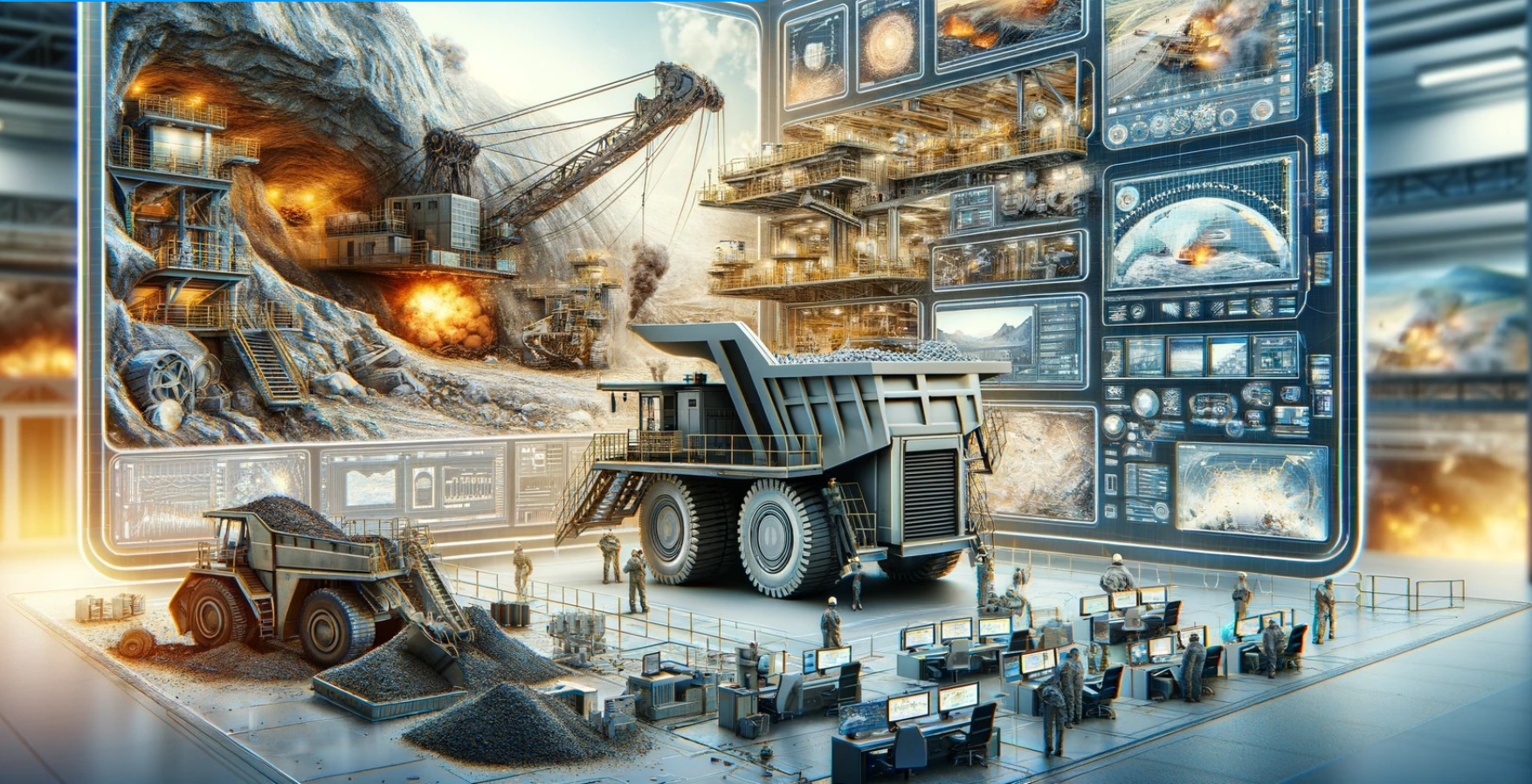


The future of digital fatigue and drowsiness management





BUSINESS CASE



Peru



Mining



<https://es.zijinmining.com/global/program-detail-71956.htm>



CLIENT PROFILE

LA ARENA · SÁNCHEZ CARRIÓN

PROVINCE, LA LIBERTAD, PERU

La Arena S.A. is a Peruvian mining company (acquired by ZiJin) that operates the La Arena open-pit gold mine and develops the La Arena II copper-gold project in the La Libertad region, ~480 km northwest of Lima.

Phase I processes 36,000 t/day through heap leaching, producing ~3 t of gold per year. In December 2024, Zijin Mining acquired 100% of La Arena S.A. from Pan American Silver for US\$245 million.

15

years in the
market

1500

employees



ZiJin



LA ARENA

BUSINESS CASE

Client: LA ARENA
IDENTIFIED PROBLEM

Fatigue in mining: A SILENT ENEMY PRESENT IN OPERATIONS

La Arena is an open-pit gold mine at 3,000–3,600 m.a.s.l. near Huamachuco, La Libertad.

The initial assessment of 96 operators revealed that 79% presented fatigue-associated risk — a critical liability under DS 024-2016-EM and Law 29783 applicable to Peruvian mining.



