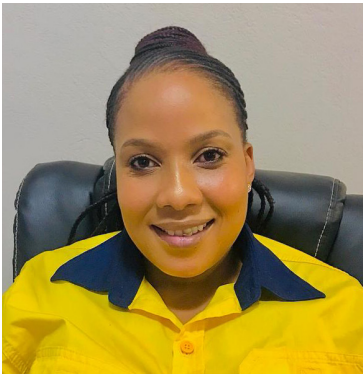


# THE WOMEN IN MINING MODERNISATION HEROES



**Ladonah Pampon**  
Digitalization Project  
Manager, Royal  
Bafokeng Platinum

As a Digitalization Project Manager for Royal Bafokeng Platinum (RBP), Ladonah is responsible for the infrastructure and development of the Digitalization Project for the Trackless fleet at RBP's Styldrift Mine, a project which has resulted in Styldrift mine in becoming one of the most modernized Trackless mines in South Africa - something in which her motivation, innovation, work ethic and commitment to the team has played a key role.

Ladonah and her team have put Styldrift and RBP on the innovation map by installing underground Wi-Fi networks and mining and engineering apps which have reduced control room workloads by more than 30%. Ladonah has also implemented the installation of a Trackless machine knowledge box and the associated information downloading processes, which now provide an accurate and immediate picture of the status of all machines before even the hands-on operating personnel have that information. This innovation has had a significant impact on workload reduction and accurate reporting.

In her role, Ladonah ensured not only the seamless roll-out of the project, but that its benefits were understood by all her colleagues. Ladonah's inclusive approach fostered critical collaboration between the mining and engineering departments, bridging gaps which had existed previously. For the first time they are working hand in hand, discussing the same issues and together coming up with solutions to rectify them, to the benefit of the entire operation. Fixing mechanical devices is very difficult but changing people's mindsets is far harder - the fact that Ladonah has managed to do that is an achievement beyond recognition.

Her positive attitude and knowledge made this project a learning experience for her colleagues and taught them the art of working smart, in contrast to just working hard. Her infectious attitude, hard work and perseverance have slowly spread throughout Styldrift and have marked a turning point for mining and engineering.

The project has put the mine and Royal Bafokeng Platinum on the innovation map.



**Simangele Soni**  
Senior Operations  
Manager, De Beers

**Simangele Soni is the Senior Operations Manager at De Beers Sightholder Sales South Africa (DBSSSA), where all De Beers South Africa's diamonds are sorted and valued. Simangele is passionate about embracing and leveraging technology and has played a leading role in defining the skills of the future for DBSSSA in light of Industry 4.0.**

Simangele is a dynamic leader and process expert, and developed an Operational Excellence (OE) strategy for DBSSSA to ensure that an OE culture is embedded and sustained within the business by:

- Driving for an OE culture
- Building OE capacity
- Ensuring stable, measurable and predictable processes
- Reducing waste
- Using data to support decision making

Simangele's contribution to DBSSSA has ignited change in the culture of the business and has challenged employees to become more agile in their approach to work. The business has seen a number of positive changes, including:

- OE capacity developed in team leaders through an 18-month productivity learnership, as well as other short courses
- Production processes are now stable, measurable and predictable
- Waste reduced through process optimisation as well as through an operation wide 5S process to de-clutter the business
- Data used at all levels to support decision making through daily data capturing

Simangele forms part of the Global Operations Leadership Team who have been instrumental in mapping out a five-year technology roadmap with a drive to increase process automation to ensure that employees focus on value adding work and not repetitive processes.

Simangele has also reviewed the business' operating model to leverage technology and reduce reliance on human resources, given the specialization and criticality of sorting skills. At the same time, she has reviewed future skills to ensure that humans and machines can work side by side into the future.



