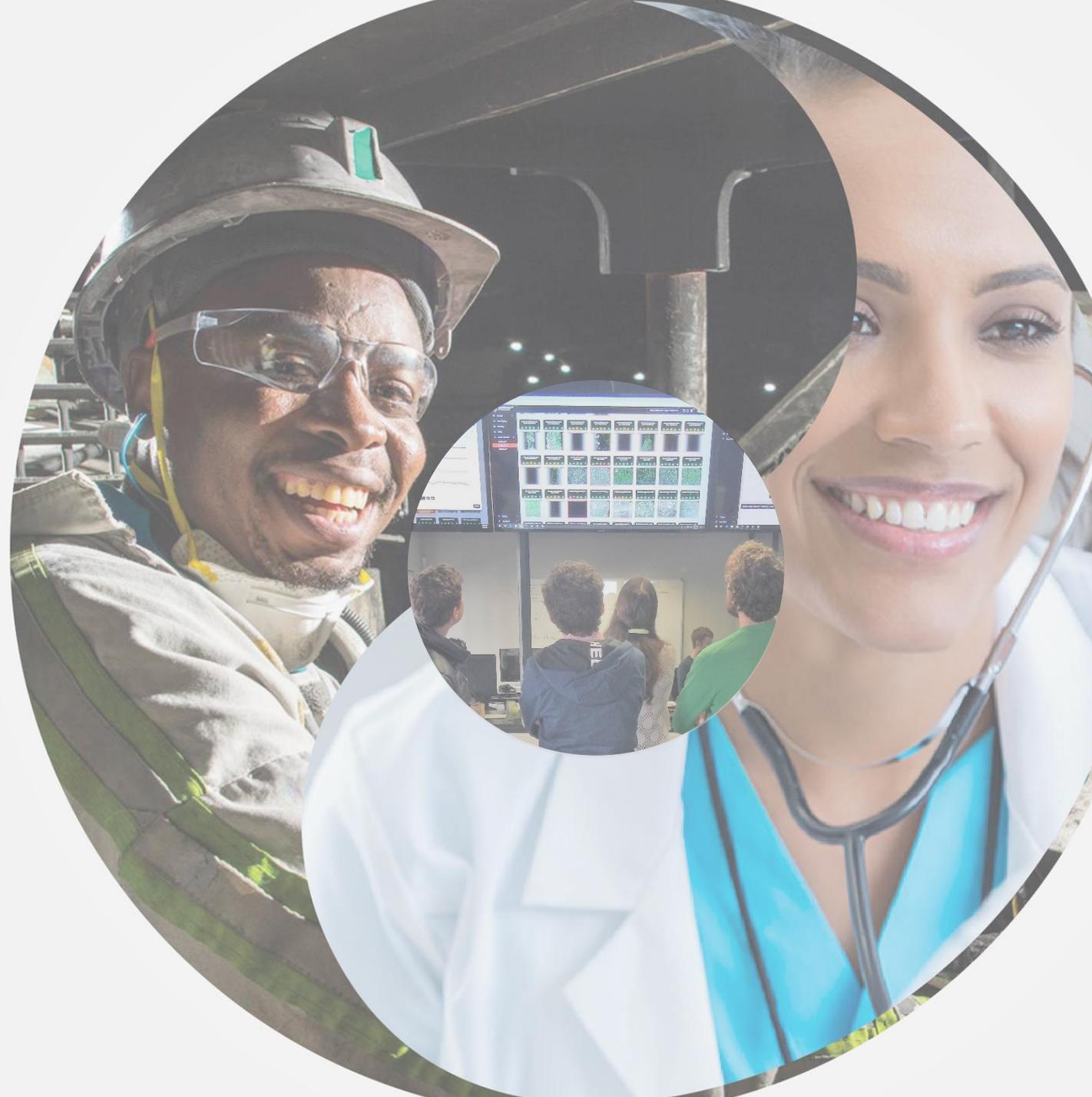




StoneThree
The Future of Work. Now.



A hand is shown from the bottom right, reaching upwards towards a glowing, interconnected network of nodes and lines that spans across the top of the image. The background is a deep blue gradient.

We use technology for good.

We use it to innovate, improve and empower.

To create better working conditions. To make people safer, healthier and happier.

To save companies time and money. And to help them become more successful.

To do this, we keep researching, designing and developing.

We keep looking for ways to make technology extraordinary;

to turn possibility into reality and potential into practical,

to embrace the new industrial revolution, and to move us all forward.

We do this constantly and endlessly, as we have for 20 years.

We believe in the future.

And we create *The Future of Work*. Now.



Digital technologies help mining companies become competitive by providing tools and enabling processes that make operations safer, sustainable and smarter.

Praveen Samraj



Employees, investors and government agencies, as well as public opinion, constantly pressure the mining industry to improve safety, reduce impact and update mines so they are more in sync with our digital age.

