Audio Leaflets for Mobiles - The Recipe

Roger Hyam ~ 23 March 2015

Audio Leaflets are simple, inexpensively produced mobile phone apps for delivering compelling audio interpretation of places and exhibitions. They typically contain between ten and twenty Points of Interest (POI) each with two to three minutes of commentary. They can contain a map or plan to help locate the points but have no other features. They can be produced entirely in house or with the help of writing and voice talent.

Previously production and deployment of a full Audio **Tour** has been a major, long term investment of resources. But the maturing of the mobile phone market and innovative use of software allows an approach to be taken whereby delivery of audio content is seen more like creating a leaflet - hence Audio Leaflets.



Audio Leaflets are not direct replacements for traditional tours but they may have a significant role to play. The main challenge we face is in thinking in new ways about how we can exploit this approach.

- We can use incremental development. Because individual tours are small and can be very cheap to produce it is feasible to make pilots and test ideas out perhaps coming back later to produce a more polished version for public launch.
- Not all Audio Leaflets need the same production approach. Just as we produce
 photocopied tri-fold leaflets but also large print run glossies so we can produce
 some audio leaflets entirely in house and, for others, hire in writers and voice
 talent.
- Audio Leaflets can be ephemeral. We could publish one for a single exhibition
 with recordings of the artists talking about their work. This might only take a day to
 produce.
- Audio Leaflets can be permanent. We could publish one that is voiced by a famous actor, takes several months to produce and is an addition to the garden for years to come.
- Internationalisation is eased by the incremental approach. If the English version of a tour is produced first and tested on the public we can simply revoice it in different languages as funds become available.
- Audio Leaflets are fundable. Once we have a few Audio Leaflets published it is easy to communicate what a new one would be like and seek funds for its production.
- Audio Leaflets are sustainable. There are, theoretically, no on-going costs. Once
 the Audio Leaflets have been published to the app stores all costs are borne by the
 consumer. (For long running apps it may be necessary to do upgrades if the
 subject matter of the tour or the software changes but these should not be
 expensive).

Audio Leaflets are potentially revenue neutral. It is possible to charge for the
tours and this may raise money to fund their production. It is unlikely that any tour
would be very profitable though. Certainly in the early days they should be free.

The rest of this document runs through the steps needed to produce an audio leaflet.

Collate Points of Interest (POIs)

Once the theme is established a core list of POIs needs to be developed. It can be changed as the scripts is authored and tested but without an initial list nothing can proceed. If the tour is one that is to be walked in a particular order then a route should be established at this point.

This is always likely to be the role of RBGE staff as we know our collections best. There is no opportunity to outsource.

Author Text on POIs

For each POI the script should contain around two or three minutes of commentary. This amounts to around three hundred words but will depend on delivery which in turn depends on

subject matter and audience. Thinking in terms of around 120 words per minute is a good starting point.

Following the interpretation principles each point should contain some element of wonder, an explanation of RBGE's connection and an invitation to act.

The last sentence should say where the listener can move on to next. e.g. "Walk down the hill to the Temperate Palm House or through the gap in the hedge to the Queen Mother Memorial Garden."

It is likely initial text or at least key facts will be developed in house but there is the possibility of hiring specialist external writers for some projects. There is also the possibility of doing away with this step all together and recording voices interview-style as was done in the current glass houses tour.

POI Images

Each POI will be presented as a choice on the screen for the user. This will require a small square image that could be an icon, illustration or photograph. Often this will be a prompt for when to play that audio so it could be an image of a landmark or of the thing being interpreted. e.g. the herbarium building.



Let the glasshouses take you on a journey of discovery through the world of plants. In our ten landscaped environments you will find plants that have adapted to a variety of different growing conditions, from rainforests to deserts.

The plants on display in the Glasshouses only represent about 1% of all known species of flowering plants, cycads and ferns! Botanists continue to discover more new species every year, but we are still a long way from knowing how many.



These images are likely to be sourced internally. They may be produced by an artist as part of a larger project e.g. a physical leaflet.

