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Aggregation Services and Songwriter Independence

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B.A. Music: Audio Recording Technologies

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## Abstract

Digital download aggregation services are the modern songwriter's greatest ally and independent record labels' newest competition. Digital download aggregators like CDBaby, Distrokid, Tunecore, and Awal have made releasing an album for online distribution far easier than before. Many aggregators are affordable and also provide many services to the songwriter that historically involved employing additional middlemen.

Like distribution, the mastering stage of production has evolved. Mastering music can now be done through online services independently and on a very tight budget. Automated mastering services like LANDR and iZotope will be briefly discussed in section three, as well as additional options for the modern artist. These services illustrate a portion of the online network of music production, which can offer a replacement for the historic record label model.

Historically, terms like 'A&R scout' were used to describe those who seek local talent and offer them a contract. This contract was often manipulative and included many obligations. A distributor, engineer, and manager were usually partnered with the musicians and were often compensated with more security than the songwriter.

A modern musician hoping to distribute their work to streaming services online now has more freedom to release their work without manipulative, obligatory contracts. It is more cost effective than ever to record, mix, and distribute; and the competition online has increased as a result.

The modern music industry transitioned largely from physical releases like CD into online services where MP3 files could be shared and downloaded (Birtchnell 3). In 2003, CD sales began to decline. While this was beneficial for listeners, there was a drastic change in profit margins for major record labels after CDs became obsolete and MP3 piracy became more common (Kirby 302). This current climate is unique and troublesome for labels, in that musicians are now making most of their profits independently through touring and merchandise as opposed to record sales. Early musicians profited much more from their physical album sales, and for that reason, they relied more on labels for recording and distribution (El Gamal 25).

The major labels used to send scouts who found talented musicians who had already been sharing their music and then took advantage of musician's creativity for their own use. Few industries have exploited their labor force as much as the music industry (Dubner). In the past, the music industry has been a unique opportunity to take advantage of songwriters. Producers often used exploitative contracts to profit from the artists they worked with (Kirby 107).

Many MP3 downloading methods arose in the 2000s, causing record sales to plummet. Controversial piracy software that accessed libraries of music like Limewire, AudioGalaxy, Kazaa, and Napster were beginning to challenge the more legitimate MP3 purchasing methods like iTunes (Kirby 306). Major labels were also criticizing early streaming in-browser on websites like Grooveshark.com and questioning their legitimacy. This led to substantial lawsuits and caused many consumers to rethink the cost of MP3 files. As the consumer demand for MP3 download and streaming increased, CD sales were declining; and listeners were finding clever ways to obtain MP3 files for free (Bielas 5). For instance, converting MP3 directly from YouTube.com violates the sites Terms of Service, but is technically a legal conversion; it is

illegal, however, to download the resulting MP3 or any copyrighted music video. YouTube and Google have struggled in the past to track down sites that offer this conversion, dubbed stream-ripping (Gough).

MP3 piracy created a demand for affordable access to an extensive library of music both online and offline. Purchasing individual songs on iTunes was eventually replaced with the unlimited streaming model of Spotify and Apple Music (Kirby 305). Streaming has made the sharing of audio files more legitimate than before. Major labels have attempted to shut down MP3 sharing services like Napster countless times with many lawsuits specifically highlighting the illegality of the distribution of a label's copyrighted material (Bielas 36). Spotify and Apple Music differ from Napster in their legitimacy, by charging a monthly fee for streaming they've created a system that benefits the listener, the artist, and the associated labels (Bielas 27).

In the current age of music streaming services, musicians make little profit off of their popularity from their recorded music. A musician's popularity on streaming services is mostly an investment in fanbase. In its earlier years, the Beatles, Taylor Swift, and Pink Floyd kept their music off Spotify (Dubner). Perhaps some of these artists hesitated to distribute through Spotify because of its lack of artist commission and how the consumer demand for affordable music pressured more artists to focus on merchandise and touring income. Some would say this lack of streaming income is the aftermath of the 1990s piracy epidemic, where consumers were questioning the value of individual songs. For now, artists will continue to upload their music to fit consumer demand, despite essentially no gratuity. In 2018, just 28 percent of artists earned any money from streaming, with the median amount being \$100.00 (Dubner).

