Sanjeev Sreetharan

Selling Music in a Brave New Bittorent World

The 1800s had the Luddites – British textile artisans who violently protested against the changes brought by the Industrial Revolution. The 1900s had horse carriage merchants who fought the rise of the automobile. And now, the 2000s have the RIAA: dinosaurs futilely clutching to old ways of generating profits as the world changes around them. And like the dinosaurs, and the textile artisans and horse carriage merchants before, the recording industry will go extinct if it does not evolve. The recording industry needs a fundamental overhaul of its business model if it is to survive in the internet era. I believe that to survive, the recording industry must embrace the effortless and virtually costless free music distribution system of the internet and adapt to a world where music is expected to be free. It can do this by aggressively downsizing and switching to a "free media" system (akin to Hulu.com) that generates revenues off advertisements and concerts.

The recording industry needs a new business model to adapt to a new climate where individuals expect to not pay for music. The new business model I propose has two major changes. The first deals with costs: with the free and effortless distribution of music that is now available through the internet, some of the services of a recording label, such as the art and marketing departments, as well as the business affairs branches dealing with manufacture and distribution, can be eliminated to save money. The second deals with generating revenues by giving away music. It involves the creation of a website that that allows the free distribution of all the record labels' artist's music, along with targeted ads, promotions for that artist's upcoming concerts, and a link that allows for donation of money to the artist.

However, before elaborating on the new proposed business model, it is important to reflect upon their current business model and the effect of the internet on that business model (similar to the effect of a tire iron on porcelain), because this gives important insight and justification on where it must go in the future. Before the internet, the recording industry generated revenues as such: a record company's Artists and Repertoire department (most likely from Sony, EMI, Universal Music Group, Warner Music Group or one of their subsidiaries) finds a promising young musician and enters into a contractual agreement with him or her, promising music distribution, a recording studio, manufacturing, and promotion in exchange for a measly 84% to 92% of total album sales. So the recording companies had one primary cash flow: selling albums. Over 80% of Warner Music Group (WMG)'s revenues come from selling albums (Morningstar). Their costs, however, are numerous. The standard album has an SLRP (suggested list retail price) of around $17. Studios will sell the albums to retail stores marked down to around $10 per CD. From this $17/CD eventual profit, the recording studio loses around $7/CD to the retail stores, and paid, on average, $0.55/CD for manufacturing, $1.25 for artist royalties, and $1/CD for promotion (Rapaport). This gives recording studios a gross margin of approximately 50% - not bad, when you can sell albums. And therein lies the problem.

Then internet happened, and with it came a tectonic shift for the music industry, and one that it is still grappling with. In the past, format changes (LPs to cassettes to CDs) have been beneficial for the recording industry because consumers would rebuild their music libraries. The stark new reality for the recording industry is that many people now believe that music is free, that music should be free, and that it makes no sense if music isn't free. Take, for example, a choice that millions of people face every year: they want to own every song made by band X, say, Radiohead. They have three options:

A) Drive to a music store or order the discography on Amazon. Pay around $100.

B) Download the music off iTunes. Pay around $50 and have your music locked so that you are unable to transfer it freely.

C) Download the music for free. Negligible chance of getting penalized by the RIAA. No digital rights management.

Someone would only rationally choose A or B for moral grounds, or if there is information asymmetry (don't know about BitTorrent, believe the chance of getting caught is much higher than it actually is) [1]. A business model that relies on normative rationale and information asymmetry is not tenable.

