



ESG IMPACTS LENS DASHBOARD



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Vishaylin Mahadeo **Junior Engagement Manager, Project Manager**

BSc. in Physiology & Psychology, B. Health Sc (Honours) in Physiology, PGDip. in Business Administration, Executive MBA

Vishaylin has worked on and been instrumental in several corporate strategy projects spanning various sectors, including mining, entrepreneurship, energy, maritime, and innovation. His expertise focuses on the integration and intersection of human processes with business structures, a passion born from his academic background. His diverse knowledge is bolstered by specialised studies in project management and strategic thinking, utilising behavioural science and neurostrategy. While at RIIS, Vishaylin has supported the research and development of an innovation ecosystem for the South African energy and marine industry. He has been involved in catalysing the digital transformation of the South African mining industry, with a core focus on the impact on people through leading the development of a digital leadership competency assessment tool and ESG Impacts Lens Dashboard for the South African gold and platinum group metals mining sector.



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THIS WORK HAS BEEN A COLLABORATIVE EFFORT



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 **The Impact
Catalyst**


MD360°



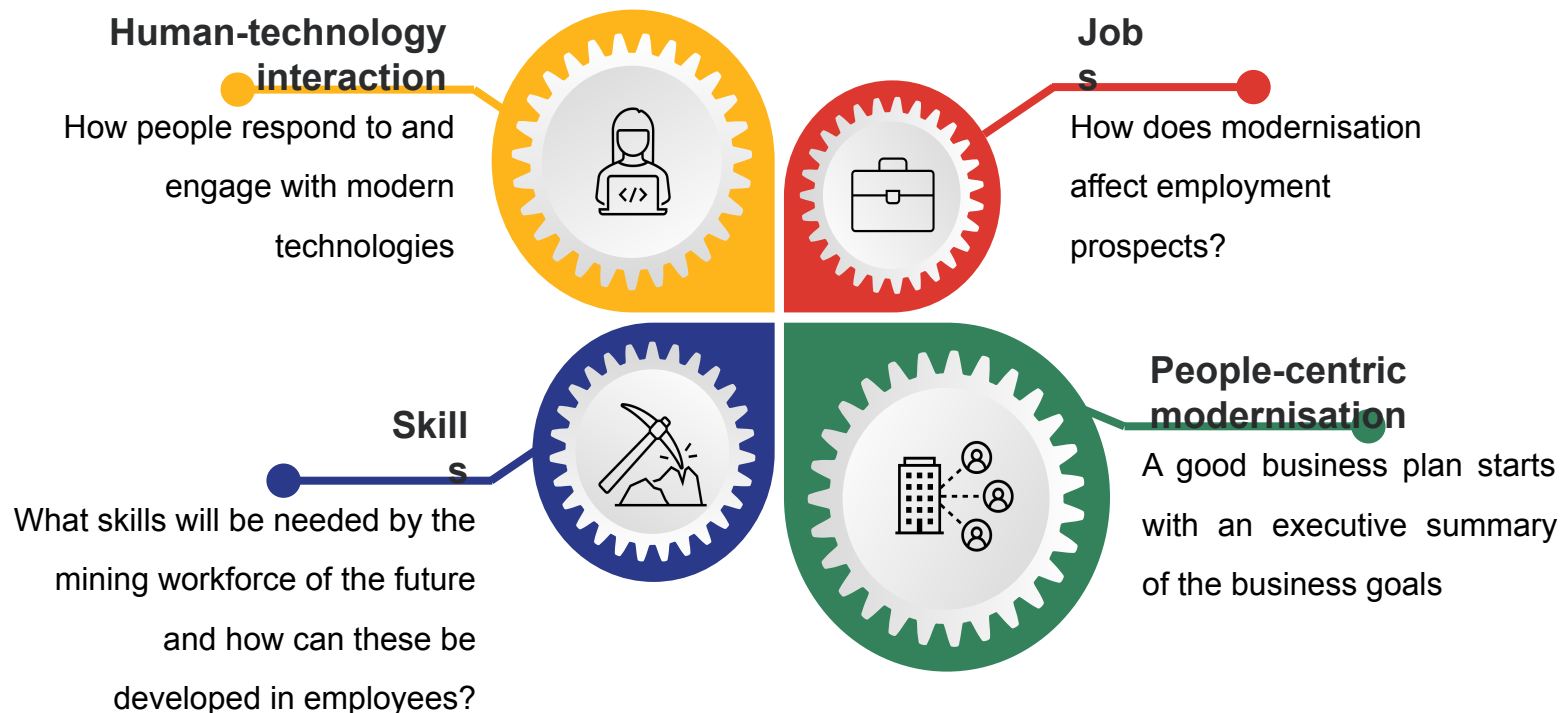
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OUR MISSION AS SATCAP

