



EMBRACING THE REMOTE DIGITAL ENVIRONMENT

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OUTLINE OF TOPICS

WHAT WE'LL DISCUSS

About Us
Partnership
Our markets
Core business
Our platforms
Company strategy
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ABOUT IPACS - TACMIN

ADDING SHAREHOLDER VALUE THROUGH ASSET & PROJECT PERFORMANCE MEASUREMENT, MONITORING & CONTROL

IPACS - TACMIN is a boutique project management consultancy that offers expertise and resources in delivering digital transformation and asset management services to the mining, minerals, construction, energy and power market sectors. We provide extensive experience in project, engineering and asset management with turnkey project implementation from conception through final close-out of projects, and beyond.

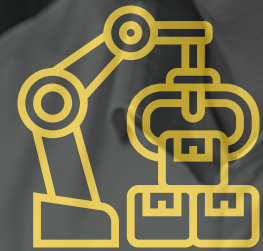
A BUSINESS MODEL FOR UTMOST ADAPTABILITY

IPACS - TACMIN delivers end-to-end value chain optimisation solutions to help organisations improve their operations and asset performance, redefine processes, reduce value leaks, sustain productivity and improve profits.

Our customers share a standard for excellence and a genuine desire to improve efficiency, enabling them to achieve the highest quality of production. It is our honour to help them accomplish this time and time again.

OUR FOCUS

PERFORMANCE IMPROVEMENT WITH REAL-TIME PROJECT,
ASSET & CONSTRUCTION MONITORING CONTROLS



FIXED
ASSETS



MOBILE
ASSETS



CONSTRUCTION
PROJECTS

MINING
PRODUCTION



Extended life
& reduced
maintenance
costs

Cost savings,
Improved
performance,
on-time &
budget
completion

Regulatory
compliance
& reduce risks

ENVIRONMENTAL
ASPECTS



CRITICAL
ASSETS



Proved on a vast variety of infrastructure, industrial and mining projects, is that our company's business models and processes, inclusive of our optimal situational awareness, operations monitoring, data collection and user-centric decision-making can deliver improved performance relating to assets that are associated with Mining, Governments, Construction, Oil & Gas, Materials Handling and Defence.



TACMIN MADINI

operational readiness, procure and cost engineer, asset and project management, decision analysis, audits and reviews.



IPACS AUSTRALIA

computer networking, virtualisation, IT infrastructure management, embedded sensing & data management.