And so, predictably, the rise of the internet has been met with the decline of the recording industry. Record sales have decreased by over 35% since 2000 (Hiatt & Serpick, 2007). Though some of this decrease has been offset by the rise in digital downloads through iTunes, the net result is still a precipitous drop in the profitability (and therefore viability) of the recording industry. Exemplifying this is Warner Music Group, the only independently publically traded recording studio of the Big Four, has performed 60 pp worse than the S&P 500 since 2005 (Google Finance). As digital downloads have increased by over 50% in the last three years; WMG's EBIT has declined by over 65% in the same time period (Reuters). The crux of the problem with the rise digital downloads not being able to offset the decrease in record sales is the deterioration of the concept of an album – before, consumers would pay $17 to buy an album with 4 good songs. Now they can pay $4 for those 4 songs. One could argue that this could be a boon for record companies as individuals who would earlier refuse to pay for an album with just

[1] There are also people who prefer owning something "physical" to a simple digital download to the extent that they would pay $10 for owning the CD, regardless of the music, but I believe it is reasonable to assume that they are not a significant portion of the population.

a few good songs would now be compelled to buy those songs online. This is an important point; however, it is currently Apple that owns the means of distribution, not the record companies, and while total digital downloads may be increasing, WMG's declining EBIT demonstrates that the increase in digital sales isn't enough to offset the loss in album sales.

So how will an ad-based free distribution system and focus on concert revenues help adapt the recording industry to the new market environment? It will do so by adapting to the two new major realities brought on by the internet and the MP3 format: free distribution and the expectation of free music. The first change will address reducing costs by eliminating parts of a record company inconsistent with free distribution of music, and the second change will address generating revenue in an economic climate where your main product is expected to be free.

The distribution of music is now near costless. Factories, truck drivers, and retail stores have been replaced by servers and internet connections. Most significantly, artists now have the ability to distribute music themselves. This means that the ability for record companies to distribute albums to different retail stores so that consumers may purchase them is no longer intrinsically value-adding because there is a virtually costless substitute. Therefore, I argue, that the overarching purpose of record companies must change as well. Artists no longer *need* record companies to distribute their music; in other words, record companies are no longer the gatekeepers to fame and fortune. Artists have the ability to get their music to consumers through self distribution, and can avoid the ridiculous 84-92% cut their recording studio would take.

But can bands do so effectively? In December of 2007, Radiohead – a popular British alternative band – decided to eschew the standard album model and simply uploaded their latest album to Radiohead.com. Moreover, they released the album for free, asking fans to pay "what you think it's worth." As a result, Radiohead not only had more people download *In Rainbows* than any of their previous albums, but they earned more money because they were able to keep all of it (Pareles, 2007). However, Radiohead is already immensely popular: most other musicians would not be able to replicate this, so record companies still have value to most bands through their ability to promote artists and offer public relations management and industry contacts. However, recording studios already provide these services, so they lose some baggage. What becomes unnecessary in a performance and ad revenue based model that I am proposing is eliminating everyone associated with album distribution and manufacturing and creation of physical media. This would significantly reduce general and administrative costs, because the manufacturing and distribution centers of record companies. Other departments within the record studio that pertained to the physical median of music storage, such as the Art Department and Marketing can also be eliminated, while, Publicity Department and Promotion can merge, and New Media and Business Affairs can be eliminated and outsourced to a database company for website management; A&R stays as is, but will focus on developing smaller, more niche, talent versus focusing on the next pop star (How Stuff Works). So instead of 7 major departments, the under the new business model record companies would have two: Artists and Repertoire and Promotion and Public Relations. The new goal of a record company would be to find talent, promote them, and give away their songs for free on a website, supported by Ads and concert revenue. By reducing the bloat and costs of record labels, and tempering their scope and function, it will be much easier to be profitable going forward.

Now that the costs have been reduced, how are record companies expected to earn a profit when they're giving away music for free? Though it may seem radical for the record industry to give away its chief product for free, the television industry has successfully used this

"Hulu.com" model since March 2008. The television industry had a similar revelation a couple of years ago. They knew that people were watching the Daily Show, Colbert Report etc for free off Youtube and Bittorrent. At first NBC and its peers tried to take action by demanding that Youtube take down its videos and filed lawsuits against those caught downloading illegally. However, they realized that people will be watching their shows for free regardless, so instead of trying to squashing free media, they embraced it – they created an extremely clean, efficient website in Hulu.com (which stands for interactive video in Chinese Mandarin) and made it profitable with online advertisement. Last year, Hulu generated over $90m in revenue. I believe that the two industries are facing almost identical threats, and that the recording industry should embrace a similar format. The details of the proposed Hulu-styled website (called, perhaps Huyinyue – "interactive music" in Chinese Mandarin) would be as follows:

- All music created by artists is free for download.
- Targeted ads on every page, as well as an optional donation button that goes directly to the artist. Record label gets all ad revenue, Artist gets all donation revenue.
- Promotions for upcoming concerts from the artists whose songs you download. Revenues from concerts split 50/50.