Taimur Lodhi

Your challenge

We care about

OPERATIONAL PRODUCTIVITY - *INSIGHTS*

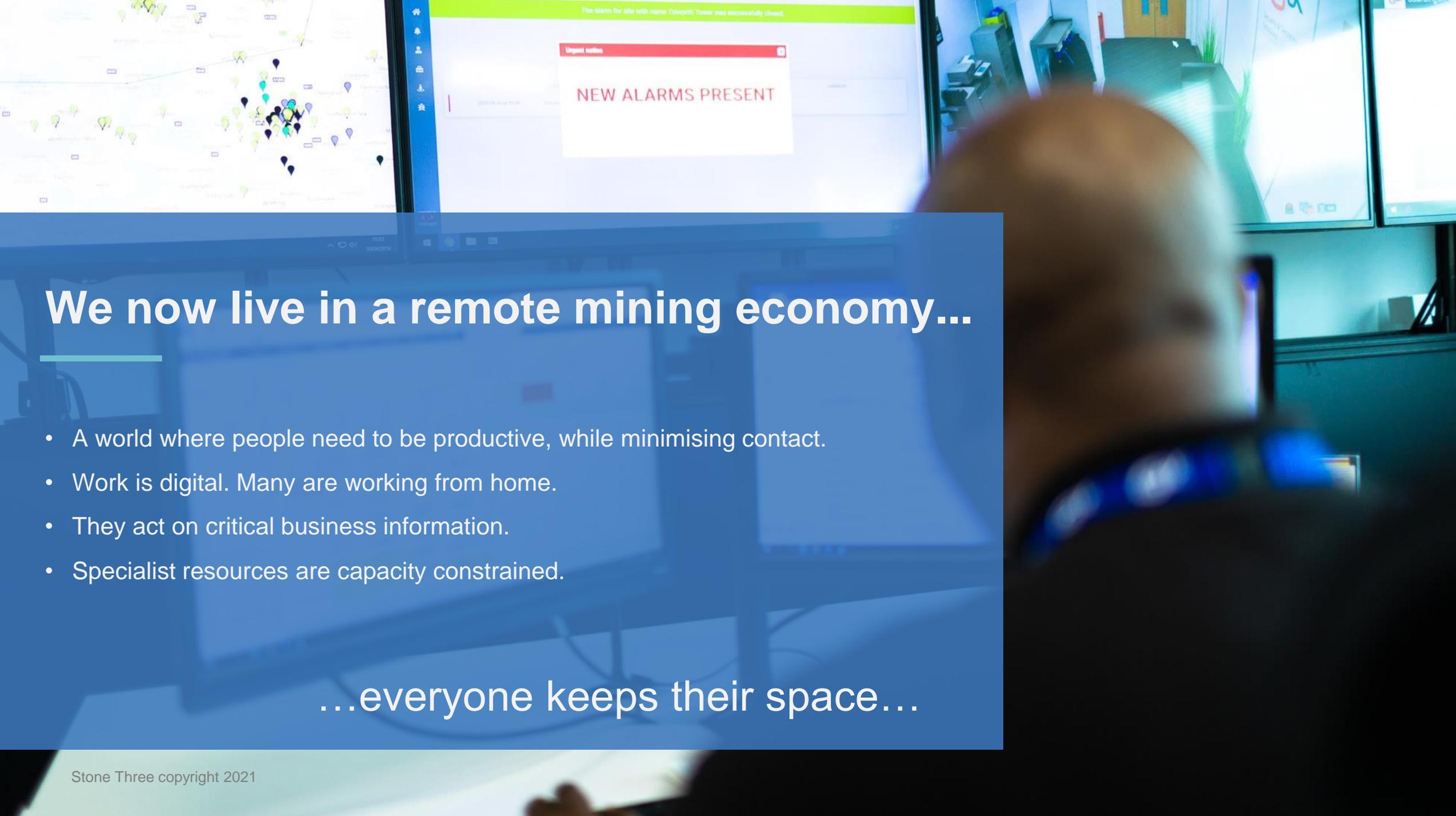
- Mining Capex CAGR 36.8% & Opex CAGR 18.1%
- Recovery and throughput opportunity cost 2% – 5%
- Unplanned downtime 2% - 5%



PEOPLE PRODUCTIVITY - *INSIGHTS*

- 736 000 days/y lost to absenteeism*
- 81 Mining fatalities 2018. Surface: Haulage 37%, Machinery 25%, Falls 14%
- Non-lethal surface LTI: Material handling 36%, Falls 8%*. \$46 400/injury*
- Section 54s stoppages R5bn SA 2015
- 23% of silicosis deaths attributed to mining*
- 70% of miners hearing loss at 60*





We now live in a remote mining economy...

- A world where people need to be productive, while minimising contact.
- Work is digital. Many are working from home.
- They act on critical business information.
- Specialist resources are capacity constrained.

...everyone keeps their space...



The COVID-19 crisis has exposed the siloed nature of mining companies and highlighted the need for integrated operations. This is likely to accelerate the adoption of digital technologies, artificial intelligence, and analytics in the mining industry.

Deloitte Insights - 9 June 2020

Companies now expect:



Digital Roadmap

- Feature critical futures
- New value unlocked
- Snowball value

Resource
Efficient



Digital Skills

- Accessible skills
- Localised supply chain
- Connectivity

Operationally
Efficient



Actionable Insights

- Essential information
- Informed actions
- Digital wisdom

Operationally
Effective



Business Integration

- Decision support
- Collective predictive
- Value chain optimisation

Sustainable



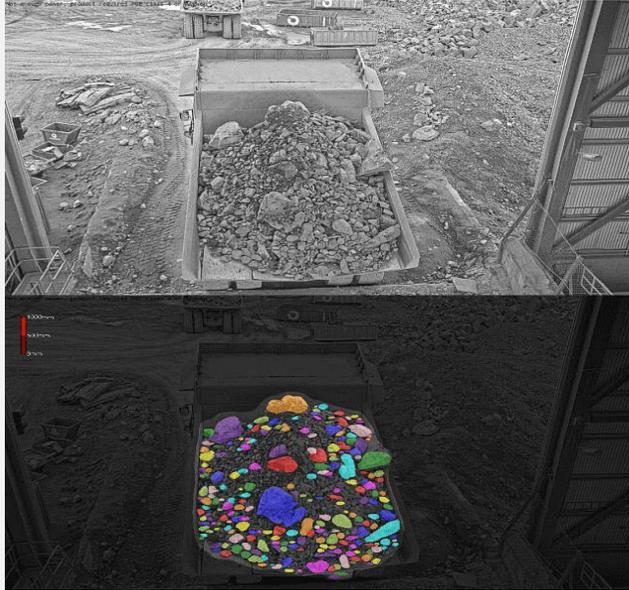
What we do

We increase
**Operational
Productivity**

We improve
**People
Productivity
& Health**



Our solutions: **Innovative products. Intelligent processes.**



PEOPLE PRODUCTIVITY - SOLUTIONS

- AI augmented Video Analytics: Forbidden Zone, PPE, Covid-19, Abnormal Behaviour, Hazardous Environment
- AI augmented Health Risk Assessment with Telehealth. Automated fusion of POC devices, wearable and exposure data



OPERATIONAL PRODUCTIVITY - SOLUTIONS

- Smart Sensors for PSA, Flotation, Critical Assets
- Packaged Crushing, Grinding & Flotation Remote Monitoring & Diagnostics
- Stabilization and Optimization
- Predictive analytics



The results: More gain. Less pain.

