



Prepared by Will Page Chief Economist MCPS-PRS Alliance and Eric Garland, CEO Big Champagne



#### About Eric Garland

Fric Garland is co-founder and Chief Executive Officer of BigChampagne Media Measurement, a privately-held technology and metrics company specialising in online media. At present, BigChampagne's available metrics include online retailers (iTunes), social networks (MySpace, YouTube), portals Yahoo and AOL, Clear Channel, MTV and through strategic partner Mediabase traditional broadcast. Garland is recognised as one of the industry's leading authorities on the intersection of popular entertainment and technology.

Acknowledgement: The authors would like to thank Chris Carey for his invaluable help and support.

#### Suggested citation

Page & Garland (2008) 'In Rainbows, On Torrents' Economic Insight No. 10, Available: www.mcps-prs-alliance.co.uk/economics

#### Disclaimer

This material has been prepared by Will Page at the This material has been prepared by with Page at the MCPS-PRS talliance for information purposes only and should not be relied on for any other purpose. It does not constitute the view of the Management or the Boards of MCPS, PRS or any associated company. It is provided for the information of the intended recipient only and should not be reproduced or disclosed to any other person without the consent of the MCPS-PRS Alliance PR denortment: Enr further enuivings information and to the and the preproduced or disclosed to any other person without the consent of the MCPS-PRS Alliance PR denortment: Enr further enuivings information and to the second s department. For further enquiries, information, and to request permissions, please contact: press@mcps-prs-alliance.co.uk

# In Rainbows, on Torrents

Radiohead's 'In Rainbows', their seventh album and first in over four years, marked a paradigm shift for the music industry. Here was an established rock band, free from its recording contract with EMI, delivering content directly to the consumer. Commencing on the 10th of October 2007 with a 'pay what you want' downloadable album, this was followed by a 'made to order' deluxe box set and then concluded with a conventional CD and iTunes release. Whilst the project has gathered unprecedented worldwide media coverage, with much speculation on what the 'average price paid' might have been: there is another less intuitive but far more relevant question that has vet to be asked, or answered. That is, did their offer of their album 'for free' succeed in diverting traffic away from Torrent sites, and (back) towards their own 'venue' of InRainbows.com? Here, Will Page, Chief Economist of the MCPS-PRS Alliance, teams up with Eric Garland, CEO of Big Champagne Media Measurement to consider how that question can best be asked, and then analyse and interpret the data to provide a meaningful answer.

#### The 'In Rainbows' Initiative

'In Rainbows' is the seventh album by the English rock band Radiohead. It was first released on 10 October 2007 as a digital download from the band's website, where consumers were allowed to 'pay what you want'. Whilst this revolutionary offering was underway, a 'made to order' deluxe box set was available from 4 December on their website, offering the consumer shipment before Christmas. Following this, the standard CD was released in most countries during the last week of 2007 and it hit the shops in the US and UK on 1 January 2008. Upon its retail release, In

Rainbows entered the UK Album Chart, United World Chart and the U.S. Billboard 200 at number one.

Surprisingly, all the media hysteria surrounded the speculation of the 'average price paid' for In Rainbows, yet this could be viewed as missing some of the wider objectives of the project. One example can be analysed here: namely, that InRainbows.com set out to redirect the inevitable torrent traffic that would (have) taken place with any high profile album release (back) towards the bands official website. From a management perspective, this could be paraphrased as 'if you're not going to pay for the record, then at least give us your email addresses - as this provides a 'currency' of its own when planning tours, and other promotional activities'. This gives rise to the complex 'counterfactual' question of could 'legal free' displace 'illegal free' which this paper will now attempt to answer, namely did the project succeed in diverting traffic away from venues where the band receives nothing, and towards a venue where it could receive something, be it the currency of cash or (at least) an email address?

## In October, On Torrents

To answer this question, we can examine the evidence of torrent traffic from BigChampagne the online media measurement company (See Box). For 'In Rainbows', we are able to present global BitTorrent downloads on a daily breakdown from 10 October to 3 November 2007. In total, a staggering 2.3 million torrent downloads were made during this period - that far exceeds what outsiders have reported as the estimated download total from the bands official website, regardless of whether those downloaders paid or not. Note also the distribution of the traffic is heavily skewed towards the first ten days, and was by November estimated to be trickling along at around 15,000 torrents-a-day. Whilst this is a truly mind-baffling 'observation', one needs to stress caution before jumping to any conclusions.