OUR EXPERTISE

IPACS - TACMIN

Outsourced

Asset & Project Performance
Measurement, Monitoring & Controls



Operational
readiness



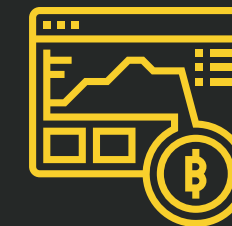
Analysis &
Procurement



Commercial
Management



Asset
Management



Data analysis
& dashboards



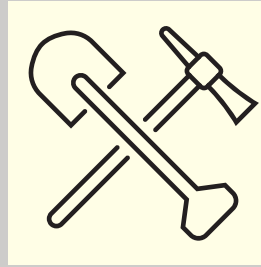
Monitoring
services



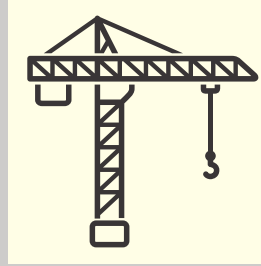
Collaborative
Remote Operations Centre

THE MARKETS WE SERVE

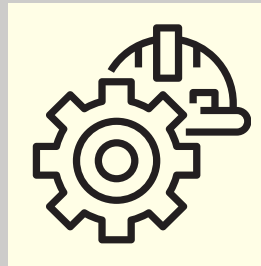
IPACS - TACMIN



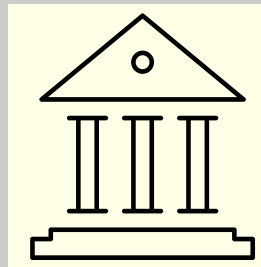
MINE AND MINERAL
OWNERS



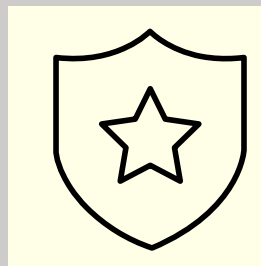
INFRASTRUCTURE
CONSTRUCTION



CIVIL & MINING
CONTRACTORS



GOVERNMENTS &
MUNICIPALITIES



DEFENCE
SECTOR

PROJECT EXPERIENCE SUMMARY

TACMIN MADINI

Our core expertise has gained vast exposure in the management and turning to account of civil infrastructure construction projects for Governments; including but not limited to single and dual carriageways, roads & township infrastructure, earth dams, bridges and concrete structures, construction and rehabilitation of roads and railroads, construction of international airport as well as construction of storage, tailings, return water, stormwater diversion and emergency dams for mining companies.

Experience gained in mining varies from the consultancy, construction and management as well as engineering design of open-pit mines in platinum, gold, diamonds, copper, cobalt, phosphates, coal, fluorspar, manganese, iron ore, vanadium, PGM's and chrome. From an asset management perspective, during the 35 years described above, our core expertise dealt with life cycle costs, owning and operating costs, capital recommendations, construction, application and or performance improvement of more than 300 different construction and open-pit mining equipment models and sizes, with hauling equipment that ranges from 25 to 380 payload tons and matching shovels of up to 45 m³ bucket capacity

+US\$ 800M OF SAVINGS

OPERATIONAL IMPROVEMENT ON PROJECTS GLOBALLY

Backed by 25 years of experience in end-to-end value chain optimisation solutions to help organisations improve their operations and asset performance, redefine processes, reduce value leaks, sustain productivity and improve profits. Assisted over 30 mines with mine optimisation, reducing costs and training of Clients personnel to develop sustainable optimal mining practices, totaling to aggregated savings of +USD800 million during operations improvement assignments since 1996.





WHY DATA DRIVEN DECISION MAKING IS IMPORTANT TO US?

"We enable companies to create new business opportunities, generate more revenue, predict future trends, optimize current operational efforts, and produce actionable insights."

The digital world is in a constant state of flux, and to move with the ever-changing landscape around us, we must leverage data to make more informed and powerful data driven business decisions. Data driven business decisions make or break companies. This is a testament to the importance of online data visualization in decision making.



IPACS-TACMIN
Dedication & Innovation

COLLABORATIVE REMOTE OPERATIONS CENTRE

IPACS operates South Australia's pioneering Remote Operation Centre, which opened in March 2015 to service the state's valuable resources industry. The centre monitors the real-time asset performance of mining vehicles, boilers, smelters, SCADA systems and mining fixed-plant infrastructure for some of the world's largest miners and contract miners - including Arrium/Lucas, Thiess and OZ Minerals. They analyse data and provide reports in clear, easily understood formats, enabling organisations to make informed and timely decisions.

Our most important platforms

ASSESS

Project life-cycle modelling, procurement, shadow bids, decision-making analysis, performance benchmarking.

MONITOR

Digitally enabled asset reliability, with fleet management and condition monitoring / preventative maintenance.

ANALYSE

Optimal situational awareness, operations monitoring, data collection, user-centric decision-making.

