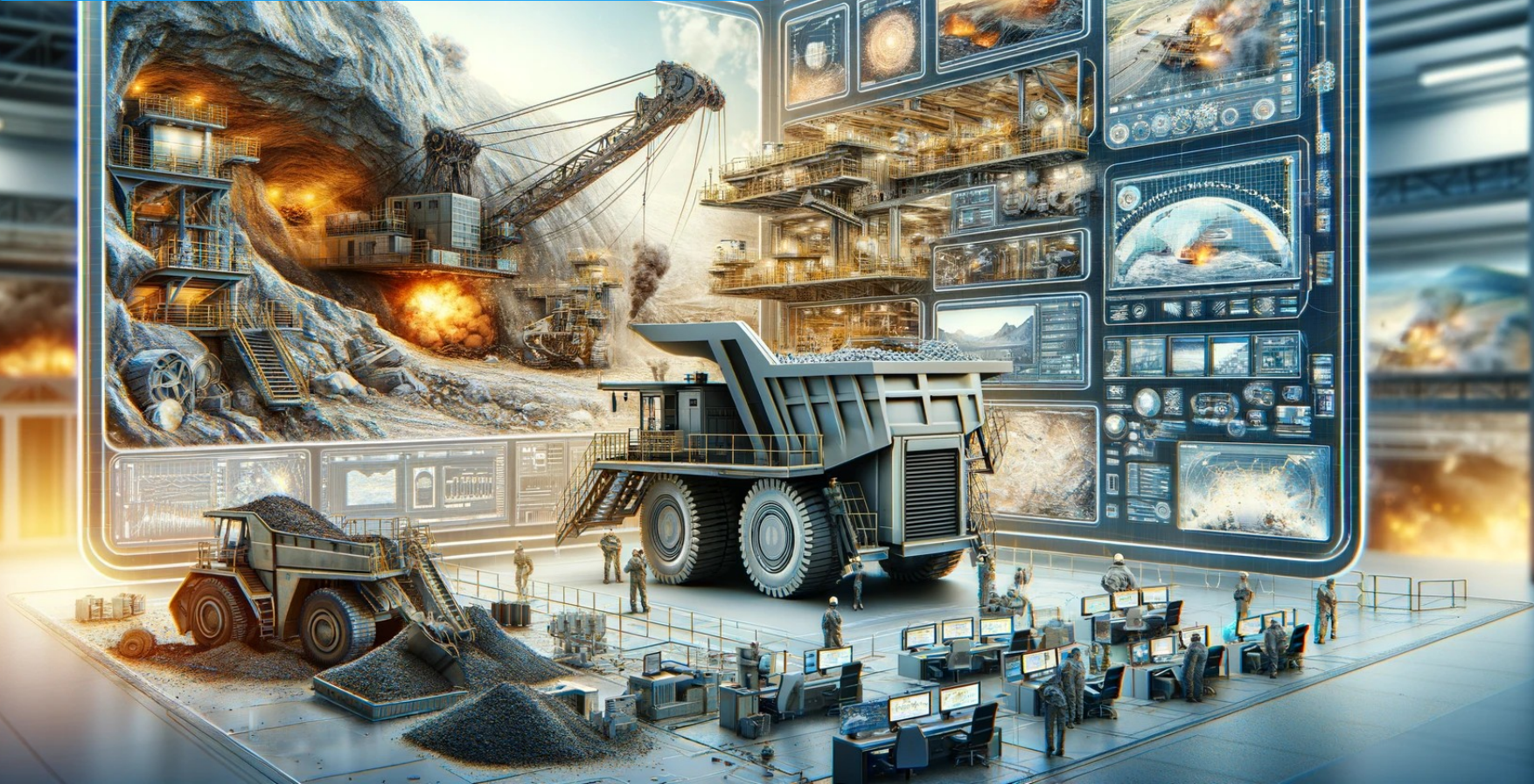


## The future of digital fatigue and drowsiness management



Logifit

# BUSINESS CASE



**TM** MAQUINARIA



Peru



Machinery

<https://tmmaquinaria.pe/>

# CLIENT PROFILE

## TM MAQUINARIA · TINTAYA MARQUIRI,

TM Maquinaria S.A. (Tintaya Marquiri Maquinaria) is a Peruvian contractor specializing in earthmoving, civil works, heavy machinery rental, and transportation for the mining and industrial sectors, headquartered in Espinar, Cusco.