Labels still exist in the current climate. The three legendary major labels remain: Universal Music Group, Sony Music Entertainment, and Warner Music Group. These three make

up most of the market, even controlling many smaller labels. Minor labels like Merge Records, Blue Swan Records, XL Recordings, and Fool's Gold are sometimes just communities of musicians that network with each other. Many musicians and consumers are happy with the modern climate and believe that the industry has just evolved beyond labels (Bielas 49). Labels have evolved with the industry adopting new techniques such as "360 Deals" where they become a partner for touring, recording, and merchandise and often sign multi-year contracts (El Gamal 25). Digital download aggregators are an increasingly popular option for the average musician trying to enter the playing field, and these services have helped to popularize MP3 file sharing and streaming: record label's fiercest competition (Bielas 27).

## II: Comparing Distribution Aggregators

In order to distribute music to streaming services, an artist needs to finalize a mix and use a digital download aggregator. Aggregators make up the current climate of distribution options: CDBaby, Distrokid, Tunecore, AWAL, and LANDR are all popular distribution options. Aggregation is often the most cost effective and independent means of distributing music (Herstand). Aggregation and labels work in competition, and the role of labels has diversified since an average songwriter can find success without signing to any label. Distrokid is one aggregator that allows for unlimited uploads for an annual cost. Other options like Tunecore will charge per album or per single but offer their own benefits (Herstand).

	<b>Distrokid</b>	<b>AWAL</b>	<b>Tunecore</b>	<b>CDbaby</b>	<b>LANDR</b>
<b>Upload Cost:</b> how much per album/per year?	<b>\$19.99</b> Annually for 1 artist, \$79.99 annually for 5 artists	<b>\$0.00</b> artists pay distributor through revenue	<b>\$9.99</b> per single per year, <b>\$29.99</b> per album per year	<b>\$9.99</b> per single, <b>\$29.99</b> per album No annual renewal	<b>\$48.00</b> per year for unlimited uploads, <b>\$12.00</b> per year for 10 tracks without mastering
<b>Commision:</b> What percent of artists profits go toward the distributor	<b>0%</b> artists keep all their streaming revenue	<b>15%</b> artists keep 85% of their revenue	<b>0%</b> artists keep all their streaming revenue	<b>9%</b> artists keep 91% of their streaming revenue	<b>0%</b> artists keep all their streaming revenue
<b>Upload outlets:</b> How many services will have your songs?	<b>+150</b>	<b>+200</b>	<b>+150</b>	<b>+100</b>	<b>+150</b>
<b>Upload Time:</b> how long will it take to upload to Spotify?	<b>2-7 days</b>	Up to <b>4 weeks</b>	<b>5 days</b>	<b>5 days</b>	<b>5 days</b>
<b>Unique Qualities</b>	<b>Unlimited uploads</b> for one annual payment, different payment options for labels	<b>No upfront payment</b>	<b>Pay per album/song</b> Customer support, Extensive Analytics Report	<b>No annual fee</b> <b>Physical release options</b> No Annual Fee	Landr can <b>master your music</b> before uploading

Fig. 1 (Herstand)

. Some aggregators have a premium ‘label’ or ‘artist’ upgrade package where multiple artists can distribute under their respective, individual names but share perks or revenue. Some



communities of musicians have gravitated toward a network of similar artists who will all share a 'label' package offered by aggregation companies like Distrokid (Herstand). These communities are cost effective, as well as offering a community of other musicians that will often tour together and split the annual or initial cost of distribution. These "label services" are different than a true label, however, because they do not own any of the rights to your music (Herstand).

Distributors often provide services to many clients and do not allow for negotiation of specific clauses for individual contracts. Some specialized distributors allow minor labels and artists to negotiate, but the options discussed above are all general agreements (Voogt). Major labels are unthreatened but surely affected by aggregation. Labels can negotiate with artists much more and often have more specialized contracts. The modern equivalent of an A&R scout now seeks talent on YouTube.com or Soundcloud.com and hopes to profit from developing talent by aiding in their distribution to Spotify and Apple Music. These labels can sometimes offer perks which smaller networks often cannot, perks like financing, advertising, arrangements, copyright enforcement, and access to knowledgeable producers and engineers (Bielas 20). While the goal of many artists is to have a dedicated mastering engineer and distribution manager who handle the refinement and uploading of their music, many don't realise that this network is entirely available without being 'discovered' by an A&R scout or label.

