



QUEENSLAND UNIVERSITY OF TECHNOLOGY

THE CUBE



Queensland University of Technology approached Pro AV Solutions for a very unique project that was to be the jewel in the crown of the Science and Technology Centre.

The Cube was to be a purpose built interactive video wall space that engaged people to touch content and discover facts on ocean life, or physics with wooden blocks, or learn about the Brisbane floods and where social media had played its part. The cube is today the world's largest digital interactive installation located at QUT's Engineering Centre in Brisbane, Australia.

The installation includes 48 55-inch MultiTaction Cell displays forming the 1,400-cubic-meter Cube; there are six educational zones, including a two-story, 14-metre-long Virtual Reef comprised of 20 MultiTaction displays and 14 edge-blended Panasonic projectors.

“When The Cube was approved for implementation, Pro AV Solutions responded in the competitive tender process and to QUT the choice was clear: their track record and comprehension of the project goals, not to mention technical understanding from the outset set them apart.”

A custom videowall installation was delivered containing 48 x 55" touch screens in a stacked array across five zones complemented with edge blended projection on a two storey high wall.



The touch screens allow visitors to interact with and control the single giant image that spreads seamlessly across the monitors and projectors. The images are real-time animations, created by a metric tonne of custom-built servers housed two floors above.

An audio matrix manages 96 x 80 audio paths for localised audio at LCD's and immersive audio for the projection zones. Video signal management is provided with five 32x32 matrix switchers and three videowall processors. Video and multi-channel audio comes via cat6

transmitter/receiver pairs.

A third network allows the servers to communicate with each other to synchronise the animation elements as they pass between screens and a fourth network, the QUT LAN, provides overall communication and control.

The Cube represents a step-change in how universities will engage their communities and industry partners in the future. For QUT it represents a huge commitment to the development of future scientists and engineers.

