TECHNOLOGY · INDUSTRY · MINING · SOUTH AFRICA

Safer mines, more tonnes.

N³ Innovations is a South African mining technology and services company. We find the warnings and delays already in a mine's own data, put a rand value on each one, and make sure the right person acts. Our work covers operating mines, closure and rehabilitation, and mine development.

Decision support

Our software advises people. It never controls equipment.

Read-only by design

We read copies of your data. Nothing connects to PLCs or SCADA.

Evidence first

Every engagement starts with a problem measured at your operation.

Vendor-neutral

We work with the radios, sensors and systems you already own.

Core services

ASSESS

Operational diagnostics

We find where information breaks down across your operation and what each breakdown costs.

- A ranked register of problems, each with a rand value
- A map of how information flows between departments
- A recommended first fix, with its baseline

Measured by: a problem register your managers agree with, priced in rand

MAINTENANCE

Maintenance intelligence

Every condition-monitoring finding, alarm and inspection note in one ranked list, tracked until the work is done.

- One warning queue, linked to your asset register
- Rand-at-risk ranking, overdue and repeat-failure alerts
- A monthly value report your finance team can audit

Measured by: findings closed on time, and failures that had an earlier warning

ENVIRONMENT

Environmental compliance and water monitoring

Every condition in your environmental authorisation, EMPr and water use licence, tracked to an owner, a due date and its evidence.

- A conditions register built from your licences
- A calendar of monitoring, reports and audits
- Water levels, quality and decant checked against licence limits

Measured by: conditions with an owner and evidence, and audit findings closed

ALSO AVAILABLE

Data integration and reporting

Read-only links to your CMMS, historian and spreadsheets, and automated shift and safety reports.

Communications and connectivity

A vendor-neutral map of where radio and network coverage fails, and what each gap costs.

Energy and compressed-air analytics

kWh-per-tonne baselines, leak detection and advice for peak tariff periods.

Every service reads data without changing it, names no vendor, and supports decisions rather than making them.

How we work: assess, prove, then run

STAGE 1

Assess

We work alongside your people to find where information breaks down, and rank each problem by safety risk, production impact and cost to fix.

You receive: a ranked problem register and a recommended first fix, with its baseline.

STAGE 2

Prove

We deploy the fix on read-only data, with your own staff approving every action it recommends.

You receive: a measured improvement against the baseline, valued with your finance team.

STAGE 3

Run

The proven service runs on your site, connected to your maintenance and reporting systems, and extends to the next problem.

You receive: monthly reporting on closure rates, lead times and the rand value agreed with you.

Our technology: N³ Action Ledger

- **One queue for every warning.** Condition-monitoring findings, alarms and inspection notes, linked to the right asset.
- **Priorities in rand.** Ranking uses the mine's own value per hour, so engineering and finance read the same number.
- **Evidence for every decision.** Each item links to the report, trend or work order it came from.
- **A person approves.** Nothing becomes a work order without a named approver.
- **No new hardware.** It runs on data the mine already collects.

What our technology will never do

- Control equipment, or write to PLCs and SCADA
- Take the place of certified safety systems such as collision avoidance
- Replace a mine's CMMS, historian or fleet system
- Send plant data to a public AI service without written consent
- Make a claim we cannot show with the mine's own data

Across the mine life cycle

Operate
Operating mines, processing plants and contractors: fewer stoppages, faster response, lower cost per tonne.

Close and rehabilitate
Monitoring of water, decant and closed workings, so rehabilitation is planned on evidence.

Develop
Mining opportunities, with a focus on mines under care and maintenance, delivered with experienced partners.

The founders

Nkanyiso Gracious Maqubela
Co-founder · Partnerships and stakeholders

Neo Magubane
Co-founder · Operations and software

Nkululeko Mdluli
Co-founder · Technology and data

Find out where your mine loses time, tonnes and safety margin.

Tell us about your operation and the problem you most want solved.

100% black-owned · B-BBEE Level 1

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