# In Rainbows Daily Torrent Downloads: October 2007

# About Big Champagne

Big Champagne is a US-based Online Media Measurement company specialising originally in peer-to-peer (P2P) networks, but today provides a nexus for intelligence about media consumption. The BigChampagne Media Measurement BitTorrent monitoring system is comprised of the following: Building a database of active torrents; Creating and maintaining title/metadata databases; Matching the torrent records to the titles/metadata in the databases; Around the clock scraping of seeders and leechers for torrents; Collecting file sizes; Participating directly in relevant swarms; Monitoring downloads directly, performing geographic analysis and more; Reporting and analysing activity at the title (aggregate) level and the individual torrent level for albums, movies, TV shows, etc.; Additionally reporting and analysing activity at the season and episode level for TV. Recently, the company was featured in the 'leaders' section of *The Economist* ("Look for the Silver Lining", July 19th 2008) with the apt subheading '*Piracy is a bad thing. But sometimes companies can use it to their advantage*'. More info: www.bigchampagne.com

The reader would be justified in asking 'why should I be cautious' about drawing conclusions from such an observation when the torrent traffic is so staggeringly high? Surely, one might argue, with so many people opting for 'illegal free' as opposed to 'legal free', the project failed and the case is closed, no? Well, working out what all this means involves some painful *counterfactual* logic - albeit with full knowledge that the thought process will not result in a definite answer. For example, one could ask: was the Torrent activity for 'In Rainbows' more-or-less than (i) previous Radiohead releases, and given the fact its been four years since the last release (ii) more or less than other similar major rock band releases in the present day. That is to say, working out what defines a 'hit' on the torrents, (and deciphering torrent genres, and the influence of legal promotional campaigns), is not a straightforward exercise.

Similarly, whilst we must not forget the textbook *stimulus* versus substitution effects: where those who consumed for free via the Torrents in October might be stimulated into helping send the conventional release to number one in January, whilst there could be those who *substituted* the intention of buying the album in the shops in January for the option of downloading for free in October. In addition, we must also consider the 'search' effects - where people consume for free because they can't 'find' it legally. This is extremely relevant as there were teething technical problems with the 'In Rainbows' website in the run up to the album launch which

might have made people with little more than 'three clicks' of attention span (many of whom will be fans) opt for a torrent route instead. Finally, we must also consider the 'creative commons' effect, and ask if any counterfactual analysis is made redundant due to unique circumstances, in that the band *signalled* to the consumer that the album was going to be made downloadable 'for free'. Put another way, there might be consumers out there who had viewed torrent activity as undesirable, up until a band says 'it's free', to which they now feel that it has been legitimised.

The short answer to all of these counterfactual questions is unfortunately blank: we simply don't know. There are too many unknowns, too many variables and - given it's a black market - an understandable lack of evidence to even generalise towards an answer. Yet, regardless of the exercise in logic - where one can get tangled up in a labyrinth of those who *might* of done one thing who *could* have otherwise done something else - the simple 'fact' is that on 10 October 2007, almost 400,000 people opted to take the album from Torrents. That's a bloody big number! To help illustrate why, Big Champagne are able to share further evidence, presented in the chart below which offers weekly (not daily) torrent activity for releases by albums from Gnarls Barkley, Panic at the Disco and Portishead. The selection is discretionary to the authors, but designed to resemble 'fans that would have bought In Rainbows, might also (have) bought...' in Amazon'esque fashion.