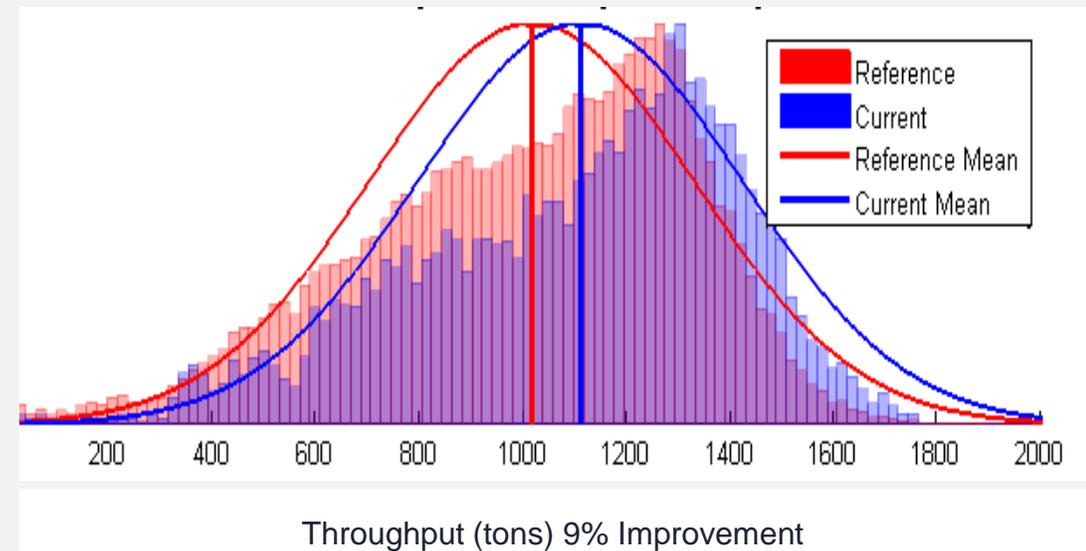


PEOPLE PRODUCTIVITY - RESULTS

- Decreased risk: Average of 1 000 safety notifications per site per month
- 78 000 Tele consults annually in North America & South African primary care
- Population Health platform: 40 000 patients, 70 facilities
- Installations in South Africa, Brazil, North America

OPERATIONAL PRODUCTIVITY - RESULTS

- Copper recovery improvement: 4.5%
- 9% crusher throughput improvement: gap setting control
- R64M annual savings in conveyor belt stops
- R13M annual savings primary crusher oversize prevention
- 30% reduction in cyclone blockage in coal plant
- More than 95% renewal rate



How we do what we do



Power of AI. Expert Judgement. Stone Three M&D



Compliance Monitoring



Worker Environment Monitoring



Incident Management



Telemedicine



Production Performance



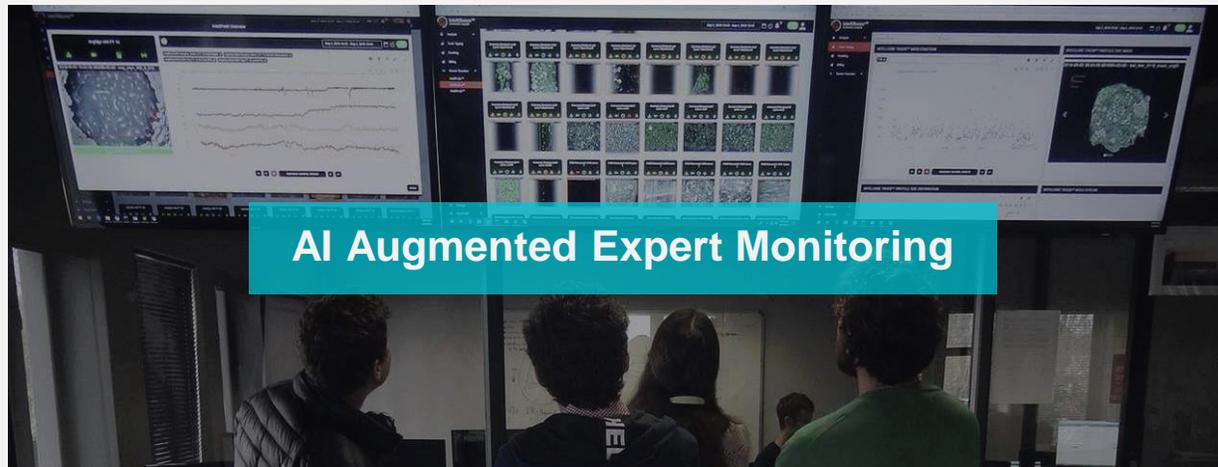
Regional Integration



Integrated

Best Practice

Thought Leadership

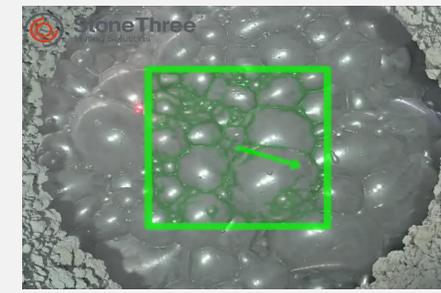
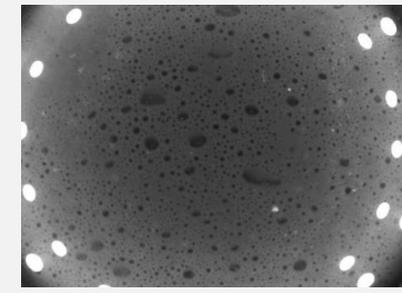
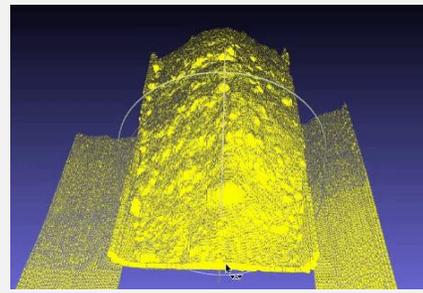


