A STUDY INTO ONLINE BROADCASTING & PODCASTING

BY

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A REPORT ON PROJECT WORK CARRIED OUT FOR THE DEGREE OF BSC (HONS) MUSIC TECHNOLOGY AND AUDIO SYSTEMS

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1.0 INTRODUCTION

1.1 ABSTRACT

This project will look at how Broadcasting Companies and Individuals have embraced the web using it as a tool to reach the public, bringing the Radio Industry into the Digital age. This report will include research into how broadcasting has manifested itself on the internet with specific reference to Online Streaming and Podcasting. The outcome will be the production and set-up of an internet radio station for a suitable target audience. This will then be evaluated using a pilot audience group.

1.2 REPORT STRUCTURE

This Report will include the following sections:

1.2.1 RESEARCH

This study will take an in-depth look at how Online Broadcasts started and how they developed into what we are familiar with today. A number of pre-existing examples of Internet based services and how they have tackled the key aspects of setting up their broadcast will be examined, Including:

- Background: History of Internet Radio & Podcasting.
- Online Implementation: How stations are embedded onto the web, the importance of RSS Feeds, format standards and how stations attract listeners.
- Legal and Financial Protocol: The Rules and Regulations of starting and maintaining an Internet Broadcast and where applicable the finances involved.
- Programming and Target Audience: Looking at the similarities and differences between traditional AM/FM based program content and online ones.
1.2.2 ARTIFACT

Information extracted from researching examples of Online Broadcasts (Section 3.3) will lead to a series of test (pilot) broadcasts created for a chosen Target Audience (Section 3.2). These will follow the Rules and Regulations of the Industry (Section 2.3) to produce an interesting and engaging program. Broadcasts will be conducted from ‘Bluerooms 4’ at The University of Huddersfield.

1.2.3 RESULTS & EVALUATION

Listeners of the Pilot Shows will be asked to complete a survey to rate aspects of the broadcast on a 1-5 scale. Evaluating that the Programming content is interesting and engaging for the Target Audience and that the broadcast has met the criteria set by the appropriate Rules and Regulations of Online Broadcast in the United Kingdom. Program Quality will also be judged based on the standard of Recording and Editing and the Programming Content included.

1.2.4 CONCLUSION

Findings will then be summarized and a self evaluation of the author will be taken.
2.0 RESEARCH

In the age of the internet, it could be argued that the Radio Industry could be under threat of being in decline. However many Broadcasting companies, radio stations and individuals have utilized the web to develop Online Broadcasting.

2.0.1 DEFINING TERMS

**Online Broadcasting:** It can sometimes be assumed that this term applies only to a live stream of a traditional radio AM/FM or television transmission. In actual fact ‘Online Broadcasting’ is a blanket term used to describe all audio or video programming implemented by companies or individuals on the internet. (Be this Podcasting, Simulcasts, Catch-Up Services, Live Streaming etc.) (Rayburn & Hoch, 2005).

**Stream:** An audio or video service that is watched on an embedded player online. Data is not permanently downloaded. This includes Simulcasts and Catch-Up Services (Rayburn & Hoch, 2005).

**Simulcast:** (Simultaneous Broadcast) A transmission that is streamed on the internet at the same time as an AM/FM transmission. (Media Dictionary, 2011).

**Catch-Up Service:** A pre-recorded program that can be streamed after the original AM/FM transmission (Rayburn & Hoch, 2005).

**Podcast:** A pre-recorded program that is downloaded to the hosts’ computer manually or automatically with subscription (Mack & Ratcliffe, 2007).

**Internet Radio:** A radio station, broadcaster or individual that transmits shows using one of the above methods. An Internet Radio station could broadcast solely online, i.e. just a Live-Stream. However most are a simulcast of an AM/FM or DAB transmission. Some Internet Radio Stations however may just use Podcasts (Stewart, 2006)
Bit Rate: The amount of data stored per unit of time. In this case it references to the amount of digital data transmitted per second. 128kbps means 128kbits are transferred every second. Audio quality increases with higher bit-rates at the expensive of computing power and download time (Rayburn & Hoch, 2005). Typical Bit Rates are illustrated in the table below:

<table>
<thead>
<tr>
<th>Function</th>
<th>Bit Rate (kbps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM Radio*</td>
<td>32</td>
</tr>
<tr>
<td>FM Radio*</td>
<td>96</td>
</tr>
<tr>
<td>Standard CD Quality</td>
<td>192</td>
</tr>
<tr>
<td>DAB Radio</td>
<td>256</td>
</tr>
<tr>
<td>High Quality MP3</td>
<td>320</td>
</tr>
</tbody>
</table>

* Approx. Perceived Value
2.1 BACKGROUND OF ONLINE BROADCASTING & PODCASTING

2.1.1 STREAMING

The foundations for Online Broadcasting were first laid in the early 1990’s by a video and audio conferencing system called ‘M-Bone’ (Multicast Backbone) developed by Van Jacobson, Steve Deering and Stephen Casner. (Savetz et al, 1996). This was a free experimental piece of software that allowed users to connect to an online virtual network full of real-time multimedia. The seeds of Online Broadcasting can be found in 1994 when a Rolling Stones gig was streamed live on M-Bone. This was widely regarded as the first ever official online broadcast available to the general public. Although M-Bone still exists today mainly as a conferencing service the system struggled to gain commercial viability due to the need for non-standard specialist hardware.

Broadcasters continued to experiment with live streams throughout the 1990’s. In 1994 WXYC, an FM station in Chapel Hill USA became the first traditional station to offer a simulcast of its FM transmission. (WRAL Tech Wire, 2011). This was also the first commercial evidence of ‘Internet Radio.’ In 1996 Virgin Radio London became the first in Europe to offer a 24 hour simulcast. (BBC, 2011). As online broadcasting popularity grew firms such as Microsoft and Nullsoft released free audio streaming players leading to a wealth of Internet Radio stations appearing across the world.

The advancement in internet speed and bandwidth has helped drive a boom in the Radio Industry. A third of the UK currently uses the internet as a method to listen to the radio. (RAJAR, 2011) There are a host of benefits for both broadcaster and listener from transmitting services online:

Reach & Content: Online Broadcasting reaches anyone in the world with an internet connection. Listeners can therefore tune into a service they may have been out of range of. Where AM and FM bandwidth would restrict the number of stations per area, online broadcasting allows for an infinite number of stations anywhere in the world. This means that it is more likely to find a station suited to an individual’s tastes.

Cost: The cost of running an online broadcast compared to an AM or FM transmission is greatly reduced. Not only is the license for online broadcasting cheaper than AM/FM (PRS, 2011), it avoids
the need for transmission equipment. In the case of national radio stations where multiple FM masts would be required, only one live feed is needed for an online broadcast.

**Quality:** In the last 10 years as internet speeds and bandwidth have increased as has the quality of Streaming available for Online Broadcasting. Although there is no standard streaming format, well established broadcasters such as the BBC tend to stream audio at around 128kbp/s depending on the service, giving as good as or near to the same quality available on FM. (BBC, 2011). Other companies or individuals may choose to stream at a lower bit rate to save money and computing power.

**Ingenuity:** As well as ‘traditional’ radio stations utilizing the internet as a method to further the reach of their transmission, (e.g. BBC, Absolute Radio, and Capital FM etc.) there is now an emergence of alternative streaming services that can be classified under the Radio and Online Broadcasting umbrella. Automated Recommendation Services such as Last FM and Pandora tailor content to the users taste. One step further and Subscription services like Spotify which allows users to choose from a library of songs in return for a fee or advertising exposure.

All the above reasons highlight why Streaming is an essential part of the future of Online Broadcasting and The Radio Industry.

### 2.1.2 PODCASTING

Although the term ‘Podcasting’ was not coined until 2004 by a British Journalist, Ben Hammersley (Hammersley, The Guardian, 2004), the theory behind the concept can again be traced back to the early 1990’s when a computer specialist, Carl Malamud set up ‘Internet Talk Radio,’ – the first ever public Radio Station to distribute shows via pre-recorded audio files. (Museum Media, 2011).

Podcasting differs greatly to streaming as the data is downloaded to the hosts’ device rather than played live. Although this takes time and uses up hard drive space, which to today’s standards may be considered inefficient, in the 1990’s this was a far more reliable method of delivering multimedia to an audience over slow dial-up internet connections compared to a live stream.
One of the original forms of ‘Podcasting’ was a concept called ‘Push Technology’ utilized by companies such as PointCast Inc. (Mack & Ratcliffe, 2007) Push Technology as it suggests automatically pushes data to host machine forcing it to be downloaded at periodic intervals. It also overwrites old data as it goes. This allowed the user to browse large quantities of up-to-date multimedia (including audio and visual programming) without any latency – a problem of dial-up internet connections. Although free for the user, PointCast Inc’s success was short lived as it had to charge broadcasters for the privilege to use the service to fund the development of Push Technology. This inevitably led to the collapse of the company in the late 1990’s. However, PointCast Inc and Push Technology showcased the concept now familiar behind Podcasting – **Automatic downloading of episodic content for offline use.**

At the turn of the century new technologies and concepts were being developed to supersede ‘Push.’ The most important of these was RSS (Rich Site Summary, sometimes referred to as Really Simple Syndication) produced by software developer David Winer (Mack & Ratcliffe, 2007) which will look at in more depth in Section 2.2.2.1. The concept however is very simple - an RSS file is compiled using standardized XML code which can then enclose within it text or audio files (most commonly MP3). Users can then subscribe to and open the RSS feed (which automatically downloads new content) using a variety of third party ‘RSS Readers’ or ‘Aggregators.’ The big difference between RSS and Push is that the host machine searches and collects new data itself whereas Push had data forced upon it from an external server.

The RSS feed itself could be easily edited and compiled meaning virtually anyone could get to grips with starting episodic broadcasts. The next step in securing the success of the RSS feed and broadcasting partnership came in 2001 when Apple released the first iPod, one of many portable devices that allowed users to transfer RSS feeds to it. (Mack & Ratcliffe, 2007). Come 2004 the term ‘Podcast’ (Amalgamation of iPod and Broadcast) started to be used officially to describe episodic audio content distributed by RSS (Hammersley, The Guardian, 2004). In just two weeks in October of that year hits for ‘Podcast’ on Google rose from 2750 to 100,000 per day highlighting the explosive nature of the concept.
The original podcasts were created by the developers of the technology itself. Dave Winer, previously discussed, is often credited with the first ever podcast – Morning Coffee Notes, a show designed to promote RSS technology. (Mack & Ratcliffe, 2007).

Podcasting from then on became a craze that took the world by storm. As the technology behind it was essentially free (potential costs will be broken down in section 2.3), anybody could get involved who had basic recording equipment and an internet connection, having a go at presenting their very own radio show. One of the earliest examples of such success came from ‘The Dawn and Drew Show’ produced by Dawn and Drew Domkus in the US about the comic ups and downs of their own married life. This highlighted a key advantage in podcasting – that for nearly every subject and genre imaginable there will be a prospective market audience, no matter how small, somewhere in the world. This became known as narrowcasting which will further look at in Section 2.4. (Mack & Ratcliffe, 2007).

Podcasting also has a range of other unique benefits (Morris & Terra, 2006):

**Portability & Schedule:** The listener can tune in whenever he or she wants, and with a portable device, wherever he or she wants.

**Digestible Fix:** Whilst not always the case, many podcasts are short and to the point. A news based podcast for example could be 15 minutes in length and could be easily listened to on a morning commute. Such examples make vital information easy and hassle free for users to digest.

**Automatic:** As discussed throughout the report, podcasts automatically download for the user; removing the need to visit multiple websites multiple times.

**Better Range of Content:** As discussed above (Narrowcasting), podcasting allows for a wider variety of content.
2.2 ONLINE IMPLEMENTATION

2.2.1 STREAMING

Unfortunately there are no standards in setting up an online stream be it a simulcast or catch-up service. The BBC’s iPlayer is an example of a scratch built flash player embedded within their site.

