

Case Study

OpenEMI - Making Music App Development more Accessible



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## **1. Summary**

The evolution of distribution and convergence of technology has led to the rise in popularity of smart phones and mobile application development (“apps”). Led by Apple’s App Store and Google’s Android Marketplace (Perez, 2011), the app has become a popular selling point for mobile phones and now tablets. Mobile internet use is now as popular as traditional access through computers and is predicted to overtake fixed internet by 2015 (Weide, 2011) and is being used by media industries to create new channels of distribution and interactivity. The app marketplace has facilitated this new interactive media stream, allowing greater connectivity between companies and customers.

The smart phone’s increased market share has been the primary factor in the app’s success. However, now the app is appearing in a range of different devices - tablets, TVs, game consoles, etc. The app has generated interest from banks, online retailers, car manufacturers and computer game publishers. The music industry has joined this list, using the app’s interactivity and ability to communicate directly to consumer as a new marketing tool.

In response to demand, EMI and development company The Echo Nest have partnered to create apps for their artists. Using a streamlined licensing system and content from the label’s artists stores in “Sandboxes”, the OpenEMI project aims to source elevator pitches for apps using their multimedia and approve the best. The arduous process of securing publishing rights will be facilitated by EMI, creating an appealing service for developers.

This case study discusses the rise of the app, its use in the music industry and the ways in which the OpenEMI project is addressing the issues of content licensing for app development to circumnavigate complicated publishing processes.

## **2. Background/Context**

### **2.1 The Echo Nest**

Based in New York, The Echo Nest is a software development company that specialises in tools for music application creation. Created by two MIT PhD students in 2005, it focused on developing a “music data repository”, building an impressive database and crawling system. The company describes itself as a “Music Intelligence Company”; their *Music Brain* platform is a complex indexing crawler which analyses trends by:

- Reading about music - scanning blogs, reviews, forums, playlists for information
- Listening to music - using analysis software to identify key, tempo, time signature etc.
- Seeking trends - analysing online “chatter” about popular artists and songs.

(The Echo Nest, 2012)

The *Music Brain* platform provides a database of information which allows developers to create useful apps. The Echo Nest not only focuses on mobile apps, utilising its database for web apps and traditional software; it is also behind many popular social music applications, including Spotify Radio, BBC Music Showcase and MTV Music Meter. It claims its APIs interact with over 100,000,000 users every month (The Echo Nest, 2012).

## 2.2 EMI

Although recently bought out, EMI is traditionally considered one of the four major record labels. Arising from a merger in the 1920s, EMI was a company of many hats - recording, distributing and publishing. As such, much of the business operated internally. However, the emergence of new technology has led to other means of sales and distribution - something EMI could not keep up with.

Music sales have suffered since the arrival of the internet and online illegal file sharing, yet companies like EMI reacted slowly to technological changes. EMI have often been noted as a “troubled company” (Wikström, 2009, p.80), but a pending merger of its recording division and its 9% market share show it still has value (Shaw, 2011).

EMI has now decided to reach out to external developers, hoping to boost growth. Their partnership with The Echo Nest should help them attract talented programmers, building new relationships in the digital domain and creating new and exciting products.

## **2.3 The OpenEMI project**

The OpenEMI project is designed to make EMI-owned available to app developers. Developers access “Sandboxes” - containers of EMI multimedia - and create elevator pitches for review by EMI and The Echo Nest. If their idea is accepted, the developer will help create the app alongside The Echo Nest developers and with oversight from EMI, the artist’s management and the artist himself.

Creating apps with music content is often difficult as licensing processes can be drawn out and arduous, especially for online content usage (Gammons, 2011, p.47); OpenEMI attempts to streamline the process. By creating sandboxes of content, a developer is essentially given media to play with and manipulate. Their elevator pitch to both EMI and The Echo Nest operates in much the same way as Apple’s App Store approving apps for its marketplace. It is down to the team at The Echo Nest (working with the original developer) to build the apps; the developer must team with all those involved in the OpenEMI project, working to their guidelines and restrictions.

However, the ideas do not flow in one direction; EMI and The Echo Nest will also be putting ideas online and seeking developers to implement them. The OpenEMI project will contact EMI artists and managers, asking them for app suggestions using their content.

