Virtual sky is no limit for RemSense

The days of having to hastily arrange for a city-based expert to travel to a remote site to investigate and resolve a complex problem could be limited, thanks to the rapid advancement of a revolutionary visual platform which has caught the eye of energy giants such as Woodside Energy Ltd.

Founded by Steve Brown in 2012, RemSense Technologies Ltd has spent the past few years developing virtualplant as its core product. The platform leverages virtual reality/artificial intelligence technologies to provide a visual representation of plant assets, known as a digital twin.

Virtualplant was also designed to be easily integrated with existing business operations and asset management systems for greater productivity, increased safety and reduced costs.

Woodside supported the initial development of virtualplant and last month contracted RemSense to create a photographic visual twin of one of its floating production storage and offloading vessels. It was the Perth-based company's third such contract award in the last 12 months.

Brown said virtualplant was appealing to large companies such as Woodside which run remote operations from a city-based location.

"Woodside had gone to the market a couple of times trying to find something that enabled everyone in the organisation, from operational teams right through to the CEO, to understand their assets without having to go up there," Brown told **Paydirt**.

"For any company with remote assets, it's a difficult conundrum to manage. Sending people out there is a serious issue when it comes to not only just the cost, but the loss of productivity, safety and a host of other things. They couldn't find that solution, so they approached us to look at what we could do for them.

"It didn't take us very long to realise that if we cracked this, we actually had a product that was really usable across a number of industry sectors. Our experience has been that once someone uses this, it tends to grow within the organisation very quickly. It's a very sticky product, it's simple and it's easy to use."

This month marks the two-year anniversary of RemSense's listing on the ASX. Brown said while it took about 12 months longer to develop virtualplant to a stage everyone in the company was comfortable with, the foundations have now been laid to engage with a wide client base.

RemSense's target markets are the oil and gas and resources industries, but the company believes its core product will also be suitable for power and utilities, telecommunications, construction, transport infrastructure and emergency response, as well as the agricultural and forestry sectors.

Brown said virtualplant was gaining international traction because of its potential to be "transformational" for any business which uses it.

"We know the product works, we know the product will add value to almost every facet of an organisation across many industries," he said.

"The ease of being able to understand what it is you're working on without going there is a big deal. The challenge we had initially was that we needed to develop a product that was available to anybody, anytime, in any place, on any approved device, and ensure it doesn't compete with any existing systems inside a particular organisation.

Virtualplant allows employees to access remote operations from city-based locations

"Woodside and other companies like them have lots and lots of systems to manage, quite a lot of them are siloed systems, so it's difficult to actually extract data from all these systems. Virtualplant is simply a link into any of these other systems, it's a means of bringing data in and out of in a way that is simple, easy and not complex, it doesn't really require really major training because it's easy to understand and navigate, and you're ready to use it."

RemSense's potential and future clients have indicated virtualplant holds the potential to become an important tool for pre-starts, shutdowns and contracting tenders, as well as management of corrosion and general wear-and-tear of plant equipment and facilities.

"Virtualplant is digital truth, it's absolutely what you see is what you get," Brown said.

"If something has rusted completely, then that's exactly what you're seeing. We've just completed a project for Woodside where we've added a corrosion management tool into virtualplant so people in the office can sit down and actually do their corrosion assessments and come up with a remediation plan without going up to site.

"Sometimes it's difficult to convince executive boards to approve budgets for technology upgrades, but with a product like virtualplant, the return can be invaluable."

Brown stepped down as managing director of RemSense in early September following the arrival of new chief executive Warren Cook, but he remains on the company's board in an executive director capacity.

Cook joins RemSense having previously served as chief executive of acQuire Technology Solutions and more recently as country manager for environmental software developer EarthSoft Inc.

– Michael Washbourne

RemSense's proprietary technology has piqued interest from several major resources and energy groups