

Storytelling in virtual environments

Armed with the latest in Virtual Reality (VR), museums can entertain visitors far and wide. Over a third of the people who tested a new interactive and 3D system flying over a Greek gorge or touring an ancient Asian temple - said their experience was better than a real trip.

"The VR market is just beginning in museums," says Dr Manfred Bogen, coordinator of the European IST project DHX. "But it has a great future in cultural and natural heritage institutions, offering visitors an intense and emotional experience."

Using their own system - mainly projectors, screens, audio and computer equipment - the partners created several guided tours. Adds Bogen: "Besides the gorge and temple, we developed virtual tours of Pisa's Baptistry building, Milan's Piccolo theatre as it was in the 19th century and a tour about German composer Ludwig van Beethoven. All of these have lifelike, stereoscopic and interactive animation, and people can interact with them with touch displays or joysticks."

Uniquely, the system allows museums to form networks and create, share and disseminate cultural heritage. In a recent live demonstration in Milan, the European project partners linked up with their Korean partner over a broadband line for a virtual visit of the Yellow Dragon Temple. Participants in various places interacted with the display, while guided by an expert in Milan.

"By being part of an open network, a museum with a VR system such as DHX can tap into digital heritage worldwide," says Bogen. "The content databases held at one institution can be customised for display at any other."

Visitors of the DHX demonstrations rated them as excellent for their 'presence, ambience and dynamics' and good on visual details. Some were impressed by the 3D environment or the ability to see scenes from different viewpoints. Others wanted to be able to move around scenes more or for objects to look more realistic.

"Our virtual platform is ideal for museums that may have large collections, but limited space and money," says Bogen. "Visitors would prefer to see everything available in a museum, presented in the right context. With VR and suitable software, such as our storytelling and guided tour tools which assist with new exhibition planning, museums could break into the emerging world of edutainment."

With some 43,000 museums worldwide, there is a huge market for so-called immersive display solutions. But few can afford VR systems, which come with four-

figure tickets for basic systems and up to six figures for sophisticated displays for large theatres.

"Prices are coming down and a VR system will run on a high-end PC with a good graphics card," says Bogen. "But you also need the right tools, such as storytelling software."

Results of the project will be highlighted in Kuurne, Belgium, where technology partner Barco will demonstrate the DHX system, and in the permanent showcase in Crete's new Natural History Museum in late 2005.

Each partner has committed to be a reference partner for Barco, to spread the news about the project technology. "We are showing our products to interested companies and institutions," adds Bogen. "The complete package is not for sale, but it is possible to purchase individual components such as the Logical Storytelling Designer."

Contact: Dr Manfred Bogen, Head of the Competence Center Virtual Environments (VE), Fraunhofer Institute for Media Communication, Schloss Birlinghoven, D-53754 Sankt Augustin, Germany, Tel: +49-2241-142367, Fax: +49-2241-1443433, E-mail: manfred.bogen@imk.fraunhofer.de Published by the IST Results service which brings you online ICT news and analysis on the emerging results from the European Commission's Information Society Technologies research initiative. The service reports on prototype products and services ready for commercialisation as well as work in progress and interim results with significant potential for exploitation,

Countries

Germany

Contributor

Contributed by

SESAR Joint Undertaking
100, avenue Cortenbergh
B-1000 Brussels

[Website](#)

Last update: 27 September 2005

Permalink: <https://cordis.europa.eu/article/id/97087-storytelling-in-virtual-environments>