This is what is meant by a bloody big number! For the most popular album, torrent activity peaked at around 150,000 a week - let's recall that InRainbows.com data was presented on a daily basis. Why was the 'In Rainbows' activity so high, relatively speaking? Well, before proceeding, its worth remembering that the issue of file sharing has been with us for a very long time, ten years to be precise - with the launch of Napster in 1998. [At least one of your authors can testify to this as he was using a similar application at his University in Glasgow soon after]. Hence there is an element of 'lock in' which must be appreciated; you always do what you have always done. Think of it this way: in the same way in which we are locked into QWERTY, a deliberately inefficient layout of a keyboard, suggests that no matter how much technological advancements improve the customer offering, (and there have been many since its launch in 1874, including DVORAK, patented in 1936) we will be using QWERTY for a very long time to come. So, the logic goes, could one view QWERTY and Torrents both as 'venues', places people are 'locked into' going to despite there being more efficient (or more legitimate) options available?

### Garland & Page's 'Venue Hypothesis'

Despite the focus on the significant Torrent activity thus far, one must not be distracted from the fact that the In Rainbows project, and subsequent tour, was a phenomenally popular success. To get to Number One on both sides of the pond, (and on iTunes), after offering the album for free and shipping a considerable number of box sets, tells you a lot about the *popularity* of the album. Similarly, you can tell a lot more about the band's *popularity* on tour when you consider the fact that they added a second date to their sold out performance at Victoria Park, London, bucking a visible trend of rock festivals nearing 'saturation point' with Glastonbury not selling out for the first time in a generation. So, if 'In Rainbows' was popular on the official site, in the shops and on stages around the world, and also on the torrents - then perhaps one should be 'indifferent' to where popularity is derived from?

We offer a 'venue hypothesis' to help the reader come to their own line of reasoning to explain this observation. In short, when a band leads with a revolutionary 'free offering', but removes the anonymity aspect of the venue by asking for email addresses and to opt out of a monetary transaction, then they'll lose significant traffic and conversions to a place where they can remain anonymous - such as Mininova. We cite a well documented alternative approach, taken by Nine Inch Nails (NIN) to offer balance, as to which of the two 'venues' competed best with the illegal torrent sites. Before we begin to put our 'Venue Hypothesis' to the test, lets be clear: there is no definitive answer to this question, but what we can do is use the theory to provide insight as to the real challenges which writers, performers, publishers, labels, trade bodies and most importantly managers are now facing.

Our venue hypothesis suggests that in addition to succumbing to the intrinsic appeal of free music online, many core music fans worldwide are now making regular, habitual use of file sharing **technologies** like BitTorrent and Gnutella, and specific related web sites (Mininova, The Pirate Bay) and software applications (Azureus, Limewire). We call these 'venues' because they are destinations and, like any retail outlet (iTunes, HMV), they are popular because of their brand reputation, convenient location, superior value proposition and ease of use. Of course it is not popular to point this out - because these 'pirate sites' enable the free (uncompensated) exchange of vast quantities of the world's most popular entertainment content, they are considerably more widely-used than iTunes, HMV, and all other retailers...combined.

It is even less popular to use phrases like 'brand reputation' when talking about the same sites the music industry characterises as shady, fly-by-night, and outright criminal. Make no mistake: The Pirate Bay is a powerful brand with a sterling reputation in the minds of millions of young music fans. Naturally, Torrent sites are highly-trafficked because they boast a nearly limitless selection of high quality, free music. And while it is often suggested that their unauthorised status (and the resulting potential legal risk to users) should serve as an effective deterrent, by the numbers it does not. The volume of unauthorised uploading and downloading is at an all-time high, and rising. In fact, younger (core) music fans may be drawn by the rebellious nature of youth, and the anti-establishment spirit of rogue sites. In other words, an off-limits venue may be even more appealing to that demographic.

For the purposes of this argument we will posit that online piracy thrives not only because of the widespread availability of free, top-tier entertainment, but because the venues themselves are now well-known, well-liked, and habitually used. This sounds a bit like suggesting that 'piracy is popular because it's popular'. In fact, Mininova's cost of retaining customers seems to be lower than iTunes' cost of acquiring them. Put another way, it is easier to win a customer than to win them *back*. The pirates have most of the customers, but we don't know who they are.