Artists stand to gain from this business model as well; though consumers would be at no moral or legal obligation to donate, people will still donate. An average donation of $4 per download was made to Radiohead when they tried a similar model for *In Rainbows*, up from the approximately $1.27 per album they would get under the old business model (Pareles, 2007).

Because the musicians are the fundamental aspect of this industry, that not only the recording industry finds the business model appealing, but the musicians find it tolerable, at the very least.

How should a recording studio finance this shift in business model? This should not be too hard if the firm times the shift correctly. Because an integral part in the change in business model is a massive downsizing of the firm, the recording company should wait until all of the initial investment in their next sure-fire album to drop (for WMG, this would be from one of their superstars such as Jay-Z), and immediately when that album hits the shelves commence massive firings and downsizing – the revenues from the album sales would likely generate enough free cash to set up the internet distribution site and advertising for their new business model. Any other financing that is necessary should be taken in through the issuance of medium-term debt (long enough to not risk immediate insolvency, and short enough to be paid back in a reasonable timeframe). Given that most of the changes to the structure of the firm can be done with the free cash inflows from a successful record, the debt and equity structure of the record company shouldn't need to change much.

Operating under the old business model, WMG has a Beta of 3.13, which implies an r_e of 0.22 (Yahoo Finance). As the new business model increases the ROE of the firm should make it smaller and more profitable, investors in a firm using an ad revenue and concert sales to spur revenue growth should expect an r_e higher than the previous business model's was at .22. One benefit to a near costless method of distribution is that it allows record companies to be able to concentrate on cultivating many niche artists instead of just a few megastars, because of the lower cost per artist and therefore smaller revenue required per artist for the project to be worthwhile. This shift will create more potential drivers for future growth.

What is most important to ask is, however, if implemented, would this new business model be value creating, and, if so, what would be the expected returns compared to the current business model. To do so, we will look at the present value of a successful “project” or band, here using Coldplay as a model. The following page presents two Project Valuations, with the present value of Coldplay, if Coldplay had been discovered and signed today (that is, using their historical albums sales but shifted as if their first album were released next year). The assumptions used in this valuation are attached in the appendix.

Present Value: "Coldplay 2.0" Album Business Model

Year	CFs	cd decline	disc rate	PV
2009	38500000	0.85	1.11	29481982
2010	0	0.7225	1.2321	0
2011	60500000	0.614125	1.367631	27167096
2012	0	0.5220063	1.5180704	0
2013	0	0.4437053	1.6850582	0
2014	55000000	0.3771495	1.8704146	11090174
2015		0.3205771	2.0761602	0
2016		0.2724905	2.3045378	0
2017	49500000	0.2316169	2.5580369	4481968
			PV	**72221220**

Present Value: "Coldplay 2.0" Hulu Business Model

Year	CFs	disc rate	PV
2009	$12,916,375.00	1.11	11636374
2010	$10,000,000.0	1.2321	8116224.3
2011	$14,578,750.00	1.367631	10659856
2012	$10,000,000.0	1.5180704	6587309.7
2013	$10,000,000.0	1.6850582	5934513.3
2014	$14,162,500.00	1.8704146	7571850.8
2015	$10,000,000.0	2.0761602	4816584.1
2016	$10,000,000.0	2.3045378	4339265
2017	$13,746,250.00	2.5580369	5373749.6
		PV	**65035727**

