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MA Music Industry Entrepreneurship
Economics, Planning and Finance
Essay 1 – Pandora Media

PART A – History of Pandora Media

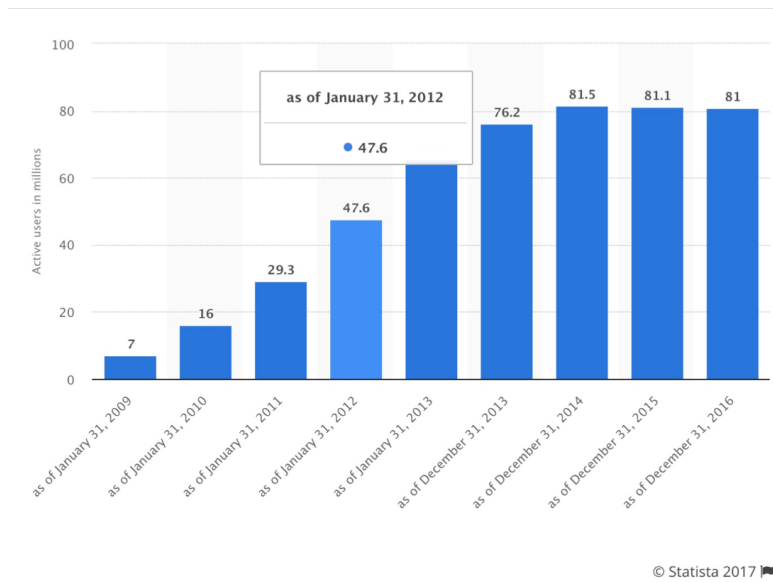
Pandora Media's life began with the Music Genome Project (Pandora – About) which was launched in 1999 by Tim Westergren along with Will Glaser and Jon Kraft. With the initial name Savage Beast Technologies, the founders wanted to create a radio service that would be able to play a sequence of songs that a user would enjoy, based solely on the information of just one chosen song that the user likes already. The Project was implemented by manually inputting data that analysed over 400 attributes of each track. Since the beginning, this process has never been automated and has always been undertaken by trained musicians who go through a stringent recruitment process.

After a turbulent few years, requiring employees to work without pay and building up huge personal debt, Westergren managed to raise \$9 million in funding. The business changed their name to Pandora Media and launched its first platform as a subscription based service. In 2005, they also made the addition of an advert-based service that allowed the platform to be free for users to use.

In July 2007, Westergren announced that Pandora has had to shut down all operations outside the US, citing "lack of a viable licence, structure for Internet radio streaming in other countries" (Westergren, 2007). However, they continued to operate in the UK with the hope that there was still a solution to be found. Less than a year later, in January 2008, Westergren sent out an e-mail explaining that Pandora has been "told to sign totally unworkable license rates or switch off, non-negotiable." (Westergren, 2008) and therefore had no choice but to close down in the UK as well. Licensing problems continued in America, with reports that "*U.S. Copyright Royalty Board's new rates for webcasters would end online radio as we know it*" and was very close to causing Pandora to shut down completely. (Van Buskirk, 2008). Finally, in July 2009 Sound Exchange settled the issue with an "*experimental*" process "*for at least five years*" but still defended the rates that were being put in place before this agreement.

Having rectified their problems in the US, Pandora continued to have steady growth in user numbers and filed for an IPO in 2011. A couple of years later, Pandora was showing good progress and dominating the Internet Radio market in 2013, accounting for "*70% of Internet Radio and 8% of total US radio listening*" and achieving "*71 million monthly active users*" (Guglielmo, 2013). By 2015, Pandora was a market leader and undertook acquisitions of *Rdio* and *Ticketfly* to further broaden their business into streaming and ticketing services. The year after, it was announced that they had reached direct licensing agreements with major labels and were able to launch their new subscription plans – Pandora Plus and Pandora Premium.