### III: Mastering Content for Distribution

Audio files require precise editing and mastering to maintain optimal clarity in a wide range of speaker systems used by listeners. Mastering engineers were historically designated as transfer engineers. In the 50s, a recording engineer would cleverly place a microphone to record

audio in mono that a transfer engineer would then translate onto commonly shared physical media. Specialized mixing consoles were built only for legitimate studios; the transfer engineers in studio were expected to have both technical knowledge and give aesthetic advice (Shelvock 9).

Early studios relied on a quality acoustic environment, and recordings were cleverly tracked to achieve different effects. Technological innovations of the 70s substantially changed the studio environment (Kirby 77). 24-track consoles, popularization of cassette, and synthesizers benefit many artists who wanted to utilize experimental techniques with their multitracking. Meanwhile, independent musicians attempted to improve the quality of their recordings at home. 1980s and 90s home studios sometimes tracked ADAT or 8-track cassettes (Kirby 284). In the 90s, manufacturers Soundcraft, Focusrite, Amek, Studiomaster, and Allen & Heath began releasing products aimed at the increasing popularity of home studios (Kirby 297).

In the 1990s, it became significantly more affordable for individual musicians to produce music thanks to revolutionary recording software. Digital audio workstation is a term for particularly useful audio editing software that became popular in the late 90s. These digital audio workstations are widely used by musicians today and allow individuals to record studio quality mixes at a fraction of the cost (Kirby 269). Today, using only software, an at-home musician can record and edit sound with a sometimes overwhelming amount of options. The previous relationship of musician to engineer has been challenged by modern musicians who attempt to engineer their own content.

Julian Michel's "If You Don't Know" is a modern example of quality, affordable, at-home recording using Ableton Live MIDI sequencing, a Focusrite Scarlett 6i6 interface, and a DIY vocal booth (Tot 15). Additionally, numerous other examples exist especially among

amateur music sharing services like Soundcloud.com and Bandcamp.com. Recording artists working from home often utilize these websites because of the open source community, which requires no distribution service and allows users to upload, share, and embed original content (El Gamal 22). Because of the ease of upload these sites are home to some unrefined mixes. These artists work to create their fan base before ever having the ability to distribute their music on all platforms. Many of these artists ask themselves what the major labels can offer them when they have come so far on their own.

Recording studios previously filled songwriters' demand to have their music mastered for quality and clarity before distribution. Modern songwriters often attempt to record quality music and vocals at home, sometimes with little technology outside of the digital audio workstation. Music distribution has become much more complex as advances in technology have been made available to amateurs (Tot 3). While the effects plugins and workstations are available to anyone with a personal computer, the thorough knowledge of these delicate effects remains a secret shared among experienced audio engineers.

The traditional recording studio has since evolved from a rentable collection of cutting-edge technology into a common software for musicians to individually refine their sound (Kirby 386). Particularly in the communities of producers on Soundcloud.com, YouTube.com, and Bandcamp.com, there is an intense desire to be involved in every step of your production. In these communities, audio engineer and songwriter are beginning to be considered synonymous as many more artists strive to create their own recording space (Kirby 343). While communities of producers still share their music outside of streaming services, the modern age of music focuses digital distribution on Spotify and Apple Music as its primary mediums. Now that streaming is the distribution standard for album release, there is an increased necessity for

quality mixes to help one's project stand out among the immense collection. Mastering engineers' work is additionally edited as the material is shared across platforms with standards like loudness limits. Some of these standards and techniques are important to understand before trying to master one's own material. For this reason, independent musicians often seek out mastering services. Some modern mastering services are available online by freelance mastering engineers, while some are even entirely automated, where processing is applied via algorithm based on human perception (Birtchnell 3).

When music was first featured on records and radio, the recording studios and record companies had access to the best technology and could supply the artist with valuable knowledge about mastering and distribution. As more musicians began investing in their own equipment, the at-home audio engineer began involving fewer middlemen by recording at home using digital audio workstations (Kirby 4).

