



The Roborigger team at the Wangara facility in Perth, Western Australia. Photo credit: Roborigger

Perth robotics start-up drives global growth

Lauded as a game-changer in crane lifting automation when originally developed in 2016, award-winning Western Australian start-up Roborigger has gone from strength to strength, and thrived.

Roborigger technologies are recognised by industry as 'must have' tools to improve crane safety and efficiency – keeping workers away from under the crane load where they could be injured.

As well as improving safety, Roborigger's integrated hardware and software solutions, developed in Western Australia, make lifting operations easier and faster by logging all load movements with images and weight.

Roborigger has been adopted by leading construction, engineering, and resources companies including Multiplex, Built, Laing O'Rourke, Newmont and Woodside.

Shawcor, a Canadian oilfield services company and one of the largest pipe-coating providers in the world, has utilised Roborigger at the Kabil Industrial Facility in Indonesia, and Woodside

has recently deployed a Roborigger unit at its onshore base operation in Ranong, Thailand.

In 2020, COVID-19 pandemic restrictions began just as Roborigger was on the cusp of global growth - staff were unable to meet clients in person, or organise demonstrations on project sites.

Managing Director Derick Markwell said it was essential to have units placed in a location because people want to try them out before they buy or rent.

During the pandemic, even when Roborigger units were hired, the restrictions on interstate and overseas travel limited the company's capacity to train and certify crane operators on site, and slowed down their business development progress.

"We had commitments for our units, and we have fulfilled those orders. But then we found out we couldn't go over there to support them, so we had to find another way," Mr Markwell said.

"Our plan in 2019 was to develop remote online training for release in 2021, but when COVID-19 hit in March 2020, we actually ended up having to do this in two weeks."

Rapid response

With enquiries pouring in from major overseas companies, Roborigger set up ways to build their capabilities, and support and service network, despite the challenges caused by the pandemic.

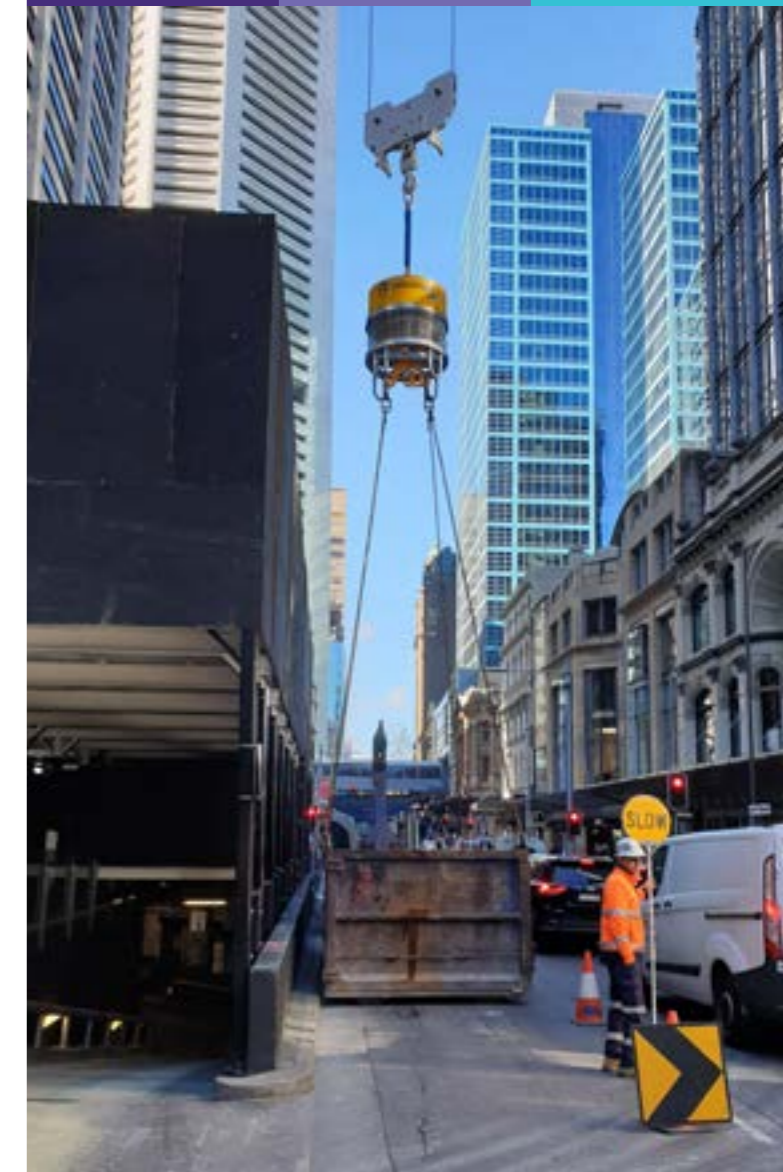
The Roborigger team organised online training for their operators and combined it with their network of service agents and their units' availability in different cities. This meant they could continue to implement their trials and training, even without their team being able to travel interstate or overseas.