With over 6 years of operation, +15 owned equipment units, and +25 executed contracts, it is a key supplier to Compañía Minera Antapaccay (Glencore) at the Tintaya project.

**13**

years in the

**+500**

employees

Logifit



15 1  
14.866





# BUSINESS CASE

Client: TM  
MAQUINARIA  

---

IDENTIFIED  
PROBLEM



# Fatigue in mining: A SILENT ENEMY PRESENT IN OPERATIONS

The Tintaya tailings complex is located at 4,100 masl in Espinar, Cusco.

The pre-Logifit assessment revealed that 78% of TM Maquinaria's 75 operators exhibited measurable fatigue risk — a critical level, given Antapaccay's HSEC standards and the framework of DS 024-2016-EM for mining safety in Peru.



**78**  
%  
Workers with  
Fatigue-  
Associated Risk



# BUSINESS CASE

Client: TM MAQUINARIA  
STRATEGY, ACTION PATHS,  
RESULTS



# TECHNOLOGY WITH MINING EXPERTISE SUPPORTING HEALTH AND SAFETY

Logifit was deployed across the fleet of 75 operators, integrating smartbands and Psychomotor Vigilance Test (PVT) protocols into TM Maquinaria's pre-shift routines and safety management at Tintaya.

Continuous biometric monitoring with smartbands, alertness PVT, and the Driver Monitoring System (DMS) on mobile equipment enabled real-time detection and intervention.

**75**

operators



# A PREVENTIVE SAFETY VISION

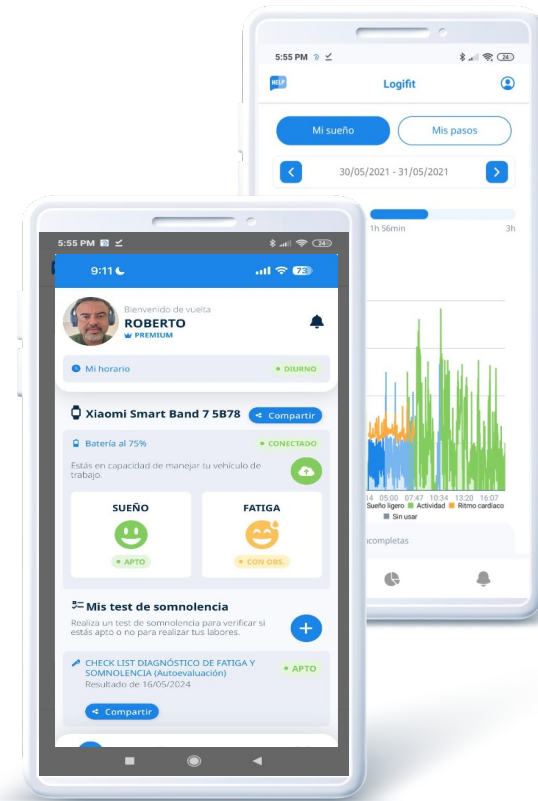
changing the paradigm and innovating

TM MAQUINARIA's commitment to operational safety generated measurable results throughout the deployment at Tintaya, reinforcing a culture of prevention and well-being for all personnel.

The Logifit model integrates technology + ongoing support services, and has positively influenced a more robust safety culture and a user-friendly control system that directly impacts the health and well-being of field personnel.

*“Implementing fatigue management with Logifit at Tintaya allowed us to take our operators' safety to a level we had never reached before — reducing fatigue risk from 78% to 5%.”*

**Safety Management — TM Maquinaria**



**Logifit**



# TRANSFORMING BENEFITS INTO WELL-BEING RESULTS



**BEFORE**

**78**

Workers with  
Fatigue-  
Associated Risk

**BENEFIT**

**+94**



**NOW**

**5%**

Workers with  
Fatigue-  
Associated Risk

*“From 78% to 5% fatigue risk — Logifit changed how we protect our people at altitude.”*

**Management — TM Maquinaria**



## The future of digital fatigue and drowsiness management