In order for an artist's music to sound best when distributed to Spotify or Apple Music for streaming purposes, audio files require precise editing and mastering to maintain optimal balance and clarity in a wide range of speaker systems used by listeners. When mixing, in addition to processing and effects like equalization, compression, and reverb, there are phase relationships, and there are necessary automations and fades in volume. Mixing and mastering at home requires high-quality speakers, tasteful effects, and a trained ear (Tot 3). An experienced mastering engineer understands that there is intense competition and many variables to consider.

The increasing number of unrefined demos appearing on various mediums indicates that more artists are tracking from home with little-to-no tracking or mixing knowledge (Tot 18). Mastering engineers are responsible for techniques like sequencing, equalization, loudness management, format optimization, equipment/plugin knowledge, and subjective loudness

management that are likely overlooked when artists mix their own content (Shelvock 10). Home recording artists that seek a professional mastering engineer sometimes expect an imperfect mix to be repaired by the engineer's expertise. Audio engineers utilize clever techniques to dramatically improve mixes, but sometimes cannot repair a poorly recorded mix. A mastering engineer working on an album of tracks recorded in different environments must take many things into consideration, like listeners that may hear each track of an album one after another and compare their relative loudness (Shelvock 10).

As the demand for mastering engineers in the digital age has increased, so has the competition for a cheaper, faster method of mastering. LANDR is one example of automated mastering using artificial intelligence. Systems such as LANDR are intriguing to those that previously couldn't afford a mastering engineer. LANDR has uniquely combined its aggregation services with the mastering and finalization options to provide an effective and affordable refinement option for songwriters (Birtchnell 12).

Despite the competition, a human audio engineer's expertise is still considered superior to artificial intelligence mastering, and mastering engineers are still available for the network of competitive musicians online (Birtchnell 11). These AI mastering algorithms may put subpar mastering engineers out of work as they gain popularity and become more sophisticated, and these programs will undoubtedly help at-home songwriters prepare their compositions for streaming on a tight budget (Birtchnell 2).

## Conclusion

While the relationship between songwriter, distributor, and mastering engineer has changed, each has maintained their individual responsibilities; the artist just has more options and independence than before. The music industry has evolved to comply with many different forms of media, but no transition has been quite as complex as the transition from physical CD to digital streaming services.

Thanks to the internet's network of services encouraging streaming as the modern standard, artists on almost any budget can enter the playing field using digital download aggregation and digital audio workstations from their home computer. Distribution of one's music is now as simple as choosing a method of payment, most often either annual or per release.

The refinement of audio files prior to distribution has now become standard and musicians must now focus more on the mastering process to compete with the plethora of material online. Recruiting an accomplished mastering engineer, mastering at home, or using an automated mastering service are three equally intriguing methods of preparing a track for distribution. A human mastering engineer can be somewhat expensive to recruit, but they will be able to tell what your mix is lacking, and they will repair it with consultation and updates. Mastering at home puts even more pressure on the artist, and the necessary materials are usually costly. If a musician is particularly comfortable in their digital audio workstation of choice, they may produce a quality final master at home. A partially or fully automated artificial intelligence mastering service is beneficial for those who lack mastering expertise and are on a tight budget.

It is controversial whether this option is entirely viable, but it is often an improvement in comparison to an unmastered mix.

## Bibliography

Bielas, Ilan. "The Rise and Fall of Record Labels." 2013. Claremont McKenna College, CMC Senior Theses.

[https://scholarship.claremont.edu/cgi/viewcontent.cgi?article=1595&context=cmc\\_theses](https://scholarship.claremont.edu/cgi/viewcontent.cgi?article=1595&context=cmc_theses)

This article recalls the rise, peak, and the fall of record labels both major and minor and their services before digital distribution was an option. It is particularly useful in section one for referencing record label's reaction to MP3 piracy. As physical media like CDs became increasingly obsolete, labels struggled to adapt and adopted new techniques like "360 deals." Section one briefly discusses some lawsuits and often references Bielas' thesis.

Birtchnell, Thomas. "Listening without ears: Artificial intelligence in audio mastering." 2018. *Big Data & Society* Volume: 5 issue: 2. 205395171880855.

10.1177/2053951718808553.

