

ers in the huge Komatsu haul trucks that are following a path so accurately set that the miner does not ensure it is varied slightly to avoid creating ruts in the road.

Other than driving the trucks during 12-hour shifts, day and night, in the 40-plus degree heat of the Pilbara summer, employees are overseeing the process on computer screens in a control room that, for now, is on the site but eventually will be moved to the operations centre in Perth. "What we are able to do is take an operator out of a cab and give people jobs that are more interesting and less monotonous," says the general manager of the mine of the future, James Petty.

The more precise driving of the autonomous haul trucks reduces fuel use, cuts carbon emissions and leads to less wear and tear on heavy million-dollar machinery.

For the drilling at the site, the spacing is set perfectly and the depth of each hole and the amount of explosives used are more precise when the rigs are operated by humans. The rigs can also re-enter the area more quickly following a blast because there are no humans to protect from safety hazards.

Back in Rio's operations centre in Perth, an employee, Jimmy, operates the three drill rigs at Angelas from a series of computer screens in the comfort of an air-conditioned office located near the airport. It's a far cry from the 10 years he spent as a drill rig operator on mine sites.

"It is much better [than being in the Pilbara]," says Walsh of the new role. "It is safer, there is no dust and vibration and it is much better on the weekends. I've got children and I see them more. It's very positive."

At the company, there are also some immediate financial benefits. "Our employees up here need housing," Walsh says. "Build a house in the Pilbara today and that is \$800,000 to \$1 million per house and [because of the operations centre] there are 250 houses that we actually need to build."

Perhaps the biggest benefit from the operations centre to date has been improved productivity.

As a global head of technology and innovation, Preston Chiaro, says productivity gains in the mining industry have been slowing down due to a reduction in ore grades and technical limits on the ability to keep increasing the size of machinery such as haul trucks.

"We have seen improvements in productivity over the years but we are petering out, frankly, in some areas," he says. "And in a few areas we have even gone a bit backwards." **BRW**

An edited version of a story which was first ran in The Australian Financial Review.



Willing and able: Kevin de Bruin found a niche in the market

Fill a niche to get out of a rut

The founder of this vehicle business began as a tour operator. Then he found another kind of adventure. Report: Jackie Range

Able Bus and Coach founder Kevin de Bruin didn't set out to be a manufacturer but nevertheless has happily become a successful maker of four-wheel-drive and two-wheel-drive vehicles for remote areas.

Amid widespread decline in the car industry and manufacturing more broadly, Perth-based Able Bus and Coach has done what a few others have managed to: find a niche and supply into it.

De Bruin began his business 17 years ago, as a tour company offering West Australian adventure tours for people with disabilities. He quickly realised he needed specialist vehicles for the rugged job.

"Though I had the best vehicle available at the time, it wasn't able to cope with the harsh conditions of the north-west and was struggling to do the job," says de Bruin, who is also managing director.

De Bruin, like many entrepreneurs, came up with his own solution. He had always had an interest in vehicles and their design but had no practical experience. Undeterred, he decided to design and build a four-wheel-drive coach.

Able Bus and Coach modifies trucks – 95 per cent of which are made by Isuzu – and makes them comply with the standards required of buses, including a better braking. They need to be prepared for some rough country – the company's vehicles are

driven on dirt roads and through washed-out creeks. They may well be driving on routes 800 kilometres from the nearest town.

It turned out there was a market for such vehicles.

"After demand increased for Australian-made coaches that could cope with Australian conditions, our tour business morphed into an Australian coach manufacturing company," says de Bruin.

Making the company's first mining vehicle for Leighton Contractors in 2003, de Bruin now counts mining giants BHP Billiton and Rio Tinto among its clients. The number of vehicles it produces has surged – it's aiming for its 320th by early 2013 and is building 70 this year.

Revenue has grown. In the financial year ended June 30, 2012, the company expects to make revenue of \$10 million, up from \$8.5 million in 2011. But Able's profit margin has come under pressure on the cost of expansion and rising labour costs. De Bruin declined to reveal his profit. The business now employs 32 people and has about 20 contractors.

De Bruin uses his understanding of the conditions the vehicles will face to guide the business and keeps in touch with customers for feedback. He also focuses on quality and local sourcing.

"While it's been tempting at times to look to cheaper options with parts and prefabricated vehicles from overseas, the benchmark has always been high quality, using local suppliers who also understand Australian conditions," he says. "Care has been taken to expand at a rate that keeps up with demand without reducing quality and care."

Export may be in the future. Able Bus and Coach now only supplies the domestic market but has interest from countries including Kazakhstan and Papua New Guinea, most of it from Australian companies abroad. **BRW**