As of 2008, (BBC, 2008) depending on the service audio is streamed between 80kbps for mono speech (5live etc) and 192kbps for classical music (Radio 3). In 2010 iPlayer received an upgrade to include ‘adaptive bit rate’ – one that will change according to the speed of your internet connection.

This of course is a high end example of how online broadcasting is implemented. A more cost effective method is to use a fixed bit rate, dictated by the cost and speed of your own server, coupled with a third party application to launch your stream in.

RadioHudd at the University of Huddersfield for example uses a bit rate of 96kbps per channel and launches in Windows Media Player. The advantages of this method for a small scale broadcaster such as RadioHudd are that no time and money is spent on developing a flash player, whilst still maintaining a near FM bit rate quality.
2.2.2 PODCASTING

Similar to the implementation of streaming there is no standard format for podcasts. Although the predominant method is via an RSS feed, the implementation of a podcast could be as simple as a link on a webpage. This method however would not allow for automatic subscription which this project aims to achieve. (Mack & Ratcliffe, 2007).

2.2.2.1 RSS THEORY – SYNDICATION & AGGREGATION

As previously discussed the majority of podcasts are implemented using RSS feeds, a technology developed by David Winer in 1997 to dispense information about site updates. (Mack & Ratcliffe, 2007).

Syndication: The process of creating an RSS feed, sometimes referred to as ‘Syndication’ involves creating an XML file standardized by Winer in 1997. XML (Extensible Markup Language) can be seen as a variant of HTML (Hyper Text Markup Language), an example and breakdown of how to build one is shown overleaf in (Fig.1) (Morris & Terra, 2006):
Perhaps the most important part of the RSS XML file with reference to podcasting is the line `<enclosure … />`. This embeds within the feed the instruction to download an MP3 file. Each time a new update is released a new `<item … />` is created. RSS XML files and Items can then be easily added by either human or automated computer input.
Aggregation: Once an RSS XML file has been created it needs to be read and understood. The process of aggregation automatically compiles multiple RSS XML feed subscriptions and translates them all back into a webpage format. These are best viewed using an ‘RSS Reader’ or ‘News Aggregator.’ There are thousands of Aggregators available online; the example below is a breakdown of Google’s Reader (Fig.2) (Morris & Terra, 2006).

(Fig.2) Google Reader.

Whilst Google Reader is an adequate method of compiling, viewing and playing podcasts the most popular method is via Apple iTunes. This has features specifically designed towards podcast playback and external device synchronization as well as a ‘podcast search engine’ in the Store shown overleaf in (Fig.3) and (Fig.4):
(Fig.3) iTunes Podcast Display

(Fig.4) iTunes Store
2.2.3 SUMMARY

All streaming services need to be hosted on a server, be it your own PC or externally online. Either option requires a more intimate knowledge of how servers work. Podcasting is a far easier and faster method to understand and implement, especially for the first time user.
2.3 LEGAL & FINANCIAL PROTOCOL

Whilst Online Broadcasting is a cheap and popular method for amateurs to get involved with Radio Production many rules, regulations and laws still apply to any material you may release on the internet. This section will look at how Broadcasting on the Internet is governed; highlighting the rules, regulations, and costs which must be obeyed if an Online Broadcast is to be successfully developed within the bounds of the law. Rules, Regulations and Laws differ from country to country, for the purpose of this project those of the United Kingdom will be looked at only.

2.3.1 TRANSMISSION LICENSE

Online Broadcasting at its most basic is free. It does not cost anything to broadcast over the internet and no paperwork or license is required to do so, whereas AM/FM and DAB stations have to own a license to transmit over a bandwidth of frequencies. This makes Online Broadcasting an attractive method for the public to get involved in the Radio Industry and make their own programming.

However it is important to understand that Online Broadcasting is only free when no copyright material is used. This means that realistically only speech can be broadcast without cost as well as any royalty free or self composed music (sometimes known as PodSafe music). For any content that is not your own the same rules apply to Online Broadcasting that would apply to AM/FM and DAB. (Mack & Ratcliffe, 2007).
2.3.2 COPYRIGHTED MATERIAL & MUSIC

For use of any copyright music or content a fee must be included to PRS for Music the governing body for all performing rights royalties in the UK. At this point it is assumed that the start up broadcast will not be designed to make any revenue. Therefore if any copyright material is intended to be used ‘Limited Online Music License’ (LOML) must be acquired described on the PRS for music website (PRS for Music, 2011),

“**Limited Online Music Licence – for small online services**

LOML is perfect for small online services offering music or general entertainment content to the UK public where the revenue generated by the service is less than £12,500 per year.”

Therefore, depending on the service provided, the cost of using copyright material in the prospective online broadcast will be as follows in (Fig.5) as quoted on the above site:

(Fig.5) PRS Costing

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Service Description</th>
<th>Streams/Downloads permitted per Year</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>On Demand Service</td>
<td>Users can stream pre recorded programming</td>
<td>&lt;45,000</td>
<td>£112</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;90,000</td>
<td>£224</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;225,000</td>
<td>£560</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;500,000</td>
<td>£840</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;1,000,000</td>
<td>£1,120</td>
</tr>
<tr>
<td>Pure Webcast</td>
<td>Users can stream continuous programming without interaction (i.e. Cannot skip or fast forward tracks)</td>
<td>&lt;180,000</td>
<td>£112</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;360,000</td>
<td>£224</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;500,000</td>
<td>£560</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;1,350,000</td>
<td>£840</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;1,800,000</td>
<td>£1,120</td>
</tr>
<tr>
<td>Podcast</td>
<td>Downloadable, Audio Only Programme that contains both Music and Speech. Any music tracks cannot be seperated</td>
<td>&lt;68,000</td>
<td>£112</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;136,000</td>
<td>£224</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;340,000</td>
<td>£560</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;510,000</td>
<td>£840</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;680,000</td>
<td>£1,120</td>
</tr>
</tbody>
</table>

A more detailed breakdown of the pricing structure can be viewed in (Appendix III).
2.3.3 HOSTING COSTS

Depending on the method of broadcast, it is possible that a charge to host the service online will be incurred.

In the case of streaming a server needs to be set up. Some websites offer free plans in conjunction with certain third party software (i.e. SHOUTcast for WinAmp) whilst others will charge for usage (servers.Internet-Radio.org.uk).

Similarly for podcasting, the MP3 show files themselves will need to be stored somewhere. Again, some online storage solutions are free however most will incur some kind of limitation – usually on file size or total storage amount. These limitations can be compensated for by restricting show length, number of shows and audio quality. (Morris & Terra, 2006). These are factors that will be carefully considered in Section 3 of this project.

2.3.4 OTHER LEGAL ISSUES

As Morris and Terra (2006) state, with all forms of broadcasting it is important to make sure content is not libel or in any way slanderous. Although some Online Broadcasting methods such as podcasting may not be strongly regulated by authoritative bodies such Ofcom, any content that could be considered as slanderous should be heavily avoided.

In Podcasting for Dummies, Morris and Terra (2006), write “The legal definition of slander is a verbal form of defamation, or spoken words that falsely and negatively reflect on one’s reputation.” (pg. 94) It is therefore imperative to make sure that any speech within the service does not breach this law. Where any opinions may be expressed, it should be clear to the listener that this is the case.

2.3.5 SUMMARY

The rules and regulations which need to be obeyed to start a successful Online Broadcast have been highlighted. These and any financial factors will greatly determine the type of service, and content within that service that will be chosen to be provided in Section 3.
2.4 PROGRAMMING & TARGET AUDIENCE

Perhaps the most key element behind any form of broadcasting is who is being broadcast to - the Market or Target Audience. In the case of traditional radio formats, AM and FM, most stations have a very large target audience. BBC Radio 1 and KISS 100 for example cater for a certain age range (16-25) whilst service like TalkSport and Classic FM market towards a specific topical or musical genre. To sustain the large financial backing these large national stations need to stay alive their main goal of broadcast is to maintain high listening figures. To do this they must make sure they appeal to a vast quantity of people. The result is that their programming and content can be considered ‘Generalized’ or ‘Mainstream.’

2.4.1 NARROWCASTING – A PODCAST FOR EVERYONE

The beauty of cheaper Online Broadcasting, especially with reference to podcasting, is that there is less emphasis on appealing to as many people as possible. In fact some of the most successful podcasts are those that appeal to a narrower market. As well as attracting a new type of audience this also attracts a new kind of broadcaster. Below are just a few examples of the types of establishment now experimenting with Podcasting as a new method of reaching the public:

- Academic & Educational Institutions – The University of Oxford Podcasts, Royal College of Music Podcast etc.
- Governmental Departments – First Minister’s Questions (Scotland), Number10 Podcast etc.
- Celebrity or Sporting Figures – The Ricky Gervais Show, Richard Hammond’s Tech Head etc.
- Teaching, Training & Infomercials – Learn French by Podcast, The Handyguys Podcast etc.
- News Outlets & Magazines – Absolute Radio News Podcast, Sound on Sound Podcast etc.

……… and many more.

The success of many Narrowcast examples is governed by many of the advantages of podcasting laid out in Section 2.1.2.
2.5 RESEARCH ANALYSIS AND CONCLUSION

The background behind Online Broadcasting and its many advantages have been pinpointed in Section 2. This research will be carried onto Section 3 where a plan will be developed for a new Online Broadcast. Key points in helping develop this service are as follows:

**Format & Online Implementation:** Podcasting offers the easiest and quickest route for this service. Although there is an inability to broadcast live, by choosing podcasting the need to learn server theory as well as not having to purchase any server space is eliminated. Any file and site hosting will be freely provided by the University of Huddersfield on their Helios server. http://helios.hud.ac.uk/radiowave. RSS XML feeds for the podcast will also be developed.

**Cost & Copyright Material:** As only a series of pilot broadcasts are going to be created and as there is no plan to have a source of revenue it would be irrelevant to purchase a year’s license to use copyright material. Programming content will be developed that does not use protected material. This will mean any music used will have to be royalty free or better yet, self-composed.

**Programming & Target Audience:** It has been discovered that Podcasting favours narrow or niche markets. Instead of trying to appeal to a large general audience, it will appeal to a small focused target group. As the broadcast will be produced at the University of Huddersfield it is sensible to choose students of the University as the market audience. Content must also be chosen that is interesting and engaging for the listener whilst remaining clear of any topics that could be considered libel or slanderous.
3.0 OBJECTIVE PLAN

3.1 LIMITATIONS & NARROWING THE TARGET AUDIENCE

Legal and financial limitations of creating a Podcast have already been outlined in Section 2. As students at The University of Huddersfield have been chosen as the target audience there are also some new limitations to consider.

3.1.1 RADIOHUDD

Any Online Broadcast set up marketed towards the University students will be in direct competition with RadioHudd. RadioHudd is owned and run by the Students’ Union at the University. It operates as an Internet Radio station streaming online Monday – Friday from 10am – 10pm. Content is diverse and caters for a wide range of interests and genres.

The goal is not to compete with RadioHudd with similar content. After all they already have an established listener base.

A podcast could be designed for RadioHudd and the Students’ Union aimed towards their existing listeners for times when they are not on air. However, because of their eclectic and diverse programming schedule it would be hard to cater for every genre and taste.
3.1.2 AUDIENCE RANGE

Currently the chosen target audience is too large. RadioHudd can afford to cater for a wide range of age groups, ethnicities, topical tastes and backgrounds as they have more broadcasting time at their disposal. The field needs to be narrowed further so that the podcast is attractive and effective. (Fig.6) shows a table of potential fields that could be looked at and areas that could benefit from podcasting.

