

## **iRadio OUM – The Development of Educational Internet Radio to Enhance Open and Distance Learning**

Umi Hanim Mohd Ibrahim; Mazlan Zulkifly; Halimatolhanin Mohd Khalid  
Open University Malaysia's

### ***Abstract***

*iRadio OUM is Open University Malaysia's (OUM) official internet station, with segments based on courses offered by OUM as well as general infotainment segments broadcasted only via the World Wide Web. Established to enhance and add value to the open and distance learning experience of OUM learners, iRadio OUM combines education and entertainment into a balanced and interactive package. The segments aired over iRadio OUM is also made available for downloads in the form of podcasts that learners can listen to at any time, at any place. Bridging the concept of blended learning methods with a practical approach, iRadio OUM is OUM's testimony of our continuous improvement efforts. This paper focuses on iRadio OUM's progress through the years in the world of open and distance learning by making full use of current innovation in educational internet radio to deliver meaningful learning materials and engaging learners in the continuous process of learning.*

**Keywords:** *educational internet radio, mobile learning, iradio*

### **Introduction**

Launched in April 2007, iRadio OUM started with only 9 part-time staff and 21 hours of broadcast a week. Now, more than a year after its establishment, iRadio OUM is a thriving media mouthpiece of Open University Malaysia (OUM) that broadcasts 36 hours a week with 4 full time staff. **Presenting module-based segments as well as general infotainment segments** via the World Wide Web, iRadio OUM also **enables listeners to download audio files of the programmes broadcasted** to listen to at their leisure, enhancing and adding value to learners' open and distance learning experience. The podcasts are mini-lectures that learners can listen to at any time, at any place.

**60% of the segments** broadcasted on iRadio OUM are **based on modules or courses offered by OUM**. The segments provide value-added learning materials for the learners by **inviting subject matter experts, module writers as well as moderators to talk about the courses**, highlighting different aspects within the modules that otherwise might not have been covered in their tutorials. Other approaches, like **drama or skits**, are also incorporated, to give learners variety in their learning process.

iRadio OUM also broadcasts **segments that informs our listeners of the latest going-ons in OUM**, such as special segments on our convocation ceremony as well as interviews with OUM's top management, such as the Chancellor and the President and Vice Chancellor. We also broadcast **interview sessions with notable visitors from all over the world**, like those from the United Kingdom, Nigeria, China, and many more. These visitors are usually academicians touring OUM and these interview sessions allow them to share their views and knowledge with OUM citizens, staff and students alike.

Since iRadio OUM is broadcasted via the Internet, the iRadio OUM team realizes the importance of engaging the interest of not only OUM's learners, but also, visitors from foreign countries. From our Google Analytics results, **visitors from more than 100 countries has surfed the iRadio OUM website** (<http://iradio.oum.edu.my>). Thus, recognizing the potential of a worldwide audience, the iRadio OUM team **broadcasts 60% of its segments in English**.

iRadio OUM also ventures into different types of media to deliver its segments. We plan to further **enhance our podcasts with RSS feeds** which will enable students to either be notified of new audio files to download or the audio files will be downloaded to their devices automatically once uploaded to the website. Not only that, there are also plans to **incorporate slide presentations and videos** to the segments iRadio OUM broadcasts. This is done to engage listeners' and improve their understanding.

Another venture by iRadio OUM is the development of **audio books**. Originally done for one visually-impaired student, this project has grown leaps and bounds and is now available to all OUM students, particularly, those taking up the subjects where the modules have been made into audio books. To date, the iRadio OUM team has developed a total of 13 modules and we plan to develop more of these in the near future.

### **iRadio OUM – The Facts and Figures**

A distinct advantage of being an internet radio station, we are **able to closely monitor the number of listeners or visitors to our website**. It is easy for iRadio OUM to keep track of how many are listening in to our programmes. And since our launch in April 2007, the number of iRadio OUM listeners has grown.

iRadio OUM uses **2 web analysis programme** that can identify, among other, the number of visitor or listener per hour and/or per month as well as the listeners' location and their loyalty. The 2 programmes used to identify these facts and figures are Google Analytics (<http://www.google.com/analytics/>) and The Webalizer (<http://www.webalizer.org/>).

According to data collected by The Webalizer, the number of visitors or listeners to iRadio per hour is as illustrated in Figure 1 below.

