# Mining Magazine (1969)



# Fleet management

The world's biggest FMS vendors talk R&D and new products for 2014

# **Workforce well-being**

From accommodation to work rosters and mental health, make sure your team is fit for work

### Water treatment

Best-practice advice and current projects from experts around the globe

# **Mapping & surveying**

Learn how inversion modelling and laser mapping techniques can be used to boost safety and productivity at surface and underground mines

when it has to be right

# **Collaborative learning**

uring a recent discussion on Aspermont's LinkedIn group, Mining News & Networking, regarding innovation within the mining sector, a very important point was raised. While everyone involved in the discussion agreed that innovation, specifically technology development and implementation, is key to ensuring the sustainable and economic future of mining, several people pointed out that relationships between miners and vendors are currently not conducive to optimal technology development.

To many, this will not come as a surprise. However, given the importance of collaboration in advancing the state of play within the sector, this is something that needs to be addressed, and quickly. Closer ties between technology providers and miners not only mean that R&D spend is more targeted and effective, but there is also the possibility to add value downstream.

Virtual Consulting International (VCI) published a very interesting report last year. 'Mining innovation state of play 2013' details the findings from a survey of top mining executives from 25 of the world's biggest mining companies – see: http://www.govci.com/thoughts/40/thoughts/mining-innovation-state-of-play-2013

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It revealed that while 100% of the companies involved regard innovation (doing new things, utilising technology and increasing business value) as important in reaching their objectives, 81% don't have a formalised approach to implementing innovation, and 62% said that their innovation efforts were either ad hoc or non-existent.

VCI points out that this lack of a structured approach reflects the fact that most mining companies see innovation as a value add, and not as essential for survival or growth.

The structure of competition within the industry is also a factor. Innovation often requires high capital and infrastructure investments, and for companies with long-life, low-cost orebodies, the need to innovate is simply not great enough. In contrast, companies whose operations are marginally profitable over the long term need to innovate in order to survive.

More worryingly, only 25% of the companies surveyed saw their technology introductions as being successful. This is where better collaboration with technology and service providers and research institutes can come into play.

When entered into properly, such relationships are mutually beneficial. All parties involved share in the investment (risk) to some degree, the drivers behind the initiative can be better understood, and improved access to resources can mean that the outcome of the programme/uptake of the technology is more successful.

Mining companies that take a proactive and long-term approach to innovation, and build up a solid network of relationships with technology vendors and research organisations globally, are likely to be the real winners here.

As programmes such as Rio Tinto's Mine of the Future begin to bear fruit, and technologies born from team work (for example, CRCMining's Cave Tracker system developed with Newmont, Rio and Elexon Electronics) gain acceptance, it will be interesting to see which mining companies look to embrace collaboration and innovation in the coming years and use them to drive a

tion and innovation in the coming years and use them to drive a competitive advantage. I suspect it will also be very telling as to which ones continue to regard them as important but discretionary factors.

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### Next month

Haulage	Heap leaching
Oils & lubricants	Marine mining
Copper mining	Mine security

### COVER

The Leica Jigsaw Mine Management Solution (Leica Jigsaw) is a fleet-management and production-optimisation system that contains proven utilisation and optimisation algorithms. When implemented, the algorithms, in conjunction with the rest of the system, improve time management and increase production, with a measurable reduction of costs. This was experienced at African Barrick Gold's North Mara mine, which increased production output by 28%, improved equipment utilisation by 7%, and measured cost savings of over U\$\$300,000.

For more information on Leica's success at North Mara, see the *Mining Magazine* iPad app for an exclusive feature









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