Number of Pandora's active users from 2009 to 2016 (in millions)



More recently, 2017 has been an extremely turbulent year. Coming under pressure from the huge growth of competitors Spotify and Apple Music, Pandora's user numbers had stagnated and led to a series of poor financial results. Losing money and losing listeners, the business decided to close its operation in Australia and New Zealand, leaving the USA as its only active territory. Pandora were in need of financial support to regroup and figure out a recovery plan. As a result, Sirius XM – who were hoping to take on Pandora as a full acquisition – invested \$480m and taking a 19% stake in the business, alongside 3 seats on Pandora's board. This was coupled with Pandora's divestment of TicketFly, having acquired it two years previously. Although this injection of funds may be seen as the start of a recovery process, CEO and Founder Tim Westergren stepped down from his post

PART B – Business Economics

Pandora, entered the music industry just as it was undergoing huge changes with the digital era and many of their licensing issues came about because music copyright law was not well suited to businesses in the digital market and had to be adapted. Although these changes explain some of the problems Pandora has had, the music industry is now in a position where service-based platforms are being used to consume music more than traditional purchases. In this way, Pandora was almost so far ahead of the market in 2004 that they didn't get any sort of early-mover advantage – in fact it was most likely detrimental to the business. Now, they need to be able to overcome their previous complications and compete against global streaming services who, in hindsight, launched at the optimal time such as Spotify.

Product and Pricing

Pandora's primary business-to-consumer product is Pandora Radio, an internet-based radio service that plays a curated playlist of songs based on an initial source track that the user chooses. This product is free to use and generates revenue through tailored advertising. Advertising is Pandora's primary source of revenue, accounting for around 77% of total revenue in 2016. There are also two subscription levels on top of their radio service, Pandora Plus and Pandora Premium, which users can pay for to get various benefits and extras (Figure 1).

	Pandora (ad-supported)	Pandora Plus	Pandora Premium
Cost	Free!	\$4.99/Month \$54.89/Year*	\$9.99/month** \$12.99/month (iTunes) \$109.89/year*
Pandora-Curated Radio	☒	☒	☒
Unlimited Skips		☒	☒
No Timeouts			☒
High Quality Audio		☒	☒
Replays		☒	☒
Offline Listening***		Limited to 3 stations	☒
On-Demand Listening***			☒
Fully Customizable Playlists***			☒

Figure 1 - From Pandora Website - <https://help.pandora.com/customer/en/portal/articles/84834-information-about-pandora-subscriptions#1>

Whilst the free service solely includes the Digital Radio, Pandora Premium is essentially the same as a streaming platform, with the ability to listen to songs on demand and customising

your own playlists. Pandora Plus leans more towards the Radio service but with an interactive element. Users can't choose what tracks to play on request, but do have the ability to skip and replay tracks as much as they want. The ability to download music to listen to offline is also limited to Premium. Combined subscription fees for these two services made up 16% of Pandora Media's revenue in 2016 and continues to be a priority focus for the business with the belief that they can *"build a \$1.3 billion subscription business over five years, conservatively based on 10% conversion of our current US audience"* (Pandora 2016 Annual Report – Five Year Plan)

On the Business to Business side, Pandora's main selling point to advertisers is the connection between its personalised service and its user base:

"Our mission is to transform the future of music and be the effortless source of personalized music enjoyment and discovery around the world. We bring the same fervour to helping marketers connect with the people who matter most to them. Learn how when Pandora plays, your message works." (PandoraForBrands.com)

By analysing their user data, Pandora is able to offer their clients a platform that caters for a wide spectrum of advertising, from a national campaign to targeted, local adverts. The marketing products are broken down into Audio, Video and Banner adverts, which can then be customised to target users of a specific demographic, in a certain area, or by their music taste. As this is by far Pandora's main source of revenue, it is essential for them to maintain and optimise the products on this side of their business.

In the financial statements posted for Q3 2017, Pandora posted a revenue of \$378m and a net loss of \$66m. Combining this with figures from Q1 and Q2, the first 3 quarters of 2017 have seen a revenue of \$1.07bn with a total net loss of \$473.6m – already an increase of 38% on total net loss for 2015.