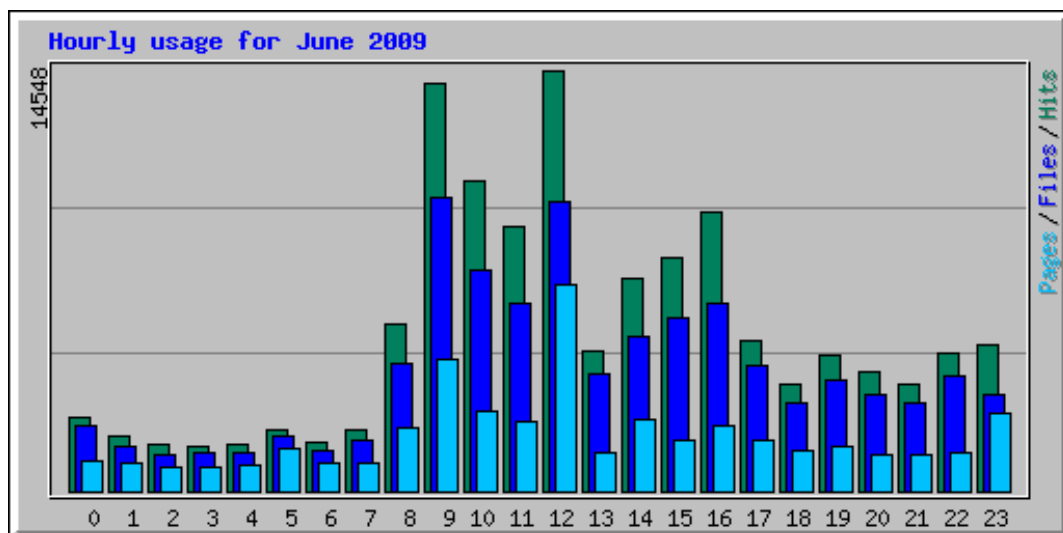


Figure 1 : Number of Visitor per Hour (June 2009)

From the hourly usage statistic provided, it is clear that iRadio OUM has the most number of listeners during the day, specifically from 9 a.m. to 5 p.m., with the most visits occurring from 9.00 a.m. to 12.00 p.m. However, even after the broadcast hours, i.e. 5 p.m. onwards, there are still visitors to the website. These visitors are most probably those who download our audio files.

The number of visitors is especially higher in the late afternoon. This is probably due to the fact that most listeners are perhaps our learners who are working in the office, and they are looking for a

source to release their stress for a little while. Since iRadio OUM offers both education and entertainment, we are probably one of the more balanced choice for them to listen to in their environment as an open and distance learner. Not only that, from 4 p.m. to 5 p.m., iRadio OUM broadcasts a song dedication segment where listeners can dedicate songs to their friends, family and loved ones.

Also from The Webalizer programme is the daily usage statistic that illustrates the number of files, pages and sites hits as well as kilobytes downloaded by visitors to the iRadio OUM website. Figure 2 shows the daily usage statistic for iRadio OUM for the month of June 2009.

