

guiding principles

Success or failure in the mining industry relies on the availability of information and how to process it, says Pieter Nel, CEO of MineRP. By KERRY DIMMER

Mining always carries a level of uncertainty and while risk can be estimated, there are thousands of possible scenarios that may cause hiccups in production schedules. Anticipating those and accounting for them, is extraordinarily difficult in such a capital and human-intensive business where the diversity of operations and external factors can impact significantly on outcomes.

Fortunately technology, and in this case mining technical software, has brought about solutions that allow for a thorough exchange of information throughout the value chain.

‘Collating all the data needed to manage a mining operation is one of the biggest challenges for mining companies,’ says Pieter Nel, CEO of MineRP. MineRP provides technical mining enterprise and mining technical software solutions globally.

‘Mining technical data is created by discipline experts, be that in spreadsheets or any number of brilliant software tools. But when it comes to sharing and integrating these technical domains, people and systems remain highly fragmented,’ explains Nel.

‘In spite of good intentions, different mining specialists, such as geologists, engineers, planners or surveyors, are generally not able to collaborate easily and effectively. While they may share a picture or a block model, it is not always possible to manually integrate

all the processes that make these specialists work as an effective team.’

More than just integrating mining technical disciplines, there is an additional requirement to marry the technical side of mining with the commercial side.

This can only be done by establishing a platform for the integration of mining technical information with the commercial information contained in systems provided by companies such as SAP, Microsoft, Oracle and others.

This is something that MineRP identified as a priority in 1997, when it was established as a subsidiary to Anglo American.

‘From day one we were focused on the integration of mining technical data, something we had identified as the biggest shortcoming in the industry. While we initially focused on building a natively integrated solution set, covering the technical domains for precious metals, recent years have seen MineRP redoubling its efforts to develop a platform for provider-independent mining data integration and interoperation.

‘We needed to provide a way that enabled mining experts to continue using the mining technical solutions that worked for them, yet be able to collaborate as a team without the need to buy all required systems from a single vendor by using the MineRP framework for enterprise integration.’

The focus on enterprise integration framework development forms one leg of MineRP’s two-pronged software development approach, the other being the development of expert mining tools aimed at the specialists who create data.

The company’s enterprise solutions enable the seamless integration of tools developed by MineRP or other vendors of mining technical solutions. Its expert solutions deliver niche functionality to specific disciplines, such as mine planning and design/survey solutions.

Spearheading the expert solutions portfolio are products such as Mine2-4D, EPS and MineCAD.

Nel says that MineRP has plans in the next calendar year to capitalise on the release of the latest version of Mine2-4D, the mine planning solution that is tightly integrated with the company’s EPS production scheduling product.

The enterprise solutions offered by MineRP are differentiated by their focus on formalised, structured data management and the relation of different mining datasets around a common spatial reference.

From an operational perspective, this enables improvements in activities such as planning and workflow, hot spot identification, action management and much more. Added to these operational benefits, MineRP allows

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for the effective management of big datasets created at mining operations and the spatial and traditional analysis thereof delivered over the web. Analysis is made easier and, as Nel points out, aside from being far cheaper than using human capacity, MineRP's enterprise platform also enables management to make better decisions earlier.

MineRP is one of the top three suppliers of mining technical information systems in the world. With nine offices across five continents, all situated close to mining operations, its user base is vast. Some clients boast up to 2 000 users on a single integrated implementation.

'We know we are the biggest player in the enterprise software development and implementation space in the mining industry. We have also caught up with other suppliers of niche applications, but we will not duplicate products that already exist on the market. We prefer to pioneer enterprise development and provide solutions to mining companies of all shapes and sizes, from the SMEs that need cost-effective solutions to manage the collection of data to the largest diversified global mining houses,' says Nel.

Structuring solutions that fit the variety of mining enterprises and budgets in the market is one of the key focus areas for MineRP.

As such it recently introduced a uniquely designed packaged solution called the MineRP Planning Collaborator.

It allows mines to implement Mine2-4D (for mine design and planning), EPS (for scheduling), and MineCAD-SDB (drafting, plotting and data management) on a single implementation of SpatialDB, SpatialDash and SpatialAnalyzer.

'Not only is this package offered at an unbelievable price, but MineRP's Planning Collaborator can be implemented on site within 10 days and will allow mines to plan remotely while sharing their plans over the web,' he says.

Mine locations are always going to be a problem, which is why technology-based solution packages are so effective, explains Nel.

'MineRP's Planning Collaborator will allow remote and centralised planning offices to effectively share information and improve on elements such as design standards, feedback cycles and much more. We are currently developing something similar for the mine survey discipline and other niche areas.'

According to Nel, there are at least five high-level benefits for clients using MineRP's solutions.

'There is the competitive advantage that one mining operation has over another. Compliance and legal standards can be identified and enforced. Information availability is instantaneous and results in being able to make the right decisions quickly. And finally, presentation – which is important because you cannot see what lies underground.'

Growth for MineRP will come from three pillars: geographical expansion, strategic partnerships and extending solutions from the planning room into the boardroom.

The company plans to extend its geographic footprint in Ghana, the Philippines, Brazil and Peru. Its main strategy is to follow current clients into all areas where they operate and then penetrate surrounding areas from there.

Says Nel: 'MineRP is pursuing strategic partnerships that will further strengthen its sales footprint and product delivery capabilities over the next year.'

'As far as its planning room to boardroom strategy is concerned, the focus is on introducing our enterprise integration capabilities to the expansive network of companies currently utilising products such as our highly successful Mine2-4D, EPS and MineCAD offerings.'

With the recent centralisation of all software development teams at its head office in South Africa, MineRP has managed to cut down significantly on software development costs while positioning its various product teams for optimal planning, development and maintenance.

Across the globe MineRP has a single vision: 'To be the global standard for enterprise inter-operability, integration and analytics solutions in the mining industry.'

With the dawning of big data management and visualisation tools, information has truly become the source that determines the real value of what lies beneath. **MD**