## Lizelle Prinsloo

**Senior Chief Rock Engineer, Anglo American Platinum**

**Lizelle is the Senior Chief Rock Engineer at Anglo American Platinum's Amandelbult Complex, and was recently elected the 1<sup>st</sup> female President of the South African National Institute for Rock Engineering (SANIRE).**

In her role, Lizelle has initiated and implemented several projects that contributed significantly to the safety of underground workers from a Fall of Ground perspective. These include:

1. The development (in collaboration with a supplier) of a lighting instrument that is used during the start of shift inspection following a blast, improving the crew's ability to identify rock related hazards. It also has an impact on crew morale and improves productivity. Previously UG workers were reliant on cap lamps that provided limited lighting.
2. Successfully testing and implementing a device used to pre-stress timber elongates (a mine pole installed to support the hanging wall of a stope). This increases elongate longevity and a more even hanging wall load. This also allowed for the reduction of elongate diameter, making it much easier for crews to handle (and a significant cost reduction for the company).
3. Converting a section with difficult ground conditions to a more stringent timber-less support system resulting in a much safer working environment. She successfully tested a similar "timber-less" support system, where longer tendons are installed at the face, again making the mining environment much safer with an additional benefit of an improved mining cycle.

All of these initiatives have contributed to the excellent FOG safety record at the mine, reduced costs and improved productivity.

Lizelle has also introduced systems to develop the people within her department and is a role model to her team. Her work has also ensured that a large number of local community people on learnership programs have been absorbed in her department as permanent employees.



## Corlia Smit

**Manager: Business Improvement, Exxaro Coal (Pty) Ltd**

**Corlia Smit is Manager: Business Improvement at Exxaro Coal, whose modernisation credentials are demonstrated by her ability to link the future potential unlocked by automated data and systems to the current reality and to then create a practical plan to move through the levels in an agile manner.**

Corlia has made a significant modernisation impact in a number of areas, in this case specifically related to Exxaro's Grootegeluk Mine, including -

- Playing a key role in developing and executing the Grootegeluk digitization strategy, taking Grootegeluk into a digital era where citizen reporting, citizen data science and citizen development accelerate and sustain value add; and
- Taking ownership of moving Business Improvement to the next level by integrating Operational Excellence and Digital@Exxaro into a single process. This allowed the Grootegeluk team to solve true root cause problems and to sustain the value through structured data and effective systems.

The impact of Corlia's work has been significant.

Grootegeluk moved from a 100% excel-driven data world to a point where the team can deliver effectively on digital projects, reporting and analyses, because data is managed efficiently and is readily available in a structured manner. In addition, Grootegeluk now has an effective digital project approach ensuring agile progress and effective change management to ensure money is spent where it will add value and where that value can be sustained.

Corlia also understood that for Grootegeluk to derive maximum value from its digital journey, its different teams needed to think and operate in a more agile manner, within a cross-functional team. She spent time on coaching and change management not only within her own department but all the other affected departments, to ensure that there was buy-in, understanding and a vision for success that would ensure the success of the various digitalisation projects. In the end, it is people that make the digitalisation journey possible.



**Maryke Burger**

**Senior General Manager,  
Assmang Iron Ore**

**Maryke is the Senior General Manager at Assmang Iron Ore's Beeshoek Mine, leading the team and demonstrating exceptional transformational and collaborative leadership, since 2018. In this time, her commitment to modernisation has manifested in a range of areas, including -**

- Exhibiting exceptional intrapreneurship by undertaking a Pit Optimisation Project at Beeshoek, resulting in the increase of the life of mine (LoM) from five years to approximately 17 years;
- Monitoring exploration activities at satellite ore bodies around Beeshoek, with the intention of further increasing LOM, and thus creating more employment opportunities;
- Showing exceptional Transformational and Collaborative Leadership, resulting in Beeshoek achieving 20,000 fatality-free production shifts – a world record in the industry;
- A year-on-year reduction in LTIFR to zero in September 2021;
- Ensuring Beeshoek consistently meets its contractual obligations to customers in a cost-effective manner;
- Ensuring procurement opportunities for smaller companies, thus contributing to local economic development.

The impact of Maryke's exceptional leadership can be seen across the operation, and at every level. This includes creating a motivational and conducive work environment, where all employees can work safely and see their productivity improve; contributing to shareholder value by being an effective cost producer; the significant positive impact that the increase in Beeshoek's LoM has for employees – resulting in long-term employment for approximately 791 permanent employees and around 300 contractors, all of whom could otherwise have been facing unemployment from 2024; modelling success as a senior woman in the mining industry and thus providing motivation and inspiration for other women who see themselves following a similar path; and the multiple positive impacts felt in Beeshoek's communities as the result of local procurement spend and an increase in community support projects.