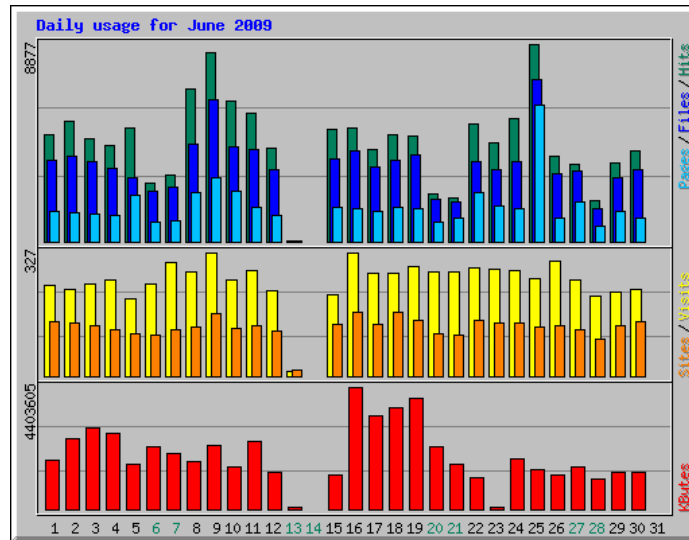


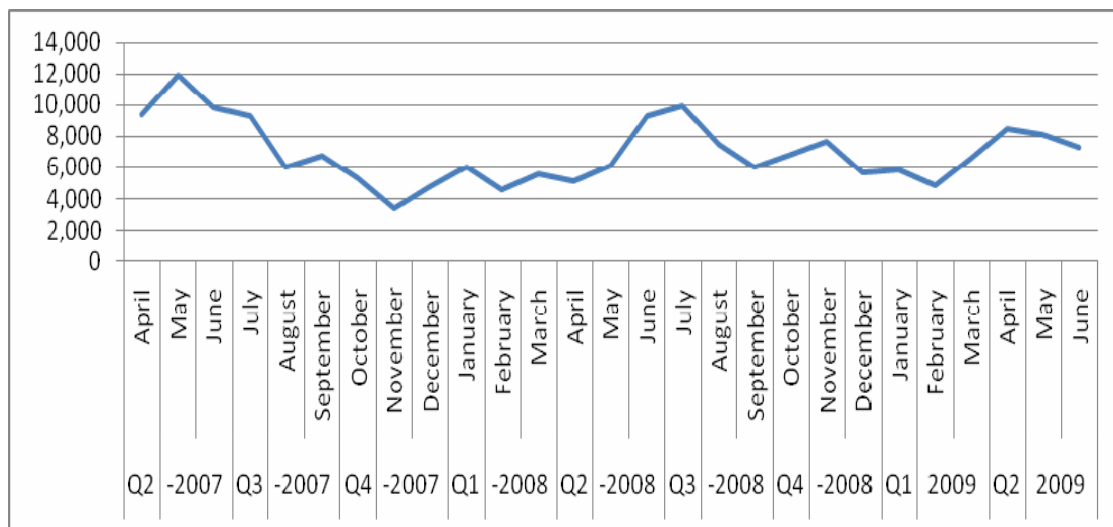
Figure 2 : Daily Usage Statistics(June 2009)

The Webalizer programme also enables us to keep track of the file size downloaded by our visitor. The following table illustrates the size of the file downloaded from the inception of iRadio OUM.

Quarter	Month	Visits		Total Monthly Visits	Total Download (mb)
		Average	Max		
Q2 -2007	April	312	454	9,367	31,069
	May	383	627	11,883	
	June	327	451	9,819	
Q3 -2007	July	300	529	9,300	22,077
	August	193	299	5,992	
	September	226	338	6,785	
Q4 -2007	October	171	257	5,301	13,480
	November	113	193	3,404	
	December	154	397	4,775	
Q1 -2008	January	193	555	5,996	16,097
	February	156	235	4,546	
	March	177	269	5,555	
Q2 -2008	April	170	222	5,116	23,342
	May	197	294	6,112	
	June	309	471	9,289	
Q3 -2008	July	320	504	9,921	182,389
	August	241	429	7,474	
	September	201	307	6,047	
Q4 -2008	October	219	326	6,800	298,618
	November	254	445	7,634	
	December	182	285	5,647	
Q1 2009	January	187	252	5,813	279,950
	February	173	219	4,847	
	March	210	280	6,529	
Q2 2009	April	280	403	8,425	224,666
	May	261	448	8,119	
	June	242	327	7,280	

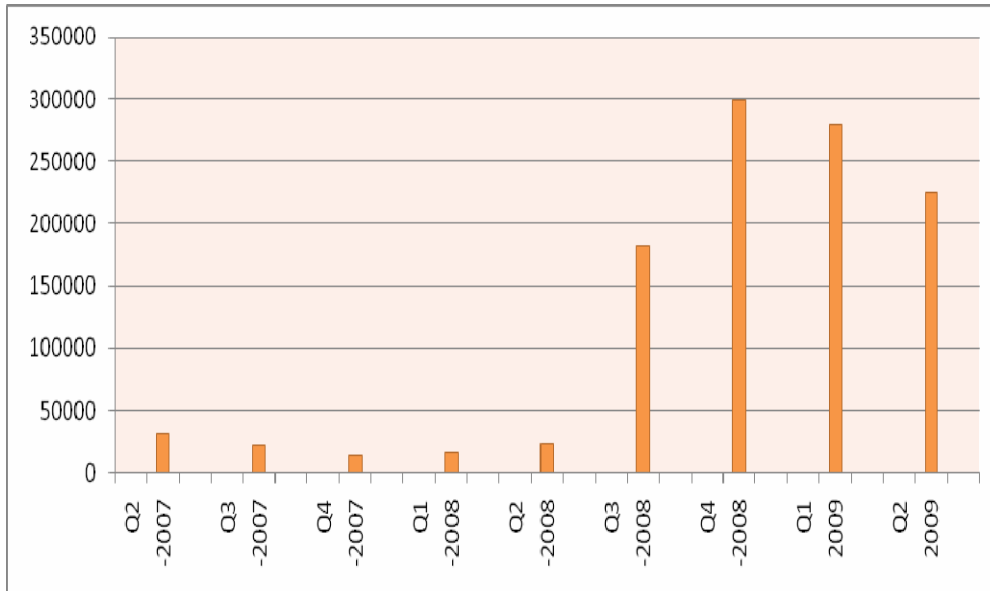
Table 1 : Quarterly Usage Statistics (April 2007 – June 2009)