Pandora's Competition

Because Pandora is essentially a hybrid of a streaming platform and a digital radio service, it has competitors in both markets. On the streaming side, the best comparison to make is with Spotify. This is because the other major players in the industry, such as Apple Music and Amazon Prime Music, are enveloped in large businesses that also operate outside of this market. They are also not required to provide separate financial information for their music services and is therefore not possible to analyse this part of their business accurately. For these reasons, Apple and Amazon's music services will not be compared to Pandora in detail. For the digital radio market, Pandora will be compared with iHeart Media.

Spotify

Spotify is currently the leading streaming service in the world, having just announced 70m paid subscribers (Stutz, 2018). Their primary product is based in on-demand streaming; however, they also offer radio services and curated playlists on top of this. In terms of their

customer bases, Pandora have a wider range of ages but is primarily on the older share of the market, whereas Spotify has a more concentrated demographic who are much younger as 62% of their audience is under 30. This could be down to several different reasons, however it is most likely that the older generation are more attracted to services that replicate traditional radio in some way, whereas younger people will be more used to having streaming platforms and don't consume music with radio as much.

Demographic Profile of US Pandora vs. Spotify Users, April 2015

% of total

	Spotify	Pandora
Gender		
Female	55%	52%
Male	45%	48%
Age		
13-18	21%	11%
18-24	26%	19%
25-29	15%	15%
30-34	11%	12%
35-44	14%	21%
45-54	9%	13%
55-64	4%	6%
65+	2%	4%

Note: numbers may not add up to 100% due to rounding

Source: CivicScience, "Differences Between Pandora and Spotify Users," May 5, 2015

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www.eMarketer.com

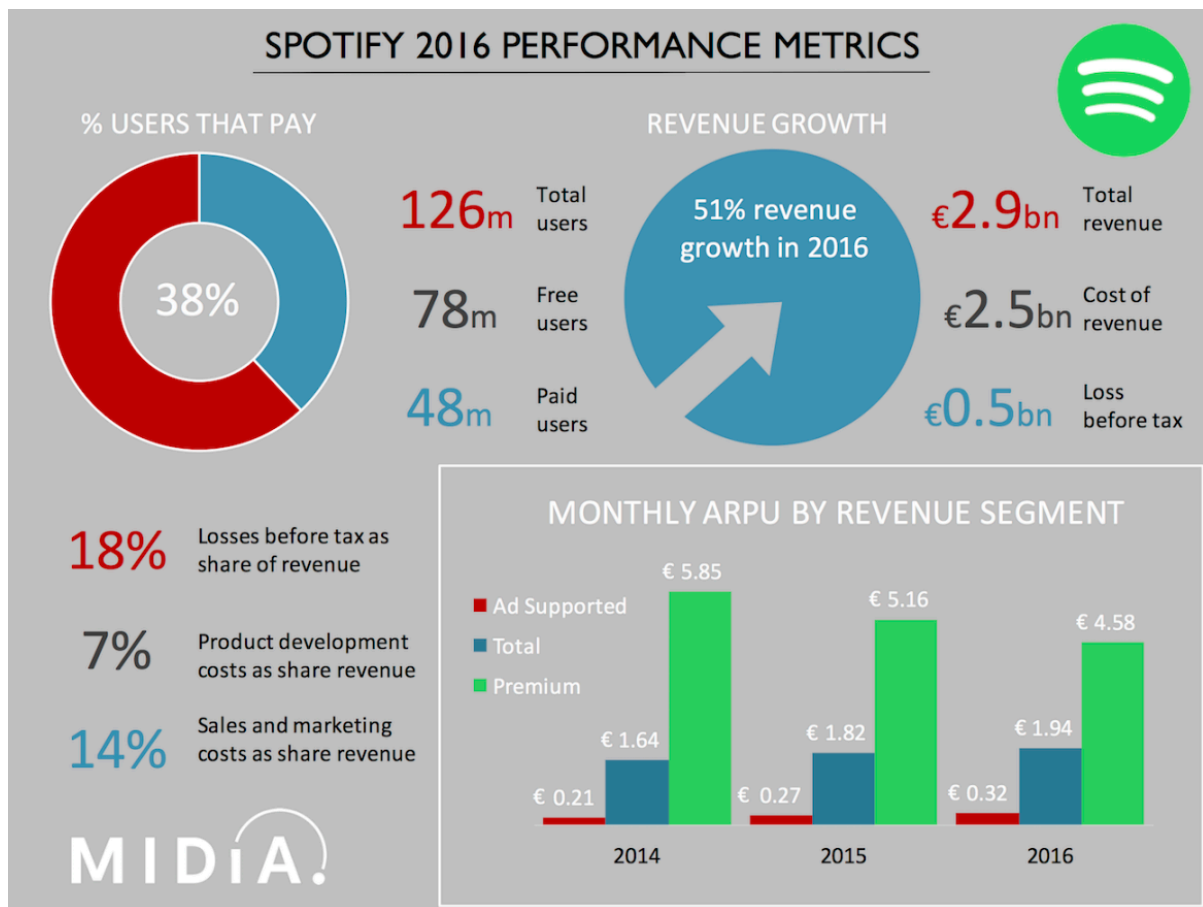
Figure 2 - Statista, Active Users of Music Streaming Service Pandora