(Fig.6) Potential Audience Ranges

| Possible Field | Description                  | Example                               | Comment                                                                                      |
|----------------|------------------------------|                                      |                                                                                             |
| Age Range      | Choose a narrower age band   | Mature Students, First Years Only     | Whilst a podcast for first time students may be a great tool to help them settle in, it is not likely to have any longevity passed the initial months. Range of tastes and genres still very large. |
| Ethnicity      | Market towards an ethnic group | Foreign Students                     | Again, a potentially great tool for first time visitors however it's not a topic I (the author) can relate to well enough to produce interesting and engaging content for. |
| Sports & Societies | Members of University Societies and their fans | Huddersfield Hawks American Football, Team Music & Radio Society | A fantastic method of getting news and information out to members and fans. A narrow enough audience to appeal to. |
| Course Specific | Aim towards a specific course or group of courses | Music Technology, Psychology, Computer Science, Many More! | A great way to enhance lectures, share work and discuss what's happening in the subject outside of university. A narrow enough field that myself as the author can relate to (Music Technology) to create interesting and engaging programming. |
3.2 CHOSEN TARGET AUDIENCE

The table in Section 3.1.2 shows a variety of audience groups available to be marketed to. The most appealing is to market a podcast to **Music Technology Students**.

3.2.1 WHY THIS TARGET AUDIENCE HAS BEEN CHOSEN

There are many advantages for choosing this target audience:

- Not in direct competition with RadioHudd.
- Easier to address a niche target audience you can relate to.
- Music Technology Courses at the University already have an online presence at [www.BlueroomsOnline.co.uk](http://www.BlueroomsOnline.co.uk). It will be easy to supplement an already established online community.
- Student work can be showcased; this will also avoid the need to use copyrighted material.

3.2.2 CREATING A PODCAST FOR THE BLUEROOMS ONLINE IMAGE

Staff at the Bluerooms Studios based in room T4/02 of the Technology Building at the University of Huddersfield were approached about the proposal to create a pilot Podcast for use on their website aimed at the target audience stated above. This they agreed to as they felt it would further expand the online presence of their website [www.BlueroomsOnline.co.uk](http://www.BlueroomsOnline.co.uk) and was something they could pick up if successful.
(Fig.7) illustrates aspects of the Bluerooms Online website that will be used to develop the podcast.

All screen grabs taken from [www.BlueroomsOnline.co.uk](http://www.BlueroomsOnline.co.uk)

<table>
<thead>
<tr>
<th>Bluerooms Online Website</th>
<th>Element</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Fig.7.1)</td>
<td>Visual Branding</td>
<td>Blue themed – the developed website will take a similar stance</td>
</tr>
<tr>
<td><img src="image1.png" alt="Bluerooms Online Website" /></td>
<td>Crib Sheets</td>
<td>The website offers a variety of instructional based text as well as.....</td>
</tr>
<tr>
<td>(Fig.7.2)</td>
<td>Video Cribs</td>
<td>A host of video tutorials are also available. Tutorials in Podcast format would be a logical evolution of this service.</td>
</tr>
<tr>
<td><img src="image2.png" alt="Crib Sheets" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Fig.7.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><img src="image3.png" alt="Video Cribs" /></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Contact Details

These will be maintained as key anchor points in the podcast.

Newsletters

Similar to Sound on Sounds 'News' Feature the website offers a text version of latest events in the studios. This could be adapted for the podcast version.
3.3 CASE STUDIES

Some existing examples of Podcasting relevant to our proposed target audience of Music Technology Students at the University of Huddersfield will now be looked at.

<table>
<thead>
<tr>
<th>Sound on Sound</th>
<th>New York University Music Technology Podcast</th>
<th>Science@Huddersfield</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Background</strong></td>
<td>The SoS Podcast is a supplement to the Sound on Sound magazine; It is released every month in conjunction with the magazine counterpart and is aimed at all Music Technology professionals and hobbyists.</td>
<td>Here an example is shown of a similar institution offering a Music Technology based Podcast. All episodes are released in one bulk; users can choose to listen to which episodes they feel are relevant to them.</td>
</tr>
</tbody>
</table>
| **What They Offer** | • What is available in the magazine counterpart.  
• News of upcoming products.  
• Event reviews.  
• Detailed reviews and demonstrations of new products.  
• Help and Advice via an e-mail based Question and Answer service.  
• ‘Tech Talk’ a main feature that talks in length about one given topic within Music Technology. For example in Podcast 035 of the April 2011 Issue they discuss ‘What Matters the most in making a good music recording.’ | Each Podcast has a professor from New York University talking to you about one specific topic within Music Technology. For example Episode 6 discusses Mastering. As well as discussing some basic Mastering knowledge the host also informs the listener how New York University will develop your skills within that field. Combined, all the episodes act as a prospective guide for any students thinking about studying at NYU. This novel marketing technique is a great alternative example of how podcasting can be used. | Each episode Steven Bentley interviews a different Lecturer from the School of Applied Science at the University of Huddersfield about a varying range of subjects, from Chemistry to Road Pricing, which is related to current affairs in some way. |
### Relevant Content

<table>
<thead>
<tr>
<th>Sound on Sound</th>
<th>New York University Music Technology Podcast</th>
<th>Science@Huddersfield</th>
</tr>
</thead>
<tbody>
<tr>
<td>As well as showcasing content that is relevant to the target audience laid out in Section 3.2 (product reviews, production advice, etc) the Sound on Sound podcast illustrates how well it can run in conjunction with their magazine. The podcast produced in this project will take a similar role, being a forum to discuss matters related to Music Technology but also offer as a calling card to the other services available on the Bluerooms Online website.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>This example highlights the important alternative role of podcasting – as an advertising tool. Although prospective students are not the chosen target audience outlined in Section 3.2, The NYU Podcast illustrates that students can be pointed towards to the Bluerooms facilities with reference to specific Music Technology Topic Areas. As the NYU podcast has predominantly speech only content they have used a low bit rate. This means files sizes are small and quick to download, however the lack of musical content could be considered dry and dull.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science@Huddersfield is a great example of how a similar broadcaster (School of Applied Science) is reaching their target audience (Students studying Science). This example differs from Sound on Sound and NYU as they are focusing mostly on interviewing. The presenter’s role is purely there to facilitate each week’s guest speaker. This compares to Sound on Sound where the presenters also offer advice and answer listeners’ questions. Both are good techniques, therefore a good balance between guest speakers and presenters in our podcasts will need to be created.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Release Frequency

<table>
<thead>
<tr>
<th>Sound on Sound</th>
<th>New York University Music Technology Podcast</th>
<th>Science@Huddersfield</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/month</td>
<td>In Bulk</td>
<td>1/week</td>
</tr>
</tbody>
</table>

### File Format

<table>
<thead>
<tr>
<th>Sound on Sound</th>
<th>New York University Music Technology Podcast</th>
<th>Science@Huddersfield</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP3</td>
<td>MP4</td>
<td>MP3</td>
</tr>
</tbody>
</table>

### Average Size*

<table>
<thead>
<tr>
<th>Sound on Sound</th>
<th>New York University Music Technology Podcast</th>
<th>Science@Huddersfield</th>
</tr>
</thead>
<tbody>
<tr>
<td>22.8 Mb</td>
<td>4 Mb</td>
<td>10.3 Mb</td>
</tr>
</tbody>
</table>

### Average Length*

<table>
<thead>
<tr>
<th>Sound on Sound</th>
<th>New York University Music Technology Podcast</th>
<th>Science@Huddersfield</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 ½ minutes</td>
<td>6 ¼ minutes</td>
<td>11 ¾ minutes</td>
</tr>
</tbody>
</table>

### Bit Rate

<table>
<thead>
<tr>
<th>Sound on Sound</th>
<th>New York University Music Technology Podcast</th>
<th>Science@Huddersfield</th>
</tr>
</thead>
<tbody>
<tr>
<td>128 kbps</td>
<td>84 kbps</td>
<td>128 kbps</td>
</tr>
</tbody>
</table>

### Jingles & Idents Used

<table>
<thead>
<tr>
<th>Sound on Sound</th>
<th>New York University Music Technology Podcast</th>
<th>Science@Huddersfield</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Limited</td>
<td>Limited</td>
</tr>
</tbody>
</table>

### Bed Music Used

<table>
<thead>
<tr>
<th>Sound on Sound</th>
<th>New York University Music Technology Podcast</th>
<th>Science@Huddersfield</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limited/None</td>
<td>Limited</td>
<td>Limited</td>
</tr>
</tbody>
</table>

### Presenters

<table>
<thead>
<tr>
<th>Sound on Sound</th>
<th>New York University Music Technology Podcast</th>
<th>Science@Huddersfield</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

### References

<table>
<thead>
<tr>
<th>Sound on Sound</th>
<th>New York University Music Technology Podcast</th>
<th>Science@Huddersfield</th>
</tr>
</thead>
</table>

*Average over latest 3 episodes.
3.1 CASE STUDY SUMMARY

Each Broadcaster looked at offers a different style of podcasting, programming and presenting.

All three examples show elements of branding, each with a signature piece of music or, in Sound on Sound’s case, various idents. Sound on Sound also highlights the use of signposting at the beginning of their show and all three demonstrate good further communications methods.

Sound on Sound’s podcast is the longest, coming in at just over 25 minutes however this is reflective of quantity of content they cover. For this case it will be more suitable to have a shorter overall length with a focus on maybe three to four features. This will hopefully help keep the pace of the podcast up; keeping the listening interested and engaged.

Sound on Sound and Science@Huddersfield come in an expected MP3 format. As they have both used some musical content they have chosen to use 128kbps to maintain a good near FM audio quality. NYU on the other hand have chosen a lower bit rate (84kbps) as their podcast is predominantly speech. This has reduced their file size considerably for quick download, although rather bizarrely they have used an MP4 format without having a video feed. If this had not been used their file size would be even smaller.

None of the three examples fully utilise music. Musical beds can help to break up long sections of speech which may appear dull and lifeless.

Sound on Sound is the only of the three to have more than one presenter. This helps add character to the broadcast as the two can engage in banter and share ideas.
3.4 MARKET AUDIENCE SURVEY

A questionnaire will be compiled for prospective Target Audience members to fill in. The questionnaire will find out:

➢ What current methods students use to listen to the Radio.
➢ If students would like to see a brand new broadcast set up to target them.
➢ If Podcasting is a viable method of broadcast for Bluerooms Online Radio.
➢ How often Bluerooms Online Radio should release shows
➢ What content should be included on Bluerooms Online Radio.

The questionnaire was made available for students to fill both on paper via The Music Tech Store in room T4/02 in the Technology building at the University as well as online. A copy of this can be seen by visiting: www.tinyurl.com/blueroomsradiosurvey.
3.4.1 RESULTS

Overall 62 responses were received. All paper copies were inputted on the online version for completed results below.

Bold Figures indicate number of individual responses.

An additional comments box was also included (Question 11). Useful comments have been quoted.

(Fig.8.1)

1. How do you like listening to the radio?

<table>
<thead>
<tr>
<th>Method</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional AM/FM transmission</td>
<td>37</td>
<td>60%</td>
</tr>
<tr>
<td>DAB</td>
<td>19</td>
<td>31%</td>
</tr>
<tr>
<td>Internet - Live Online Streaming</td>
<td>42</td>
<td>68%</td>
</tr>
<tr>
<td>Internet - Catchup Service Streaming (BBC iPlayer etc)</td>
<td>20</td>
<td>32%</td>
</tr>
<tr>
<td>Podcasts</td>
<td>13</td>
<td>21%</td>
</tr>
<tr>
<td>Customisable Formats (LastFM, Pandora etc)</td>
<td>9</td>
<td>15%</td>
</tr>
<tr>
<td>Via TV (Freewave, Sky, Virgin etc)</td>
<td>11</td>
<td>18%</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

People may select more than one checkbox, so percentages may add up to more than 100%.