New Value

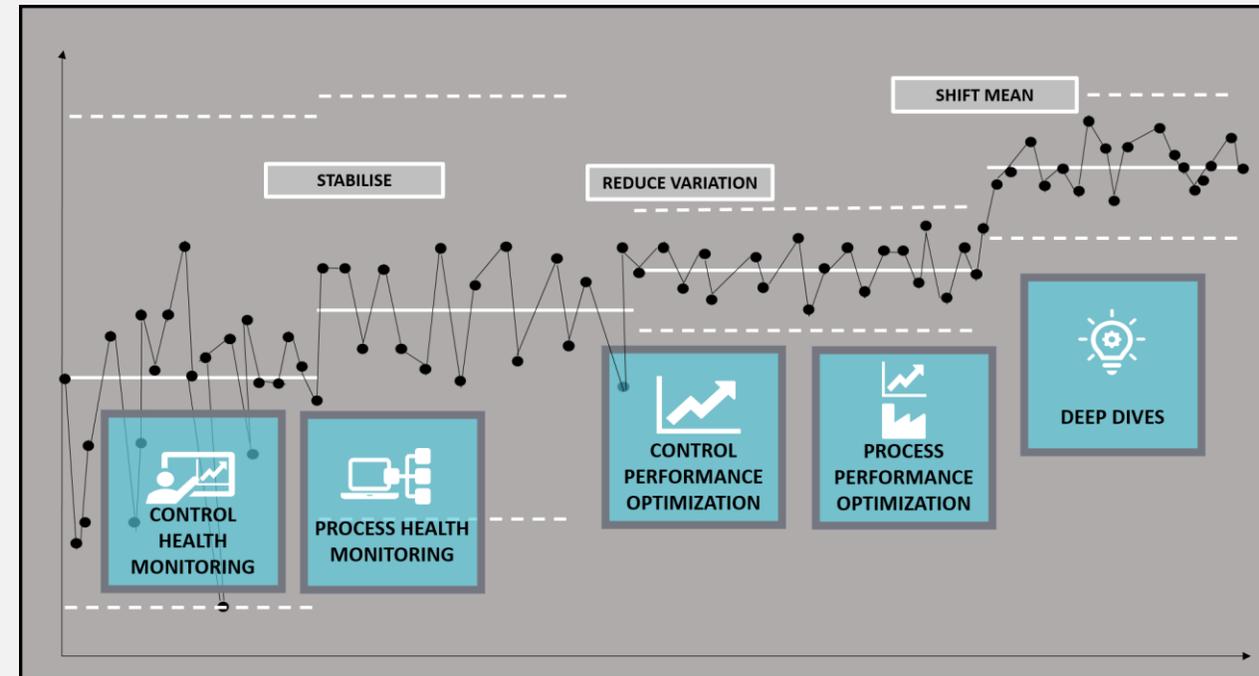
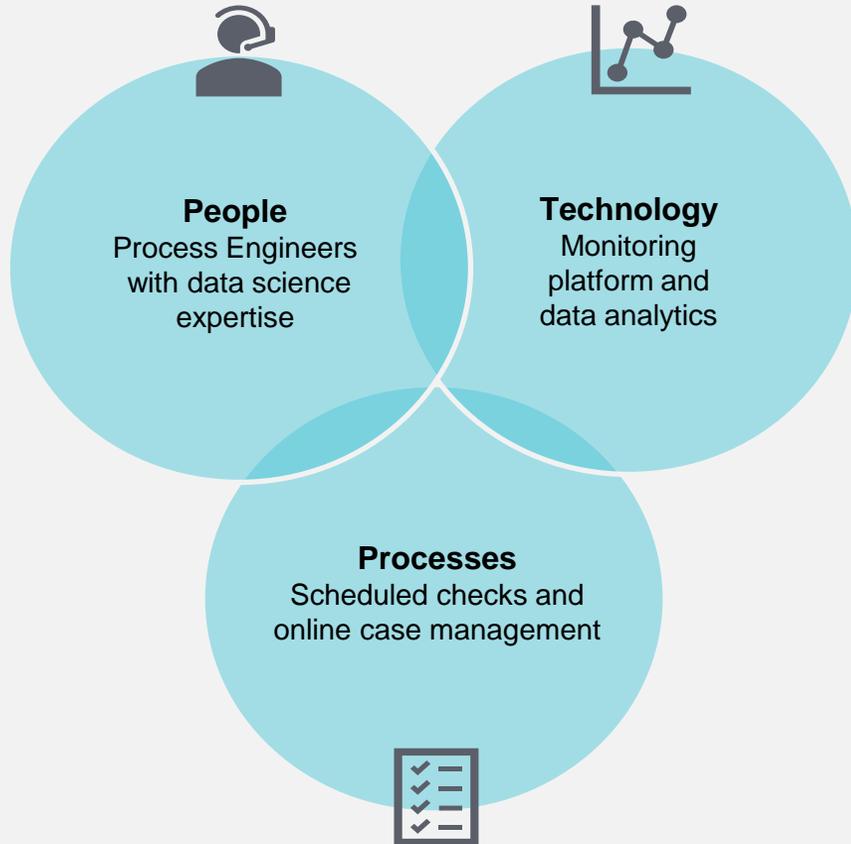
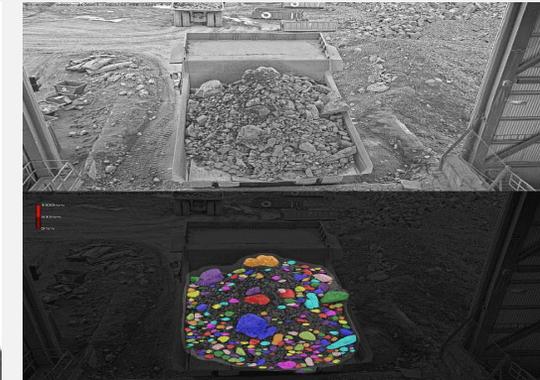
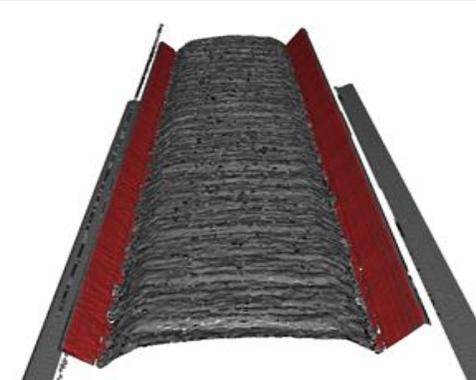
Risk Mitigation



