A new patented technology that can plot walls or furniture from life-size building design plans is just one of the research projects that highlights how the University of South Australia (UniSA) is using its world-class expertise and capabilities to address industry needs through the University’s commercialisation arm ITEK Ventures.

Jumbo Vision International’s ingenious fusion of high-tech 2D and 3D visualisation and control room design skills, CADwalk™ allows users - such as operators, architects, builders and engineers - to walk their way through a full-sized representation of a control room. Modifications of the room layout are made possible by a special camera and movable pole receptor system created by Jumbo Vision International and UniSA which allows users to physically walk through their project at 1:1 scale.

The result is a life-sized digital playground that gives users a fully immersive visual sense of the room as it will appear when completed. Interactive software provides feedback and control over the layout in real time, with users simply having to physically move the tracking devices until they have achieved the desired output.

CADwalk™ has already been utilised in a live setting with promising results by its very first user worldwide, New Zealand’s national electricity power provider Transpower. Here, the virtual reality based system allowed users to engage with their recently completed major control room upgrade as the design took shape which resulted in an estimated cut of three months from the design project cycle.

To find more about research at the University of South Australia visit unisa.edu.au.

“This is world first. We estimate it can save three months or longer in design time.” Lena Kimenkowski, General Manager Jumbo Vision International.