## **Moshibudi Mokgashi**

**Manager: Mining  
Development, Exxaro  
Resources**

**Moshibudi Mokgashi, Manager: Mining Development at Exxaro Resources, has been a leader in the Grootegeluk Mine innovation journey, bringing new ways of working that have improved both safety and productivity.**

From her days as a junior engineer, where she introduced the successful purchase, implementation and integration of a new selective mining method - the Vermeer Terrain Leveller - Moshibudi's impact has been in the innovation space.

Promoted to senior engineer, Moshibudi led the Grootegeluk Mining Hackathon session with key stakeholders to identify areas of improvement and opportunity where digital solutions could be introduced, and process optimisation enabled. She then led the solution-creation process to address the identified challenges, coming up with new work ideas that improved productivity and safety.

The impact of Moshibudi's work included improved productivity through better visualization of data to identify improvement opportunities; savings on contractor costs; capital cost savings; improved operator safety; in-time management of mining value chain processes and bin floor management.

In 2019, Moshibudi was appointed Digital Value Chain Lead, and became part of the team building Exxaro's digital strategy. To ensure the successful implementation of these projects, she successfully organised the Grootegeluk D@E Fun Fair where employees could learn about the new technology.

Appointed Manager in the Mining Development section, Moshibudi now leads a team of engineers who support Grootegeluk with new ways of mining, tackling mining problems and introducing innovative ideas. She currently leads the biggest capital project on primary equipment strategy, and works on integration with HR projects to introduce agile and efficient ways of acquiring skills in the community, which will be in execution in the next five years.



## **Wilhemina Ngcobo**

**Senior General Manager:  
Assmang Black Rock  
Mine Operations**

**Wilhemina Ngcobo is the Senior General Manager: Assmang Black Rock Operations, and has displayed exceptional safety leadership, with the operation achieving four million fatality free shifts. During Wilhemina's tenure as Head of Operations, Khumani has in addition consistently achieved and exceeded all its KPIs - production volumes, cost and quality products to the market.**

Wilhemina's innovative thinking is demonstrated in a range of ways - including her initiation of a cavity pumping project at King Operations that unlocked R1 billion worthy of reserves; and her development of an asbestos removal project to create a safer environment for the community.

In January 2021, Wilhemina was seconded to Assmang's Black Rock project to assist in resolving a number of production challenges. In this capacity, she implemented a turnaround strategy resulting in production and cost improvements and increased employee motivation - and reduced a potential product loss by over 50% (from a potential loss of 500,000 tons to one of below 200,000 tons). She has also established an operational readiness team, which will support the transition of Black Rock from Project to Operation.

Across Assmang, Wilhemina's collaborative teamwork programme is gaining support from all stakeholders, who are participating actively in addressing workplace challenges, thereby improving productivity and performance. The programme has also clearly demonstrated that involving employees and union leadership is key to buy-in for such initiatives, and thus to improving productivity.

As a senior Women in Mining leader for Assmang, Wilhemina is a role model for others, demonstrating that women can occupy critical leadership positions in the company and the industry. Her motivation has been a critical factor in more women taking up leadership positions at Assmang.



## **Thabile Makgala**

**Group Executive, Impala Platinum**

**Thabile Makgala is Group Executive for Impala Platinum's Eastern Limb operations – Marula Platinum Mine and Two Rivers Platinum Mine. In that capacity, her impact has been felt not just at every level in those operations, but across the company as a whole.**

The entire South African mining industry is faced with the challenges of rising labour costs, falling productivity, mine safety and skills shortage. In an effort to address these, Thabile proposed, procured and spearheaded the implementation of the XLP (extra low profile) in-stope dozer at the Marula operation. The dozer is remote-operated; limits exposure to fall-of-ground by significantly reducing the need for employees to be present in high-risk areas of the stope; increases the ability to drill, clean and support mechanically; and means the removal of winches from workings – all of which result in increased production rates and improvements in safety performance.