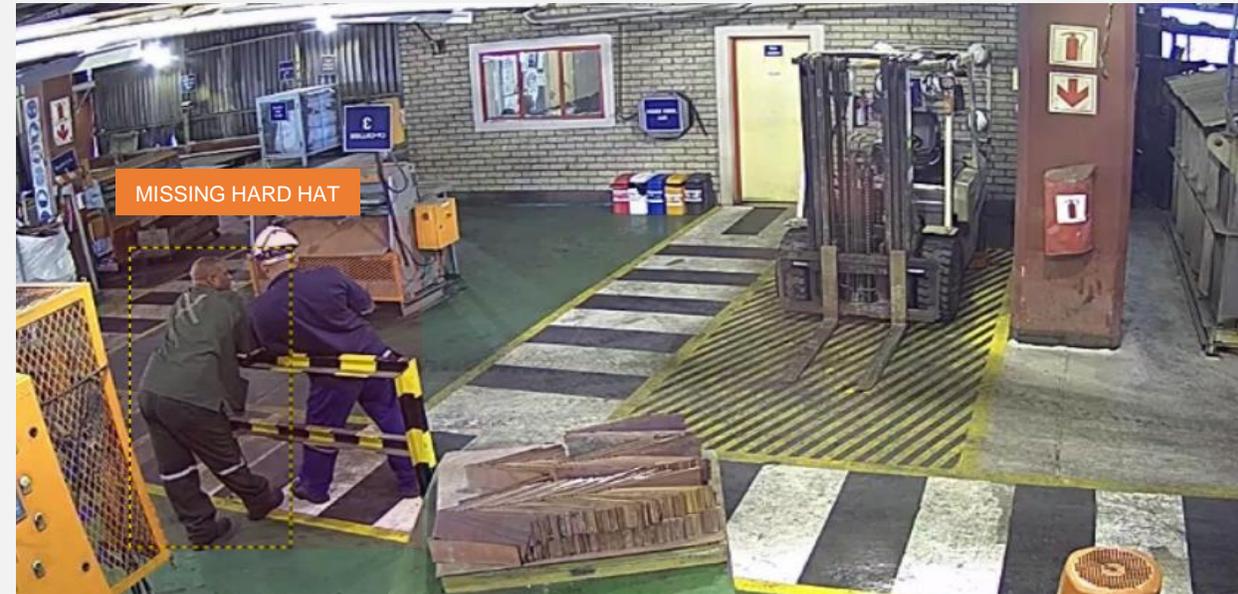
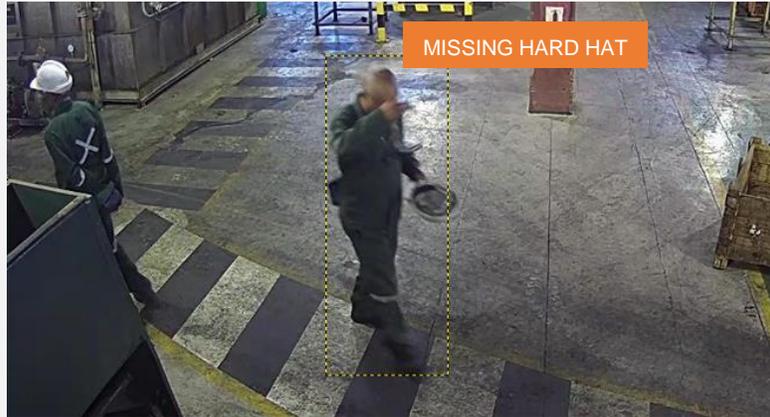
We Measure, Analyse and Act. Smart Sensors and Process M&D



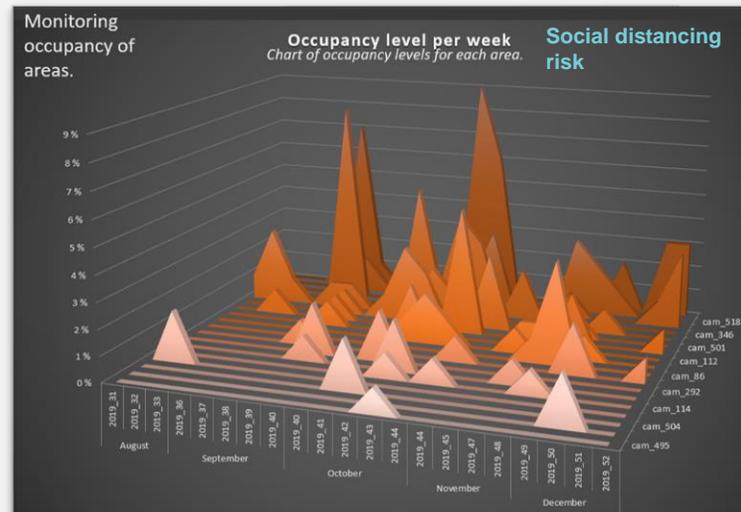
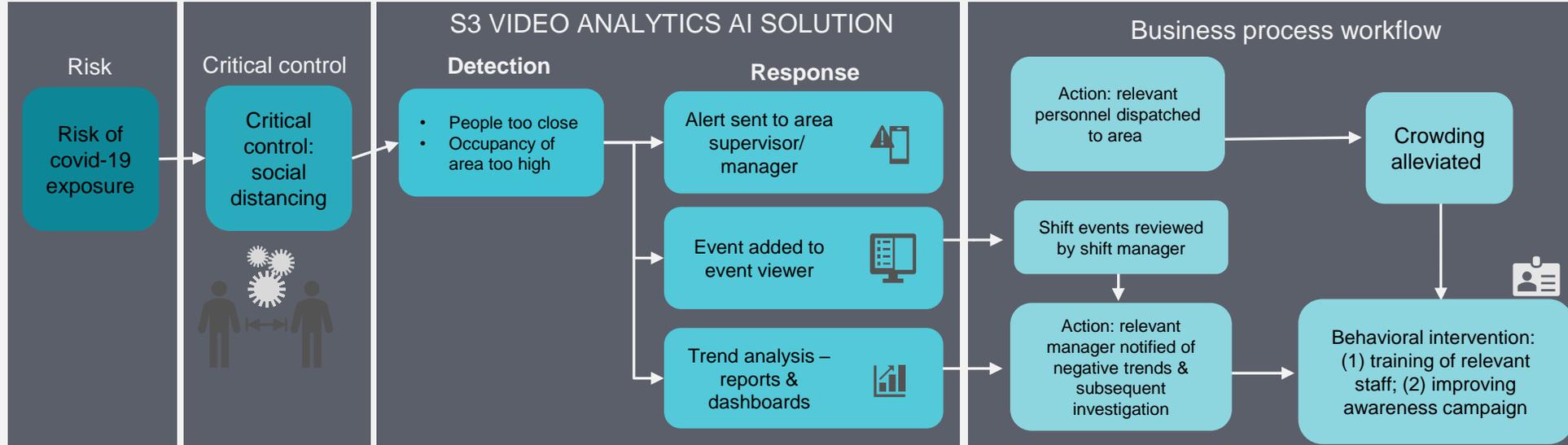
SMART SENSORS



