

KEYNOTE ADDRESS: “EXPLORING 10 INSIGHTS INTO VALUE CREATION THROUGH 4IR, DIGITAL, AND ESG - AN INTRODUCTION TO THE 2023 STUDY”

Good morning and welcome to this event, which highlights the work we as an industry are doing to modernise and make mining safer and healthier while at the same time making it a career men and women want to join and remain in for the long term.

The mining industry employs nearly 72,000 women out of a workforce of 475,500 people, which equates to 15%. While the number seems low, consider that no women were employed in the sector before 1998 by law. The growing participation of women in mining will be encouraged by the transition of our industry into a modern, safe and healthy environment for everyone both physically and emotionally.

The Minerals Council South Africa, in collaboration with PwC and the Mandela Mining Precinct, launched its first study into ‘the State of Digitalisation and 4IR in SA Mining’, in 2020. The study’s findings were summarised into Ten Insights. These Insights were globally well received and disseminated.

Many mining companies referenced that Report to either kick off or accelerate their Digitalisation and 4IR Preparedness Journeys. The onset of COVID-19 also played a role in the industry embracing digitalisation and 4IR technologies at their operations. Attention was given to key strategies for maturing companies’ Modernisation and Digitalisation programmes. Furthermore, the Minerals Council’s Board, mandated PWC’s Smart mining Team, and the Mandela Mining Precinct’s Real-Time Information Management Systems programme, to perform this study every two years.

The 2020 Report was presented to the original equipment manufacturers community supply the mining industry. These equipment developers and suppliers used the findings to understand their clients’ needs, priorities, and focus areas better.

One such Service and Solution Provider stated:

“This two-yearly report has been fundamental in our understanding of the mining industry and has directly contributed to the growth and success of our company. We are grateful for its

insights and look forward to continued success with its guidance. Thank you” Lee Bothma, Chief Sales Officer, Nerospec OSCON.

Digital transformation is an imperative for mining – a non-negotiable if you like – as it serves as the seamless thread through all of the mining value chain processes, and enhances safety and health, security, production, and workforce and leadership capability. The implementation of these processes needs to be executed with care and responsibility. This formed the basis for the 2022 study, which has included the environmental, social and governance (ESG) aspects of mining, which are so important to mining companies’ boards, investors, communities and stakeholders.

The 2020 Study focused purely on Digital Transformation and 4IR Readiness. The 2022 study was expanded to include ESG aspects into the study to bring the industry in line with what is expected of companies in a modern world. Furthermore, the target respondents for the survey were predominantly CEOs, and/or nominated senior leaders from their companies. We also interviewed organised labour representatives. The study was anonymised. The aim was to search for a broad range of opinions to extrapolate the implications of digital transformation on South African mining and ESG – thereby formulating impact statements and addressing the ‘so-what’s’.

Many Insights – in fact more than 30 – were extrapolated from the Study, but again summarised into Ten (as you can see from the slide) – thereby addressing the categories of Vision, Priorities and Strategy; Workforce; Business Sustainability, ESG Imperatives, Stakeholder Collaborations.

A striking difference from the previous Study is how prolific and integrated all of these issues have become. We can no longer speak or think about these issues in silos - they are integrated, holistically connected, and comprise systems of systems.

The Ten Insights are:

1. Mining CEOs and their Executives are being deliberate
2. Technology is being applied where it has the greatest measurable benefit
3. The hunt for value requires cooperation and compromise
4. Digital tools don’t just measure, they contribute
5. The imperatives for sustainability, and the crown jewels
6. We are up to the challenge and have the tools to win
7. Mining is about people – and we need to fight globally for talent
8. ESG – critical for business survival or tick-box?
9. Regulations shape ESG (for better or worse)
10. ESG drives long-term value

Ian MacKay and Jean-Jacques Verhaeghe will elaborate on each of these in more detail in the next programme item.

What is glaringly obvious though, is that our miners have distinctly moved on from pondering 'the why' in terms of digital transformation, to 'the how' and 'the what'. This is encouraging and so mining is moving firmly away from a perceived notion that it is a laggard in adopting 4IR and digitalisation.

Our industry leaders are driving the digital transformation vision and expect to enjoy the results in the next few years. They are also very clear about their companies' role in meeting the ESG expectations but have powerful and thought-provoking insights to share and enact.

I'll leave the detail to JJ and Ian to expand on but I just want to highlight a few pertinent results. Our miners recognise the opportunity to leverage Technology infrastructures, such as ICT, to improve their ESG control systems, especially with the use of data across the entire mining value chain and its processes, and disciplines. It also becomes clear that the move away from distinct point solutioning is increasingly becoming the preferred option. Use, re-use, optimise and re-use again is how one CEO framed it. And so some miners emphasise the importance of 'data-mining'.

Modern Integration requires new approaches – new ways of thinking – out-of-the-box engineering, and hence demand new skills to be enacted. The Executives expect more up-to-date expertise from their technical teams, ICT departments, ESG Functions such as Risk, Governance, Environmental, and Social, What applied and worked 10 years ago no longer suffices to meet the goals of modern mining. The factors of uncertainty, complexity and plurality need to be management differently, and so mining is learning from other industries. The opportunity to leverage digital better for the purposes of ESG exists – this notion is supported by organised labour – and our CEOs intuitively know (and expect) that data-flow and information-sharing will occur for the ESG Functions by means of the digital systems. They, and their technical teams, are exploring the mechanics, which are the standards and reference architectures, of how this will be improved and materialised.

Indications to-date and from the feedback of our respondents, points to the notion that digital transformation and ESG practices are paying off – qualitatively and quantitatively. Improvements are being noted. They are also seizing opportunities to solve problems that other entities cannot, such as Eskom and Transnet - With a 'we can wait no longer- we will get things done attitude'.

Our CEOs and mining operations across the nation are taking on the mantle of becoming 'ecosystem' leaders where they operate. Having said that, they also strongly appeal to all stakeholders to play an increasingly profound and meaningful role towards business sustainability and impact. This is at a national government level, and inherent expectations of a sound regulatory environment, as well as at a local government level for stable, functional service delivery and community upliftment. The ecosystem included collaboration and public-private -partnership entities such as the Mandela Mining Precinct, and academia to prepare the next generation in the workplace.

The Report captures important recommendations by CEOs – namely that enhanced and real collaboration between parties in the mining industry is paramount for success. Furthermore, it states that the existing mechanisms that enable such collaboration needs to be leveraged by willing stakeholders. The CEOs specifically noted the Minerals Council's programmes and those of the Mandela Mining Precinct.

Tools and systems have been developed -- or under development -- to enhance executives' abilities to make better decisions with regards to their digital transformation efforts, such as the RTIMS Digitalisation Business case and Benefits Tracking methodology and tool set, which is available on the Mandela Mining Precinct's Know more public portal.

The Final 2022/2023 Survey Report is available for download from the PwC website and will also be made available on the websites of the Minerals Council and Mandela Mining Precinct. Our expectation is that this Study and its results will have a profound effect and influence on how we mine metals and minerals if or the future and continue #MakingMiningMatter.

Special thanks to the Research team who made this Study possible. We thank you all, for your attendance at this event and wish you enjoyable and productive engagements.