The South African Mining Extraction Research Development and Innovation (SAMERDI) strategy, an initiative of the Mandela Mining Precinct, supports the **revitalisation and modernisation** of the South African mining industry – a necessity for sustaining it.

Housed within SAMERDI, the **Successful Application of Technology Centred Around People** (SATCAP) programme aims to understand the **challenges of mining modernisation on people** in the minerals sector.

SATCAP'S FOCUS:



WE HAVE COME FAR WITH YOUR COMMITMENT

SATCAP lends support to the mining industry's Environmental, Social and Governance (ESG) agenda, particularly in “**social**” or “**people-related**” matters.

The **2022 project allowed mines to gather information for analysis and informed decision-making**, as well as enabling mines to address gaps through required interventions.

In 2023, the development of the ESG Impacts Lens Dashboard allowed for **measurement and tracking of continuous improvement towards socio-economic transformation's impact on mines, automation and change impacts related to people and processes**.

The ESG Impacts Lens Dashboard is developed. The dashboard, which draws on data from the 2022 tools, unites three domain-specific dashboards focused on the impacts of increased modernisation on Socio-Economic Transformation, Impact of Automation, and Change Management.

2023

2022

SATCAP introduces five innovative digital data-collection tools aimed at enabling informed decision-making on mines:

- Training Needs Survey Tool,
- NGO Community Social Needs Tool,
- SMME Communications and Engagement Tool,
- Digital Leadership Competency Gap Assessment Tool, and
- Change Management Blueprint.

2024

The ESG Impacts Lens dashboard is unveiled and rolled out to industry.



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THE MINING INDUSTRY FACES CHALLENGES

South Africa's commitment to **climate protection and sustainable production** are forcing the mining industry to adapt. As mines grapple with the impacts of modernisation on **profits, the planet and most importantly, people**, they must be able to identify, among other things:



Opportunity Recognition

Assisting the mine's decision-making process through data collection, analysis, and interpretation.



Community Needs

Regular temperature checks with the host community to understand their social and business needs.



Support Mechanisms

Access to resources and information to assist mines along the modernisation journey