Author Text for Welcome and Credits pages

There is room for some introductory text when the user first opens the app. This should set the scene but doesn't need to be longer than three hundred words. There is also a credits page where contact details and acknowledgements can be displayed.

Associated Images and Icons

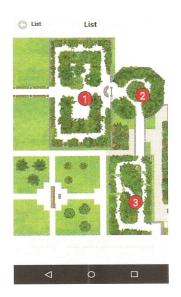
The user taps on an icon to start the app. This icon needs to be specified. They then see a splash screen while the app opens. This image needs to be specified. The About page and the Credits page both have space for images that should ideally be filled.

Map or Plan

If a map or plan is to be used then they need to be sourced. The app is designed to run without any internet connect so Google maps can't be used. The map/plan takes the form of an image about two thousand pixels wide.

Currently the app does not show the user's position with GPS however this feature may be added in the future. If it is then the map/plan image will need to be geo positioned at a number of points but doesn't have to be completely rectified. Sometimes GPS will not be appropriate e.g. internal exhibitions.

We are largely responsible for our own maps and plans but purchase or commissioning of images may be required.



Locations for POIs

If a map or plan is used then POIs need to specify coordinates as top/left in pixels on the image. Not all POIs need to specify locations. If they don't they simply won't be plotted. This may be appropriate for POIs that cover the whole site such as an introductory piece.

Audio Recording

This provides the most flexible area as regards in-house versus outsourcing solutions.

Audio could be recorded on location or in a studio. Professional voice talent could be used or members of staff. Although use of a professional studio is optimal recording equipment is cheap enough and easy enough to use for many tours to be produced in-house. Voice overs of sufficient quality are already being produced by the Propagation Learning team.

It is important to apply the iterative development approach here. A recording using staff or even an electronically generated voice could be made and, once this has been tested, replaced by a professionally voiced version.

Compilation and Build

We have the skills and software in-house to build the tours into apps and install them on test devices. This can be done multiple times as the content evolves to enable a test and fix cycle.

Release

The delivery mechanism for Audio Leaflets is via the Apple App Store and the Google Live app store. It is important for resilience that RBGE own the accounts that are used to manage the apps in these stores.

Appendix: Technical Background

Smart phones really kicked off with the launch of the first iPhone in 2007. The market has now matured with very capable handsets available for little over £100. They are becoming ubiquitous especially amongst younger people with estimates of 80% of 20-30 year olds having one and even 50% of 50-60 year olds. By and large phones are used for texting, social media, photography, shopping, general browsing, gaming and even making calls.

Although the penetration of smart phones presents an opportunity for enhancing visitor experiences and attracting new visitors there are major challenges.

- 1. The technical landscape is quite heterogeneous. Although dominated by Android and iOS (Apple) devices there are a plethora of different software versions, and hardware form factors. This is especially so as the market is only just reaching maturity. e.g. a three year old phone might well lack the ability to run the latest version of an operating system even if the user wants to upgrade.
- 2. The social landscape is heterogeneous. A teenager will use a phone very differently from her parent.
- 3. Hype is still present. Although the major applications do a single task, especially at launch, (think Angry Birds or Twitter) there is still a temptation to try and create apps that do everything; build a community, integrate with social media, sell things etc etc. The Kew app was a little like this and now appears to have been withdrawn.

Learning from this there are some guiding principles to applied:

- 1. An app needs to run on a wide range of phones to be accessible to a significant proportion of the market. We can't just do Apple or just do Android.
- 2. We need to accept that we won't support every phone out there. Some will be too old some will be too niche. Realistically apps that could run on 80% of phones carried by visitors would be a major victory.
- 3. We can't use the latest technologies. iBeacon and NFC are a good examples of technologies that we simply shouldn't adopt for core functionality until they are support by the majority of the phones in circulation.
- 4. One app will not appeal to all audiences. Apps need to have a single, obvious purpose for the user. We shouldn't have a "Botanics App" that tried to be all things to all visitors. We should have "Native Trees Trail" or "Fun with the Kids" apps.

It is in this environment that Audio Leaflets might be an appropriate technique.