(Fig.8.2)

2. On average how many days a week do you listen to the radio online?

<table>
<thead>
<tr>
<th>Days Per Week</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - Never</td>
<td>14</td>
<td>23%</td>
</tr>
<tr>
<td>1</td>
<td>19</td>
<td>31%</td>
</tr>
<tr>
<td>2</td>
<td>14</td>
<td>23%</td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td>16%</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>5%</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>7 - Every Day</td>
<td>1</td>
<td>2%</td>
</tr>
</tbody>
</table>
*For Other participants could elaborate:

“Live webcam from studio”

“More contemporary music available”

“Choose specific radio show for the mood of music I feel like listening too”

“I don’t have a traditional radio”
3b. If you listen to podcasts, what attracts you to this format?

- Portability: 18 (55%)
- Automatic download of subscriptions: 11 (33%)
- Better audio quality than AM/FM: 7 (21%)
- Greater choice of content: 19 (58%)
- Other: 3 (9%)

People may select more than one checkbox, so percentages may add up to more than 100%.

*For Other participants could elaborate:

“Specially made focused material not released in other formats”

“A group of friends run a podcast I contribute to”

4. Would you like to see an online student radio station set up from the Blue Rooms Studios?

- Yes: 61 (58%)
- No: 1 (2%)

5. Would you like the station to be aimed towards Music Technology Students?

- Yes, Content should be relevant to Music Tech students at the University of Huddersfield: 32
- No, Content should be general: 30
6. Would you be interested in getting involved if such a project was set up?

- Yes, I would definitely like to be involved with the station: 26 (42%)
- I might like to be occasionally involved with the station: 28 (45%)
- No, This is not my thing: 8 (13%)

(Fig. 8.6)

7. Shows on Bluestreams Online Radio should be available...

- To Stream Online: 3 (5%)
- As a Podcast or Downloadable mp3s: 1 (2%)
- Both: 58 (94%)

(Fig. 8.7)

8. Bluestreams Online Radio should produce shows/podcasts...

- A Few Times Per Term: 2 (3%)
- Once A Month: 4 (6%)
- More Than Once A Month: 21 (34%)
- Once A Week: 25 (40%)
- More Than Once A Week: 10 (16%)

(Fig. 8.8)
*Participants could also suggest content ideas if selecting ‘Other’ these are as follows:

“Music Reviews”

“Interviews with Recognised Producers”

“Interviews with people already in Industry, e.g. guest lecturers who visit the uni”

“Interviews with external artists and producers”
11. Additional Comments Quotes:

“This is a great idea”

“Go for it!”

“I do genuinely believe Bluerooms Radio would be a very good idea. Not only is it a great forum to cover music tech but it is a chance for more people to get radio experience. I have applied for Hudd Student Radio but struggled to get a spot, so would jump at this opportunity.”

3.4.2. ANALYSIS

68% of all students asked listen to the radio via live online streaming, 32% via a pre recorded stream and 21% via Podcasting (Fig.8.1), highlighting a demand for Online Broadcasting. Although the podcasting figure is low this is intended to be improved by offering the students an engaging service that relates to them. It is also shown that students choose podcasting for its portability and greater content choice (Fig.8.3b).

98% of students said they would like a new radio station in the university (Fig.8.4) and over half of them (Fig.8.5) said it should be aimed at the target market laid out in Section 3.2.

(Fig.8.7) shows that students would want the new station to offer both podcasting and streaming, however we will continue to offer only podcasting at this time due to the limitations laid out in Section 3.1.

The most popular content choices were Showcase of Student Bands/Artists work and Production workshops (Fig.8.9). This is both in line with content supplied on www.BlueroomsOnline.co.uk and the plan to avoid copyright material.

Students themselves highlighted in the ‘Other’ category of (Fig.8.9) that they would like to hear Interviews with Industry Professionals. This will be added to the content plan Section 4.1. Another suggestion was Music Reviews, this will be difficult to include without the need for a PRS licence already illustrated in Section 2.3.2.
4.0 ARTEFACT PRODUCTION

4.1 CONTENT PLAN

Two pilot Podcasts will be created both of approximately 15 minutes in length. This time limit allows for 3-4 features each 3-5 minutes in length which at this stage will showcase potential material, be long enough to engage the listener and not too long to bore.

The Podcast will be presented by me, Andrew Carter and a former colleague, Joel Peters after working together for a placement at the Bluerooms Studios. This decision was made as both presenters have sufficient background knowledge to relate to the shows that will be hosting as well as an in depth knowledge of Bluerooms Studios. Two presenters rather than one, have been chosen so that banter can be exchanged maintaining a light hearted and easy to listen to feel.

Content will include a range of ideas outlined in the Market Research section (Section 3.4):

Pilot Show 1:

- String Production Workshop & Tutorial: This will be lead by the presenters (similar to the Sound on Sound ‘Tech Talk’ Example).
- Interview with former placement students Ben Heys & Luke Reid: This will offer students the opportunity to find out what happens on and after placement. This section will highlight the course’s Placement Year similar to how NYU utilise podcasting as an advertising tool. This differs as the target audience will be existing students rather than prospective students.
- Student Work Showcase: A presenter lead analysis on student work, in this case kindly donated by student band ‘Naked.’
Pilot Show 2:

- Final Year Interview with Daniel Wright: An informative Interview to find out an example of what happens in third year.
- Highlights of Hayden Bendall Lecture: This will be covered due to market demand and will be a recording of a guest lecture.
- Life on Placement with Jenny Harwood: An interview with current placement student Jenny Harwood will be conducted via phone link. An example of Jenny’s placement work will also be included. Permission for her work to be used has been granted by her employers at KLFM, Norfolk.
- PhD Interview with Steve Fenton: This section will highlight a niche area within Music Technology, and inform what lecturers get up to out of teaching hours within the Industry (Similar to the Science@Huddersfield Podcast). This will also act as a calling card for PhD studies at the university.
4.2 PRODUCTION ANALYSIS

4.2.1 RECORDING

4.2.1.1 VOCAL & SPEECH

The majority of recording for interviews and presenting took place in Bluerooms Studio 4 (a dedicated Radio production facility) at the University of Huddersfield. All Speech was recorded using Electrovoice RE20 Microphones with pop shields and Beyerdynamic DT150’s for monitoring. The Jenny Harwood Interview was conducted via telephone link using the Telephone Hybrid II within Bluerooms Studio 4.

The PhD Interview with Steve Fenton was conducted in Bluerooms Studio 3 using Beyerdynamic M58 microphones, pop shields and DT150’s for monitoring.

The Hayden Bendall Lecture was recorded using an Edirol R4 hardisk recorder and took place in the CWG/11 lecture hall at the University.

Additional speech for use with Idents, Jingles and Signposting was also recorded in Bluerooms Studio 4 using RE20’s with vocal credits to: Ben Heys, Gregg Holsgrove, Toby Stretch and Leah Dale.

All recordings were taken using Steinberg Nuendo 4.

4.2.1.2 BEDS, JINGLES & IDENTS

All Beds, Jingles & Idents were self composed to avoid copyright laws. These can be found in the JINGLES & IDENTS project file on the submission disc.

Two sets of musical beds were composed both in a modular format using the Steinberg Hypersonic MIDI sampler for all instrumentation. Set 1 includes modular Intros, Outros, and a host of 4 bar loops composed around a simple walking Bass line in G minor. Instrumentation includes: Standard Drum Kit, Bass Guitar, Piano and Synth Pad. The role of the bed music is to make the podcast sound...
more interesting without distracting listeners away from any speech. This is reflected in the minimal use of instrumentation. Set 1 is also used as signposting music both at the start and end of both podcasts.

On the JINGLES & IDENTs project file each ‘module’ is presented on its own (Bars 1 – 39) and an example of the ‘modules’ being used together (Bar 41).

Set 2 is an alternative bed for use underneath Interviews (Bar 145).

4.2.1.3 OTHER MUSICAL CONTENT

Some other musical content was used within the podcast:

- ‘The Storm’ – un-copyrighted material, recorded by student band ‘Naked.’
- Sweeper Effect (RadioHit 01) – heard as part of Jingles is a royalty effect acquired from the student ‘M’ drive at the University of Huddersfield.
- String Samples – un-copyrighted material used in the ‘Production Workshop’ feature, recorded by Joel Peters.
4.2.2 EDITING & MIXING

All mixing and editing was conducted with Nuendo 4. A full editing transcript of each show can be found in (Appendix VI). The main editing and mixing processes for both podcasts have been listed below.

4.2.2.1 VOCALS & SPEECH

All speech content from all interviews was first normalised. It was then appropriately cut and arranged according to the content plan to achieve feature lengths of around 3-5 minutes. (See Appendix VI for Show transcriptions).

(Fig.9) Example edit from SHOW 1, Track: Joel, File: Guests (R)_02.wav.

All speech content was then routed to a group ‘Vox Master Out.’ The majority of processing was then done on the group channel rather than the individual tracks.
Vox Master Out EQ Settings using Voxengo Gliss EQ Plug-in from SHOW 1:

- High pass at 122Hz to remove low end rumble.
- -2.4dB reduction at 205Hz to remove ‘boxy’ sound of room.
- 1.6dB boost at 2KHz with wide Q to accent the body of all speech.
- -6.2 reduction at 8.03KHz with smaller Q to remove sibilance and high end spit.
- Low pass at 13.3KHz to remove unwanted high frequency content such as studio air con noise.

(Fig. 10) These settings were saved and transferred to Vox Master Out on SHOW 2 to maintain uniform.
Compression on Vox Master Out using Nuendo standard Compressor on SHOW 1:

- Threshold at -27dB compresses mostly all peaks so speech appears to all be at the same level
- Fast attack time with slow Release make sure the compressor is always on.
- Make up gain of 8dB

(Fig.11) These settings were saved and transferred to Vox Master Out on SHOW 2 to maintain uniform.

Side Chain Sends on Vox Master Out on SHOW 2:

The Vox Master Out on both shows was then side chained to ‘Idents 1 Main Out’ (The master output for all musical beds). This reduces the level of background music when any speech is played.

(Fig.12) from SHOW 2.
The compression settings on the Indents 1 Main Out Channel were as follows:

- Low threshold -47.7dB to capture entire wave form.
- Fast Attack to make sure music is reduced as soon as speech starts
- Slow Release so music gradually fades back in.
- No make-up gain when compressor is active.

(Fig.13) These settings were saved and applied to any musical bed in either show.

![Image showing compression settings](image)

4.2.2.2 USE OF JINGLES & OTHER EDITING TECHNIQUES

As all other musical examples were pre recorded by others, no additional processing was made on them.

Jingles & Idents are used within the podcast to punctuate the end of feature sections as well as act as branding.

(Fig.14) Jingle Usage
Jingles are speech only, ‘book ended’ but two sweeper effects. The second is a mirror image of the first.

(Fig.15) Bookended Sweeper

The musical beds are also used to mark the beginning and end of speech sections. Referring to the JINGLES and IDENTS file, Loop End1 signifies the end of presenting speech and Loop End2 signifies the end of feature speech. These should help familiarise the listener with a standardised format of the shows.

(Fig.16) Idents
4.3 WEBSITE DEVELOPMENT

A website was also developed to host the podcasts. This was in part supplied by former student Dan Nuttal and senior Bluerooms Studio technician Ben Evans. This was then adapted for use with the pilot shows. A blue theme was chosen, with a similar logo to that on www.BlueroomsOnline.co.uk. The adapted and annotated CSS style sheet is included in (Appendix I).

(Fig.17) http://helios.hud.ac.uk/radiowave
Shows were then uploaded to the University’s ‘Helios’ server and posted on the site.

(Fig.18) Shows on Website.
4.3.1 SYNDICATION & AGGREGATION

The Podcast was syndicated by creating an RSS XML file enabling users to subscribe to the feed via iTunes or via alternative Aggregators. An annotated copy of the RSS XML document can be found in (Appendix II).