In terms of financial performance, Spotify and Pandora seem to have followed a similar pattern with continuous revenue growth alongside significant net losses. In June 2017, Spotify announced a milestone in active users, totalling 140 million (Gumble, 2017), at the same time as releasing financial statements for 2016 showing a 52.1% annual rise in revenues to €2.933billion (\$3.064bn). Initially this seems like very healthy growth, however these figures came with a €556.7million loss (\$581.4m) which is more than double their loss in 2015

In comparison, Pandora posted a 2016 revenue of \$1.38bn, which is a steady 19% increase on their 2015 revenue of \$1.16bn. However, in the same period of time, their losses also doubled, sliding from -\$169m to -\$342m (Pandora Historical Financial Results – September 2017). Furthermore, Pandora's Q1 through Q3 reports in 2017 show that they have already made a loss of -\$473m against a revenue of \$1.07bn. One justification for this is a 'Goodwill Impairment' of just under \$132m to account for selling off TicketFly, a business that they acquired in 2015 for \$400m and sold on to Eventbrite in 2017 for \$200m. The impairment figure "relates to the net assets of TicketFly and other one-time expenses related to its recent financing" (Ingham, 2017).

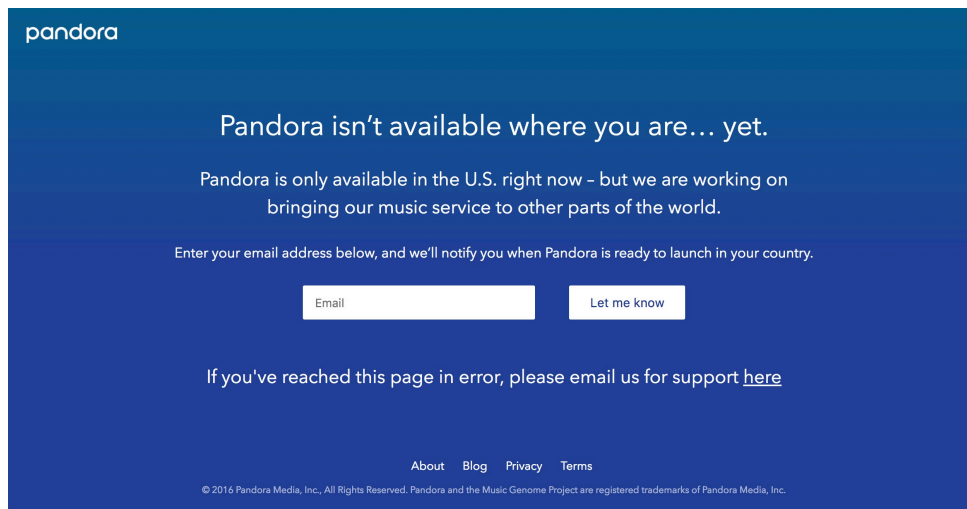
Looking closer at Pandora's quarterly results, 50-60% of their revenue is instantly wiped out by 'Content acquisition costs.' (Pandora 2017 Q3 Results). In a similar fashion, Spotify

reports attribute €2.5bn as a 'Cost of Revenue' from a Total Revenue of €2.9bn or almost 85% (Mulligan, 2017).



