ensure comprehensive dissemination and fair

revenue distribution, the music industry need not be so doomed after all.

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