From the tabulated data in Table 1, we can monitor the number of visits, the total size of files being downloaded and a host of other data that we use in determining a lot of the strategies concerning the development and growth of iRadio OUM. From Table 1, we can see the following trends:



Graph 1 : Total Monthly Visits

This data is also helpful for us to identify the impact of special activities, such as promotional events, special interviews, etc on the overall total visits. We can roughly assume and gauge the success of the activity by monitoring the total visits of the subsequent months, if there is indeed an increase or if the number remains the same.



Graph 2 : Total Downloads (kb) according to Yearly Quarter

From the total downloads data as illustrated above, we can see a considerable rise in the size of files being downloaded, signifying a favourable response towards our effort to enhance the quality of the audio files. This aids greatly in the monitoring and tracking of the iRadio OUM website and in what ways visitors are using the website.

Another application that we use to track and monitor our listenership is Google Analytics. This freeware is available just by signing up for a Google ID. We can set the pages that we want the application to track and monitor and the information can be accessed by only the Google ID owner. Google Analytics enables us to track and monitor another characteristic of our listeners, specifically where they come from. To date, iRadio OUM has visitors from 105 countries all over the globe.

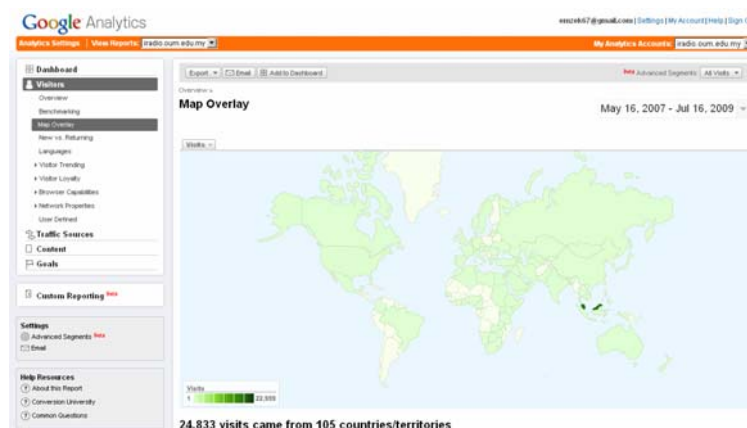
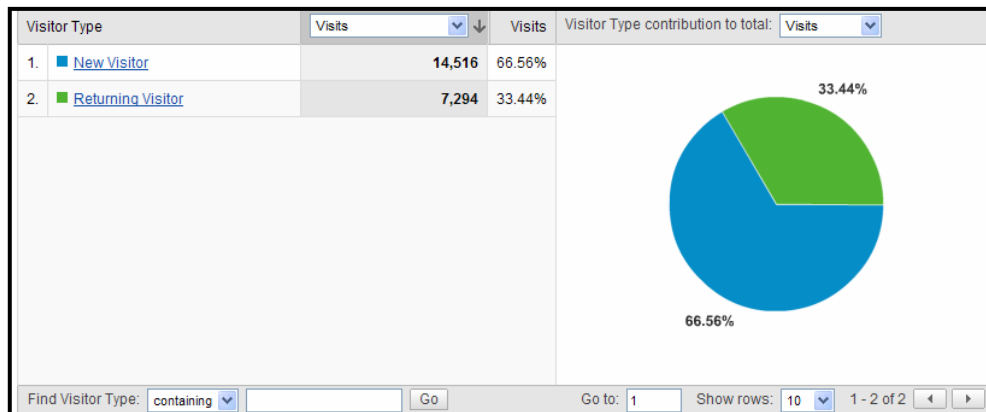
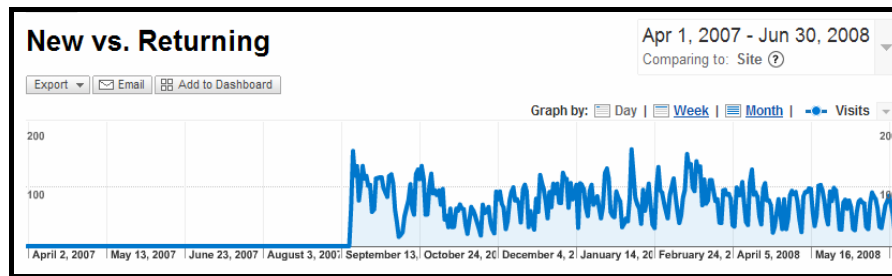