(Fig.19) Shows on iTunes

(Fig.20) Shows on Other Aggregator.
5.0 TESTING & EVALUATION PROCESS

Once the podcasts are complete they will be evaluated in the following ways:

5.1 PILOT AUDIENCE TEST

Pilot Audience sessions were set up to enable a sample group of the target market (Music Technology Students at The University of Huddersfield) to listen to the podcast. This was tested using the following method:

1. A range of Music Technology Students from The University of Huddersfield were asked to come into Bluerooms 1 at the University in groups ranging from 1-4 people.

2. Participants were given a Questionnaire relevant to the Show (1 or 2) they were about to listen to. Participants supplied name, student number and a signature before commencement of the show. A copy of the blank questionnaire can be viewed online at:

   Show 1 – www.tinyurl.com/blueroomsradioshow1
   Show 2 – www.tinyurl.com/blueroomsradioshow2

3. Participants were then informed of the nature of the pilot test and what was hoped to be achieved by the project. Participants were told they could fill out the questionnaire as they listened or at the end of the show. Additional time was allotted for them to do this.

4. Show 1 (15 minutes) or Show 2 (16 minutes) was then played in its entirety.

5. Participants were then able to give additional verbal feedback about the show they listened to. Conversations were recorded (See file AUDIENCE RESPONSES) using an AKG C414 set up at the front of the room. Participants were asked if they were comfortable for a recording to take place.

   ➢ Overall the process took roughly half an hour.
5.2 ONLINE QUESTIONNAIRE

Both shows were made available at http://helios.hud.ac.uk/radiowave/index.php?op=Most%20Recent%20Shows with a link to each of the online questionnaires used in Section 5.1. This also included instructions.

5.3 BLUEROOMS STAFF

Ben Evans, senior technician at the Bluerooms Studios was asked to give verbal feedback on the broadcasts and whether they have a feasible and sustainable future on the www.BlueroomsOnline.co.uk website. This has been transcribed in full in (Appendix V).
6.0 RESULTS

6.1 SHOW 1 QUESTIONNAIRE RESULTS

13 students evaluated Show 1. Graphs taken from automated Google Documents Summary.

(Fig. 21.1)

How well has the audio been recorded?

| 1 | Poorly recorded | 0 | 0% |
| 2 | Poorly recorded | 0 | 0% |
| 3 | Poorly recorded | 0 | 0% |
| 4 | Poorly recorded | 0 | 0% |
| 5 | Well recorded   | 13| 100%|

(Fig. 21.2)

How well has the audio been edited?

| 1 | Poorly edited  | 0 | 0% |
| 2 | Poorly edited  | 0 | 0% |
| 3 | Poorly edited  | 0 | 0% |
| 4 | Well edited    | 10| 77%|
| 5 | Well edited    | 3 | 23%|

(Fig. 21.3)

How well has the audio been arranged?

| 1 | Poorly arranged | 0 | 0% |
| 2 | Poorly arranged | 0 | 0% |
| 3 | Poorly arranged | 0 | 0% |
| 4 | Well arranged   | 3 | 23%|
| 5 | Well arranged   | 10| 77%|
6.0 Results

(Fig. 21.4)

How clear and intelligibly are the vocals?

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not intelligible</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>2</td>
<td>15%</td>
</tr>
<tr>
<td>5</td>
<td>Clear and intelligible</td>
<td>11</td>
<td>85%</td>
</tr>
</tbody>
</table>

(Fig. 21.5)

The show was...

- Too Short: 0 (0%)
- About The Right Length: 12 (82%)
- Too Long: 1 (8%)

(Fig. 21.6)

String Production Workshop

Do you think this feature is relevant to University of Huddersfield Music Tech Students?

- Yes: 13 (100%)
- No: 0 (0%)
### 6.0 Results

#### (Fig. 21.7)

**How Interesting did you find this feature?**

<table>
<thead>
<tr>
<th>Level</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Not Interesting</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
<td>62%</td>
</tr>
<tr>
<td>5 - Very Interesting</td>
<td>5</td>
<td>38%</td>
</tr>
</tbody>
</table>

#### (Fig. 21.8)

**There should be similar content on future shows/podcasts?**

- Yes [13] 100%
- No [0] 0%

#### (Fig. 21.9)

Please add any additional comments about this feature...

- Fixed the technical talk :)
- Workshops could be tailored to assignments?
- Nicely edited with excerpts from recorded song, good use of a song as bed
- Look at other mic techniques as well for same instruments. Talk about what effects etc could be used.
- Should definitely be a feature for future shows. Look at a variety of recording and how production works is something every music lecturer needs to hear.
- Podcast gives a great insight in how to record this.
- Didn't need the backing music.
- Because we don't really cover strings/woodwind in detail on the course. The
6.0 Results

(Fig. 21.10)

Ben Heys & Luke Reid Placement Interview

Do you think this feature is relevant to University of Huddersfield Music Tech Students?

Yes 13 100%
No 0 0%

(Fig. 21.11)

How interesting did you find this feature?

1 - Not Interesting 0 0%
2 0 0%
3 4 31%
4 5 38%
5 - Very Interesting 4 31%

(Fig. 21.12)

There should be similar content on future shows/podcasts?

Yes 13 100%
No 0 0%

(Fig. 21.13)

Please add any additional comments about this feature:

good to know for future experience;
Perhaps having more contrasting placements for each pair would add more interest and diversification;
good vibe within interview, not boring, encouraging to second years;
Added humour - easy to listen to, informative + relaxed;
Good to hear what others have been involved in. Especially good for second years in the process of thinking about placements!
very formal. No need for backing music makes it sound like 5 o'clock News;
Great for giving 2nd years an insight on placements and what to expect;
Conversation type interview style works really well.
6.0 Results

(Fig. 21.14)

**Naked: Track Preview & Analysis**

Do you think this feature is relevant to University of Huddersfield Music Tech Students?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>100%</td>
<td>0%</td>
</tr>
</tbody>
</table>

(Fig. 21.15)

**How interesting did you find this feature?**

<table>
<thead>
<tr>
<th>Score</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>46%</td>
</tr>
<tr>
<td>5 - Very Interesting</td>
<td>7</td>
<td>54%</td>
</tr>
</tbody>
</table>

(Fig. 21.16)

**There should be similar content on future shows/podcasts**

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>100%</td>
<td>0%</td>
</tr>
</tbody>
</table>

(Fig. 21.17)

Please add any additional comments about this feature...

- I like music.
- Tricky ground with talking about songs from bands on the course, content could come from other local/up and coming bands?
- The level of the track itself was poor.
- Good balance, nice to hear tech and music content for range of students.
- Gets new bands, noticed/heard plus in depth advice on structure, music + recordings.
- Great to hear what other students are involved in, and nice to hear a technical argument with regards to production – more of this!
- Annoying sounding
Overall

Do you think the podcast was relevant to University of huddersfield Music Tech Students?

| Yes | 13 | 100% |
| No  | 0  | 0%   |

(Fig. 21.18)

How interesting did you find the podcast?

<table>
<thead>
<tr>
<th>Rating</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Not Interesting</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>38%</td>
</tr>
<tr>
<td>5 - Very Interesting</td>
<td>8</td>
<td>62%</td>
</tr>
</tbody>
</table>

(Fig. 21.19)

Would you listen/download the show again?

| Yes | 13 | 100% |
| No  | 0  | 0%   |

(Fig. 21.20)

Please add any additional comments about the podcast...

- Would listen again to techniques in a production workshop, interviews perhaps not.
- Vocals seem a bit too dry, could do with being a bit more interesting.
- Very good and interesting, it was upbeat and sounded professional, however at times it felt a bit too rehearsed and organised.
- Very informative, snappy, easy to listen to and learn from. Could have a bit more humor injected to keep listener more entertained.
- Wish I had had the chance to listen to a show like this in my time at University. Would have been great.
6.2 SHOW 2 RESULTS

9 students evaluated Show 2. Graphs taken from automated Google Documents Summary.

(Fig. 22.1)

How well has the audio been recorded?

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Poorly recorded</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>67%</td>
</tr>
<tr>
<td>5 - Well recorded</td>
<td>3</td>
<td>33%</td>
</tr>
</tbody>
</table>

(Fig. 22.2)

How well has the audio been edited?

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Poorly edited</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>56%</td>
</tr>
<tr>
<td>5 - Well edited</td>
<td>4</td>
<td>44%</td>
</tr>
</tbody>
</table>

(Fig. 22.3)

How well has the audio been arranged?

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Poorly arranged</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>56%</td>
</tr>
<tr>
<td>5 - Well arranged</td>
<td>4</td>
<td>44%</td>
</tr>
</tbody>
</table>
6.0 Results

(Fig. 22.4)

How clear and intelligibly are the vocals?

<table>
<thead>
<tr>
<th>Level</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>33%</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>67%</td>
</tr>
</tbody>
</table>

(Fig. 22.5)

The show was...

<table>
<thead>
<tr>
<th>Length</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too Short</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>About The Right Length</td>
<td>9</td>
<td>100%</td>
</tr>
<tr>
<td>Too Long</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>
6.0 Results

(Fig. 22.6)

**Dan Wright Interview**

Do you think this feature is relevant to University of Huddersfield Music Tech Students?

- Yes: 9 (100%)
- No: 0 (0%)

(Fig. 22.7)

**How interesting did you find this feature?**

<table>
<thead>
<tr>
<th>Score</th>
<th>Interest</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not Interesting</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>2</td>
<td>22%</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>5</td>
<td>58%</td>
</tr>
<tr>
<td>5</td>
<td>Very Interesting</td>
<td>2</td>
<td>22%</td>
</tr>
</tbody>
</table>

(Fig. 22.8)

**There should be similar content on future shows/podcasts?**

- Yes: 9 (100%)
- No: 0 (0%)

(Fig. 22.9)

Please add any additional comments about this feature...

- Good for first and second years to help generate project ideas.
- Good length and relevant questions.
- I liked the feature but I would be wary of doing too many similar projects.
- Broader, maybe include dance music area.
6.0 Results

(Fig. 22.10)

**Hayden Bendall Lecture**

Do you think this feature is relevant to University of Huddersfield Music Tech Students?

- Yes [9] 100%
- No [0] 0%

(Fig. 22.11)

**How interesting did you find this feature?**

1 - Not Interesting [0] 0%
2 - [4] 44%
3 - [2] 22%
4 - [2] 22%
5 - Very Interesting [1] 11%

(Fig. 22.12)

**There should be similar content on future shows/podcasts?**

- Yes [6] 67%
- No [3] 33%

(Fig. 22.13)

Please add any additional comments about this feature...

The recording of this wasn't clear. The bits I heard were interesting, but as the audio wasn't clear I found myself switching off...
Really poor audio quality on this section for some reason. Sounded like he was in the world's biggest bathroom. If recording was better, then yes but not like this.
Obviously not optimal audio quality but good to have as content also good that listeners can access whole lecture and this is explained.
Couldn't really hear much of the content which is why I gave it a 2.
6.0 Results

(Fig. 22.14)

**Jenny Harwood Placement Interview**

Do you think this feature is relevant to University of Huddersfield Music Tech Students?

- Yes [9] 100%
- No [0] 0%

(Fig. 22.15)

**How interesting did you find this feature?**

1 - Not Interesting 0 0%
2 0 0%
3 1 11%
4 3 33%
5 - Very Interesting 5 56%

(Fig. 22.16)

**There should be similar content on future shows/podcasts**

- Yes [9] 100%
- No [0] 0%

(Fig. 22.17)

Please add any additional comments about this feature...

- The idea of doing distant placements is great!
- Great to show the example of what was done on the placement. Phone interview was a good idea. Most memory bit - very good.
- Useful for 2nd years who are interesting in going on placement. She babbled on a lot before the feature.
6.0 Results

(Fig. 22.18)

**Steve Fenton PhD Interview**

Do you think this feature is relevant to University of Huddersfield Music Tech Students?