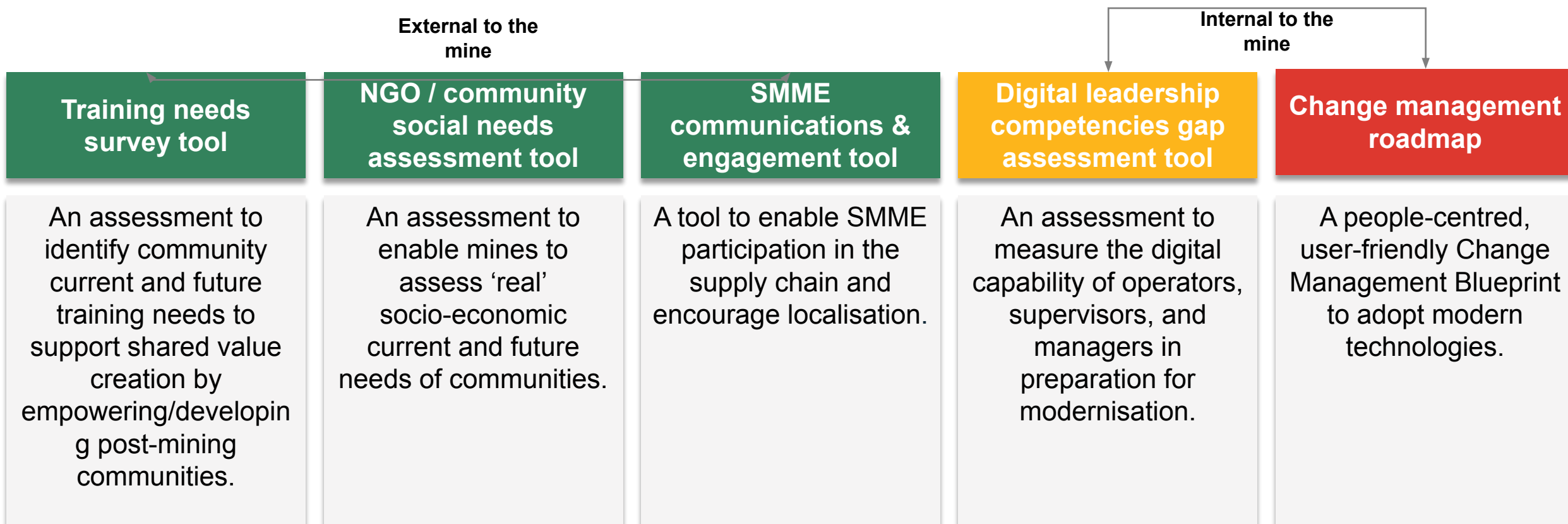


Efficacy of change management

Ensuring a comprehensive and robust blueprint to ensure the effectiveness of change across the organisation.

TO AID THE MODERNISATION TRANSITION, SATCAP DESIGNED AND DEVELOPED 5 FREELY AVAILABLE, VALUE-ADDING DIGITAL TOOLS FOR THE MINING INDUSTRY

The tools are freely available, open-source, and customisable according to the user's needs. Any data captured by the tools is private to the companies that embed the tools, and not stored or shared by SATCAP.



THE MINES ARE GRAPPLING WITH THE FOLLOWING QUESTIONS RELATING TO MODERNISATION AND ITS IMPACT ON SOCIO-ECONOMIC TRANSFORMATION, AUTOMATION, AND CHANGE

How does modernisation within the mining industry impact the following domains?

Socio-Economic Transformation in host communities

- What impact have community development interventions had on host communities?
- How is modernisation impacting the skills and social needs with the host communities?
- What are viable, alternative to mining economic activities surrounding the mine?
- How do SMMEs perceive the vendor application portal?
- How has modernisation impacted employment with the communities?

The Impact of Automation on jobs across the mine operation

- How has automation impacted the skills of employees?
- How has automation impacted the jobs that people do on the mine?
- How has automation impacted the health and safety of employees?

The effectiveness of Change Management in the adoption of modern technologies

- What is the impact of the adoption of new technologies on people?
- Where are people on the ADKAR spectrum to enable technology adoption?
- How ready are the organisation and people to adopt the new technology?
- What are the organisational impacts?



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IN RESPONSE TO THESE CHALLENGES AND SUPPORTING THE TOOLS

The **ESG Impacts Lens Dashboard**, a brainchild of the SATCAP program, is a cutting-edge tool comprising:



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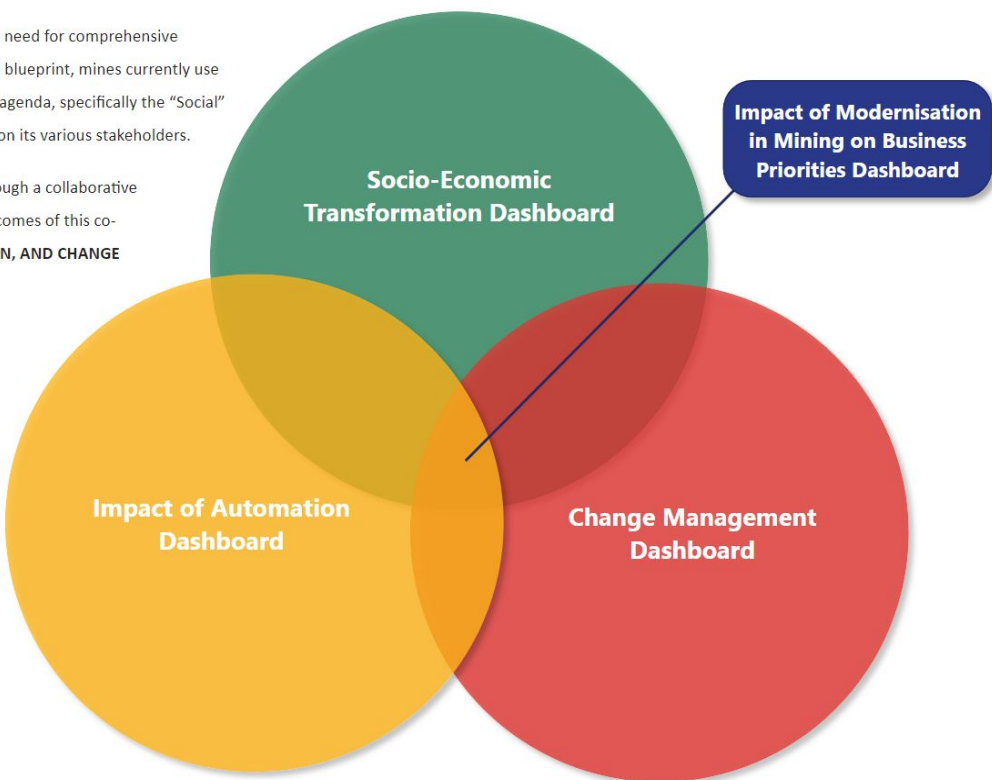
Environmental, Social & Governance (ESG) Impact Lens Dashboard

