Tate Modern Multimedia Tour Pilots

2002 – 2003

1.   Tate Modern Multimedia Tours

Audio guides have been part of the interpretation and education strategy since Tate Modern opened in May 2000. Having established a reputation for delivering excellent audio tours (with award winning tours for children and for the visually impaired), Tate Modern would like to remain at the cutting edge of educational technology by helping to shape a new generation of multimedia tours.

Preliminary research into multimedia saw Tate develop a Multimedia Tour Pilot in collaboration with Antenna Audio, which was tested in the galleries from July through September 2002. Tate and Antenna Audio are now collaborating on a second phase pilot in 2003 which will expand the wireless network and applications developed in 2002 to focus on interactive educational programmes and contextual learning for younger visitors, aged 16-25, to Tate Modern's permanent collection galleries. The 2003 projects will also test a text-based tour of the permanent collection, and a British Sign Language Guide offering signed interpretation of selected objects on display.

1.2. Multimedia Tour Pilot 2002

In July 2002, Tate Modern, London launched a unique, interactive audio-visual tour of its galleries. Using the latest developments in wireless technologies and handheld computing, this three-month pilot project was the first of its kind in any museum in the world. The tour was sponsored by Bloomberg, and developed in association with Antenna Audio. The iPaq 3850s and network equipment used in the pilot were loaned by Hewlett Packard.

Unlike the existing audio tours currently used in UK museums, the Multimedia Tour allowed background information about the works on display to be provided to visitors in a variety of different media on a portable screen-based device. Visitors could see video and still images that gave additional context for the works on display, and could listen to an expert talk about details of a work, while the details were

Figure 1 A visitor to Tate Modern takes the 2002 Multimedia Tour Pilot.

simultaneously highlighted on their screen. Interactive screens encouraged visitors to respond to the art on view, for instance by answering questions or by layering a collection of sound clips to create their own soundtrack for a work.

The location-sensitive wireless network meant that visitors no longer needed to spend time searching the multimedia tour to find the relevant information for a room, because the network pinpointed their exact location in the gallery and fed the correct information to them at the right time. Because this information came from a central server, rather than being stored in the memory of the hand-held device, practically limitless content could be provided, and could easily be kept up-to-date. A further

benefit of connecting the tour to a network is that visitors could request the central server to send additional information about the art they have seen to their home e-mail address. It also meant that Tate could broadcast messages to users during the tour, and send automated alerts when the film or other programmed events were about to start.

1.1 Visitor Feedback

852 visitors took the pilot tour and completed evaluation forms recording their experiences. In addition, qualitative focus group studies were conducted by the Susie Fisher group. The software system used in the trial also logged all uses of the MMT and provided a statistical picture of how the tour was utilized, which rooms were visited, and how the visitor e-mail system was used.

Although this technically innovative pilot often pushed the technology to its limits, visitors were enthusiastic about both the service and the tour. Visitors generally see this technology as an exciting and inevitable part of the future landscape in museums. The British Academy of Film and Television Arts agreed that the multimedia tour enhanced the visitor experience at Tate Modern, remarking in its award to Tate Modern and Antenna Audio for Technical Innovation that:

Genuinely groundbreaking, this was an exciting demonstration of how new technology can be used to enhance museum and gallery visits. Using a hand-held wireless device that knows just where you are on the tour, this offers a stimulating array of material to add to, but not confuse, the experience of a gallery visit. Commendably, Tate Modern is working with day-to-day feedback from visitors to develop a system that complements an already stunning physical learning space. – BAFTA 2002

1.1.1 Visitor Demographics

The largest group of visitors fell in the 26-40 age bracket, with 26% of visitors aged 18-25, 24% aged 41-60, 9% aged 10-17 and 4% over 61.

- 42% of visitors were female, and 58% male;
- 56% of visitors were British;
- 18% were North American;
- 17% were from Continental Europe.

The remaining 8% were from the rest of the world (1% did not respond to this question)

1.1.2 Visitor Satisfaction

The average amount of time visitors spent taking the tour was 55 minutes.

Over 70% of visitors said they had spent longer in gallery than they would have without the MMT, and a similar percentage said that the MMT had improved their visit to Tate Modern.

In general, older visitors found the technology more difficult to use than younger visitors. Overall 55% of visitors found the MMT easy to use, while 45% found it difficult.