In summary, signing a successful band today such as Coldplay would have a net present value of approximately $72 million in album sales, while under the new business model a record company could stand to gain $65 million in album sales. Although the new business model would reap less revenue from a band, which is somewhat predictable as the record company is no longer making *any* money off record sales, the actual profit of the record company will almost undoubtedly be higher, as the number of departments in the record company is being downsized from approximately 7 medium sized divisions to two larger divisions of Artists & Repertoire and Promotions & Public Relations. Although the expected revenue of the firm dropped approximately 10% for that one artist, it is not unreasonable to assume that by eliminating all of the costs that deal with manufacturing and distributing albums, as well as the massive downsizing of the staff, overall costs could be reduced (conservatively) by 15%. For WMG in 2009, this would lead to an expected revenue of 2.85 billion, down from 3.18 billion, but a total cost of 2.38 billion, down from 2.81 billion, with a new EBIT of 461 million, up from its most recent EBIT of 135 million. Obviously these numbers are just estimates, but they demonstrate that the recording industry is operating at middling and shrinking margins, so any change in business structure that reduces costs more than revenues yields outsized returns.

The record industry is going through tough times. Like dinosaurs, record companies are currently sitting idly by as the internet inexorably blocks out their sun and chokes future growth potential. By embracing near costless distribution of music and embracing the concept of free music, the recording industry can reinvent itself, slim down, and not only survive, but evolve and thrive.

APPENDIX:

1. Valuation Assumptions and Data inputs

Financials			
WACC	0.11		
annual rec sale dec.	0.15		
Album Business Model			
Coldplay album sales		**Hulu Business Model**	
Parachutes - year 1	7.00E+06	cost per click	$2.50
A Rush of Blood to the Head - year 3	1.10E+07	concert attendance	20000
X&Y - year 6	1.00E+07	ticket price	100
Viva La Vida- year 9	9.00E+06	concerts per year	10
		album sales: free download ratio[2]	3.33
profit per sale	$5.50	clicks per view	.05

2. Valuation Formulas:

Album Business Model

PV of CF = [(record sales * profit per sale) * (annual rec sale dec)^n] / (1 + WACC)^n

Hulu Business Model

PV of CF= [(record sales * album sales : free downloads * cost per click * clicks per view) + (concert attendance * ticket price * .5)] / (1+WACC)^n

[2] Value approximated by taking total sales from In Rainbows download (3million) and dividing it by total sales of their last CD, which was sold as an album and not a free digital download. This value is to predict the approximate rise in number of downloads of a free album with respect to the total sales of an album if it were priced and sold as a normal record..

Works Cited

Google Finance. (n.d.). *WMG*. Retrieved December 1, 2009, from Google Finance: http://www.google.com/finance?q=NYSE:WMG

Hiatt, B., & Serpick, E. (2007, June 28). *The Record Industry's Decline*. Retrieved December 1, 2009, from Rolling Stone: http://www.rollingstone.com/news/story/15137581/the_record_industrys_decline

How Stuff Works. (n.d.). *How Record Labels Work*. Retrieved December 1, 2009, from How Stuff Works: http://entertainment.howstuffworks.com/record-label1.htm

MorningStar. (n.d.). *Warner Music Group Corporation*. Retrieved December 2, 2009, from MorningStar: http://library.morningstar.com/Quote/Quote.html?country=USA&ticker=WMG&TimeFrame=

Pareles, J. (2007, December 9). *Pay What You Want For This Article*. Retrieved December 2, 2009, from New York Times: http://www.nytimes.com/2007/12/09/arts/music/09pare.html

Rapaport, D. (n.d.). *How Record Companies Make Money*. Retrieved December 1, 2009, from http://www.bmusic.com.au/links/industry/archives/ararchiv/reccomp.html

Reuters. (n.d.). *WMG*. Retrieved December 1, 2009, from Reuters: http://www.reuters.com/finance/stocks/incomeStatement?stmtType=INC&perType=ANN&symbol=WMG.N