Copenhagen City interactive history wall to be built by Gibson International

Gibson International has won an international design competition to create a world first multimedia installation for the Museum of Copenhagen.

The installation will coincide with archaeological excavations for a new City Ring metro line, which will be the largest urban archaeological dig ever undertaken in Northern Europe. As the institution responsible for interpreting the excavation findings, the Museum of Copenhagen is turning the investigations into a high profile, highly visible attraction. In key inner city locations the excavations will be flanked by a large outdoor interactive multi-media Wall called Væggen (pronounced Vay-ggen).

The Gibson design for Væggen will create a spectacular wall of large format multi-touch screens which will enable the public to explore the findings of the archaeologists, to link these findings with the vast historic collections of the museum, and to create their own personalised pathways of history and community. The winning design was created in partnership with avant-garde Danish graphic media company Spild af Tid, and Wellington designer Jerry Hewitt.

The technology features banks of ultra bright, high definition 103"plasma screens – that's 2.3 metres wide each, with an entirely new multi-touch interface that allows a number of users to work collaboratively on the same screen. Væggen is the first time such sophisticated multi-touch technology has been used on such a large scale, and in daylight, and is the result of cutting edge interactive research and development from the Gibson team supported by Tech NZ.

Væggen will be one of the first large scale multi-media interactive experiences to be driven entirely and in real time by a central media database. The database is being designed to house the museum's most intriguing media documents as well as high volumes of citizen contributed material. The Væggen database will drive the in situ Wall experience in real time, and it will also be linked to interfaces on the new Museum of Copenhagen web site that will be created in parallel with the Væggen user interface, so that users can continue and extend their Væggen experience on the web.
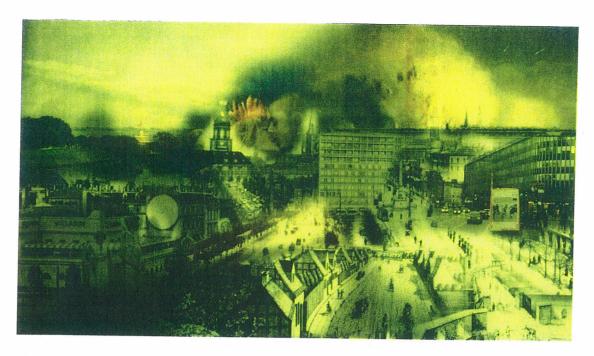
The Gibson design for this database heart of the project draws on the team's experience with other user generated content projects like the award winning Our Space for Te Papa. The database upload functionalities will allow archaeologists and members of the public alike to update the database easily and continuously.

Along with original technology, the design for Væggen creates a new paradigm in user interfaces. The visitor approaching the Wall sees a graphical model of inner city Copenhagen that blends 2D imagery from all eras of the city into a 3D graphic model.

On site at the Wall, or at home or school on the internet, users can call up their personal thread of comments and contributions. They can edit them, send links to friends, and they can "play" them. The Væggen Blog interface provides video clip making tools, so users can arrange their micro-blogs into a video clip timeline to which they can add transition, captions, and titles. They can then play down the resultant "Wall blog movie", send it as a link to friends, to You Tube, Facebook etc.

You can upload images from your digital camera, mobile phone or PDA directly into your personal wall blog thread, and they will appear instantly in the database for other users to see – and comment on. Other users can comment on any user's blog – agreeing, disagreeing, offering more information, uploading more images related to the blog theme.

The production time for this project is very short because the Wall has to be installed to coincide with the first major excavations. Gibson has a team of 8 software developers working on the project in Wellington, 3 graphic artists and designers working in Copenhagen, and designer Jerry Hewitt working with a large team from technical equipment supplier ProShop Europe to develop the physical structures of the installation. The official opening is 01 April 2010.

This 2D imagery is inserted into the 3D cityscape from the central media database in real-time, so that as the user manipulates the time and theme tools, the imagery seamlessly blends from one era to the next, from one theme to the next, all the while moving around the cityscape.

Users can select any image to explore further. Descriptive details can be selected. Multi-touch gestures will scale and move images - like an i-phone but 2.3 metres wide. But one of the major innovations of the user interface is that vistors can add their comments directly to an image on the Wall in text or video recording.

In this way visitors generate "micro-blogs" that are both personal and associated with an historic media object in the museum's database. So as they explore the cityscape interactive wall and add micro-blogs to media database objects as they go, visitors create a personal thread of micro-blogs that can be assembled together into their personal Væggen Blog.