[https://www.researchgate.net/publication/328683918\\_Listening\\_without\\_ears\\_Artificial\\_intelligence\\_in\\_audio\\_mastering](https://www.researchgate.net/publication/328683918_Listening_without_ears_Artificial_intelligence_in_audio_mastering)

Thomas Birtchnell conducts interviews with engineers and discusses the effective use of AI mastering programs like LANDR. LANDR is one of the five aggregation options that I compare in section two. The AI mastering services they provide are one of the three methods of mastering I describe in section three.



Dubner, S. J., & Frassica, M. (n.d.). "How Spotify Saved the Music Industry (But Not Necessarily Musicians)" *Freakonomics*, Ep. 374. William Morrow, 10 Apr. 2019, <http://freakonomics.com/podcast/spotify/>.

Stephen Dubner on the Freakonomics podcast conducts an interview with Spotify CEO Daniel Ek in regards to sharing one's music on Spotify. Ek also covers some of Spotify's criticism. They further discuss the music piracy service of the past: Napster; its effect on music consumers; and the lack of artist commission on streaming services.

El Gamal, Ashraf, "The Evolution of the Music Industry in the Post-Internet Era" (2012). Claremont McKenna College. CMC Senior Theses. Paper 532. [http://scholarship.claremont.edu/cmc\\_theses/532](http://scholarship.claremont.edu/cmc_theses/532)

This article sheds light on digital distribution and explains the differences between releasing a digital album and a physical album. It helps to differentiate the two methods of releasing an album, and discusses why digital releases are now standard. El Gamal's thesis is referenced throughout the paper and helped to inspire my content.

Gough, Owen. "Youtube downloader: Convert youtube to MP3 - Is it legal? Could you be fined?" *Express*, Express Newspapers, 6 June 2018, [www.express.co.uk/life-style/science-technology/970429/Youtube-downloader-convert-youtube-to-mp3-is-it-legal-fined](http://www.express.co.uk/life-style/science-technology/970429/Youtube-downloader-convert-youtube-to-mp3-is-it-legal-fined).

This article I reference only once in section one to explain the specific legal controversy surrounding YouTube to MP3 conversion. It also explains the term 'stream-ripping.'

Herstand, Ari. "Who Is the Best Digital Distribution Company for Music." Ari's Take, 19 Dec. 2018, <https://aristake.com/post/cd-baby-tunecore-ditto-mondotunes-zimbalam-or>

This very recent article acts as a shootout between available aggregation and distribution software for the independent musician. Herstand's article has a massive chart comparing many distribution options and is much more critically comparative and scholarly sound than my chart comparing just five options. This content was critical for the development of section two of my paper.

Kirby, Philip Ronald. "The Evolution and Decline of the Traditional Recording Studio." 2015.

University of Liverpool, PhD thesis.

<https://pdfs.semanticscholar.org/6f24/eb400e8b5f55e887be09749a58074de1f89f.pdf>

Philip Kirby covers the history and innovation of the British recording studio. This source helped me to organize a timeline and describe the technological advances leading up to the modern, at-home studio, in which recording artists fundamentally utilize the digital audio workstation.

Shelvock, Matt. "Audio Mastering as Musical Practice." 2012. University of Western Ontario, Master's thesis. Electronic Thesis and Dissertation Repository. 530.

<https://ir.lib.uwo.ca/etd/530>

Matt Shelvock describes the history, processes, and responsibilities of a mastering engineer in great detail. This helps me describe the mastering engineer's job description and introduce its associated vocabulary. He further defines terms like 'digital audio workstation' and 'phase relationship' that I reference later in my content.

Tot, Josef. "Multitrack Mixing an Investigation into Music Mixing Practices." 2018.

Staffordshire University, MS thesis.

Josef Tot defines mix artistry and additionally describes a timeline of mixing innovations. He also conducts a case study using the feedback and opinion of twenty-one various mixing engineers to categorize the general opinions of modern audio engineers.

Voogt, Budi. "The Indie Musician's Guide to Digital Distribution." *Heroic Academy*, edited by Tim Van Doorne, 12 Feb. 2019, [heroic.academy/indie-musicians-guide-to-digital-distribution/](https://heroic.academy/indie-musicians-guide-to-digital-distribution/).

Voogt is referenced only once at the end of section one to support the non negotiable aggregation contracts that he explains as a 'one-size-fits-all' contract. It is important for me to explain that labels and audition-based, individualized distributors can offer you a more flexible contract.