Figure 3 : A Screen Capture of the Report from Google Analytics

Also, from Google Analytics, we were able to identify the number of new visitors and returning visitors. Returning visitors basically refer to those who come to the iRadio OUM website repeatedly and new visitors are those whose visits are for the first time.



Figures 4 & 5 : Google Analytics Screen Capture

## iRadio OUM - The Educational Tool

### iRadio OUM and the Blended Learning Method

The demand for more learning opportunities for open and distance learners is something that will continually grow. That is a challenge faced by many open and distance education providers, especially in terms of learning materials delivery. Realizing the need for a more dynamic approach to deliver its learning materials to the learners, Open University Malaysia (OUM) has embarked on a new frontier in open and distance learning by establishing iRadio OUM, the university's internet radio station that broadcasts segments based on courses offered by OUM.

This venture into the world of online broadcast media is perhaps another testimony of OUM's blended learning approach, mobilizing education and facilitating learners' studies. According to a study by the eLearning Guild, the use of a multi-channel approach or the blended learning method is preferred because it is more effective than providing class alone (76%), there is a higher learner value and impact (73.6%) and learners actually like this method (68.6%). (Sparks, 2007).

The idea behind a blended learning approach is the integration of different channels and media to deliver learning materials. Technology, especially in terms of the development of the World Wide Web is arguably one of the most important resources in education. No industry or organization, especially a distance and education provider can maintain their competitive edge without making full use of technology in all of its operations.

This is perhaps one of the areas where iRadio OUM can play its role for OUM. The segments aired are based on the modules offered by OUM. The segments can also serve as a platform for the subject matter experts, from the module writers, moderators to the deans of the faculty, to connect with the learners. Instead of just being in the foreground, these experts actually have the chance to share their knowledge with learners, bridging the gap between the faculty and the learners.

## Podcasting as an Educational Tool

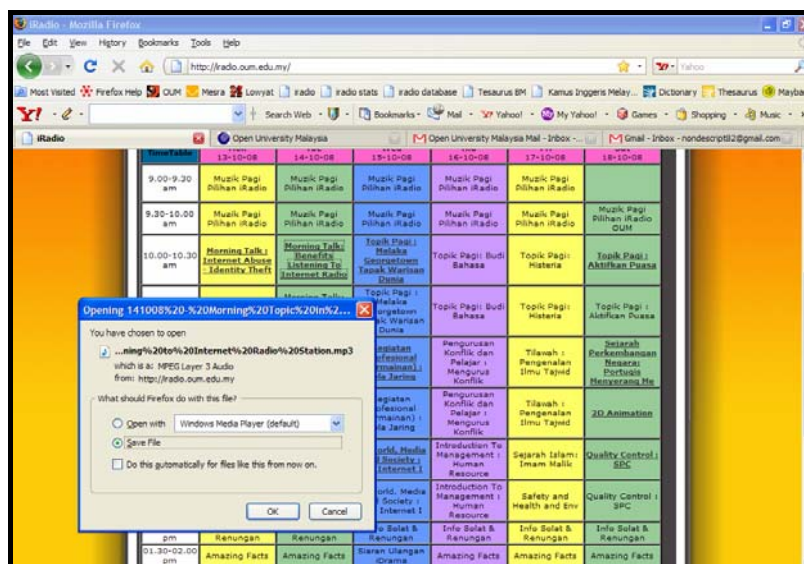
A podcast is audio content available on the World Wide Web. It can be automatically delivered to a personal computer, a MP3 player or a mobile phone. The concept was created by Adam Curry (MTV DJ) and Dave Winer (Programmer) (Carvalho, Moura and Cruz, 2008). This means that learners can subscribe to the audio material that are updated regularly and listen to the podcasts when it suits them.



