Sauza Virtual Reality – Mexico City.

In an international first, $de\ pinxi$ is launching ArgoGroupTM, the virtual exploration system for immersive and interactive rooms.

The newest attraction currently being launched at Reino Aventura Park (Mexico City) is a pavilion dedicated exclusively to Virtual Reality.

For its client Sauza (world leader in the production of Tequila), *de pinxi* has created the key attraction of the pavilion, allowing an entire room (in this case, 36 people) to interact *together* with the virtual world under exploration.

The audience is divided into teams, each with different missions, sometimes competing, others co-operating: to open passages, to navigate through risky terrain, to destroy obstacles and, above all, to collect all the necessary pieces to recreate the ancient Mask of Time, with absolute magical power.

Techniques.

 $ArgoGroup^{TM}$ is the hardware and software combination developed by $de\ pinxi$ to make this interactive adventure possible. The system consists of:

- a software core, *ArgoKernel*TM, our real-time engine (similar to the techniques of a flight simulator);
- electronic control units, including joysticks and personal displays, built into each operator's seat; several modules of 48 operators can be interconnected to support 200-seat rooms.

 $ArgoGroup^{TM}$ is the basic infrastructure; it is a support for the interactive contents and the virtual experiences developed by $de\ pinxi$.

ArgoGroup™ exists in a portable version, specially developed for exhibitions, marketing events and trade fairs. Two installations have recently met with great success: Laval Virtual and Siggraph 99.

Experience.

In Mexico City, the first title on the bill is "Kaotik2, the Mask of Time", an experience blending the dynamism of the game with the thrill of flying aboard a spaceship.

Although the pavilion has not been officially opened yet, there has been a crush of people for the test and qualification sessions, attracting over 1200 enthusiastic visitors daily!

A new adventure is currently being developed, "Odyssea Virtual Sauza, the Mexican Adventure", an interactive experience based on the reconstruction and protection of Mexico's main natural and heritage sites. The avant-premiere of this title will be launched during the official inauguration of the pavilion during the week of 20 September.

The immersive and interactive room.

Immersive.

The experience takes place in a panoramic room where a system of 3 high-definition video-projectors create a 160° open picture (the human field of vision) over a diameter of 8 meters.

This technology was installed by Trimension, an English company and world leader in the set up of immersive rooms (panoramic, domes, etc.). Trimension was also in charge of the sound installation (18 channels), supporting sound spatialisation and surround 7.1! An infrasound system placed in each seat recreates the feeling of shocks and vibrations throughout the experience.

The spectators are given special glasses for a very high-quality stereoscopic vision (Sonics/Imax system).

Interactive.

Each seat is equipped with a joystick so that *all* spectators can become actors in the experience. This creates a real group dynamic. Each spectator/actor can select, take, activate and navigate at will.

Furthermore, each seat is equipped with a display allowing the player to see how he/she is doing within the team and to find out his/her score.

The engine.

Power of interaction and immersion in large imagery are made possible thanks to SGI real-time graphics supercomputers. The Onyx2 IR2 machine powering the show, enables to reach very high display resolutions (typically 4000 X 1000 pixels), at 60 fps, including stereography!

Unrivalled rich and complex virtual worlds can be rendered at a steady frame rate. Furthermore, the outstanding antialiasing removes any computer image artefacts from the displays: no jagged edges, no flickering, perfect rendering of texts, light points and symbols.

Other applications.

Other titles have been developed or are being developed within the scope of interactive group experiences.

The titles listed below are designed for museographic applications; in these cases, the audience is plunged into a virtual guided tour, navigating at will. Each operator has the means to obtain personal information (on the individual display and audio units) about the objects and people encountered during the visit.

Human Body Travel v2.0:

Entirely interactive exploration of the 3 main body systems: total immersion in the respiratory, digestive and circulatory systems.

Reduced to atomic size, visitors discover for themselves the twists and turns of an educational and internalised journey! A *de pinxi* production for the Museum of Science Exploration in Cairo.

Dexia's Virtual Gallery:

Since its creation over a hundred years ago, the Belgian section of the Dexia Group (Crédit Communal of Belgium) has followed a continuing policy of artistic philanthropy. As a result, this bank has an impressive heritage of contemporary art.

This interactive production by *de pinxi* consisted in reproducing, as faithfully as possible, the bank group's permanent gallery. Some of the works are presented in extremely high resolution, beyond even the capacities of the human eye.

Since its inauguration in 1995, the "Virtual Gallery" has stood as a unique example of using Virtual Reality in the aim of opening a private collection with limited access to a greater number of people!

Ancient civilisations:

This title, currently in the development phase, will take you on a journey along the Mediterranean of ancient days.

de pinxi.

In attachment, you will find a brochure describing our activities since 1991 in the specialised domain of interactive experiences.

For more specific information, please contact us: info@depinxi.be www.depinxi.be

PhotoCD, videotape et demonstrations available on request..