

How Covid-19 is driving the need for mining companies to accelerate digitalisation

By Louis Retief 15 Sep 2020

There's no doubt the Covid-19 pandemic has fundamentally shifted the world of business, forcing organisations across sectors to rethink their business models and implement responsive operational changes. However, the mining industry is a different ball game altogether - mine workers can't simply work from home to curb the spread of the virus. Responsibly managing Covid-19-related risks extends beyond the obvious for mining companies.



Louis Retief, general manager Innovation and IM, Exxaro.

As the supply of minerals and metals has a significant knock-on effect for the rest of the country – impacting supply chains, manufacturing industries, various economies and the general public – mining organisations must embrace digital technologies to ensure the safety of their employees during this challenging time.

If anything, this crisis has thrust digitalisation into the spotlight, spurring mining leaders to speed up their adoption of automated systems and data-enabled machinery. Digital transformation has become critical for mining companies to not only survive but to thrive beyond the current pandemic and well into the fourth industrial revolution.

Let's look at what this means for our industry as we continue to adapt to an ever-changing environment.

The importance of digitalisation in mining

Over the past few years, digitalisation has had a significant impact on improving the efficiency of mining operations. Advancements in data visualisation and analytics, the Internet of Things (IoT) and automation technology have unlocked major productivity and cost-saving benefits in our sector.

As local mines return to full staffing capacity, the use of integrated digital solutions that gather and analyse operational data is more crucial than ever. Mining companies can use these valuable insights to make well-informed business decisions, particularly relating to managing risks and strengthening safety measures. For example, integrated operations centres across all our business units break down boundaries in the value chain and promote a single view of the operation, thereby driving improved understanding and decision making. By using automated weighbridges at our digital and connected Belfast mine, we can operate at the highest level of throughput and accuracy.

During the Covid-19 period, mining companies can also use digital technologies to screen their workers, alert infected employees, monitor and track their contact with others or book visits to our head office. Our implementations of digital signature solutions also negate the need for documents having to be distributed physically for approvals. We a mobile phone platform to convey information and conduct surveys with all of our employees and contractors. We have a responsibility to prioritise the health and safety of all our employees and leveraging digital tools can help us do just that.

Innovative mining during uncertainty

While the future of our industry and how we'll work is unclear, we do know that agility is key for mining businesses to seize digital opportunities. Companies that are forward-thinking in their approach and those that leverage technologies to transform their business are set to yield even more benefits in a digitally driven world.

We are targeting up to a 25% improvement in productivity through an enterprise-wide digitalisation strategy that includes adopting a "cloud first" approach with the deployment of scalable digital platforms e.g. for customer and supplier engagement, IoT, advanced analytics, robotics, automation and virtual/augmented reality. We are adopting technologies that will enhance the way our people work, rather than displace them, and upskilling our workforce to be able to operate these new platforms. A cultural drive that trains employees and promotes teamwork is crucial as it minimises the disruptions that digitalisation brings.

With increased operational efficiency, improved collaboration among stakeholders and enhanced employee safety, the value of digitalisation in our sector can't be emphasised enough. Covid-19 has undoubtedly sparked the urgency for mining companies to accelerate their digital transformation, presenting a prime opportunity for our industry to weather the storm of change.

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