Home How-To SET Summary IoA Summary CM Summary >

The journey of digitisation in mining is progressing, and the recent 4IR study highlighted the need for comprehensive harmonisation on reporting on ESG in the mining sector. In the absence of a widely adopted blueprint, mines currently use their own methods and path of reporting for progress on ESG. SATCAP's focus is on the ESG agenda, specifically the "Social" principle. To that end, SATCAP strives to understand the impact of modernisation in mining on its various stakeholders.

To that end, three integrated impact evaluation dashboards were designed and created through a collaborative effort between the mining industry, academic partners, and collaborative partners. The outcomes of this co-creation were the **SOCIO-ECONOMIC TRANSFORMATION IMPACT, IMPACT OF AUTOMATION, AND CHANGE MANAGEMENT DASHBOARD**.

The integrated impact evaluation dashboard act as a mechanism for mines to measure the change and impact of modernisation on their operations and host communities, as well as providing a method to measure themselves along the modernisation journey.



19 sub-dashboards with over 85 domain-specific indicators

integrated approach to data collection

strategically aligned to key priorities of the South African mining industry

spotlights critical concerns around cost, safety, people, and productivity

supports in achieving a socially responsible and sustainable future!

Useful Links

[SATCAP Website](#)

[Surveys](#)

[Guideline](#)

[Excel Data Inputs](#)

Note: click the hyperlink to view the live demonstration of the ESG Impacts Lens Dashboard



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BUSINESS PRIORITIES IMPACT DASHBOARD

In accordance with requests from leadership across the major mining houses, **alignment towards the organisation's strategic business priorities** was ensured on the ESG Impacts Lens Dashboard.



Acts a summary of the 3 domain-specific dashboards



which displays the impact of modernisation across

cost, internal workforce, safety, external stakeholders and production.