79
%
Workers with
Fatigue-
Associated Risk



BUSINESS CASE

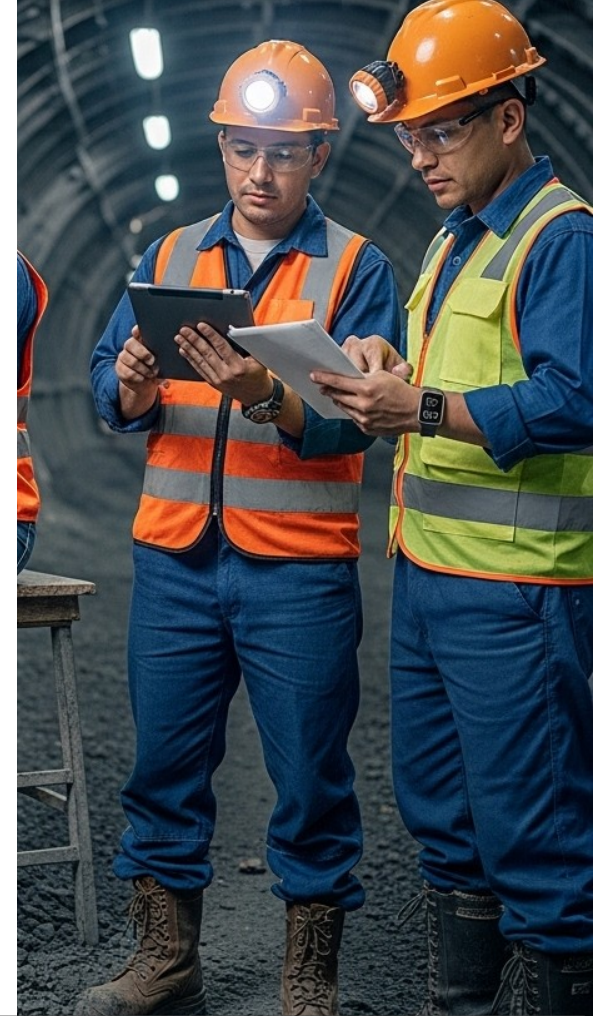
Client: LA ARENA
STRATEGY, ACTION PATHS,
RESULTS

TECHNOLOGY WITH MINING EXPERTISE SUPPORTING HEALTH AND SAFETY

Logifit deployed a structured fatigue management program for 96 operators, integrating smartbands, psychomotor vigilance tests (PVT), and real-time dashboards coordinated with the mine's HSEC team.

Continuous biomechanical monitoring via smartbands enabled early alerts; PVT results guided shift assignments and rest protocols. Following deployment, fatigue risk dropped from 79% to 7% — a 72-percentage-point decrease — closing the compliance gap.

96 operators



A PREVENTIVE SAFETY VISION

changing the paradigm and innovating

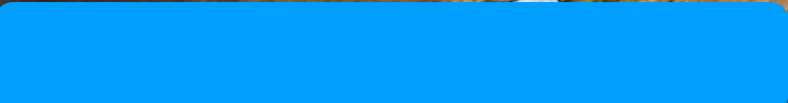
LA ARENA's commitment to operational safety delivered measurable results throughout the deployment at La Arena, reinforcing a culture of prevention and well-being for all personnel.

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

“Reducing fatigue risk from 79% to 7% among our operators transformed our safety culture and gave us a measurable and defensible compliance baseline.”

Safety Leadership — Minera La Arena





TRANSFORMING BENEFITS INTO WELL-BEING OUTCOMES



BEFORE

79

Workers with
Fatigue-
Associated Risk

BENEFIT

+91



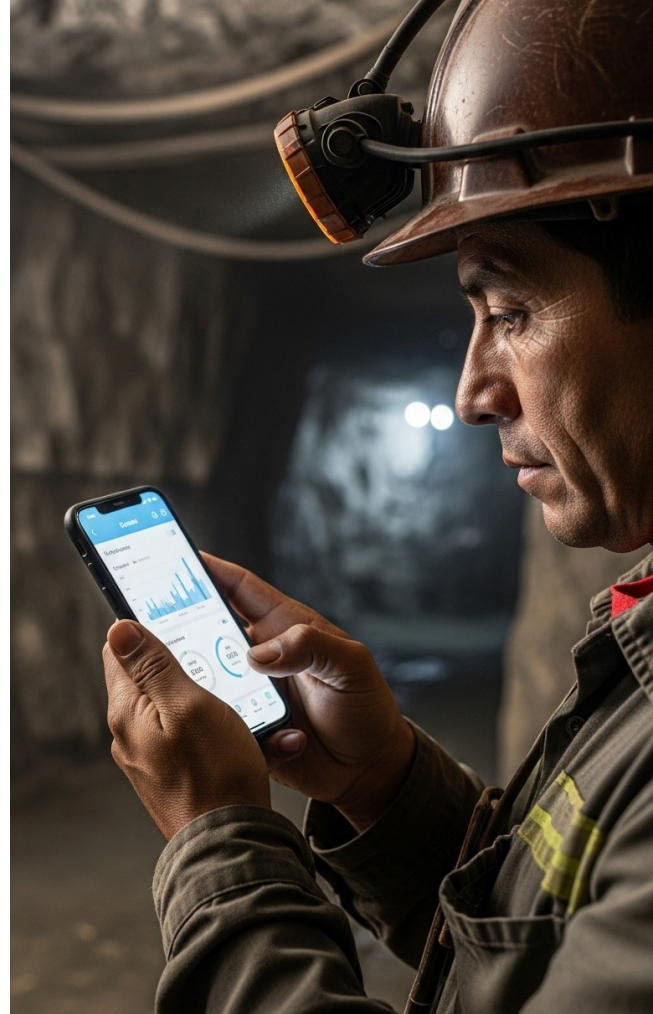
NOW

7%

Workers with
Fatigue-
Associated Risk

“Real-time fatigue monitoring at high altitude is no longer optional — it is critical to the operation.”

Operations Management — Minera La Arena



The future of digital fatigue and drowsiness management