The huge costs that Spotify pays out merely to licence their product is exactly why Pandora has had issues with expanding outside of the American market – they would be subject to the same fees, if not higher. With the position that Pandora are in at the moment, it would be suicide to start expanding globally.

One of the main issues Pandora will face with having a global business, like Spotify, as a competitor is their revenue potential. Spotify is currently available in 61 countries across 4 continents (Spotify, 2017) and they are still geographically expanding. By contrast, Pandora has been cutting the territories in which it is available, due to licensing issues. When previously they were active in the USA, Australia, New Zealand and the UK, they are now solely operating in the USA.



Only having one active territory puts a ceiling on their accessible market and limits their revenue potential. At the same time, Spotify is gaining traction as a global leader and this reputation may start converting Pandora's paid subscribers. Along with Spotify, Apple Music is also seeing a steady rise in subscriber numbers, hitting 30m paid subscribers in September 2017 compared to Pandora's 4.9m (Sparks, 2017). The extra competition from Amazon's music service will also add to Pandora's problems competing in the music streaming market as they try to keep hold of their existing paid user base. If Pandora react to this and manage to expand globally in a financially viable way, it might already be too late as their competitors will have solidified themselves at the top of the market and will be incredible difficult to compete against.

iHeart Radio

In the digital radio sector, Pandora's main competitor is iHeart Media, which owns iHeart Radio – a national network of over 850 local radio stations in America that broadcast through its digital platform. Since 2017, the business has started to move into Pandora's product territory by launching a music recommendation feature. In a similar way to Pandora, iHeart generate most of their income through selling advertising on their service:

"Our primary source of revenue is derived from selling local and national advertising time on our radio stations, with contracts typically less than one year in duration [...] We also generate revenues from network syndication, our nationally recognized live events, our station websites and other miscellaneous transactions"

(iHeartMedia Form 10-K/A 10th March 2017– Item 7, Management Discussion and Analysis)

In January 2017, iHeart Media announced the addition of 2 subscription products – iHeart Radio and iHeart All Access, described as *"the first fully-differentiated streaming music services that use on demand functionality to make radio truly interactive"* (iHeart Media Form, 10 K/A Oct 2017 Item 1 – Business)

Along with most other digital music platforms, iHeart Media is also experiencing financial difficulty, however it is in a unique situation that its competitors are not facing and its future is in significant doubt. Due to a leveraged buyout of Clear Channel Media in 2008, iHeart Media took on a debt worth approximately \$20billion as part of their acquisition. Since then, they have struggled to pay off the debt and significant payments are due in the next few years. “\$350m of that debt was due to be paid this year” (Music Business Worldwide, April 2017), which has led to a significant decrease in Cash levels and dropped their liquidity Cash Ratio to 0.15 at the end of Q3 2017 whilst the Current Ratio is still just above 1 at 1.09. These liquidity ratios will fall drastically once the bulk of this debt starts to become a current liability – it’s reported that \$8.3bn more is “to be satisfied in 2019” (Music Business Worldwide, April 2017). For a business that is still posting a loss of \$700m+ each year, their situation may become catastrophic in the absence of serious intervention.

This debt also has a significant impact on Equity figures with iHeart posting a stockholder deficit of -\$10.88bn in 2016 and -\$11.67bn in Q3 2017. These figures make Pandora’s equity of \$554m in 2016 and \$169m in Q3 2017 look fairly healthy, although a 70% equity reduction in less than a year is hardly a good sign either.

In their quarterly report, published in April 2017, the following statement was included as a forewarning to their seemingly imminent decline:

“Management anticipates that our financial statements for the three months ended March 31, 2017 will include disclosure indicating there will be substantial doubt as to our ability to continue as a going concern for [the subsequent 12 months].”