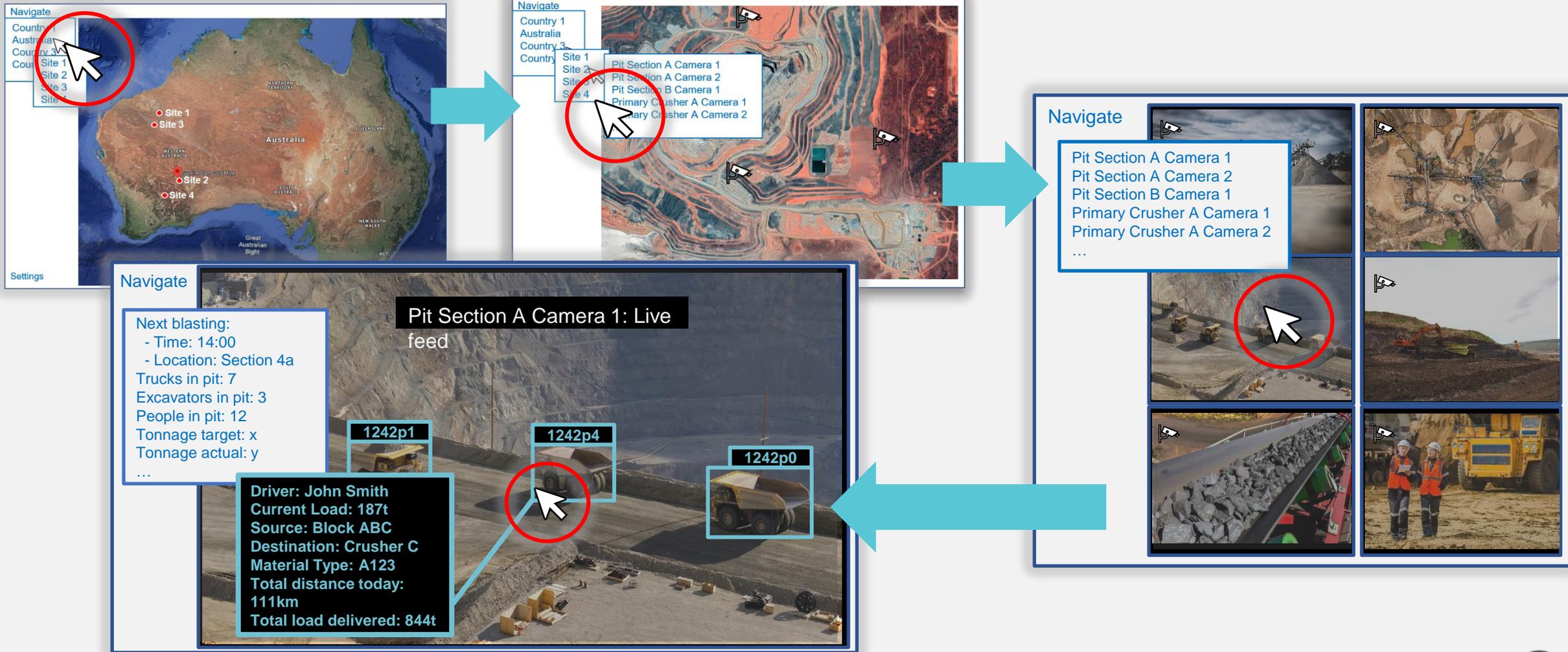
Keeping workers safe. Detecting missing PPE



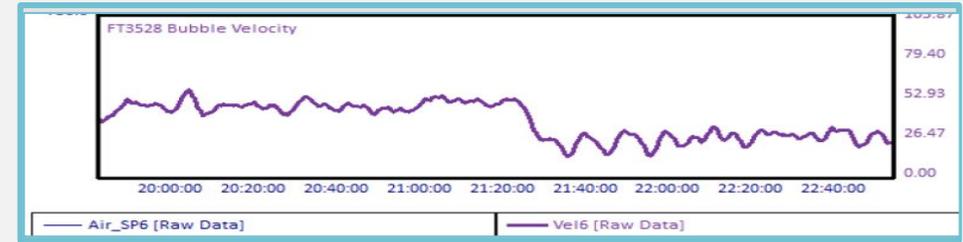
Lowering risk. Identifying areas of poor social distancing



