IDC Energy Insights: Agile Mining Operations

**Programs**

**Digital Exploration**
- Drilling Optimization
- Ore Search Optimization

**Connected Assets**
- Smart Assets
- Strategic Asset Management

**Agile Integrated Operations**
- Resilient Operations
- Integrated/Collaborative Operations
- Smart Processing
- Digital Supply Chain
- Process Safety
- Enhanced Personal Safety
- Environment & Sustainability

**Use Cases**

**Strategic Priorities**
- Agile Integrated Operations
- Resilient Operations
- Next-Gen Safety and Sustainability

**Technologies**
- Insight Guided Drilling
- Geological Digitalisation Platform
- Virtual Geophysics
- Drone-Based Exploration
- Ore Intelligence
- Rapid Ore Insight
- Greenfield Mine Viability
- Remote Control Exploration

- Self-Healing Assets
- Asset Instrumentation
- Equipment Health Communication
- Predictive Analytics
- Digital Inspection
- Coordinated Maintenance
- Asset Tracking
- Integrated Asset-Centric Maintenance

- Ore Grade Optimization
- Resource Management
- Operational Decision Support
- Lean Mining Execution
- Digital Twin
- Autonomous Mining
- Digital Native Designed Mine

- Predictive Ore Optimization
- Collaborative & Autonomous Operations
- Digital Blending
- Smart Processing Insights
- Integrated Ore Recovery
- Collaborative Development

- Autonomous Stockpile Management
- Pit-to-Port Optimisation
- Supply Chain Automation
- Global Trade Automation
- Mine to Demand
- Vendor Engagement
- Inventory Intelligence

- Process Condition Monitoring
- Process Self Inspection
- Augmented Training
- Robotic Mine Safety
- Geo Spatial Safety

- Connected Safety Wear
- Virtual Presence
- Augmented Training
- Mine Site Rehabilitation
- Tailings & Other Storage Facility Management
- Environmental Resource Optimisation

**Websites**
- www.idc.com/iteexecutive
Building Your Industry - Specific Digital Roadmap

Identify your baseline state and define what it will take to evolve your organization to the future digital state

Factor in customer journey maps, capabilities and portfolio gaps as you establish your programs and use case
Agile Mining Operations
Digital Roadmap

HORIZON 1
Use cases that are deployed today

HORIZON 2
Use cases that are being incubated

HORIZON 3
Use cases that imagine the possibilities

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Break Digital Roadmaps into Horizons

A digital roadmap should be aligned with the overall digital strategy and contain concrete goals in Horizon 1 and more abstract and aspirational goals in Horizon 3.
Digitally Transforming the Enterprise Industry by Industry

Industry Digital Missions
Succinct representation of enterprises purpose of existence

Strategic Priorities
Describes what organization expects to accomplish over extended period of time to achieve the mission

Programs
A long term plan of action to achieve the strategic priorities through a series of use cases

Specific Business Use Cases
Discrete funded effort that supports the objective of a specific program that employs LOB and IT resources

Use Cases Include:
- Current Situation
- Business Goals and Objectives
- Key Enabling Technologies
- Business Case Summary

Learn more at www.idc.com/itexecutive