Of course it is easy to understand why one would choose free goods over (relatively) expensive goods. Human nature explains a good bit of the lead that Limewire enjoys over iTunes. The venue hypothesis suggests that *even when the price approaches zero, all other things being equal*, people are more likely to act habitually (say, using The Pirate Bay) than to break their habit (say, visiting www.InRainbows.com). The implication of this 'venue hypothesis' is that if you wish the customer to deviate from his habitual action (and try a new venue), then you must offer him an improved venue, at least in his perception. Let's consider this in the case of two recent very high-profile, precedent setting releases from established artists:

Category	InRainbows.com	theslip.nin.com	Torrent Sites; thepiratebay.org, etc.	Superior Venue
Awareness of High- Profile Release	High	High	High	Draw
Advertising Message (Sales Pitch)	Strong. Popular media: "pay-what- you-wish download."	Strongest. Popular media: "FREE, legal download."	<b>Strong</b> . Popular media: "always free, but usually illegal."	NIN
Existing Site (Venue) Familiarity	None. New site created for the release.	None, beyond core fans. New sub- site created at NIN.com for the release.	<b>Highest</b> . Mininova.org is currently among the top 50 sites online.	Torrent sites
Price & Currency	Required credit card (strongly implied), "tip jar" pricing, currency Pounds sterling	Free, no credit card, currency: N/A.	Free, no credit card, currency: N/A.	Draw: NIN/Torrent sites
Attention Costs	<b>Complicated</b> mental transaction: the customer must consider the potential value and reason out his price.	None. Offered free for the taking.	None (barring any ethical and legal conundrum).	NIN
Privacy Costs	Higher. Multiple fields required: full name, mobile phone, physical address, valid email.	Lower. Valid email required.	<b>Lowest</b> . Anonymous: no email or other contact information of any kind required, ever.	Torrent sites
Delivery Latency	Higher. Download redeemed (much later) through email notification and follow-up visit to the In Rainbows site.	<b>Lower</b> . Download redeemed (immediately) through email notification and follow-up visit to the NIN/The Slip site.	Lower. Torrent download redeemed (immediately) @ favourite torrent site. [Note: third-party Torrent software required to obtain music download as a separate file.]	Draw: NIN/Torrent sites
Quality of Product	Lower. Only one product offering (160 kbps MP3), no artwork. [Note: torrent sites (falsely) advertised higher quality alternatives.]	Highest. Wide variety of product offerings (MP3/FLAC/M4A/better- than-cd 24/96 WAV), with artwork. [Note: torrent sites could not meaningfully compete here.]	Higher. Reasonable variety of formats and encoding rates (of varying quality) available, but disaggregated. Artwork ultimately available.	NIN
Quality of Service	<b>Lower</b> . Performance was hindered by teething technical problems.	<b>Highest</b> . No known site performance issues.	Higher. Some performance issues are inherent in the Torrent architecture: download performance depends on peers.	NIN
Duration of Offer	<b>Limited</b> time offer (limited period of availability).	<b>No limits</b> on availability.	<b>No limits</b> on availability.	Draw: NIN/Torrent sites

Of course this framework is loosely and editorially constructed. Of course the judgements about the merits of the venues within and across categories are highly subjective. The point of the illustration is that there are clearly some qualitative differences among the venues. Given that, it is perhaps not surprising that the NIN.com site was far more successful as an alternative to the habitually used (pirate) torrent venues. The majority of copies of NIN's *The Slip* were (freely) acquired from the official, sanctioned source. Radiohead's *In Rainbows* experiment, while generally held to be a great success and good precedent, was nonetheless less competitive, by the numbers.

A short (somewhat cynical) conclusion would be: even asking for a voluntary payment is enough to keep the habitual pirates away.

A longer consideration would have to include some estimation of what Radiohead offered to motivate a change of venue? Could InRainbows.com be reasonably found to be a superior venue, had we employed different criteria and a different editorial bent?

But to even pursue these questions vastly underestimates the complex relationships among legitimate and pirate markets. Frequently, music industry professionals suggest that an increase in legitimate sales must necessarily coincide with a commensurate reduction in piracy, as if this were a fact. Yet, the company BigChampagne has made no such consistent observation in nearly a decade of analysing these data. Rather, it finds that piracy rates follow awareness and interest. In other words, if you do a good job cultivating a legitimate sales story, you must also expect a similar up-tick in grey market activity. The biggest selling albums and songs are nearly always the most widely-pirated, regardless of all the 'anti-piracy' tactics employed by music companies.

