MINING TRENDS 2018
What you need to know in the METS sector
The Australian mining industry's turnaround continues to gather momentum as 2018 approaches.

A theme of cautious optimism has become common in mining despite a significant improvement in market conditions, which was sparked by the rising value of many key commodities mined in Australia in late 2016.

Commodity values shape the fortunes of most mining companies and, if 2017 is any guide, price volatility continues to be the norm.

Iron ore, for example, has experienced a roller coaster ride for much of the year – the bulk commodity has fluctuated furiously between $US47-$US90 a tonne since January.

This floor in iron ore’s 2017 value is still a significant improvement on the $US31 a tonne it was worth at the start of 2016.

However, the gap between its annual high provides a reminder that complacency has no place in the mining industry and why companies have been urged to look ahead with caution.

Mining’s major companies, the likes of BHP, Rio Tinto and Fortescue Metals Group, have been transparent in their vigilant attitudes in the face of a resurgent marketplace.

Industry cycles are not new to these companies, while the harsh lessons that followed the mining boom continue to ring in the ears of their executives and management.

Mining equipment, technology and services (METS) companies are following this lead as they navigate an evolving environment.

Industry body, Austmine, described the opportunity for the METS sector for Australian Mining: “There is an exciting shift happening in the mining industry which, over the last 12 months, has resulted in changes in attitudes, outlook and thinking.

“Talk of industry collaboration has moved from concept to a reality. New business models are being discussed that challenge traditional ownership structures and empower greater community economic benefit.”

So, what are the key considerations for the METS sector in the modern-day mining industry:

**COLLABORATION**

As Austmine confirmed, collaboration has become a reality in Australian mining. And wow, what a change this situation is from the past.

Mining is breaking away from its reputation as a secretive and siloed industry where intelligence and data is hidden and not shared. Australia is leading the way in this movement and the METS sector has a key role to play.

Major mining companies are exploring how they can work together with OEMs, mining services companies and suppliers to find ways to enhance operations and overcome challenges.
Austmine’s Co-Labs (Collaboration Laboratories) is an initiative that has demonstrated the value of collaboration in mining. Co-Labs, a series of four intensive workshops, is delivering a new way of thinking by combining the expertise of technical specialists, industry stalwarts and strategic thinkers from the industry.

Deloitte Australia national mining leader Nicki Ivory said these collaborative efforts were creating ecosystems that were helping the mining industry. “We have seen (ecosystems) in other industries. This is an example of stuff that has been done well in other industries, like medical research for example, where it has been done well for many years,” Ivory said.

The Unearthed Hackathon Program is another great example of how a collaborative environment is being developed. The program, which has taken place in Sydney, Melbourne, Perth and Brisbane during 2017, brings together software developers with the resources sector to develop solutions for industry problems.

Sandvik automation vice president Riku Pulli described technology, automation and smart mining as expectations of the industry that had become reality. “Sandvik customers are reporting significant benefits gained by using these technologies in regards to higher utilisation, less equipment damage and remarkable improvement in capabilities in controlling the mining process in real time,” Pulli told Australian Mining.

Safety is another key area of mining that has benefitted greatly from technology. “Above all, automation has proven to improve mining safety significantly, and Sandvik is proud to report that there are more than 1.5 million operating hours with (Sandvik’s) AutoMine Loading and Hauling gained globally with zero lost time injuries,” Pulli continued.

WORKFORCE MANAGEMENT

Mining, like many industries, is grappling with the impact technology will have on workforces. The push towards autonomous operations may be reducing costs and increasing productivity at mines, but it has also instilled fear into the minds of many mine workers who believe it is putting their jobs at risk. The jury is still out on what workforces will look like in a digital mining environment. This issue has, however, become a focus area of the collaborative efforts being put in by the industry, which may also be beneficial for the METS sector as it can learn from miners already grappling with this concern.

Diversity is the trendiest human resources strategy in mining. BHP has led the way with its target of a 50 per cent female target, while Fortescue has integrated Indigenous Australians into its workforce like few other companies before it.

Mining services companies are following these benchmarks by establishing Indigenous-based contractors that are sharing in the award of contacts around the country.

It is widely considered that diversity supports growth for mining companies, with complementary personal values also now frequently pursued to round out this human resources endeavours. Iron ore operator Roy Hill has openly expressed that this is the direction of its recruitment strategy. “We’re changing the way we recruit at Roy Hill. Our focus isn’t just on mining, or people with mining experience – we’re on the lookout for people whose values and attributes align with ours,” Roy Hill said.

TECHNOLOGY

The market’s improvement has led to an increase in company revenues and profits. This is paving the way for more companies to invest in technology and what could become the digital mining era.

For major miners like BHP and Rio Tinto, their digital mining era was years ago, with the development of advanced operations centres and the introduction of autonomous technology at mine sites.

The mid-tier of mining and the METS sector is now making its move as their economics become healthier and these technologies become more affordable. OEM Sandvik, which provides equipment for many Australian miners, has been at the forefront of the technology movement as it aims to satisfy the demands of clients.

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INNOVATION & PRODUCTIVITY IMPROVEMENT

Innovation and how mining can improve its productivity would have topped the list of priorities for mining and METS companies a few years ago. The two words were on everyone’s lips as the industry pursued refuge during the commodities downturn.

Innovation and productivity improvements remain vitally important for the industry. Both have, however, evolved as the industry has gradually recovered.

The topics discussed to this point of the white paper are by-products of the innovation and productivity focus. Each is integral to the productivity push that was launched during the commodities downturn, while also emerging as methods for how mining companies can be innovative.

The next era of innovation remains a priority for mining and looks as though it has now developed into a constant consideration in the industry’s future direction.

Komatsu indicated this is the case at the OEM by establishing an Australian market innovation team in mid-2017. The team is building on Komatsu’s implementation of information technology to take advantage of the equipment manufacturer’s technologies and innovations.

Todd Connolly, general manager of the innovation team, said his role had been designed to ensure the company remained at the forefront of technology and innovation for the benefit of customers.

“Innovation, by its nature, means we always have to be looking forward, to see what trends and disruptive technologies are coming down the line, so we can best serve our customers,” Connolly said.

Productivity is set to be another mainstay in the future of mining – the performance of BHP and Rio Tinto since they implemented their productivity programs has set an example for the rest of the industry and those looking to call these miners clients.

Both companies have reported spiking profits in 2017 and declared their productivity initiatives as key reasons why.