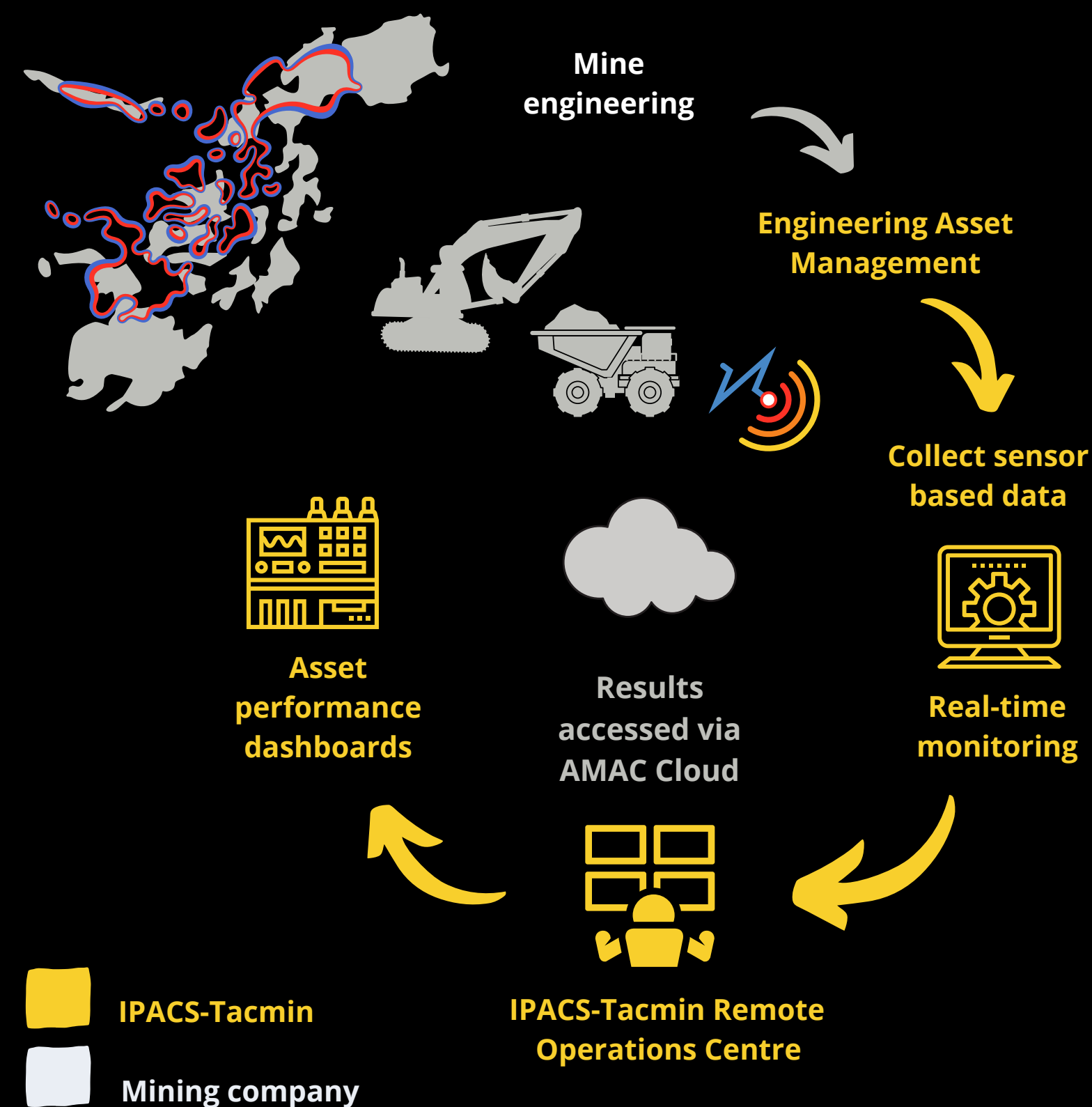
CONTROL

Project controls throughout the life cycle of the project from design to delivery with real-time feedback on performance.

CONNECTED ASSETS

OPERATIONAL INTELLIGENCE & ASSET OPTIMISATION TECHNOLOGY

Data must be collected where it's generated, and it often comes from a wide geographical area. We collect and transmit data using a wide range of sensors and data communication technologies, including innovative wireless sensor design. We use wireless, satellite or wired data transmission technologies to securely transmit data from sensors. Our most comprehensive data acquisition system (which is IP67 rated, shock and vibration proof and military-grade) comes fitted with a 3G modem and router that is configured to send data to our Cloud. It also has an onboard historian which stores data through the truck route.



Project execution



IOT INFRASTRUCTURE & DATA COMMS

Install sensors on equipment, configure & establish IoT for data collection, import and setup project data, simulation & digital twins.

BENCHMARKING & OPTIMISATION

Connect engineering and assets, benchmark performance & costs, procure & appoint, operational readiness & projections.

COLLECT DATA ANALYSE & REPORT

Data collection, real-time monitoring, analysis, decisions, actual vs planned comparisons, project controls, report & advise.