### **2.3.1 The gift of “open”**

One of the advertised major benefits of this partnership is the “open” licensing that EMI has accepted. It is not royalty free or Creative-Commons-style, but the set-up *has* been simplified and streamlined. EMI wants users to feel that content development should be much like Open Source; nothing, however, is allowed to be published directly by developers, and all must be approved by EMI / The Echo Nest. The developer partnership with The Echo Nest can ensure the company maintains control over the app and content use. The developers maintain intellectual property rights,

but the Echo Nest's professional development team ensures that any app released through the OpenEMI project is high quality and works to original pitch.

### **2.3.2 An app-sourcing exercise?**

EMI and The Echo Nest have been giving plenty of incentive to developers. A competition they launched on the back of their initial announcement will award \$5,000 to the best OpenEMI app pitch (The Echo Nest, 2011a; CMU, 2011). The project acts like a typical crowd sourcing exercise, where an incentive is offered to gather a database of users or other information. EMI Vice President Jim Brady believes it will attract developers:

*"We're very excited about the potential of working together with The Echo Nest and their network to develop great applications for our artists. We've looked at how best we can improve the process of creating new music applications and the OpenEMI sandbox we have built together as a result is a fantastic resource for tapping the passion and innovation of the best developers in the world."* (The Echo Nest, 2011b)

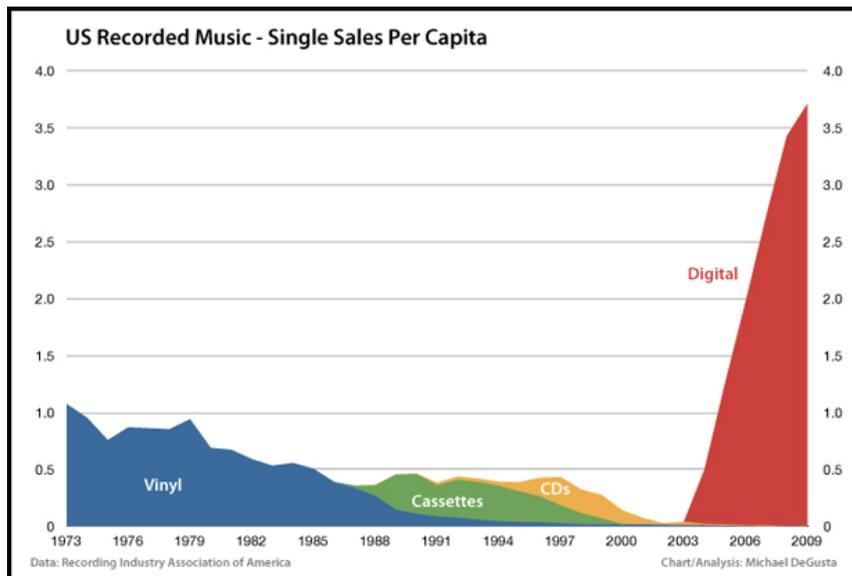
Although the concept will potentially benefit developers, there is some concern over what happens to the app ideas that are not approved by the project. It acts much like crowd sourcing, and it is worrying that a big company like EMI may be gathering ideas which they could later exploit outside the OpenEMI system, cutting developers out of the loop.

### **3. Figures**

#### **3.1 Disrupting the album model, again**

Although there have been numerous format changes in the past 30 years, the introduction of digital formats has allowed flexible distributing and selling. However, the labels and rights societies (including EMI) became distracted by legal cases of copyright infringement and struggled to get a competent grip on some new technology (Gordon, 2005, p.113). Digital distribution uptake was slow due in part to illegal services such as Napster, who capitalised on easy sharing, but the 2003 launch of the iTunes store gave the industry a new sales outlet.

Digital sales have now overtaken physical in the US, according to a Nielsen report (Nielsen Soundscan, 2012). In 2011, 50.3% of all music sales were in digital form, truly signifying a shift to new media. Nielsen also reports a 1.6% rise in overall music sales. The UK is slower, but digital reached 23.5% and, though album sales overall dropped by 5.6%, digital sales rose by 26.6% (BPI, 2011). These figures show that consumers are shifting to digital while albums struggle. This is partially down to choice: consumers can now buy particular tracks - favourites or 'hits' - rather than complete albums. Top selling albums are now from artists who have ensured almost every track is worthy single release. US music sales data reflects this trend; digital single sales have soared (see figure below).