These 17 indicators ensure high-level oversight across

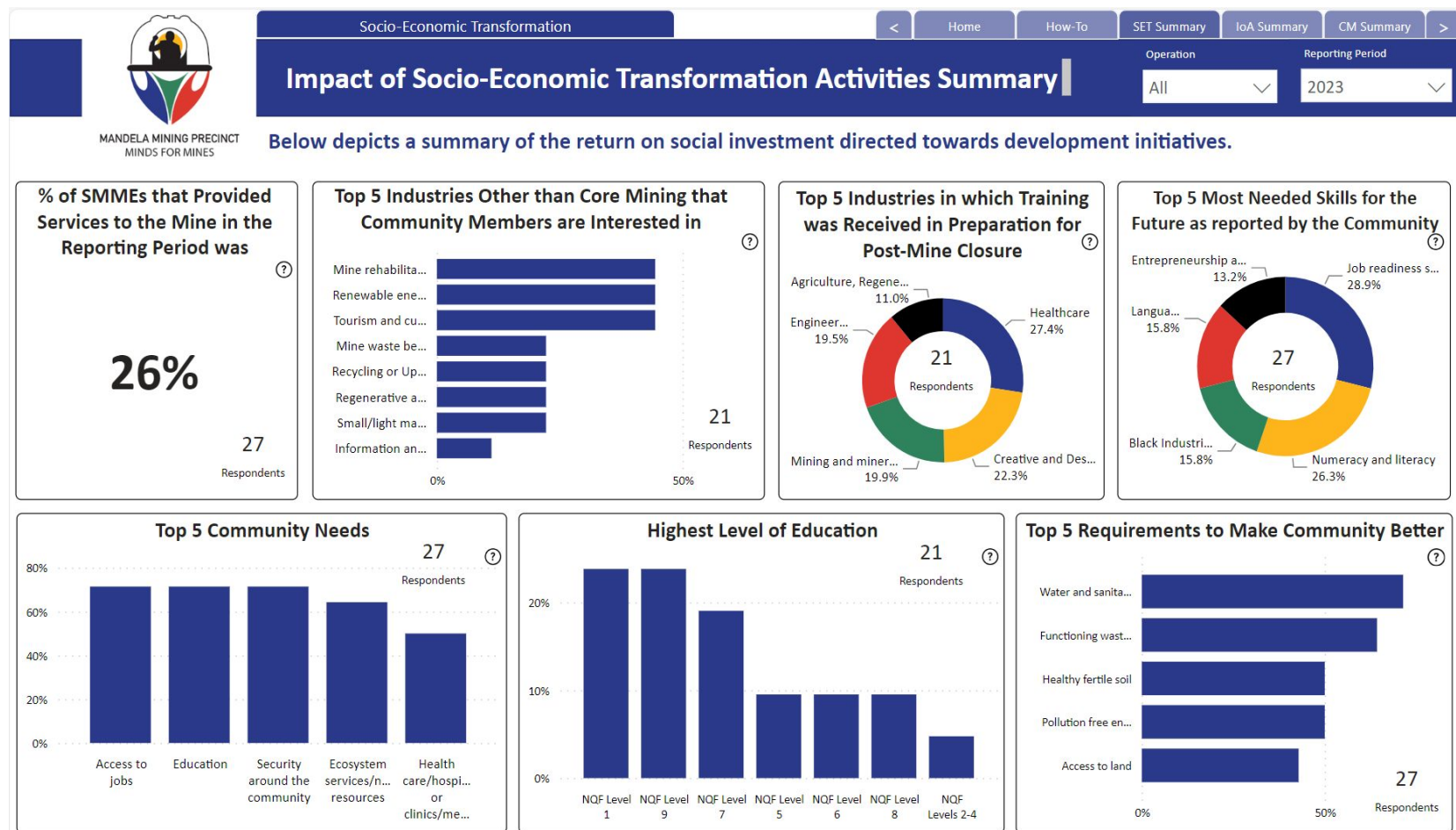
Socio-Economic Transformation; Impact of Automation on jobs; and Change Impacts.



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SOCIO-ECONOMIC TRANSFORMATION IMPACTS DASHBOARD

This dashboard reflects the impact of socio-economic transformation interventions in host communities surrounding the mine.



7 individual dashboards representing

46 indicators that address socio-economic transformation

which utilises data drawn from externally-focused digital tools.

The target audience who would gain the most value from this data includes:

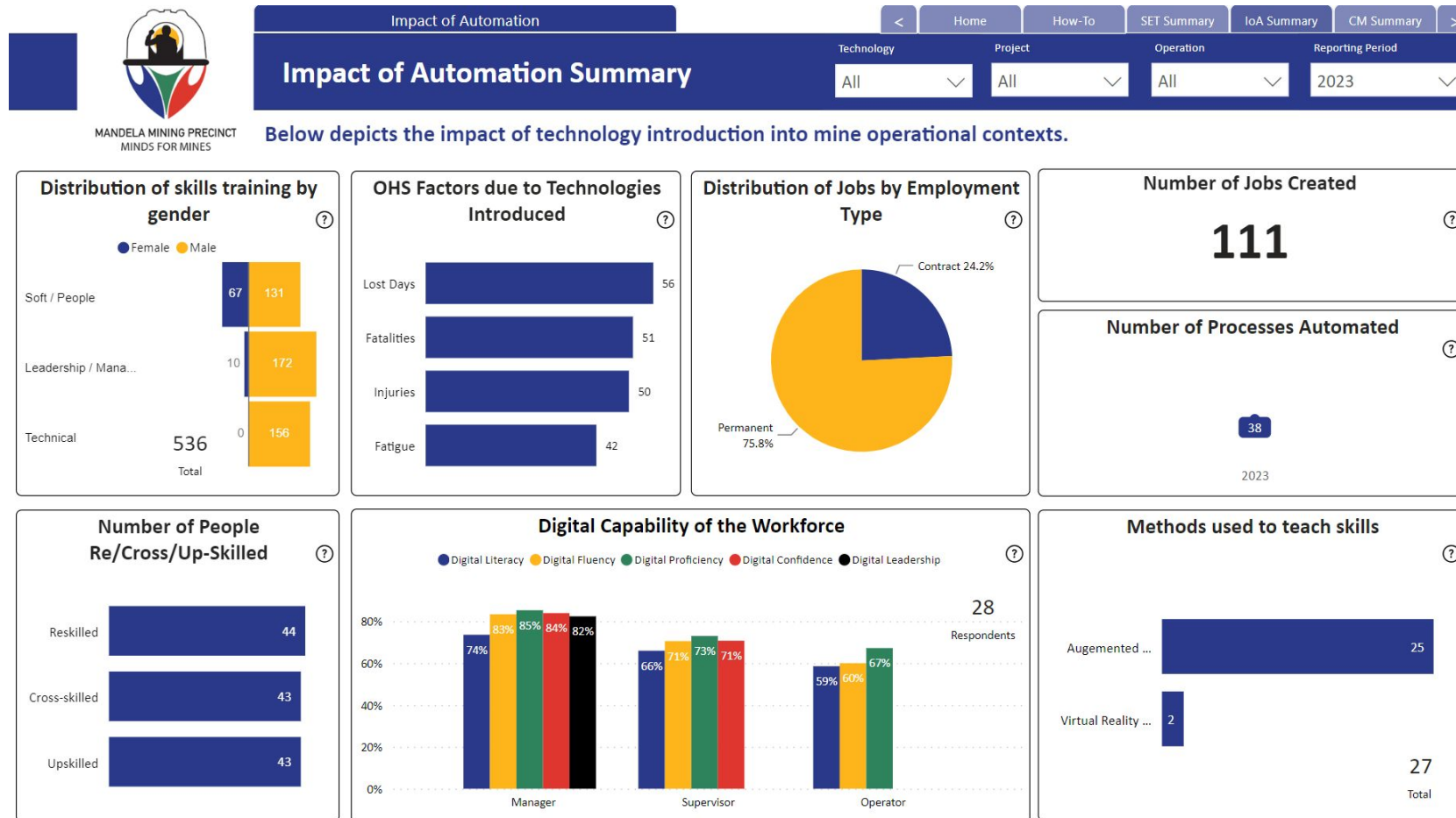
Stakeholder Relations; Corporate Affairs; Social Performance Managers; Sustainability Officers; Enterprise Development



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IMPACT OF AUTOMATION DASHBOARD

This dashboard reflects the **change and impact of automation on jobs across the mine's operation.**



3 individual dashboards representing

22 specific indicators that presents the Impact of Automation on the mine workforce

which utilises data drawn from digital leadership competency surveys

assists in monitoring how the introduction of technology in specific mine contexts are impacting the people

and can inform the digital and/or technology roadmap of the mine organisation.



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Wessel Botha **Implementation Partner, Change Management**

B. Com (Hons) Industrial Psychology, MBA

He has conducted research for both private and government institutions within the following industries: mining, Construction, Renewable Energy, Motor Industry, Manufacturing and Production (various), Water Services, Services, and Forestry. He is interested in investigating and understanding technology's impact on people and identifying future skill requirements. His core skill is developing models from academic research and applying them to real-world solutions.