(Music Business Worldwide, 2017)

This is clearly not good news for investors of iHeartMedia and consumers of their radio products. However, from Pandora’s perspective, there may be an opportunity to capitalise on this and start tapping into the 100m registered users that iHeart Radio boasted in early 2017 (iHeart Media, Jan 2017). This is a significant market share and Pandora could convert a significant portion of this figure into consumers of their own free, ad-supported radio product. Furthermore, Pandora’s music suggestion service is likely to be more established than what is offered by iHeart Radio at the moment and their new relationship with Sirius XM may allow them to market themselves towards radio consumers more efficiently.

PART C – Business Finance

Pandora IPO and Aftermath

In mid-June 2011, Pandora went ahead with its IPO and allowed the public to purchase shares in the business on the stock market. Initially, the IPO was seen as successful, closing its first day of trading at 8.9% above the initial price. Although it did have an initial spike of 63% above initial price at \$26 a share, this figure reduced quite quickly to eventually level out at \$17.42.

Pandora



Figure 3 - CNN Money, June 15 2011 - Pandora Stock Surges in IPO, Then Cools

From the start of 2013, Pandora Media enjoyed a steadily rising share price that eventually peaked at the end of February 2014 at \$37.42 a share. Since that time, share prices have been spiralling downwards. A year after the stock price peaked, Pandora was trading at \$14.91 a share February 2015 – a decline of 60.15%. At the time of writing, the business is trading at \$4.64 – just \$0.07 above its lowest ever price in November 2017. The general consensus on Pandora's IPO was so negative that it caused streaming platform Deezer to cancel their planned IPO in 2015 (Peoples, 2015).



Figure 4 - Pandora Media Stock Price from IPO to Dec 22nd

In what will become an interesting comparison in 2018, Spotify have recently filed for its own IPO planned for Q1 2018 (Roumeliotis & Baker, 2018). Their performance in the stock market will surely be judged against Pandora's due to the similar nature of their businesses.

Investing Activities

Before the issues of 2016, Pandora had started to expand the reach of its business by investing in the ticketing market and in streaming service technology through acquisitions of TicketFly and Rdio.

Rdio was acquired for \$75m in cash and was a music streaming service created by two founders of Skype. As part of the acquisition, Rdio declared bankruptcy whilst Pandora took on 100 of their staff alongside several aspects of its core product and technology:

"The addition of technology, product, IP and people from Rdio will unlock opportunities for Pandora — including speed to market for their on-demand services, global expansion and direct licensing relationships. The result will be the industry's best combination of streaming radio and subscription songs on demand." (Lunden, 2015)

It's likely that this investment was used to build and optimise the two new subscription services that Pandora released in 2016, especially considering the fact that the Premium service is more or less a streaming platform.

In contrast, the acquisition of TicketFly was a much more expensive investment and was also a diversification of their business to generate a new revenue stream. Although it was initially praised as *“an exceedingly smart move to equip Pandora for the future, even if it seems expensive”* (Burns, 2015), the \$450m investment did not go to plan as it had to be divested for \$200m, just 2 years later. As a result of this, we will never know how much further Pandora could have developed their ticketing business, after it generated a total of \$162.5m in revenue for 2016 and the first 3 quarters of 2017.

Financing

Because of its difficult year in 2016, Pandora urgently needed a boost in short-term financing to stabilise itself. As an indicator of their problems, their cash ratio had dropped from 1.44 at the end of 2015 to 0.79 at the end of 2016 – clearly showing some liquidity issues. In 2017, it was announced that Sirius XM would be investing \$480m in cash in return for a 19% share in the business. The idea of Sirius XM acquiring the whole of Pandora was negotiated but this broke down after disagreements over Pandora’s valuation:

“Liberty Media CEO Greg Maffei [...] reportedly made an informal offer for Pandora at roughly \$15 a share early last year. But in March, Maffei said that Pandora was “overvalued,” and that \$10 per share was something that could work. The \$480 million deal came after Pandora rejected an offer from Sirius to buy the entire company for \$8 a share” (McAlone, 2017)

Alongside this development, Pandora sourced some much-needed cash by divesting TicketFly for \$200m. Whilst this price is a long way off what they paid for the ticketing business, it may prove to be an important move in their ability to restructure: *“Coupled with the SiriusXM investment, the added cash buys Pandora time to prove it can build a successful and profitable on-demand music service”* (Schneider, 2017). In the short-term, Pandora seems to have saved itself for a little while however the need to change the way their business works should be becoming a priority.

