

# Las tecnologías digitales como base de la minería moderna

ProyectMin 2025

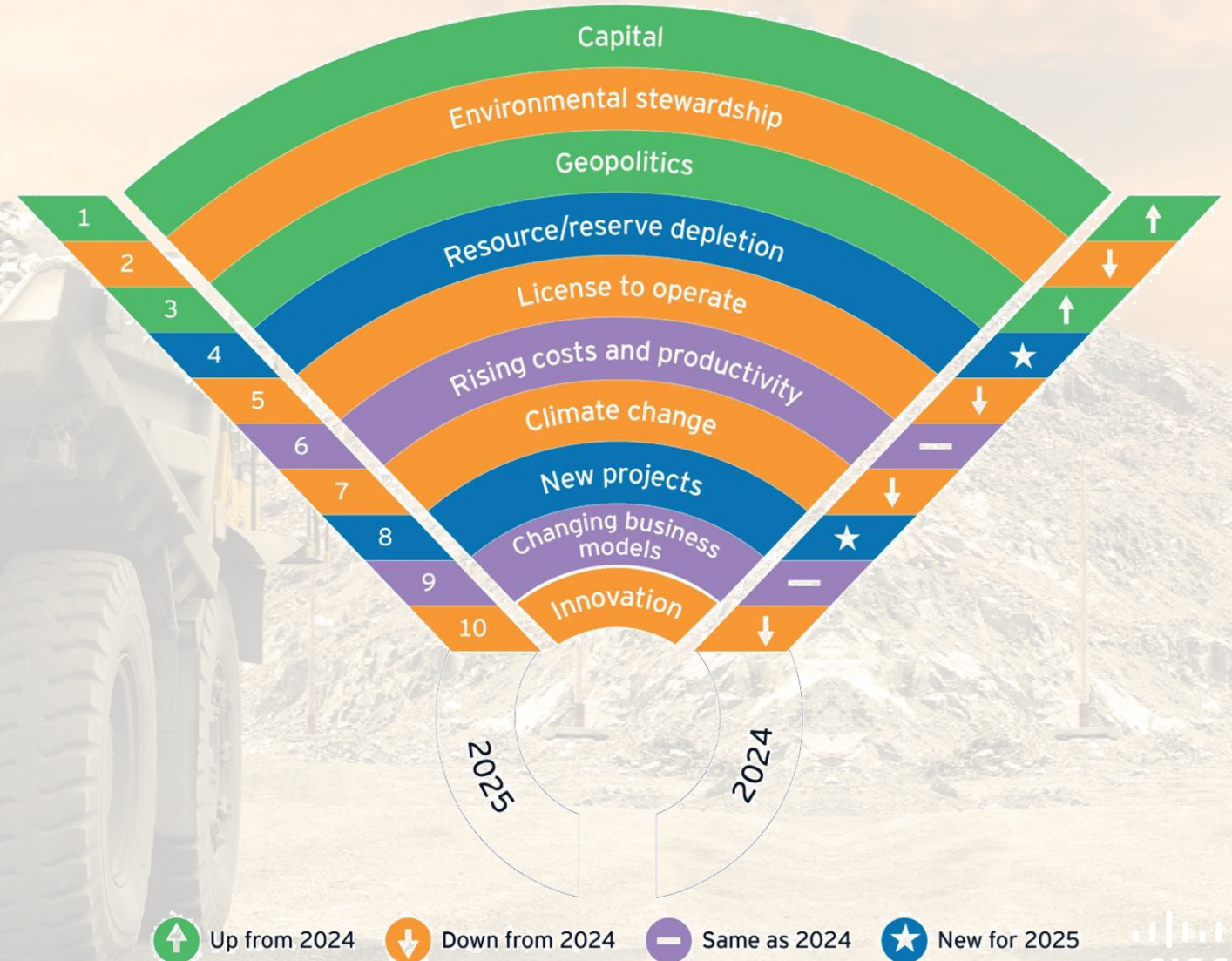
Daniel Peña  
Gerente de Ventas, Minería  
Julio 2025





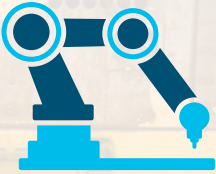
# EY Top 10 risks and opportunities for mining and metals companies in 2025

-  Environment, the push toward nature positive and Net-Zero
-  Rising Cost & Productivity: labor, energy, skills shortages
-  New Projects: regulation barriers, high capital, lack or workers
-  Innovation: more collaboration between actors to drive innovation





# Technology adoption and continuous innovation are key for Mining



- AI/ML and tools like digital twins and data analytics **provide information** for faster and smarter decision making
- **Automate** the operation and replace repetitive and risky jobs
- Decrease the impact on the **environment**
- They allow to **eliminate silos** and generate more coordination and **collaboration** between teams



# Delloitte: Tracking the trends 2025

Leading through transformational change in mining and metals



**Trend 4:**  
Enhancing mineral  
exploration with AI  
Utilizing precompetitive  
geoscience data



**Trend 6:**  
Smart operations  
in mining and  
metals  
The data-driven  
advantage



**Trend 7:**  
The impact of  
GenAI on the  
mining and metals  
workforce  
Developing effective  
reskilling strategies



# Technology allow improvements through the entire Value Chain, specially in safety and environmental impact

## Technologies

AR/VR, Digital Workers



Automation, Drones & Robots



Integrated Ecosystems



AI/ML, Big Data, Advanced Analytics



Exploration and Development



- Use of data during the exploration

Extraction



- Autonomous mining, drilling

Crush and Grind



- Ore tracking

Foundry



- Big Data to optimize performance

Integrated Operations



- Data in real time for monitoring

Safety & Health



- People Tracking (RFID)

Environment



- Use of drones to monitor large areas

Energy Management



- State monitoring to anticipate failures

Water Management



- Remote monitoring of pipes and spills

Supply Chain



- Integrated with vendors



# Everything starts with a Digital Ready Network





# Cisco, enabling the 4.0 mining and more!



Connectivity

High-speed, reliable and smart wired and wireless connectivity for IT/OT, build with AI and automation to streamline operations and enhance efficiency.



Cyber Security

Advanced user, IT/OT network & Cloud Cyber Security, powered by AI/ML for rapid and automatic response and containment



Collaboration

Secure, integrated collaboration solutions to enhance team productivity, engagement, and user experience



Data Analytics & Observability

Scalable platform for data analysis, correlation, and visualization that enables actionable insights, real-time monitoring, and enhanced decision-making



Data Center & Cloud

AI-ready, secure data center and cloud solutions fully automated to simplify operation and accelerate application delivery.

