

Smart technology opens mining's automation window: Williams

The latest key addition to mining technology newcomer Auto-mate's fast-growing Perth-based management team says lower-cost, robust sensors and other enabling devices are driving increased investment in smart mobile fleet systems, bringing mining closer to its "exponential growth" tipping point for autonomous vehicle use



Former Caterpillar technology area manager for Africa, Middle East and Asia Pacific, Damien Williams is Auto-mate's new Solutions and Implementation Manager.

He joins the company from Western Australia-based Connect Source, which saw significant growth in its core transport, OEM, agriculture and mining markets in the two years Williams was there.

Auto-mate describes itself as a smart automation technology provider that has the backing of Israel Aerospace Industries (IAI) and Australian mining logistics company, Bis.

"Solar generation and DNA technology are two areas we often see characterised as emblematic of what happens when understanding and knowledge reaches a point where it is doubling every year and the products coming out the other side are twice as good but half the price," Williams says.

"That's what we're seeing in the mobile mining technology space as sensors and other hardware cost and reliability barriers fall, and they become more and more ubiquitous. It did happen earlier in the [minerals processing] fixed plant space.

"But mobile equipment has changed a lot since I joined Cat [via Bucyrus].

"Ten years ago mine owners were saying, we think we need a technology system. The focus was fairly broad.

"Now a lot of new opportunities are becoming very discreet around applications. We've got a mine site looking to improve management of topsoil in their operations. Another one is looking to increase productivity in their long-distance haulage routes, and another is focused on better overburden management. The mines are better informed about what their requirements are, with data delivered by new technologies,

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and generally have a better appreciation of what impact certain technologies can have in discreet parts of their operation, and how that can help deliver a better bottom line."

Auto-mate, bringing proven, open-architecture technology deployed on more than 30 different ground-based asset types over nearly 20 years to the mining industry, is among a host of newcomers drawn to what is seen as a global hub for a mining automation market that research suggests could be worth several billion dollars by the middle of this decade.

As a local, Williams has seen both the WA industry appetite for large-scale mobile fleet automation, and the supply landscape, change quickly over the past 10 years.

He says a more competitive market is helping to accelerate the rate of innovation, and deployment.

"It's an exciting time in the industry and one of the things that really attracted me to the opportunity at Auto-mate was that its technology is ready to deploy in the way mines want to apply it, without completely rethinking the mining process," he says.



Damien Williams has joined Auto-mate

"We get to move at a pace that was previously not possible because [the industry's] tech readiness for deployment wasn't always there. Now, more and more, it is.

"There are niche players popping up and trying to do the one thing they can do really well. That does present challenges.

"It means we can't afford to slow down. Auto-mate is a small, agile company with the resources and capacity to move fast on a number of automation projects. Our focus is on delivering what mines need, now. "

Williams joins another new appointment, VP Engineering and Safety Mark Siddoway, in Auto-mate's Perth office. Siddoway was a former senior systems engineer on Rio Tinto's Mine of the Future program in WA.

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