In the long term however, Pandora’s solutions to its financial problems are not clear. Pandora’s original plan to *“build a \$1.3 billion subscription business over five years, conservatively based on 10% conversion of our current US audience”* (Pandora 2016 Annual Report – Five Year Plan) may be significantly altered now that Sirius XM have a share in the business, along with a significant presence on their board that could give them control to shape the company’s future decisions.

PART D - Lean Business Methods

At a very basic level, the Lean Business Method aims to generate the maximum amount of revenue or efficiency by using the minimum amount of time or resources by causing “*a process to be performed with a minimum of non-value-adding activities*” (Hobbs, 2011). Unfortunately, as Hines notes, many businesses have mistakenly implemented it as “*a short-term cost cutting or waste reduction mechanism. Indeed, many refer to Lean as a cost reduction tool kit, an initiative or a programme*” (Hines, 2010). Ultimately, the ideal goal for a Lean business is to provide perfect value to the customer through a value creation process that has zero waste. It can easily be argued that this an impossible ideal to aim for but it works as a useful measure to judge a business’ process against. However, it should not be assumed that the method is infallible.

For Pandora Media’s product development, it is immediately clear that the Music Genome Project – the backbone of Pandora’s music suggestion technology – is not working in a Lean method because the amount of value created compared to the amount of time and resources spent on manually categorising thousands of songs to its database in accordance with its 450 attributes. On face value, it would be entirely possible for Pandora to build a system that automates this process and would save them a huge amount of money. However, their whole selling point since conception is based around keeping the human element of music in a digital era – “*Algorithms aren’t personal. People are personal.*” (Pandora for Brands - <http://pandoraforbrands.com/music-genome-project/>) Eliminating the business’ Unique Selling Point would most likely have a greater negative affect than the inefficient method that they are working in to build and maintain their product.

Recently, Pandora has been criticised for being too generous with awarding its top-level staff with stock. Ingham (2016) reports in *Music Business Worldwide* that

“In the first nine months of 2016, Pandora spent \$103.8m on stock-based compensation – around \$2.9m every single week. This figure was not only more than it spent on product development across the period, but up 30.6% on the equivalent figure in 2015.”

This trend also seemed to continue into 2017 as in the first 3 quarters, total stock-based compensation was at \$98.327m. This figure is admittedly less than figures at the same time in 2016 but only by 5% when cumulative Net Losses at Q3 2017 were 87% higher than the year before (Pandora Q3 2017 Financial Reports).

To apply Lean business principles to these figures, it is highly doubtful that the recipients of this amount of stock, are adding value to the company of over \$100m every year. These excessive rewards are harming the business at a time when it’s important to be as efficient as possible to start tackling the huge losses being made.

Conclusion

Although Pandora are losing significant amounts of money each year, this is not out of the ordinary because the same can be seen with every other digital music service. Both Spotify and iHeart Media are losing huge amounts of money as well. However there is a strong case to suggest that they could be losing less money if the rewards of stock to directors are mediated.

For Pandora to be able to successfully grow their business from the position it's in at the moment, it will need to expand globally. However, as previously discussed – the licensing fees are too extreme at the moment for this to be a feasible option. Furthermore, it would be incredibly difficult to start competing against market leaders such as Spotify and Apple Music on a global scale. Therefore, Pandora needs to diversify its product to be able to offer something new to the music industry that does not involve the need to licence music on a large scale because this is what kills its revenue. By offering a product that is different to what's on the market already will also reduce the risk of directly competing with businesses like Spotify. This seems to be what Pandora were considering through the purchase of TicketFly, however due to poor timing, this was not able to be fulfilled.

The fact that Pandora has been around for much longer than its current main competitors could either see it weather out the storm and come back fighting, like it has done so many times before. Alternatively, with the departure of its primary founder, Westergren, it may be time to find other uses for the product it has built.

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