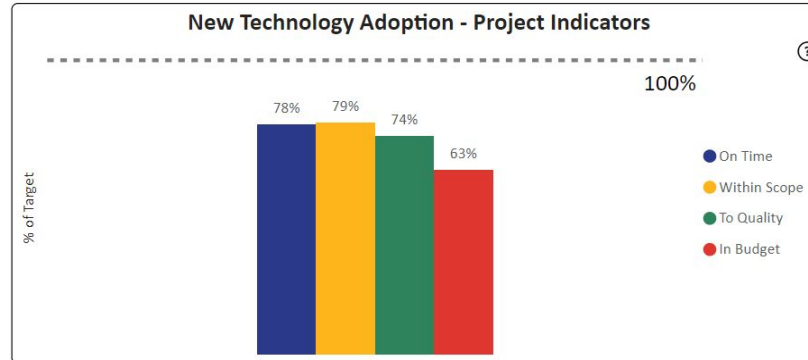
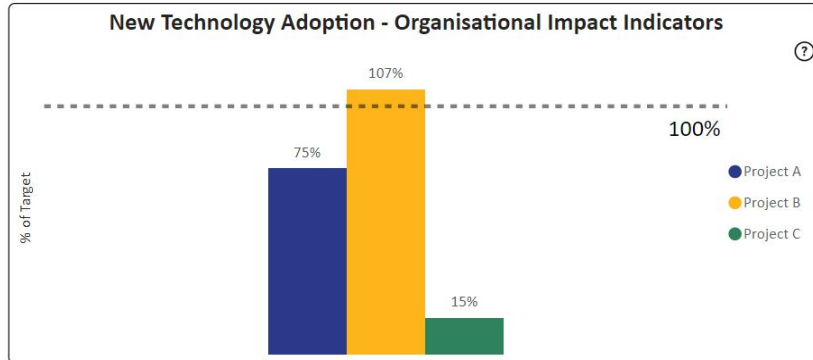
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CHANGE IMPACTS DASHBOARD

This dashboard reflects the **effectiveness of change management practices in adopting modern technologies.**

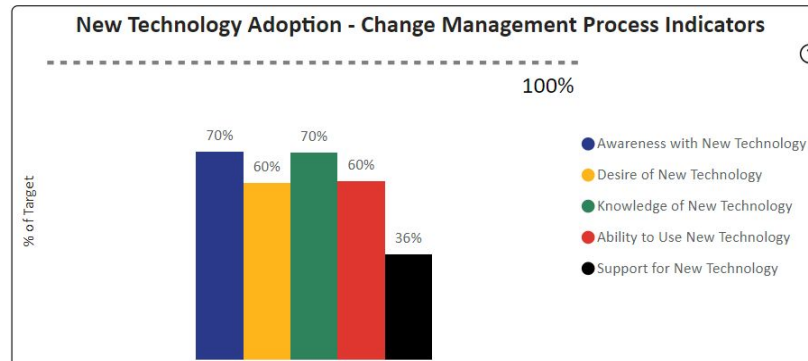
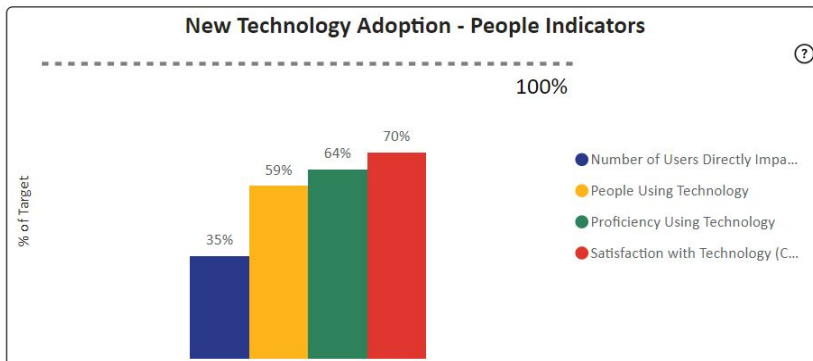


4 individual change-specific dashboards representing



17 indicators that present change impacts within the organisation

which draw on data from the 2022 SATCAP Change Management Blueprint.



The indicators are arranged across the impacts across the organisation, project, people, and process.