A further example of Thabile's modernisation leadership was as sponsor and roll-out lead on a ground-breaking project giving teams access to data, analytics and reporting. The project amalgamated unstructured data from all six of Impala Platinum's operations and multiple systems into a single cockpit view – giving executives and senior management insight into the company's performance across the KPIs associated with the company's four key pillars of People, Cost, Production, and Safety. It also allows for a more focused drill down into each operation across South Africa, Zimbabwe, and Canada. This single view uses Tableau Dashboarding as well as a Mobile application for iOS and Android devices. The project was also a collaboration of two different vendors and the company's group Business Intelligence team.

In addition to specific projects, Thabile is a role model for women working across Impala Platinum, both with the impact she has in her day-to-day role, but also through the significant work she does in the arena of women in mining, ensuring that women can imagine a career in any aspect of the mining industry that appeals to them.





## **Dr Annamare Wolmarans**

**Manager: Information Management, Exxaro Resources**

**In her capacity as Manager: Information Management at Exxaro Resources' Grootegeluk Complex, Dr Annamare Wolmarans developed and implemented innovative digital solutions which enabled Exxaro to deal effectively with the challenges posed by the Covid-19 pandemic. In doing so, her work played a significant role in ensuring that Exxaro was able to guarantee the continuation of operational activities which were crucial for providing coal to Eskom's Matimba and Medupi power stations, thus literally keeping our lights on.**

The specific initiatives developed and rolled out as a result of Annamare's work included:

- A mobile digital solution that captured employee temperatures as part of the Covid-19 screening process.
- A mobile digital solution which assisted in the tracking and tracing of contacts of employees who had tested positive for Covid-19.
- The installation of automated turnstiles to ensure social distancing at entrance points, as well as to limit employee exposure to high-touch areas.
- The implementation of a Smart Hat solution to enable virtual site inspections for project teams, tender clarification meetings and contractors - thus limiting the number of people that were required to travel to Grootegeluk mine or to be onsite during the various phases of the lock down period.

In addition to her work as Head of Information Technology at Grootegeluk, Annemare is also passionate about the coaching, mentoring and development of girls and women in the community, as well as women in mining and women in leadership at Exxaro. She is currently involved in mentoring grade 10 - 12 girls from schools in the Lephalale community, lecturing and giving talks on Women in Leadership. She has also developed a three-day internal training course to empower Women in Mining. Annamare furthermore acts as a mentor for honors and master degree students to support them in completing their dissertations.



## **Annette Small**

**Project Manager:  
Collision Management  
Strategy, Thungela  
Resources**

**In her capacity as Thungela Resources' Collision Management Strategy Project Manager, Annette Small is modernising Thungela's mining operations and having a significant impact on safety performance by systematically eradicating transport-related incidents.**

Annette has demonstrated significant intrapreneurship by enhancing a management strategy focused on organisational systems, key physical site installations, and technology improvements, namely the Level 7 and 8 EMERST collision avoidance systems, that significantly mitigate the risk of incidents related to trackless mobile machinery.

Notably, Annette has been instrumental in improving Thungela's safety performance through the analysis and design of traffic management block plans for each Thungela site. She has led more than 50 traffic flow risk analyses that have since been translated into block plans that are specifically designed to achieve compliance with the Mining Industry Occupational Safety and Health Traffic Management Standard.

In conjunction with Thungela's technology analyst, Annette developed an operator support technology strategy and model for the company, stipulating what can be monitored in vehicles – including the verification of critical controls, fatigue management, seat belt wearing, and compliance with brake testing procedures. Installations are currently under way and will continue into 2022.

In 2020, Annette became the first woman president of the Mine Professionals Secretariat Association and the South African Colliery Engineers Association (SACEA), having served on the SACEA council for seven consecutive years.

Annette not only drives modernisation in Thungela but believes that by being part of an association like SACEA, she can be a messenger to the industry on safety and modernisation aspects and projects. She was a keynote speaker at the SACEA Technical Symposium in July 2021, discussing best practice traffic management and operator support technology.