Future ideas become realities. Virtual operations

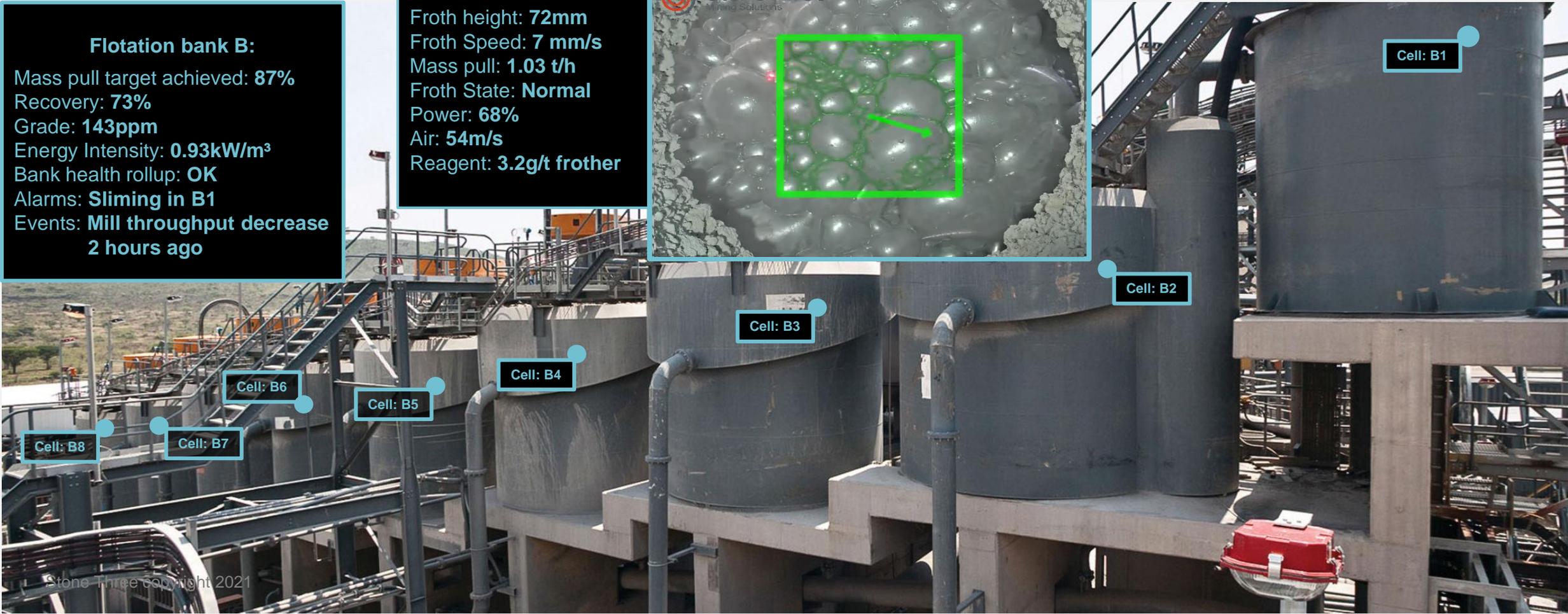
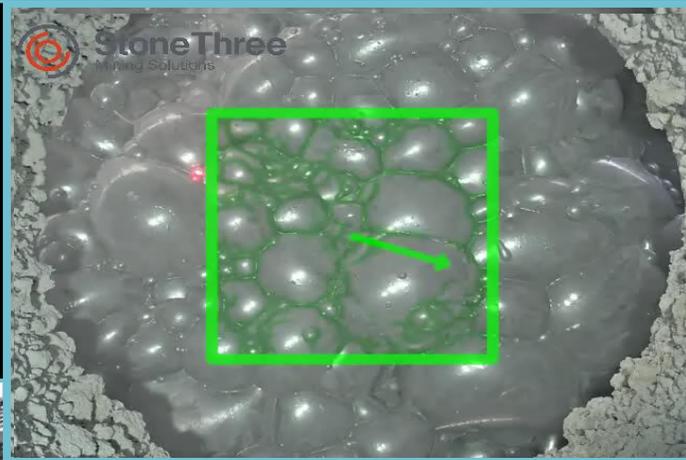


Saving our clients time and money. Augmented Productivity



Flotation bank B:
Mass pull target achieved: **87%**
Recovery: **73%**
Grade: **143ppm**
Energy Intensity: **0.93kW/m³**
Bank health rollup: **OK**
Alarms: **Sliming in B1**
Events: **Mill throughput decrease 2 hours ago**

Cell B2:
Froth height: **72mm**
Froth Speed: **7 mm/s**
Mass pull: **1.03 t/h**
Froth State: **Normal**
Power: **68%**
Air: **54m/s**
Reagent: **3.2g/t frother**





By augmenting human performance, AI has the potential to markedly improve productivity, efficiency, workflow, accuracy and speed, both for physicians and for patients. What I'm most excited about is using the future to bring back the past: to restore the care in healthcare.

Dr Eric Topol, MD

Keeping your people safe. Precision Health & Safety

Track and analyse health & safety information of a workforce in real-time, 24/7, enabling state-of-the-art digital risk assessments and management, and the effective administration of virtual care.

Data Collected

VITALS

- OUT OF RANGE (29 Feb 2020 @ 19:00:00)

POINT OF CARE

- IN RANGE (29 Feb 2020 @ 19:00:00)

CV RISK

- OUT OF RANGE (29 Feb 2020 @ 19:00:00)

Intervention Required
Thursday 29 February 2020

BLOOD PRESSURE

- REFER TO DOCTOR (OUTCOME PENDING)

BMI

- IN RANGE (NO ACTION)

SMOKING

- WELLNESS SERVICE (INTERVENE)

Vitals
Thursday 29 February 2020

NORMAL	ABNORMAL	
93		HEART RATE
	93	SYSTOLIC
	107	DIASTOLIC
23,6		BMI

TeleSensi™ CARDIAC
Thursday 29 February 2020

NORMAL	ABNORMAL	
✓		AORTIC
✓		PULMONARY
	✗	TRICUSPID Murmur detected
✓		MITRAL

FINDINGS

Class I: An abnormality at one recording location was detected. This could be due to sub-optimal recording (noise with recording) or the fact that the murmur does not radiate to other parts of the chest. Re-record all the heart sounds immediately or at a later stage. If the abnormality persists, refer to a specialist.

[FULL REPORT](#)

Risk of Heart Attack
Thursday 29 February 2020

Based on 10 year calculation of Framingham Hard CV Risk for Heart Attack and Stroke.