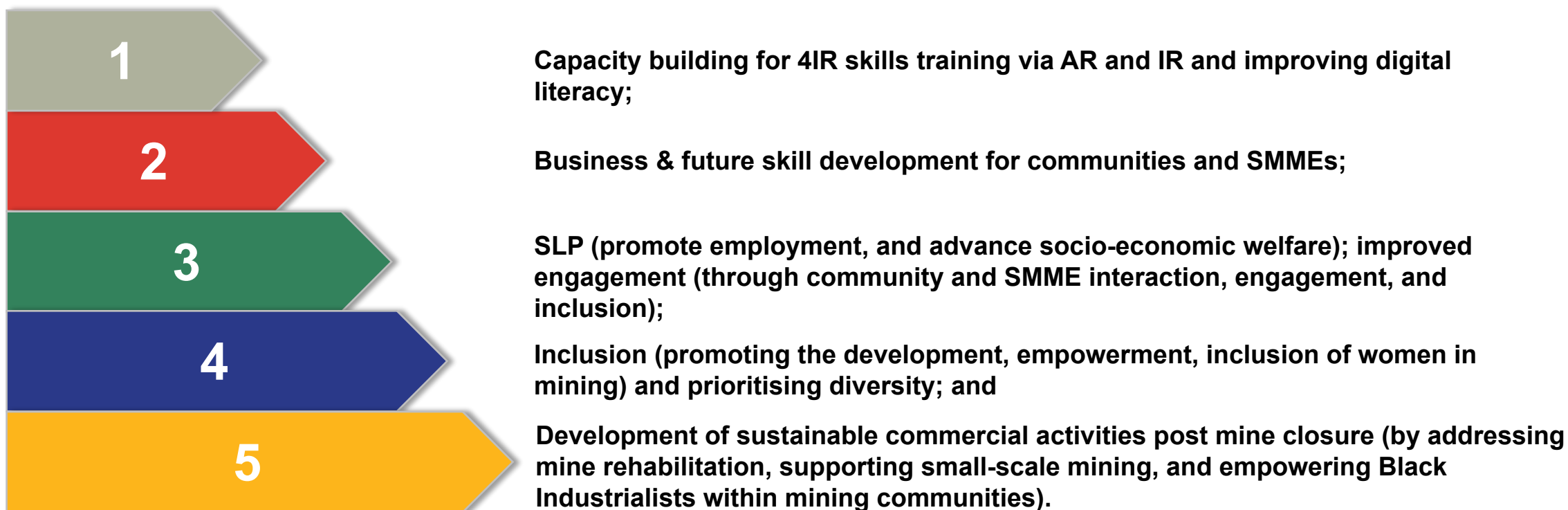
Allowing the mines to set internal targets and baselines, to measure themselves against themselves



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IN SUMMARY

The ESG Impacts Lens Dashboard measures and supports continuous improvement towards the impact of socio-economic transformation on the following key focus areas:





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ACCESS TO ALL SATCAP TOOLS AND GUIDELINES

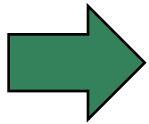
You can access the all the SATCAP industry tools and guidelines through the following links

Successful Application of Technologies Centred around People Enabling Tools



About this Research Programme

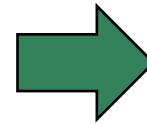
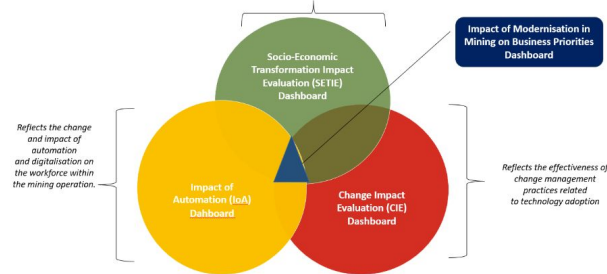
We are excited to release people-centred research solutions, for the mining industry uptake/use, through the Successful Application of Technologies Centred Around People (SATCAP) programme. The programme aims to understand the effects, impacts and challenges relating to people in the mining modernisation process as can be understood from all stakeholders perspectives. This entails gaining an understanding of how mining stakeholders are affected and impacted by mining modernisation systems, processes, and technologies of the fourth industrial revolution (4IR) with an intensive focus on skills needs, job impacts, and stakeholder inclusion. SATCAP further lends support to mines around the ESG (Environmental, Social and Governance) agenda. Hence research solutions have considered critical (ESG) 'social-related' aspects. Guidelines are availed to support industry identified 'social' needs.



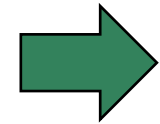
SATCAP Data Collection Survey Tools
(i.e. Training Needs, Community Social Needs, Digital Leadership Competency Gap Assessment, Change Management, Stakeholder Engagement)

Environmental, Social and Governance (ESG) Impacts Lens Dashboard

Reflects the change and impact that socio-economic transformation interventions have had in mining communities through social performance indicators.



ESG Impacts Lens Dashboard
(i.e. embedding instructions, guidelines, and videos)



ESG Impacts Lens Dashboard Demonstration Link
(i.e. PowerBI dummy data demonstration)

Note: click the arrows to be directed to the online portal where you can access the respective information



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THANK YOU

For more information/assistance, contact:

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