The term ‘podcasting’ is actually derived from iPod, the popular digital music player from Apple (Jennings, 2004). However, podcasting is not limited to only this device. In fact, any MP3 or MP4 players available in the market today can play the podcasts downloaded by the users.

The elements that make up podcasting have actually been around for quite a while (digital audio content, circulation via the internet, RSS feed). However, the potent combination of these elements and its use in an educational setting is an area that is not fully explored and experimented with just yet. What’s even more interesting is that the potential lies not only in audio content, but perhaps, in the future, video content as well (vodcasting anyone?).

As print modules continue to be the preferred mode for open and distance education, the use audio learning materials is naturally undervalued. A common misconception among both educators and learners is that the term 'audio' refers only to audio cassettes or radio (Power, 1990). However, with many studies exploring the potential of podcasts, especially in the educational setting (Edirishingha, Salmon & Fothergill (2007), Evans (2007), Kaplan-Leiserson (2005), Carvalho, Moura and Cruz (2008) and Belanger (2005)), it is worth the effort to look deeper into the practicality of developing and distributing these podcasts as a mean to deliver learning materials.



The downloadable audio files

The downloadable audio files or podcasts is perhaps the most practical characteristic of iRadio OUM. Learners who missed the broadcast on its scheduled time, they can easily download the audio file and listen to the segment whenever they are free. Although “listening to digital audio content won’t replace reading, listening to live presentations, or the multitude of other ways learners take in information... but it can augment those methods.” (Kaplan-Leiserson, 2005). In a paper by Carvalho,

Moura and Cruz (2008), a research respondent actually replied that “I liked it very much. The podcast gives a sensation of proximity to the teacher.”

The use of podcasts in learning was further explored in a research done in Duke University. In 2004, the university provided first-year students with iPods “to encourage creative uses of technology in education”. The final result includes the use of iPod in students’ learning activities, with many citing using it, among other, as a “course content dissemination tool: portable access to content... distributed in various ways, including podcasting” and as a “...study support tool: repeated listening and repetition of audio content.” (Belanger, 2005)

Belanger’s (2005) report also highlighted several benefits of using these podcasts. One of the benefits highlighted is the enhanced mobility of learning materials. With the podcasts, students have the choice on when and where to listen to their learning materials, giving them the freedom to revise and study anytime, anywhere. Another benefit highlighted in the report is that students are no longer restricted in terms of physical learning materials like their textbooks, lab and library opening and closing hours as well as the location of these facilities.

### **Podcasting: The Pitfalls**

The potential of utilizing podcasts in the educational setting, especially in open and distance education is limitless. Offering flexibility in relation to study time and place, free and constant access to learning materials and freedom in terms of learning style, the use podcasts is extremely beneficial.

However, if there is a pitfall of using podcasts in the educational setting, then it is that these podcasts are a type of asynchronous communication. As highlighted in an interview with Anders Gronstedt, president of Gronstedt Group, a training and consulting company that develops and delivers customized podcasts to help organizations improve sales, service, and frontline performance, podcasts are linear and one-way (Kaplan-Leiserson, 2005). Learners may hear the information but there is still no avenue for them to communicate with the SMEs or their lecturers about any questions of confusion they might have about the subject.

This is where the blended learning system comes into play. Integrating other channels and mode of delivery, learners will be more stimulated, motivated, engaged and interested in their learning process (Byrne, 2004). It is also important to remember that podcasting is part of the solution within blended learning; it is not the *only* solution in a blended learning system.

### **iRadio OUM – Development And Growth**

In line with the dynamic and innovative nature of the open and distance learning landscape, iRadio OUM has planned and implemented several projects to further enhance and strengthen our position both in OUM and in the open and distance learning field. Some of the areas we believe needs our constant focus to develop are iRadio OUM team capacity building, promotional tools and usability enhancement.

#### **iRadio OUM Team Capacity Building**

Any organizations, units or departments are only as strong as the people within that particular group. The human capital within the iRadio OUM team is perhaps the single most tangible asset that we can hone and develop to ensure continuous growth and success of iRadio OUM. Realizing that, the management of iRadio OUM actively seeks appropriate training programmes in order to equip the iRadio OUM team with the skill sets and knowledge needed to bring iRadio OUM one step further.