2020 GOING FORWARD

WHAT TO EXPECT

Through a partnership between IPACS and Tacmin, we have integrated the expertise of the respective companies and developed a sought after entity in which we combined our capability in project, contractor and asset management expertise, with decades of experience in the collection, monitoring and reporting of real-time asset performance and critical assets that enabled to us to develop products and solutions which can connect projects and assets to the Internet of Things (IoT)

TACMIN EVOLUTION

DIGITAL TRANSFORMATION

TACMIN



1997

Outsourced contract mining procurement, commercial & contractor management.

4 YRS AVE

Contractor and project management assignments.

TACMIN



2001

Outsourced mine engineering & mobile asset management owner operator mines.

5 YRS AVE

Owner-operator mobile asset management assignments.

TACMIN



2007

Owner-operator vs contractor trade-off & performance improvement.

4 YRS AVE

Mobile asset & contractor performance optimisation.

IPACS-TACMIN PARTNERSHIP



2020

Fixed, mobile & critical assets, civil infrastructure construction, equipment maintenance optimisation, contractor maintenance support.

Secure, reliable and low-cost collection and transmission of remote sensor data - IT infrastructure management, asset data management, analytics and dashboards, provide real-time feedback on the performance of mobile, fixed and critical assets.

**COLLABORATIVE
REMOTE
OPERATIONS
CENTRE**



Additional Plans

CONTRACT MINER SUPPORT

To assist contract miners with data insights that will give cause to reduced maintenance costs, improved mechanical availability of equipment and extended machine life.

GOVERNMENT SUPPORT

Monitoring of critical infrastructure assets, environmental compliance monitoring and auditing in conformance with the Australian EPBC Act, infra-structure construction project controls.

AMAC CLOUD SOLUTION

AMAC (Assess, Monitor, Analyse & Control) Cloud allows for our asset & project performance measurement, monitoring & control solution to be deployed online and accessed from any location around the world.

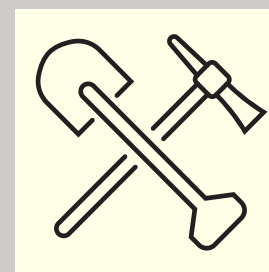
GLOBAL EXPANSION

Establish data centers with our expertise in main city centers in close proximity of operations in CIS countries, South America, Africa and or as per customer demand as identified from time-to-time.

OUR SUPPORTERS

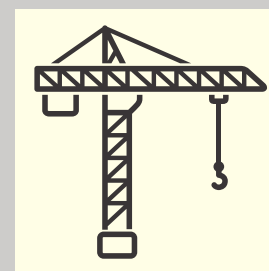
MAKING THIS PROJECT POSSIBLE

MINE AND
MINERAL
OWNERS



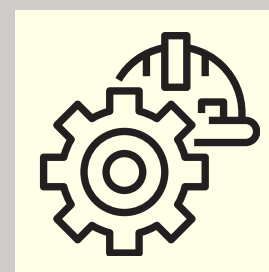
Tier 2 & 3 mining companies for centralised data monitoring, real-time performance, project controls, decision making & operational & cost improvements

INFRASTRUCTURE
CONSTRUCTION



Infrastructure project controls for monitoring progress, conformance, on-time completion, specification adherence and cost controls.

CIVIL & MINING
CONTRACTORS



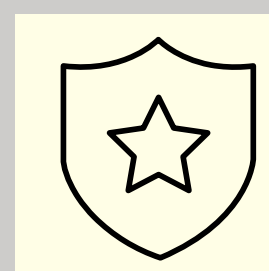
Condition monitoring of equipment, maintenance improvement, cost reductions, enhanced machine life, fleet management & best practices.

GOVERNMENTS &
MUNICIPALITIES



Critical asset monitoring, environmental compliance, infra-structure construction monitoring, real-time feedback, data analysis.

DEFENCE
SECTOR



Our suite of technologies - which include IT infrastructure management, asset data management, analytics and dashboards - provide real-time feedback.

MEET OUR TEAM

PROJECT LEADS



**SAREL
BLAAUW**
Senior Partner
Tacmin Group



**DR. VINAY
SRIRAM**
General Manager
IPACS Australia



**KAILASH
SRIRAM**
CEO & MD
IPACS Australia

CONTACT US

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