

VR tools play into resources sector

SENTIENT Computing is a WA-based software company that provides interactive training, 3D visualisation, optimisation solutions and process control.

In 2016, the interest and availability of consumer-ready Virtual Reality (VR) systems such as the Oculus Rift and HTC Vive has enabled Sentient to utilise this innovative technology to provide solutions to its existing customer base.

Sentient's clients are seeing the advantage of using VR in 3D environments to improve their comprehension of complex systems, collaboration and enhancing internal communication within the organisation.

For example, a team can observe a person in VR demonstrate how equipment works, highlight the hazards and indicate what tasks need to be accomplished.

The three main areas are generating interest: immersive training, visualising real time data and simulating shutdowns.

VR systems allow operators to safely perform high risk procedures in simulated remote environments.

The fully immersive environment enables the visualisation of outcomes to be accurately communicated when procedures are not followed correctly.

Working at Heights and High Voltage Switching and excellent examples of using VR to safely assess the capabilities of personnel to perform dangerous tasks.

Tracking assets in a stockyard using real time and historical data is a great tool for remote operations, training, and root cause analysis when an event occurs.

The ability to accurately visualise the movement of the stackers and reclaimers



VR has become an important innovation for the mining industry.

during a previous shift that had high production, is an excellent way to communicate best work practices.

Traditionally, shutdowns are communicated with Gantt charts which are time consuming and difficult to understand.

Sentient has created a product Plan It 3D, that imports the project file and enables users to create visual simulations of the critical tasks during the shutdown.

These visual simulations can be used to

significantly improve the efficiency of the shutdown.

For example, they can reduce onboarding time, retain knowledge for the next shut, improve accuracy of vendor quoting, communicate hazards and are an extremely effective aid for toolbox meetings.

Sentient has recently seen a significant increase in the number of companies that have a defined strategy for a "Digital Plant".

The way companies leverage this asset

will have a direct impact on their ability to optimise their operation and VR will be a key part of this journey.

"I believe that the digital plant will play an important role as companies strive to optimise operations, and Sentient is working hard to be a part of that conversation," Sencom managing director Doug Bester said.

"VR's ability to accurately visualise complex operations makes it one of the most important new tools to hit the resources sector."



SENTIENT

Better than being there



ANIMATIONS AND FLYTHROUGHS

Creating realistic 3D environment to communicate key messages and processes.



TRAINING AND SIMULATIONS

Utilising the latest training and simulation technology to train your teams, improve retention time and reduce onboarding.



PLAN-IT 3D

Increase the efficiency of your shutdown planning and reduce costs by bringing your work schedule to life in 3D animated tasks.



REAL TIME DATA VISUALISATIONS

Using gaming technology to enable you to visualise your applications in real and historical time

