Embrace the digital space

BY KAITLIN SHAWCROSS

It is time for companies to forget about paper and put themselves on the front line of resources innovation in the digital space, according to mine planning and software company MiPlan Solutions.

With companies desperately requiring cost savings solutions, having access to real-time data in order to optimise operations and production outcomes could make a huge difference.

Co-founder of Perth-based MiPlan Louise Daw said to date miners had really only had two data collection and management options – manual data entry or in-equipment monitoring systems.

To fill the void between manual entry and expensive automated systems, MiPlan created a suite of apps for streamlining and assessing data, management and reporting.

The apps integrate all areas of data collection undertaken at an operation, from manual activities such as pre-starts and drill hole QA/QC (quality assurance/quality control), to in-cab monitoring of production.

The current apps range includes MiDrill, MiBlast, MiDig, MiHaul, MiTime and MiSuper.

The new MiFleet solution was successfully implemented at Whitehaven Coal's Tarrawonga operation, taking the entire site paperless within two months.

"At their operation where they've invested in a traditional fleet management system, it's taken 12 months to get it installed and set up and after 12 months they're still using paper as well as the new unit and our solution costs a tenth of the price," Ms Daw said.

Being bound to equipment for manual drill and blast activities can often be very restricting, which is why MiPlan created its MiDrill and MiBlast apps for use on a tablet that can be moved around as needed.

Ms Daw said this had significant benefits in terms of an ability to turn around a design to blasters, removed the cost

MiPlan Solutions Co-founder and Managing Director Rob Daw.

of manually entering in data and allowed miners to know in real time whether they'd come across voids or cavities.

"If you're a supervisor you can pull up all your blast designs and see the current status of what holes are being drilled at that moment; holes that may have had issues or if there's a variation to what they said they were going to drill," she said.

The app can be used on an Android tablet or iPad and includes a web-based interface for use on a desktop.

The MiD&B app is currently being implemented at all Downer EDI Pilbara iron ore operations and the Kalgoorlie Consolidated Gold Mines Superpit.

MiPlan Solutions last month signed a deal with SRG to roll out an enterprise solution for more than 20 drill rigs across five operations.

"The beauty of it is because they're a contractor, when one of their contracts closes down they can just take the tablets and transfer them to other drill rigs or other operators," Ms Daw said.

"Because they've got a mobile solution it's an investment that lasts for the life of the business, rather than the life of each contract.

"Traditional drilling units would be built in to the drill rig, so if that drill rig goes down, they're no longer getting the real-time data updates.

"They might have to go hire a third party drill rig in the interim and that obviously doesn't have the software installed. With our solution you can just take the tablet out of that drill rig, walk over to the new one and just keep going."

MiPlan's MiDig gives operators insight in to a location's volume, grade and density while the MiHaul app simplifies the ability to track fleet movements and provides suggestions for optimising fleet movement in real time.

MiTime is specifically designed to give insight into the activities of ancillary equipment and MiSuper is an app especially for supervisors. **NMC**

All-in-one solution

Global information technology company Hexagon Mining has created a comprehensive solution for exploration, modelling, design, scheduling and production, allowing miners to access all site plans in one place.

Hexagon Mining Integration Principal Product Manager Mark Gabbitus said the company's MineSight software created a single space for everything from mine planning to fleet management and safety.

"It means buying one integrated solution from one technology company that is committed to connecting all parts of a mine with products that make sense of data in real time," he said.

MineSight operates on a standard Windows PC platform with several key open database applications.

New licenses and standalone solutions mean smaller mines can now integrate the solutions into their workflow, even if they don't own a full version of MineSight. Standalone versions allow companies to import data from a non-MineSight system, calculate results and then export that data to another system.

"Previously, we were considered too expensive for this sector," Hexagon Mining President Hélio Samora said.

"These licensing options and standalone tools will now make Hexagon Mining an attractive and affordable solutions provider to smaller mines."

Standalone solutions include HxM Blast, which allows miners to monitor and adjust a blast from design through to implementation, and HxM Explorer delivers CAD (computer-aided design) and surface modelling tools for building implicit surfaces and solids directly from drill hole data.

Also available are HxM Modeler for analysing data gathered in the field campaign, MineSight Atlas for manual scheduling and stockpile management and MineSight Schedule Optimiser (MSO).

Mr Gabbitus said the MineSight software tackled all geomodelling mining applications and was used in underground and surface mines, from precious to base metals, for coal, oil, sands and industrial minerals.

"Hexagon Mining recently launched flexible and affordable licenses which broaden MineSight's appeal to the industrial

Mark Gabbitus.

minerals market, which typically represents smaller mining operations for non-metallic deposits such as granite, marble and limestone," he said.

"We're also targeting the exploration market with License to Explore, an attractive lease license arming explorers with the powerful tools they need to produce high-quality data."

MineSight is being used internationally from Red Dog, Alaska to OK Tedi in Papua New Guinea. **NMC**