- Yes [9] 100%
- No [0] 0%

(Fig. 22.19)

**How interesting did you find this feature?**

- 1 - Not Interesting 0 0%
- 2 0 0%
- 3 0 0%
- 4 3 33%
- 5 - Very Interesting 6 67%

(Fig. 22.20)

**There should be similar content on future shows/podcasts**

- Yes [9] 100%
- No [0] 0%

(Fig. 22.21)

Please add any additional comments about this feature...

- Intriged my geek side.
- Future prospect and insight into what the lectures are doing, grand!
- Very interesting and relevant questions about the PhD. Good to learn about lecturers personal learning.
- Liked the feature, relevant to everyone on music tech. Very interesting, well recorded.
Overall
Do you think the podcast was relevant to University of Huddersfield Music Tech Students?
- Yes [9] 100%
- No [0] 0%

(Fig. 22.22)

How interesting did you find the podcast?
1 - Not Interesting 0 0%
2 - 0 0%
3 - 0 0%
4 - 5 56%
5 - Very Interesting 4 44%

(Fig. 22.23)

Would you listen/download the show again?
- Yes [9] 100%
- No [0] 0%

(Fig. 22.24)

Please add any additional comments about the podcast...
- Very good content. Related to the student.
- I wouldn’t re-listen to this podcast but I would possibly listen to the next one.
- Great amount of contact details. Very interesting and relevant content. Maybe advertising local gigs/bands would be a good idea.
- I’d have some music to break up the content. Maybe pieces by students?
6.3 RESULTS DISCUSSION

From the results very positive feedback can be seen across the board. Additional responses can be heard in the AUDIENCE RESPONSE project file as well as transcribed in (Appendix IV).

6.3.1 RECORDING QUALITY & LENGTH

(Fig.21.1–21.4) and (Fig.22.1–22.4) all show that listeners gave recording, editing and arranging a 4 out of 5 grade or above for both shows. This shows a high standard of production was maintained.

Out of all the students who took part only 1 said that the podcasts were two long (Fig.21.5) illustrating that roughly the right length was achieved.

Out of the transcribed responses in (Appendix IV) a number of students expressed that they would be happy to listen to a longer podcast. Some expressed that this was because some of the editing was too rushed, although some said it could bolster already good features.

A number of other students countered this by stated that any longer and they would lose interest. At this stage it is imperative to attract new audience members so if future podcasts were developed a similar length should be kept.

6.3.2 SHOW 1 CONTENT

(Fig.21.6–12.17) show that all students found the features in Show 1 relevant and thought that they should be included in future podcasts. (Fig.12.11) shows 31% only gave The Ben Heys & Luke Reid Interview an indifferent 3/5 on how interesting the feature was. (Fig.12.13) however shows positive written feedback for the feature, e.g.

“easy to listen to”

“good vibe within interview”

“encouraging for 2nd years”

Some negative feedback was received over the use of Musical Beds:
“no need for backing music”

“didn’t need the backing music”

However it is likely that these comments are made by the same person. The majority of students found that the beds did not distract from the speech and maintained a good pace within the podcast. (Appendix IV)

### 6.3.3 SHOW 2 CONTENT

(Fig. 22.6–22.21) shows similar results. All students thought that all features were relevant and the majority thought that they should appear on similar podcasts.

The exception to this was the Hayden Bendall lecture (Fig.22.10-22.12) where 33% of students thought it shouldn’t appear in future episodes and 44% didn’t find it that interesting.

This may have been in part due to the recording quality of this section:

“*The recording of this wasn’t clear*”

“*The bits I heard were interesting but the audio wasn’t clear*”

Students found the Steve Fenton Interview the best feature. 67% said it was Very Interesting (5/5) (Fig.22.19) and said:

“*Very interesting, well recorded*”

“*Relevant to everyone on music tech*”

This illustrates that features included are not only well produced but correctly appealing to the target market.
6.3.4 OVERALL
(Fig.21.18-21.21) and (Fig.22.21-22.24) all show fantastic overall responses to the podcast. All students thought that the broadcast was relevant to the target market as well as saying they would listen to future shows. All students gave the podcasts a 4/5 or above interest rating.

Many written responses show that the podcast definitely has a potential future:

“Related to the student”

“Wish I had a show like this to listen to in my time”

“Very informative, snappy, easy to listen/learn from”

6.3.5 BRANDING
In (Fig.22.25) a student comments that, “Great amount of contact details” highlighting that good branding and signposting has been upheld within the broadcast.

6.3.6 IMPROVEMENTS
Students also highlight possible improvements:

“Maybe advertise local gigs/bands” (Fig.22.25)

“More humour injected to keep listener entertained” (Fig.21.13).
7.0 CONCLUSION

To conclude, a highly successful online broadcast was established which produced interesting and engaging content for the Target Audience defined in Section 3.2 whilst obeying the legal implications (relevant to the United Kingdom) discussed in Section 2.3. A range of encouraging audience responses are seen throughout Parts 5 and 6 and (VIII) these also demonstrate that a high level of production and editing was maintained throughout the project.

The broadcast was also successfully Syndicated (Appendix II) and Aggregated (Fig.19-20) using RSS XML technologies meaning the podcast will automatically download to subscribers’ computers as intended.

Students overall seemed satisfied with the product and would subscribe to more if released. Ben Evans, senior technician at the Bluerooms Studios when asked if the pilot podcast would be picked up as a future project said (Appendix V), “Yes definitely, I think there’s great potential there. For getting information out there but also for doing something that’s fun, for students to get involved in”

Since the above quote, Ben Evans and the Bluerooms Online team have released their own full time Bluerooms Podcast after the success of the pilot demonstrated in this project.
8.0 PROJECT EVALUATION

Overall I have been exceptionally pleased with the way this project has developed. Most of all that the Bluerooms team are now producing a regular podcast as a result of this project and pilot.

I feel I have appealed to the Target Audience well with engaging and relevant content that I would expect to hear myself as well as producing two well recorded and edited podcast packages that stand up to other professional examples. I have also adhered to the rules, regulations and laws governing online broadcasting in the United Kingdom. These aspects I feel fulfil the task I set out to achieve.

8.1 REFLECTION OF FEEDBACK

The majority of audience feedback seen in this report has been hugely encouraging and positive. Some of the constructive criticism received I will now look at and where possible justify my decisions:

➢ Show length & pace of speech: A number of students said that they would be happy listening to a longer podcast so sections of speech seemed rushed. My justification for creating a fast paced show was so that interest was maintained and time kept down. There are however areas where editing could be tighter or less unnatural. This could definitely be achieved by lengthening shows. A number of other students however expressed that any longer and they would become less interested. Maintaining interest in the podcast in my opinion is paramount. If done again the same length should be kept, perhaps with less content to achieve a more natural flow.

➢ Presenter scripting: A few responses highlighted that they felt the show was too scripted. Again this was so that timing could be kept down and a good pace maintained. I was wary of people becoming uninterested by a fumbling presentation style. As recording time was limited I chose to script the presentation.

➢ Musical beds: Some feedback illustrated that the musical beds weren’t needed. I feel however that they are, this is a Music Technology podcast and therefore music should be included. They were designed in a way so that they wouldn’t be too intrusive and would also
offer as content for jingles and signposting. Many students added that they felt they weren’t obvious and added to the shows pace and interest as I intended.

- Hayden Bendall Lecture: This feature I fully agree has not been well recorded. However I left the feature in the show to illustrate to students the potential for industry professional features. If done again, more care would be taken over the recording and not assuming that a guest lecturer will be a loud speaker.

8.2 FUTURE DEVELOPMENT

If I were to develop the podcasts further I would like to include a wider range of features. It would also be my intention to get more listener feedback, and a question and answer section similar to Sound on Sound’s example in Section 3.3 would be good.

I would also like to add small clips of what’s coming up on each show at the beginning. This would help listeners browse through past podcasts easily.
9.0 REFERENCES

9.1 BOOKS


9.2 PODCASTS


### 9.3 WEBSITES


**BBC (27th June 2008)** *Radio Labs: Under the iPlayer hood for radio.* [Online]. Available from:

**Capitol Broadcasting Company.** (1st November 2004) *WRAL Tech Wire.* [Online] Available from:


**9.4 ONLINE DOCUMENT**

# 10.0 APPENDICES

## 10.1 APPENDIX I – CSS STYLE SHEET

```css
@charset "utf-8";
/* CSS Document */

body {
    background-color: #333;
}

#wholepage {
    width:800px;
    font-family: Arial, Helvetica, sans-serif;
    color:#FFF;  //In Black
    text-align:center;  //Text Align Centre
    font-size:11px;  //Font Size
    margin-top:auto;
    margin-left:auto;
    margin-right:auto;
}

#banner {
    float:left;
    height:348px;
    border-left:thin solid #008;  //Dark Blue
    border-top:thin solid #008;  //Dark Blue
}

#listen {
    float:left;
    background-color:#000;  //White
    text-align:center;
    width:338px;
    height:338px;
    padding:5px;
    border-right:thin solid #008;  //Dark Blue
    border-top:thin solid #008;  //Dark Blue
}

img {border:0px none;}

#menu {
    float:left;
    width:798px;
    background: #eee;  //Dark Grey
    text-align:center;
    border-left:thin solid #008;  //Dark Blue
    border-right:thin solid #008;  //Dark Blue
}

#menu ul {
    list-style: none;
    margin: 0;
    padding: 0;
    width: 14.5em;
    float: left;
}
```

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#menu a, #menu h2 {
font: bold 11px/16px arial, helvetica, sans-serif;
display: block;
border-width: 1px;
border-style: solid;
border-color: #ccc #888 #555 #bbb; /* Various Shades of Grey */
margin: 0;
padding: 2px 3px;
}

#menu h2 {
    color: #fff; /* White */
    background: #0044aa; /* Blue */
    text-transform: uppercase;
}

#menu a {
    color: #000; /* Black */
    background: #efefef; /* White */
    text-decoration: none;
}

#menu a:hover {
    color: #04a; /* Blue */
    background: #fff; /* White */
}

#menu li {position: relative;}

#menu ul ul ul {
position: absolute;
top: 0;
left: 100%;
}

#menu ul ul {
position: absolute;
z-index: 500;
}

div#menu ul ul {
    display: none;
}

div#menu ul li:hover ul {
    display: block;
}

div#menu ul ul, 
div#menu ul li:hover ul, 
div#menu ul ul li:hover ul ul 
{display: none;}

div#menu ul li:hover ul, 
div#menu ul li:hover ul, 
div#menu ul ul li:hover ul ul 
{display: block;}

#contents {
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    width:768px;
}
10.2 APPENDIX II – RSS FILE

<?xml version="1.0" encoding="UTF-8"?>
<rss version="2.0">
<title>Bluerooms Online Radio</title>
<link>http://helios.hud.ac.uk/radiowave</link>
<description>A Station for Music Tech Students by Music Tech Students</description>
<category>Music</category>
<copyright>Bluerooms Online</copyright>
<language>en-gb</language>
<managingEditor>Radio Wave</managingEditor>
<pubDate>Wed, 28 Feb 2010 15:55:59 +0100</pubDate>
<ttl>120</ttl>
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<description>Radio Wave Logo</description>
<width>376</width>
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</image>

<item>
<title>Pilot Show #01</title>
<link>http://helios.hud.ac.uk/radiowave/index.php?op=Most%20Recent%20Shows</link>
<description><![CDATA[Welcome to the 1st Pilot of the Bluerooms Online Radio Podcast!<br>
On the show this week: <br>
String Recording & Mix Workshop with Joel<br />
Life on Placement with Final Years: Ben Heys and Luke Reid<br />
Naked: An Exclusive Preview & Analysis of 2nd year bands new track The Storm<br />
To find out more please go to our website.<br>
- By Andy Carter]]></description>
<enclosure url="http://helios.hud.ac.uk/radiowave/listenagain/Show01.mp3" type="audio/x-m4a"/>
<author>nutman</author>
</item>

<item>
<title>Pilot Show #02</title>
<link>http://helios.hud.ac.uk/radiowave/index.php?op=Most%20Recent%20Shows</link>
<description><![CDATA[The 2nd Pilot of the Bluerooms Online Radio Podcast! <br>
On the show this week: <br>
Final Year Project Talk with Dan Wright<br />
Abbey Road Pro: Hayden Bendall Lecture Preview<br />
Life on Placement with Jenny Harwood<br />
What the lecturers get up to in their spare time: Steve Fenton’s PhD<br />
To find out more please go to our website.<br>
- By Andy Carter]]></description>
<enclosure url="http://helios.hud.ac.uk/radiowave/listenagain/Show02.mp3" type="audio/x-m4a"/>
<author>nutman</author>
</item>
</rss>
10.3 APPENDIX III – LOML COSTS

**Costs**

Annual licences start at £112 + VAT. If you know you will only use music for part of the year you can choose to be charged pro-rata for the relevant months, down to a minimum charge of £54 (excluding VAT).