Single sales per capita - RIAA (DeGusta, 2011)

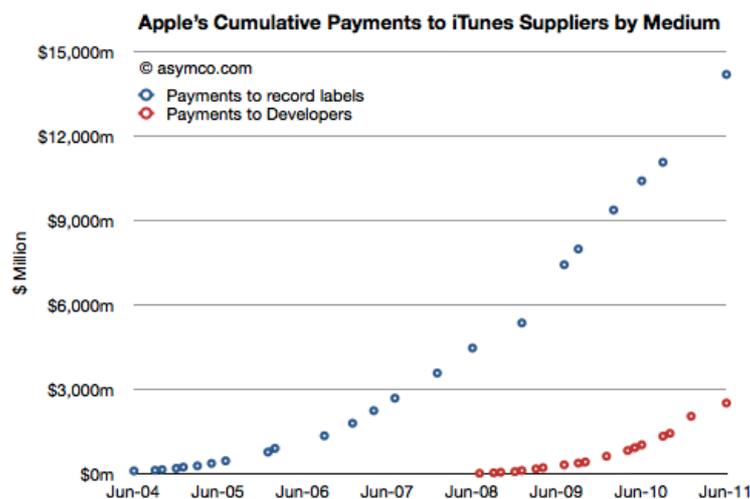
Geoff Taylor, BPI Chief Executive, has noted that the rise in digital sales is encouraging, but it is still difficult to succeed while competing with such levels of copyright infringement:

*“Despite unprecedented demand for music, and strong innovation offering consumers new ways to access music online, legal downloads are unable to offset the decline in CD sales because they are dwarfed by illegal competition.”* (BPI, 2011)

Taking this shift alongside other factors disrupting the industry (such as illegal downloads and technological convergence), it is obvious that other means are necessary to exploit the digital domain and capitalise on consumer demand.

### 3.2 The rise of the app

Figures released by Asymco in June 2011 showed apps continuing to gain popularity. The growth of this market has also led to a boom in payments to record labels and developers. A 70% return on paid apps gives developers lucrative reasons to develop for Apple and the App Store. Apple will not see high returns (approximately 1% of Apple's total revenue), but it encourages this pool of content for its device owners, using media as a loss leader that sells devices - the real profit maker (Dediu, 2011).



Asymco (Dediu, 2011)

Analytics firm Flurry also reported positive app stats over the 2011 Christmas period, including:

- 6.8 million iOS and Android activations on Christmas day
- 20 million iOS and Android activations during Christmas week
- 242 million apps downloaded on Christmas day
- 1.2 billion apps downloaded during Christmas week

Although it is normal to see spikes in consumption around the festive season, these figures show a 140% growth in activity since 2010 (Farago, 2012) and reflect a continuous trend for both the iOS and Android devices.

#### **4. The Artist and the App**

App distribution offers a level of interactivity and content delivery that a simple physical or digital song purchase cannot give. Apps are software, and as such they offer a vast amount of behavioural characteristics, allowing the creator to immerse the consumer and provide an involved experience. The OpenEMI project gives EMI artists the opportunity to create interactive content and also - crucially - open direct means of communication with the consumer through the app.

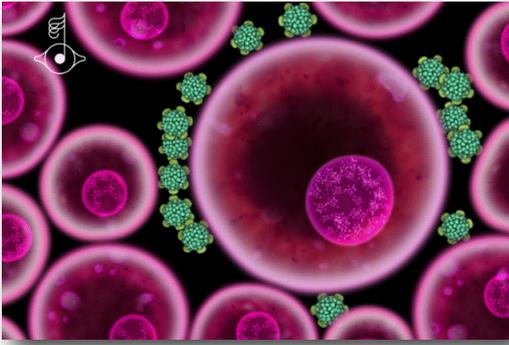
For an artist, the music distribution is only part of the experience. Traditionally, live performances have also served to attract fans and offered the closest form of interaction. Now other tools provide new methods of Direct to Consumer (D2C) communication through social media services such as Twitter and Facebook, alongside easily created video content on sites such as YouTube. Yet artists seek even more innovative ways to engage their fans and attract new ones. Bjork's *Biophilia* provides an innovative example of the opportunities an app offers the artist.