Not only does the team participate in many different training programmes, they are also sent to related conferences to gain exposure and knowledge in related field. One such conference we participated in



was the 2nd Asia Pasific Regional Mobile Learning & Edutainment 2008 Seminar or the Go Mobile Conference.

To date, different members of the iRadio OUM team has been to training programmes such as:

- i. Art of Broadcast Presentation
- ii. Instructional Design Training with Alexander Romiszowski
- iii. Internet DJing Using SAM Broadcaster
- iv. Audio Creation Workshop
- v. Radio Presenting Course
- vi. Radio Programmes Enhancement Course

### iRadio OUM Promotional Tool

There's a new take on Andy Warhol's old quote, "Everyone will have their 15 minutes of fame in the future". In this day and age of ICT boom, the quote should stand at, "Everyone will have a Facebook account in the future". That being said, iRadio OUM also have our own 'Facebook' page, in part, signifying us getting on the web 2.0 bandwagon as well a very useful promotional tool.

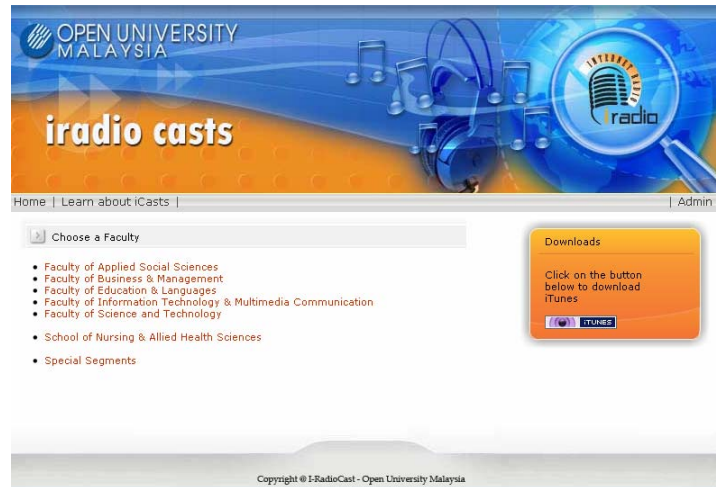


*iRadio OUM Facebook page*

This Facebook account helps us to keep track with our fans almost instantaneously. Informing them of the latest segment with special guests etc is only a Facebook 'status' away. We can also note their response towards the segment, what the listeners want and what they appreciate. As such, it makes it easier for us to improve and accommodate accordingly.

This iRadio OUM Facebook page is created in July 2009 and is maintained by the iRadio OUM team. To date, we have 100 fans, mostly OUM citizens, staff and students alike. We are working on putting a link on the iRadio OUM website so as to direct more of our listeners to the Facebook fan page.

## iRadio OUM and Enhancing Usability – The iRadio Casts Project



*The iRadio OUM Casts (iCast) Web Interface*

In our quest to improve iRadio OUM, one major project that was executed is the iCast project. The iCast project solved two issues with the current iRadio OUM archive structure. The current iRadio OUM archive structure organizes the audio files according to the date the segment was broadcasted. This made sense early in the establishment of iRadio OUM, there weren't that many segments broadcasted yet, so the archive would be fairly easy to navigate. However, as iRadio OUM grow from strength to strength, the number of segments produced increased and there is now a need for a more easily accessible archive.

Another problematic area that we were trying to improve on is on how to inform our listeners or learners of new segments that are available for them to download. As it is, listeners or learners will only know of any new content or material only if they are avid listeners of iRadio OUM or if they happen to surf the "Archive" section of our website.

After much research and deliberations among the iRadio OUM team and our web programmers, we conceived the idea for the iCast Project. Again, harnessing the powers of the internet, the iCast project resolves both issues at one go.

With iCast in place, segments now are no longer categorized according to dates. They are instead put under the Faculties of which the segments came from. This eases navigation as students from particular faculty only have to surf within their own faculties to look for content related to their course of studies.

Another plus point the iCast project boasts is the subscription-enabled feature. This feature basically incorporates RSS with our audio files, enabling learners and listeners alike to subscribe to the content they are interested in and subsequently be informed of additional materials uploaded. Also embedded is the iTunes feature which basically provides the listeners a cross-platform to listen and download iRadio OUM's materials.

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