**Please note:** We cannot issue refunds if you pay for your licence and then change your plans.

Specific licences available within LOML:

### Limited Download/On Demand Streaming Service (Per Annum Costs)

**USERS CAN STREAM SPECIFIC TRACKS ON AN ON DEMAND BASIS, OR ACCESS LIMITED (AKA ‘TETHERED’) DOWNLOADS OF TRACKS ON DEMAND**

<table>
<thead>
<tr>
<th>Band A</th>
<th>Band B</th>
<th>Band C</th>
<th>Band D</th>
<th>Band E</th>
</tr>
</thead>
<tbody>
<tr>
<td>£112 (+VAT)</td>
<td>£224 (+VAT)</td>
<td>£560 (+VAT)</td>
<td>£840 (+VAT)</td>
<td>£1,120 (+VAT)</td>
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<tr>
<td>&lt;45,000</td>
<td>&lt;90,000 streams*</td>
<td>&lt;225,000 streams*</td>
<td>&lt;340,000 streams*</td>
<td>&lt;450,000 streams*</td>
</tr>
</tbody>
</table>

*per annum

### Pure Webcasting Service (Per Annum Costs)

**CONTINUOUS, PROGRAMMED WEBCASTS. USERS CANNOT INTERACT E.G. PAUSE, FAST FORWARD, SKIP TRACKS OR INFLUENCE OUTPUT BY RATING TRACKS**

<table>
<thead>
<tr>
<th>Band A</th>
<th>Band B</th>
<th>Band C</th>
<th>Band D</th>
<th>Band E</th>
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<tbody>
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<td>£224 (+VAT)</td>
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<td>£840 (+VAT)</td>
<td>£1,120 (+VAT)</td>
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<td>&lt;1,800,000 streams*</td>
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</tbody>
</table>

*per annum
## Premium And Interactive Webcasting Service (Per Annum Costs)

**User can interact e.g. skip tracks, pause, fast-forward etc, but not select specific tracks on-demand**

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<th>Band</th>
<th>Cost (Per Annum) (+VAT)</th>
<th>Streams*</th>
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</tr>
</tbody>
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*per annum

## Permanent Download Service (Per Annum Costs)

**Users can download tracks on a permanent basis**

<table>
<thead>
<tr>
<th>Band</th>
<th>Cost (Per Annum) (+VAT)</th>
<th>Downloads*</th>
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</thead>
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<tr>
<td>B</td>
<td>£224</td>
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<tr>
<td>C</td>
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<td>&lt;12,500</td>
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<tr>
<td>D</td>
<td>£840</td>
<td>&lt;18,750</td>
</tr>
<tr>
<td>E</td>
<td>£1,120</td>
<td>&lt;25,000</td>
</tr>
</tbody>
</table>

*per annum
### Music Podcasting Service (Per Annum Costs)

A Downloadable, Audio Only Programme that contains both Music and Speech and where the Podcast cannot be disaggregated into its Individual Tracks

<table>
<thead>
<tr>
<th>Band A</th>
<th>Band B</th>
<th>Band C</th>
<th>Band D</th>
<th>Band E</th>
</tr>
</thead>
<tbody>
<tr>
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<td>£224 (+VAT)</td>
<td>£560 (+VAT)</td>
<td>£840 (+VAT)</td>
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</table>

*per annum

### General Entertainment: Limited Download/On Demand Streaming Service (Per Annum Costs)

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<th>Band B</th>
<th>Band C</th>
<th>Band D</th>
<th>Band E</th>
</tr>
</thead>
<tbody>
<tr>
<td>£112 (+VAT)</td>
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<td>£560 (+VAT)</td>
<td>£840 (+VAT)</td>
<td>£1,120 (+VAT)</td>
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### General Entertainment: Permanent Download Service (Per Annum Costs)

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<th>Band A</th>
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<th>Band C</th>
<th>Band D</th>
<th>Band E</th>
</tr>
</thead>
<tbody>
<tr>
<td>£112 (+VAT)</td>
<td>£224 (+VAT)</td>
<td>£560 (+VAT)</td>
<td>£840 (+VAT)</td>
<td>£1,120 (+VAT)</td>
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<td>&lt;900 music hours downloaded</td>
<td>&lt;1,350 music hours downloaded</td>
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</tbody>
</table>
Clips Service (Per Annum Costs)

<table>
<thead>
<tr>
<th>Band</th>
<th>Band A</th>
<th>Band B</th>
<th>Band C</th>
<th>Band D</th>
<th>Band E</th>
</tr>
</thead>
<tbody>
<tr>
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<td>3,751-5,000 clips*</td>
</tr>
</tbody>
</table>

*Made available at any one time

Application process and reporting

1. Choose from the range of online licences
2. Confirm you will make less than £12,500 gross from these services
3. [Apply for and buy your licence online](#)
4. No reporting required but you will need to submit a usage declaration form after 12 months.

OTHER RIGHTS

MCPS offer licenses for the use of [Musical Works](#), on behalf of music publishers - a licence for the use of the [Sound Recording](#) must also be sought from the company that owns the sound recording – usually a record company. Please contact [Phonographic Performance Limited (PPL)](#) in order to establish who owns the Sound Recording that you would like to use.

[View the full terms and conditions for Limited Online & Music Licence (LOML)](#)
[View the full terms and conditions for the General Entertainment Online Licence (GEOL)](#)
10.4 APPENDIX IV – AUDIENCE RESPONSE TRANSCRIPTS

All Transcriptions refer to the AUDIENCE RESPONSES project file within the submission.

Track: 1  
Show: 1  
Number of Audience Members: 1

Andrew Carter: Did you find it easy to listen to?
Student 1: Yeh I thought it was fantastic, it flowed easily, you didn’t put too much content in there which is good. It was the right length as well, you don’t want it to go on too long as people don’t want to listen for an hour but that was a nice length. Basically I wish we’d had something like that to listen to at our time at Uni because it would have been helpful. Especially the placement content for 2nd year students that’s perfect for them because they don’t know what’s going on in the real world yet. To have other students talk about it for them is brilliant.

AC: What did you like/What didn’t you like?
S1: Like I said, I don’t think there was anything I didn’t like, the placement bit is the main thing as I said there I think it’s really helpful. I liked the technical argument on the production of someone else’s music. It’s good to hear what people on our course are doing, not just technical wise but in their own bands.

AC: Is there any part you didn’t like?
S1: No, I don’t think there’s anything I didn’t like, you got the right amount of content and the right amount of time. It came across really well from both of you.

AC: How did you feel about the balance between music and speech, do you think there was enough speech, enough music?
S1: I’d maybe like to hear a little bit more music I think. But apart from that pretty good.

AC: You mentioned that it was the right length so would you listen to a longer one or is that enough?
S1: I think about 15/20 minutes is where you want to be....15 minutes is something people would listen to because they could put it on their iPod and listen to it on their way to uni. If it went on much longer it would be too much for people to listen to the whole thing.

AC: Would you download another show?
S1: Definitely would for all the reasons I’ve said, it’s useful for someone in our position.

AC: Are there any other items you’d like to see featured?
S1: Maybe production from someone, rather than live music, so say something they’ve done on Cubase, some sequencing work. It would be good to see what people are doing with that, I’m sure there are people who have interest in that and would like some analysis within that.

Track 2:  
Show 1:  
Number of Audience Members: 1

AC: Did you feel it was easy to listen to?
Student 2: It was, but I think it sounded more like a radio show than a podcast. You’ve got music underneath absolutely everything. On Joel’s string session you had the actual song playing in the background which I think is a good idea but it just sounds like the 6 o’clock news.

AC: Ok, so what did you like, what didn’t you like?
S2: The content was great, I liked the content. It’s pretty much exactly what we’re after. There’s been nothing I didn’t like; it was different to what I was expecting.

AC: You already mentioned you weren’t a fan of music underneath everything, but do you have any other comments on recording, editing and arranging?
S2: I think the vocals were produced how a radio show would be, they sounded really over compressed, and it sounds like you were listening to it on broadcast instead of a downloadable MP3. Some of the idents as well you have that effect (example) that hits you. The last one I noticed where everyone says ‘Bluerooms Online Podcast’ then you get a massive transient on the effect. Listen to that on headphone it’ll make you jump.

AC: What would make you come back and listen to future shows?
S2: What you did at the end by saying what you’re going to have next week is a great idea. It’s not a cliff hanger because you don’t get that far, but if you know what you’ve got to look forward to then you are going to make a point to do it (download show).

AC: Timing wise do you think it was the right length, too long, too short?
S2: I think it was about right for what Bluerooms needs. It seemed a bit rushed, a bit over edited. You’ve tried to fit too much in 15 minutes; I probably would have gone with 2 slots maybe an interview and something else.

AC: Ok so you’d be happy listening to a longer show?
S2: I would yes, this is why I’m surprised it’s different to the one’s I would normally listen to. The ones I listen to now are normally an hour and a half long but I would listen to it in 4 or 5 stages.
AC: Anything else you’d like to say?
S2: No I thought it was good, maybe just a bit over produced, over edited. Like when you’d ask Joel a question, he’s answer would be there straight away. Give Joel a moment to think so there’s a bit of silence there.

Track 3:
Show 1:
Number of Audience Members: 3

AC: Did you all feel that it is was easy to listen to?
Student 3: Yes
Student 4: Yes, absolutely
Student 5: Yes

AC: What did you like and what didn’t you like?
Student 3: I thought it was really good, thought it was really well recorded, good intelligibility, content was good, it was all relevant to music tech students. I put in the questionnaire there was good balance in the track analysis of having a muso and a techy balancing it out. I thought it was really good, couldn’t find anything wrong with it to be honest.
Student 4: It was really good, and maybe it’s just me but I find myself nodding along with the music underneath but I do get distracted easily.

AC: What did you think about the balance between the music and speech, and did you think the beds got in the way of speech?
S3: I thought it was pretty perfect for what it was
S4: It worked well
S3: It was a really good balance, I thought the mixing production section with Joel talking about the strings, was nice to have the actual track as the bed it was quite effective. The music didn’t detract in my opinion from the actual content.

AC: Content wise, did you like the 3 features, what else might you like to hear from a music tech based podcast?
S5: I think some gear reviews would be good.
S3: Yeh some gear reviews would be good. So people who are more into the performance side could maybe have a recording studio for beginners, that kind of home studio audio equipment kind of thing.
S4: I liked the placement section, it gives insight into what people did for a year, it also gives 2nd years insight into what to expect.

AC: Moving onto timing, did you think it was too long, about right or too short?
S5: I thought it was a bit too long, only because the people listening to it I think won’t want to listen to anything for more than 10 minutes. You won’t have to have the same features every time otherwise you’d run out of content.
S3: The length was OK because the content was engaging so the time passed. Ways you could shorten it though, with the track analysis, you could give the actual analysis and if you want to hear the track we’ve spoken about go to a link.
S4: Maybe have a more focused show that would be shorter, maybe an example of what was on one of the subjects. Some people may like more details so you could go into things a bit longer.

