

Josh Goveia, Production Engineer, Barrick Gold Corporation, Zambia

## A look at future morphology of the mining industry

The mining industry has been somewhat laggard compared to its other primary industry peers in recent years, particularly with respect to response and adaptation in a changing world economy, and a more volatile and dynamic marketplace. Technological advancements through digitisation and digitalisation are creating catalysts for an entirely new mode and method of operation, encouraging both a strong introspective and retrospective look at traditional ways of thinking in an industry whose roots are still strongly embedded within conventional paradigms.

Considering the recent outbreak of COVID-19, both the industryand the broader world economy, could not anticipate in full what the effects would be in both a direct and indirect form. A great deal of speculation has surrounded the pandemic, and the truth of the matter is that it will be unlikely that experts will fully quantify the genuine damage until after-the-fact. What is for certain, however, is that as an industry, mining has suffered.

Restrictions at Peruvian mines in an effort to stamp control over the pandemic halted commodity production of silver, gold, and copper. In South Africa, many of the underground mines in the famous Witwatersrand Goldfields had operations suspended indefinitely as Cyril Ramaphosa's government attempted to curtail the spread of the virus and mitigate the impacts that it would have on a highly labour-intensive industry. In the broader Southern-African Development Community, Latin-America, West-African Goldfields and parts of Australia, the impact of a reduced labour force and disruptions in critical supply chains has led to many companies reducing production of key-metals and revising market forecasts. The diminished demand from the East, driven through a forced economic downturn, has made companies realise their specific dependence on Chinese markets, and has cemented the importance of the creation and/or support of localised or alternative market demand. Critically, the most important realisation that has come out of all of this chaos is that mining needs to transform.

As a player in a much larger ecosystem, mining needs to look more assiduously and meticulously at upskilling their collective workforce to enable them to and compete in an age of Industry 4.0. The role of traditionalist labour will need to be remoulded to be more fit-for-purpose in an increasingly complex sector. This leaves room for the development of critical skills which are current and cross-functional, promoting the long-term sustainability of the sector and its related sub-industries. The pandemic has shown that the move toward developed technologies and autonomy needs to be both calculated and deliberate, but also expeditious. Furthermore, it has emphasised the elephant in the room: an almost extreme lack of sustainable local-sourcing and procurement practices. Operations will have to place greater attention and significance on their responsibilities from a corporate and social perspective to assist in the development of localised supply chains. This is collaboratively beneficial for the operations and their respective host-communities.

Dire struggle is oftentimes coupled or paired with opportunistic upside. Mining needs to see this pandemic for what it is: a signal for adaptation and change. The reality is that there will eventually be an evolution and establishment of a "new norm", which will very likely change the way in which business in conducted in general. The transformation from laggard to leader will indeed be a tough journey with near insurmountable odds, but success will be strongly predicated on one thing: necessity. For the sake of progression, and indeed, ultimate survival, industry will need to heed the call.

Reading and References: 1. Steen, J. (2020) 'How the coronavirus pandemic has disrupted the global mining industry', The Conversation, 30 April. Available at: https://theconversation.com/how-the-coronavirus-pandemic-has-disrupted-the-global-mining-industry-137384 (Accessed: 10 July 2020). 2. PwC (2017) 'We need to talk: About the future of mining'. Available at: https://www.pwc.com/gx/en/energy-utilities-mining/assets/pwc-mining-transformation-final.pdf (Accessed 10 July 2020).

220 JULY 2020