"In a way it was good. It forced us to look for and find a solution that could work, implement it, and make an advance in this area," Mr Markwell said. "We wouldn't have done it so quickly without the COVID imperative. Having it available now is a big advantage to the business."

Roborigger established local agencies in cities where their target markets are located, ensuring Roborigger units are readily available and can be quickly deployed to potential customers.

Roborigger is currently represented by service agents in Australia, located in New South Wales, Victoria and South Australia, as well as in Singapore.

The team has continued to virtually engage with prospective customers and has successfully set up agreements with other companies in Japan, Denmark and Germany, with discussions ongoing for representatives in the United Kingdom and Norway.



Roborigger in use on busy George Street in Sydney's central business district. Photo credit: Roborigger

Roborigger is set to deliver units to Sumitomo Mitsui Construction in Japan, and a Roborigger unit recently arrived in Dubai for Alec Construction in the United Arab Emirates.

Alec Construction contracted and paid in advance to use Roborigger in 2021, without the team being required to travel in person to oversee the project.

"It's pretty rare to get paid upfront for something they've never even seen in person. They've taken us on face value, looking at our videos and talking to us via Zoom. We were also lucky to have Multiplex sites as referees," Mr Markwell said.

"Getting a local partner on board and using that local partner to support you in the export market has been so valuable."

Strong future

Roborigger is scaling very quickly from a start-up to a small business manufacturing operation.

A \$5 million investment by Australia's top venture capital firm Blackbird Ventures is evidence of the global scalability and export potential of Roborigger's innovation.

"That investment has really made a huge difference to us. We decided to shift our focus to the software side, as there is no impediment to getting software written, as opposed to moving hardware," Mr Markwell said.

"It's a completely new business line, we've now hired 3 people whose only job is developing the software that uses the lift data and images collected by the Roborigger devices. We believe software will be a very significant part of the business for many years."

Mr Markwell said one of their clients wasn't allowed to lift over an adjacent building, so they wanted tracking of the load for every lift, giving them the ability to show the path the load took.

"This way they could prove that it never went outside the boundaries of the site," he said.

"We now have geofencing implemented as a core feature of the product. Our software is now able to track all of our clients' planned lifts for the day on the one side of the screen and show the actual lifts that have been recorded on the other side of the screen. As you go through the day you can see whether you are ahead of, or behind schedule."

World stage

Mr Markwell attributes the continued success and growth to the company's staff. Roborigger also relied heavily on the skills of engineering graduates and academic staff from Western Australian universities, and a number of mechatronic engineering interns have since become key members of the Roborigger team.

The continued interest in Roborigger signals the confidence of industry in the potential of



A Roborigger unit lifting pipe by Shawcor in Batam, Indonesia. Photo credit: Roborigger

Roborigger technology to revolutionise crane lifting and logistics practices globally.

"We have always known that we needed to be on the world stage. And we have made a commitment that we were going full steam ahead, regardless of COVID-19, so we have worked hard to build new units and expand overseas," Mr Markwell said.

"For a start-up, having companies like Multiplex and Woodside as our early adopters has been key to developing a commercial ready technology. These are the companies that have strong and genuine focus on safety and innovation and are prepared to invest in a technology that may take a long time to be operational.

"We've got enough genuine successes to give me total confidence in the product and the fact that it's a product for the future," he said.

"However, I believe that, in addition to having a great product, staying resilient as a team, and nurturing our relationships with industry, government and our clients is going to be crucial in how we continue to grow and expand our business overseas."

Get in touch

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