LOW RISK



Body Temperature
Mon, Feb 1, 2021, 12:42:00 PM

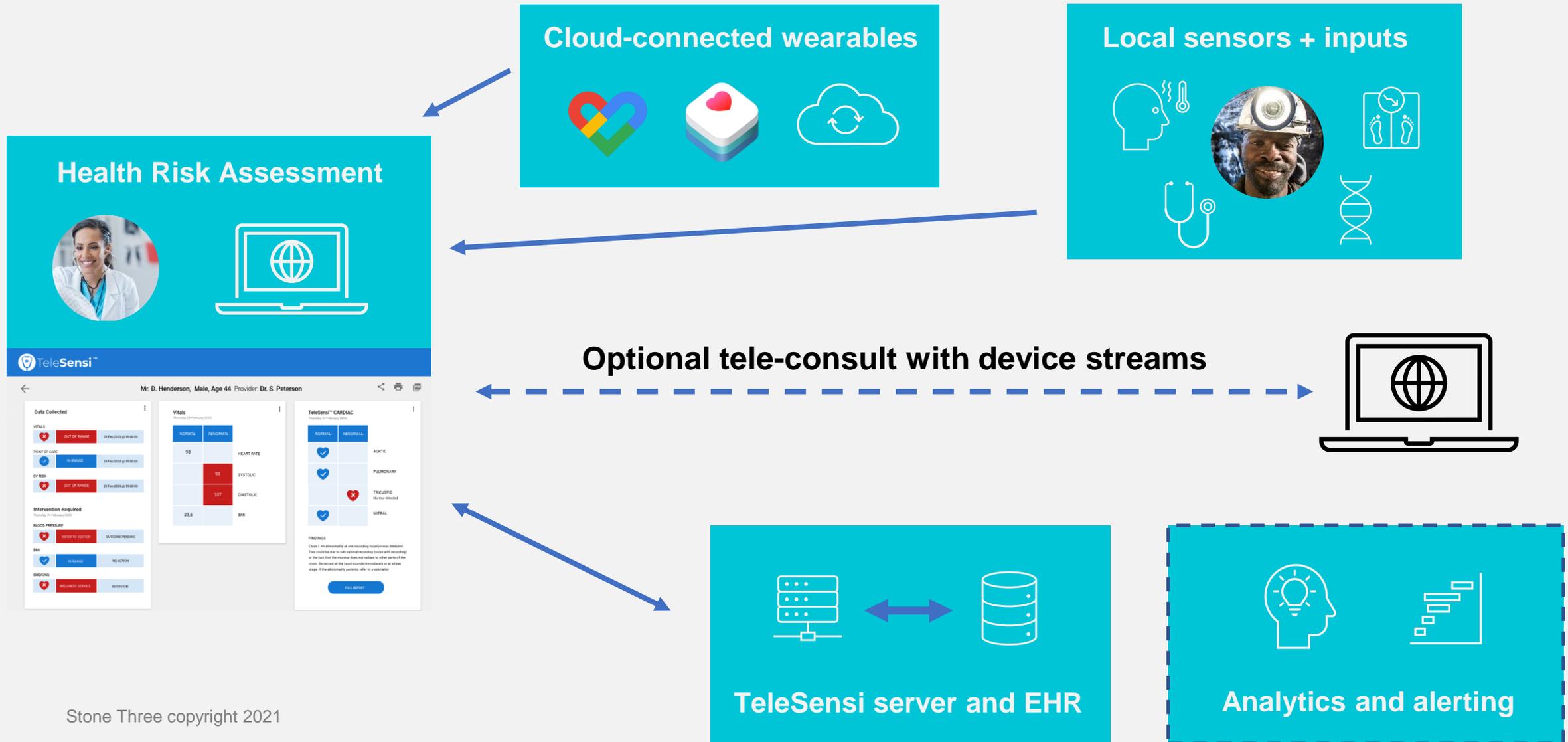
37.0 °C

30°C - 35°C 35°C - 37.5°C 37.5°C - 40°C



Tech and Expertise combined.

Health Risk Assessment Capabilities



Making smart decisions.

Health & Exposure Integration

The dashboard displays the following information:

- Header:** TeleSensi logo, USER2, and navigation icons.
- Left Sidebar:** Dashboard, Launch Session, TeleSensi Cardiac, OpenMRS, Settings, My Profile, Help.
- Patient Details:** Name: Charl Botha, Gender: Male, Birthday: August 20, 1975, Age: 45, ID: 7508209953087.
- BMI:** 22.24 (NORMAL).
- Measurement OTP:** This OTP is entered by the patient in the TelesensiConnector application to join the consultation. Click the 'Request OTP' button below when ready.
- Body Temperature:** 36.2 °C.
- Pulse Oximeter:** OXYGEN LEVEL: 100% OXY; HEART RATE: 61 BPM.
- Blood Pressure (ESC):** SYSTOLIC: 132 MMHG; DIASTOLIC: 91 MMHG; HYPERTENSION GRADE 1.
- Telesensicardiac:**

	NORMAL	ABNORMAL
AORTIC	✓	
PULMONARY	✓	
MITRAL	✓	
TRICUSPID	✓	

FINDINGS: NORMAL. No abnormalities detected. We suggest you repeat the assessment at regular intervals as valve pathology may develop over time.

[OPEN REPORT](#)
- Noise Exposure Graph:** Heatmap showing noise exposure levels (db) over time (Date and Day/Time).
- Noise Exposure Assessment:** EXTREME NOISE EXPOSURE: YES.
- Hearing Loss Overview:**
 - ABNORMAL EARDRUM: NO
 - NOISE EXPOSURE: HIGH
 - ABNORMAL AUDIOMETRY: YES
 - SUGGESTED ACTION:** [CALL AUDIOLOGIST](#)



Why work with us





- Provides uniquely practical end-to-end measurement, analytics, corrective action, change management and value tracking solutions for operational and people productivity.
- Offers unique and patented industrial solutions.
- Has built an experienced and highly qualified team that includes internationally recognised thought leaders.
- Is the preferred supplier for respected, industry-leading multinationals.
- Achieves higher than 95% renewal rates.

Purpose

We harness technology to solve problems that matter to organisations and their people.

Vision

A world where human endeavour is safer, healthier and more productive.

Mission

To bring technology down to earth, increase operational productivity and improve people's health and safety.



Digitalization Industry Trends 2021



Wearables

- Health data
- Accident reporting
- Tracking



Video Analytics

- Behaviour & Risk
- Surveying (e.g. UAVs)
- Remote monitoring
- Big data



Data Security & Cloud

- Cyber attacks & Leaks
- Flexibility & Data analytics



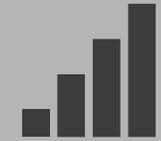
Remote Working

- Distributed skills
- Technology & Systems
- People well-being, communication, mental health



Big Data & AI

- Challenges
- Analytics, Patterns
- Decision making
- Prediction



5G

- Private 5G networks
- Remote & Realtime
- Augmented Reality
- Process control
- Machine vision
- Connected health



**It always seems
impossible until
it's done.**

Nelson Mandela



StoneThree
The Future of Work. Now.