1.2 Content Findings and Recommendations

In addition to testing the technology and visitors' responses to it, the primary aim of the MMT pilot was to test a variety of approaches to content design. The content proved to be the primary draw of the MMT, and indeed it will be the quality of the content that ultimately determines the success or failure of the tour experience.

The findings and recommendations made below regarding content design are based on Antenna staff experiences, the questionnaires, and feedback from focus groups conducted by the Susie Fisher Group.

1.2.1 What Worked

Interestingly, users did not seem to find multi-tasking and multi-tracking of different media (e.g. looking between screen and artwork) to be a problem as long as the message was well designed and the PDA was functioning properly. The multimedia tour clearly had the effect of making the visitor look longer at an object than s/he would have otherwise, even though the screen was also commanding attention. As Susie Fisher reported, "Visitors can multi track with great ease, even when the input tracks (audio, screen, painting) are not synchronized with one another." (Fisher, 2002, Chart 34)

In this regard, "audio acts like a friend", and indeed more use could be made of the audio to direct the user's eye movements between the object, the screen, and navigation through the gallery space.

In both the questionnaires and focus groups, visitors' favourite stops on the tour featured the following design approaches:

- **Audio-Visual Coherence:** A strong logical link between the audio and the visual;

- **Interactives:** Interactive messages, in which visitors had a chance to respond to artworks or register their opinions;

- **Audio:** interviews with artists, sitters, and related experts, as well as good audio navigational instructions;

- **Video:** video, e.g. using the screen to explain the process of making a work was considered by several visitors to be a good use of the screen, but also a potential distraction;

- **Intuitive, Interactive Interfaces:** to help visitors find information quickly and easily.

1.2.2   What Didn't Work

- **Long Messages:** attention spans seem to be even shorter for interactive messages than traditional audio tour messages;

- **Blank Screens:** the screen should be usefully occupied at all times, but without detracting from the exhibits;

- **Text:** received a mixed response: some, particularly more 'art experienced' visitors, liked having wall labels in the palm of their hand, while others wanted more exciting content;

- **Help Menu:** a key to the navigation icons is essential to remind visitors of the functions and options available to them.

And Moreover:
- Visitors wanted MORE of everything: more objects on the tour, and more information about each.

- Just as in audio tours, the multimedia tour can take attention away from other objects in the gallery which are not on the tour. Therefore careful tour design is essential.

1.3. Multimedia Tour Pilot 2003

Tate and Antenna Audio are now building on the results of the 2002 pilot to create a second stage pilot with a view to producing a product that can be rolled out for full public use in the galleries over an extended period of time. This year Tate's multimedia project is again sponsored by Bloomberg, with hardware loans by Toshiba, including the e750 PDAs that visitors will use in the galleries.

The information gathered to date is the first step to providing a blue-print that will help to inform handheld technologies for museums and

Figure 2 The 2003 Tate Modern Pilots will include a test of the use of the wireless PDA for Sign Language Guides to provide deaf visitors with interpretation on demand.

other institutions in the coming years. The development of this second stage project includes a particular focus on the interactive potential of the devices. The areas indicated below will be key areas of research:

- The facility for visitors to communicate directly with the gallery e.g.: posing and answering questions

- The facility for visitors to page each other in peer-to-peer communication

- The facility for visitors to access online databases while in the gallery, and to e-

mail themselves further information on objects and artists on the tour in order to follow up on artists and artworks of interest through the Tate website.

- Improvement of processing speeds, tour interface, operating system stability, and location-sensitive content delivery systems.

In addition to this multimedia content, visitors to Tate Modern's second phase trial will be able to try a text-based tour of the permanent collection, drawing from Tate's databases of information held for every object on display.

The second phase trial will also include a test of a British Sign Language Guide for deaf visitors. Deaf visitors will be able to see video footage of sign language interpretation about selected works in the permanent collection. The aim of the Sign Language Guide is to increase access for deaf visitors not only to the objects on display, but also to the fields of study addressed in the galleries by enabling familiarity with the signs and art terms relevant to these discourses.

In terms of content, the 2002 pilot tour explored a variety of contrasting approaches to delivering information about the art on display. We now want to pinpoint the most successful methods for a range of audiences, and refine them to create specifically tailored multimedia learning models for visitors.

2. References

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