AC: Would you download it again/what would make you download it again?
S5: I think its technical enough for it to be useful for tech students anyway; I thought it was interesting so I would definitely download it again.
S3: The content was relevant; it was going into specifics of what frequencies to look for...
S5: It was like a supplement to lectures
AC: Did you think that was a good thing?
S5: Yes
S4: It goes into more detail than some lectures do.

Track: 4
Show: 1
Number of Audience Members: 2

AC: Did you feel that it was easy to listen to?
Student 6: Absolutely, it flowed quite nicely
Student 7: It flowed well; none of the features were too long.

AC: What did you like and what didn’t you like?
S7: I thought all the features were relevant to students. In the string section it’s just Joel talking, maybe add in what do lecturers say or industry professionals for example.
S6: I liked all the pieces, especially the strings section; it was nice to hear what it sounded like before and after.

AC: What did you think about the balance between the music and speech, and did you think the beds got in the way of speech?
S6: It was a good bed; everything you were saying remained really clear and it flowed well.

AC: Would you come back and listen to other shows?
S6: Absolutely, more stuff like that I was really interested.

AC: Timing wise, you mentioned the features were about the right length did you think whole show was about the right length?
S6: For the kind of features you did it was the right length. If you were playing music you could perhaps stretch it out a lot longer.

AC: On that note would you be happier listening to a lightly longer version?
S6: Yeh if you put more details in from other sources I think so.
AC: Finally, editing wise did you feel the vocals and show flowed?
S7: The only downside to that I thought was the piece about strings. At times there were some unnatural edits and a bit fast.
S6: That from time to time happened in the interview with Ben and Luke. Just from time to time it felt slightly hurried.

Track: 5
Show: 2
Number of Audience Members: 3

AC: What did you like about it, what didn’t you like about it?
Student 8: I thought it was good, like you said before that lecture (Hayden Bendall) was a bit unintelligible. Everything else, the intelligibility of the vocals all the way through was really good. But that part just lost it.
Student 9: Yeh I think the same. I’d also break up the features with pieces of music, maybe by students.
Student 8: In a 15-20 minute podcast about music tech I don’t think I’d be interested in listening to people’s music.
Student 10: I think it would be interesting to hear segments of people’s music maybe not whole pieces...
Student 8: It would be good to hear what people are working on but I wouldn’t want to listen to student music.

AC: It’s interesting you mention that, on show 1 we take a look at a piece of student work. On this show I’ve gone down the route that leaves that out. But it’s interesting you’d all like to hear more music in some way.
S8: I think the placement and project stuff is really good for 1st and 2nd years, help them generate ideas for projects but not as relevant for final years.
AC: Would you have found the placement and project stuff useful in your 2nd year?
S8: In previous years I think that would have been good but from a final year point of view, other than the stuff with Steve I didn’t think there was much there...
S10: I still I think it was interesting.
S8: Yes it was still interesting.

AC: What about the interview with Dan, did you find that interesting sometimes you don’t really know what others are getting up to?
S8: What would be good if you did do future podcasts, there’s no way of finding out how people’s projects & results came out. It would be good if you could do a special end of year podcast where you talk about how people’s projects and results went.

AC: Did you think the editing flowed well?
S10: Very well
S9: Yeh
S8: I thought it flowed well, I thought the jingles were really good.
S9: There was one part of the jingle that really annoyed me; it was the little delay on some of the words.

AC: How did you feel about the musical beds?
S8: I think the beds worked and I think they helped although there was a sound effect I wasn’t keen on.
S10: I thought they worked well, and thought that it was good you didn’t have them on the telephone interview as that may have made them less clear.
S8: I liked the telephone interview in there, the distance element was good.

AC: Length wise did you think it was too long too short, just right?
S8: About right I think
S9: Yeh I thought that
S8: If it had been 10 minutes longer, if I’d been at home listening I wouldn’t have listened to the whole thing. But then I didn’t think it was short enough to be excluding content.

AC: You have kind of summed that up but would you be happy listening to a longer one?
S9: Depends what the content would be. If it was a really important interview that was relevant to me I’d be more inclined to.
S8: You could maybe do special additions
S10: I think length wise it was spot on. It has to have enough content to be worth listening to. But if it’s too long you’ll just give up half way through.

AC: Would you come back and download another show and what else would you like to see feature wise?
S8: Not to the same podcast but to future shows
S10: The one thing I’ve written down is it might be good to advertise local gigs and local music scenes.

Track: 6
Show: 2
Number of Audience Members: 3

AC: What did you like, what didn’t you like?
Student 11: It seemed very relevant to what we are doing, very good content. The editing in some places was a tiny bit choppy. Other than that the recording was very consistent throughout and was recorded well.
There was no sort of popping or sibilance apart from the interview with Hayden but I think that was because he was very quiet anyway. That was the only part that stood out as not being up to standard that you set with the other bits.
Student 12: The only thing that stood out for me was when you finished an interview and the ids came back in, the level was really loud.
Student 13: The swoosh was a bit distorted.
Student 12: Other than that flowed really well.
AC: Content wise, did you enjoy it, did you think it was relevant was there any parts you didn’t like?
S12: No it was all very relevant.
S11: Not especially no. Is this aimed at 1st and 2nd year students more so than final year students? If you’ve got an interview with a placement student that’s not really relevant to us anymore.

AC: It is aimed at the whole course and yes the placement stuff isn’t going to be relevant to final years. Although some people may find it interesting to find out what some people are doing on placement. What’s aimed at final years is the interview with Dan Wright sometimes it’s nice to know a little bit more detail about what people are doing in their final year project. And the PhD stuff with Steve so hopefully you thought that was portrayed well
S12: Absolutely
S11: Totally Yeh

AC: The music content, the beds, how did you feel they were used, did you think they got in the way or did you think it was nice having some background music?
S13: It was definitely nice to have the background music as well especially during the interviews. It gives the show pace instead of having a dry vocal.
S12: Sometimes someone just talking can be a bit boring so yeh
S11: Half the time I didn’t notice it was there, which I think is the sign of a good music bed.

AC: On a hole did you speech flowed or was evident that it had been edited?
S11: How scripted was the interaction between you and Joel? Was that totally scripted or any off the cuff?
AC: All scripted. Did you feel it was too obvious?
S11: A tiny bit and I’m just nit picking now, but other than that as a whole the whole thing worked well.

AC: Do you think it was too long, too short, about right?
S13: I’d say if I were to listen to that again it was perhaps a bit too short. If you made it about 10 minutes longer you could throw in some music by a band that’s recording in Greenrooms.
S12: I thought the duration without music was perfect.

AC: Would you feel that some musical content would be good in every podcast?
S13: Personally yes.
S12: I would probably prefer that for the information side. If it was music, it would be the type of music I’d listen to.
S11: You’ve made it quite content driven so I don’t think it needs additional music myself.

AC: Would you download another show?
S11: Yes
S12: Yes Definitely
S13: Yes

Track: 8
Show: 1 (although stated as 2 this is an error).
Number of Audience Members: 1

AC: Did you feel it was easy to listen to?
Student 14: Yeh I did, the vocals were very snappy and when there were any gaps there was always music playing. One thing I will say, inject a little bit more humour into some parts because you’re aiming it for a student station. The interview was nice as there was a little bit of humour a little bit of laughing and it made it easy to listen to. So if you just inject a little bit more humour between you and other presenters it’ll make it really easy to listen to.

AC: What else did you like/not like?
S14: The interviews were very specific to music tech which was nice because it was about the placement year which 3rd years are going to be doing. It was nice to get someone else’s view point especially ones within the university. The mic techniques for strings, if there were more of those, because they are easier to listen to than reading. If I did ever record strings it’s a lot easier to listen to someone talking about it and to show you examples than reading and having to open up files yourself. And the track analysis, I’m not being bias because it’s us but it gives bands that extra little push that they need, it gets them another viewpoint on the music, mixing, production and structure on the song. Really informative.

AC: What would make you come back and listen to future shows?
S14: If you take what you’ve got now, and in different podcasts have say another lesson every 2 episodes. Track analysis every 3. Talk to lecturers about what they do outside uni. Go out on location and talk to local studios, local live places and get yourself out there. Also, live recording, band reviews, information about new equipment, anything to do with music tech and the university.

AC: Length wise, did you feel it was too long, too short, about right?
S14: I think for the pace it was about right. Mainly because I think it was nicely balanced, it was informative and humorous and then the music in the background moves it along really well. The only thing I would say, with some edits they are bit too snappy. They felt not so natural. A little bit more space between the edits.
10.5 APPENDIX V – BEN EVANS RESPONSE TRANSCRIPT

This Transcription refers to the AUDIENCE RESPONSE project file, Track 7.

Andrew Carter: How did you feel about the two shows, what did you like and what didn’t you like?

Ben Evans: I thought they were really good. I thought they sounded very professional overall. The content was varied; it wasn’t just the same show repeated. It was interesting to hear from placement students and what they were doing in industry, as well as little critiques of recordings. I think it was good, obviously there’s only two shows but there’s scope to involve other modules of the course rather than focusing on placement and recording. Stuff like electronics and programming that sort of thing as well.

AC: What did you think about the length?
BE: I thought it was about right actually. It was long enough to feel like it wasn’t just some messing around, but it held attention. It was nice and bite size.

AC: What would be the upper limit of length be if it were to be extended?
BE: Depending on how interesting the content is, about 25, 30 minutes.

AC: Content wise what would you like to see more of/less of?
BE: It’s only two shows so it’s hard to comment on the grand scheme of things but it was very much placement and recording techniques with the string recording and critique of Naked. Bring in more variations of that and that would be really good. What was cool was that it was all genuinely really interesting and it was good to hear views and opinions on things as well.

AC: The presenting by me and Joel is scripted. I have had a few comments from students saying this is evident. My reasoning for this is to keep the time down rather than fumbling around what we have to go into next to keep things flowing. Do you feel it shouldn’t be scripted or if scripting it is the way to go?
BE: Probably somewhere in between, it’s good to have scripting as it’s not just waffle, it’s good and fast moving and not boring. But it does occasionally once or twice seem a bit forced or a couple of conversations don’t flow as naturally as they would. So somewhere meeting in the middle.

AC: How do you feel about the musical beds?
BE: I thought they were really good. On the one hand you didn’t really notice them as that’s how it’s been done, it just sounded how it should sound. If there wasn’t anything there you’d notice it more. I thought they were really good the beds yeh.

AC: And the balance between speech and music content such as the Naked feature?
BE: I think again, a nice balance to be struck up. It’s good to have music on there, and people into music tech will be into music. To listen to a good track would be a good feature to have. It would be good exposure for students’ bands on the course.

AC: Would you consider taking it up as a future project?
BE: Yes definitely. I think there’s great potential there. For getting information out there but also for doing something that’s fun, for students to get involved in it’s a bit of a community. Again its exposure for people doing good production work and doing stuff with bands. As well as feeding peoples enthusiasm in radio.

BE: The only thing I thought that was a bit naff was the interview with the Abbey Road guy.

AC: Hayden Bendall
BE: Just the sound quality, everything else was so slick and well produced and professional that it was so jarring in the scheme of things.

AC: I didn’t realise that he was going to be such a quiet guy...... but I kind of left it in to show interviews with industry professionals would be there.
BE: The other negative was on Joel’s workshop on strings. It was so quick fire which was really good because it had pace to it but just felt a little unnatural.

AC: You’d be happy for it to be 2 minutes longer for a little bit more space in the speech?
BE: It wouldn’t even have to be that long, it was good to have pace about it but it was just a little bit intense in listening to it.
### 10.6.1 SHOW 1 EVENT TRANSCRIPTION

Project File: SHOW 1

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