Or, to sum up by paraphrasing an earlier argument, 'popular music is popular everywhere it's popular.'

### In Rainbows, In Retrospect

Before we offer our answer to the original question, let's reinforce some facts. Firstly, this analysis fully respects the confidentiality of the 'In Rainbows' project itself. Rather than raise speculation about a set of commercially sensitive numbers which, as with any other band, are 'none of your business'. Instead, this analysis deliberately aims to look outside the project's walls and assess what that 'other' activity means, given the uniqueness of the experiment. Secondly, anyone who has made it to the end of this paper and assumes that the project was a failure has missed two critical points: firstly, lots of people bought the album in any one of its three formats and lots of people went to see the show - and the word 'lots' is robust no matter which comparative measure you use. Secondly, the wider purpose of this paper is in many ways echoing the tone of the recent article in The Economist: 'Piracy is a bad thing. But sometimes companies can use it to their advantage'. Hopefully the reader will now be able to at least ask (or ponder) how many of those torrent users signalled a willingness to fork out £50 for a concert ticket, which led to the second date being added at Victoria Park in London?

So, did the offer of their album 'for free' succeed in diverting traffic away from Torrent sites? Our answer is yes, but with a twist. This might confuse readers at first, but we conclude by returning to our venue hypothesis, and its implications, that both torrents and legal downloads would appear to be complements, not competitors. Think of the meaning of the term complements in the context of popularity, where there is now a wealth of information and a poverty of attention. The challenge of achieving popularity (or attention) when the old rules of scarcity and excludability don't apply (to information goods) the way they used to, changes the monetisation game completely.

Radiohead, and their management, undoubtedly got people's attention with the information embedded in their unique offering in October, regardless of whether those people were fans or not. With that attention, came consumption - from those who were established fans, and those who were just curious. Of that latter 'curious' segment, there will be a sizeable portion who were already locked on torrents, and its plausible to suggest that it is largely this segment who didn't switch to InRainbows.com. The reverse logic is that the 'fans' will have been made aware of the project, and its intentions, through Radiohead.com and will have been more likely to have switched - but the ratio of Radiohead fans who were converted from torrents to the total number of 'curious' torrent users will be miniscule. To complete the migraine, the size of the total torrent market means that traffic which was displaced from the torrents to In Rainbows will be overshadowed by a disproportionate uplift in additional 'curious' torrent activity. Ouch. So, whilst our comparative table has shown how NIN 'went one better' with their venue offering, perhaps benefiting from the Radiohead's initial experiment, that should not detract from asking 'did it work' and, importantly, 'for whom did it work'. Put another way, we argue that an awful lot of curious torrent users will have downloaded 'In Rainbows' without knowing of InRainbows.com - and would not have downloaded it otherwise, had it not been for its unique media coverage and popularity.

Let's break it down real simple and treat torrent sites like a local bar, where curious consumers can enter and leave a venue of their choice anonymously, and found 'In Rainbows' to be the guest ale at the time - and popular it was too, more popular than going anywhere else, like visiting the brewery where it originated from. Whilst the stand alone brewery did lots of new business thanks to the promotion, all the bars up and down the country did even more business. Hence the twist to our answer - in that *it is possible* to redirect traffic back to your site, as well as bring new addition traffic to the torrents.

Finally, it should be noted that the band are still on a phenomenally *popular* global tour, which may act as a catalyst to eventually getting the conventional album sales past the two million mark - and that's not accounting for all the significant pre-2008 activity. So, hopefully, this report will have moved the current file sharing debate away from a simple zero-sum game ('you were a pirate, and are now a law abiding citizen') to a rather more complex question of additionality and popularity in a market that's increasingly hard to define. In a digital arena, consumers go to venues where they feel comfortable, and what we've learnt from the ambitious and admirable experiments of Radiohead and Nine Inch Nails is that a large part of that comfort is the ability to stay anonymous. Is there a trade-off between gaining attention and acquiring information? Perhaps. And if we can solve that, then the question of monetisation can properly be addressed. And let us not forget, what really matters is that the album really rocks!