*Biophilia* was the first time Icelandic artist Bjork had released an app version of an album. The app,



released exclusively for iOS in October 2011, contained not only the music found on the regular album format, but also many layers of interactivity. The main or “mother” app houses many mini-apps - each one representing a song on the album. These can be purchased individually within the app or as a complete album. Due to the nature of the platform, upgrades, expansion packs and

remixes can be distributed within the app.



Users can play games within the mini-apps, interacting with the song and its score and even allowing the user to affect its outcome. The song “Virus” the user to save cells from being attacked by a virus, but doing stops the song; to continue, the user must let the virus kill the cell

(Van Buskirk, 2011). The scores are also open to manipulation, each sending out MIDI information which can be transmitted to an external device for remixing and sampling, something Bjork encourages her fans to do. The app contains features such as videos, music samples and even essays from musicologist Nicola Dibben. The attention generated by the app - it was one of Apple’s 2011 Best Apps (Music-News, 2012) - will allow Bjork to hold residencies in Manchester and New York, with music installations, teaching environments and live performances from the artist - certainly building hype, although it is too early to say how it has affected revenue.

## **5. Who really needs an App?**

It is important for artists - or indeed, any company - to consider whether apps are necessary. According to Mobile Web Up founder Aaron Maxwell, apps essentially fall into two main categories: income generating income or for marketing/branding/customer service (Maxwell, 2011). The popularity of apps and their “cool” factor have lead to the misconception that apps are a must, but native apps are not always cost-effective and require design for a number of different proprietary formats (Strom, 2012).

Alternatives to the native app include the web app - essentially a website designed for app-like use - and responsive design - website that scale for any device. These offer the advantage of management through a regular server and can recognise and respond to various types of devices. There are other benefits, as not all web content is appropriate for apps. “No one searches for a restaurant on the iPhone app store,” says AgilitySpeaks.com CEO Amir Shah (Strom, 2012).

This does not mean that artist shouldn't use apps, but that they should consider carefully. Although marketing is important to OpenEMI, it is interactivity and innovative content usage which top its agenda. It also operates in a media market where the “cool factor” is important, and popular services such as apps combine well with the traditionally fashionable business of music.

## **6. Will a Digital Content Exchange help?**

Although the idea of copyright was initially introduced to protect against illegal mass publication of printed text, it now attempts to cover many different media. The Hargreaves Report discusses the need to modernise copyright law for the digital age (Hargreaves, 2011, p.6). Our use of current technologies has blurred the legal lines of what we can and cannot do with our media. The ease with which licensing laws are broken (knowingly or not) shows there has to be a better understanding, both by user and distributor, of what is allowed.

The Hargreaves Report recommends a Digital Content Exchange - a simplified licensing exchange for rights holders and rights users (Hargreaves, 2011, p.28). In theory, the concept is possible but extremely difficult to execute; this “middle-man” exchange forum will have to ensure fees are paid, rights are used properly, and that such an exchange is quick and easy to use (Geere, 2011). The OpenEMI project seems to answer some of this call for a more simplified, open and transparent system for licensing and rights management. However, the OpenEMI project is restricted to EMI artists and each project still needs the go ahead from EMI and The Echo Nest, so it is not as open ended as the report hopes but more of a small step towards a simplified system.

## **7. Conclusion**

The OpenEMI project shows the music industry beginning to recognise the importance of mobile applications and also the difficulties of content licensing without stifling developer creativity. These restrictions have been noted by the Hargreaves Report, and ideas such as the Digital Content Exchange are being seriously considered (Geere, 2011).

With app marketplaces growing quickly, smart phones leading the market and consumers becoming more aware interactive media, the music industry must implement new strategies or risk being left behind again. Digital music sales continue to grow, disrupting physical and whole album sales. A relatively new market in mobile applications represents steep growth and capabilities which stretch far beyond the traditional music marketing sales formats.

Projects like OpenEMI show initiative and a step in the right direction toward a simplified system of content licensing while reaching out to software developers. It seems a major player in the industry is reaching out for ideas, rather than attacking innovation and technological convergence with threats and lawsuits. Rights holders and rights users need such a means of collaboration and experimentation to create the next wave of interactivity and innovation in an industry still suffering from stagnating sales.

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