





IDC Energy Insights: Agile Mining Operations

Strategic Priorities	Programs	Use Cases				
Digital Exploration 	Drilling Optimisation	Insight Guided Drilling	Geological Digitalisation Platform			
	Ore Search Optimisation	Virtual Geophysics	Drone-Based Exploration	Ore Intelligence	Rapid Ore Insight	Greenfield Mine Viability Remote Control Exploration
Connected Assets 	Smart Assets	Self-Healing Assets	Asset Instrumentation	Equipment Health Communication		
	Strategic Asset Management	Mine Process Insights	Augmented Maintenance	Predictive Analytics	Digital Inspection	Coordinated Maintenance
Agile Integrated Operations 	Resilient Operations	Ore Grade Optimisation	Resource Management	Operational Decision Support	Lean Mining Execution	
	Integrated/Collaborative Operations	Operational Ecosystem	Collaborative & Autonomous Operations	Digital Twin	Autonomous Mining	Digital Native Designed Mine
	Smart Processing	Predictive Ore Optimisation	Digital Blending	Smart Processing Insights	Integrated Ore Recovery	Collaborative Development
	Digital Supply Chain	Autonomous Stockpile Management	Pit-to-Port Optimisation	Supply Chain Automation	Global Trade Automation	Mine to Demand
Next-Gen Safety and Sustainability 	Process Safety	Process Condition Monitoring	Process Self Inspection		Vendor Engagement	Inventory Intelligence
	Enhanced Personal Safety	Connected Safety Wear	Virtual Presence	Augmented Training	Robotic Mine Safety	Geo Spatial Safety
	Environment & Sustainability	Sustainable Energy Management	Mine Site Rehabilitation	Tailings & Other Storage Facility Management	Environmental Resource Optimisation	
	Local Community Integration	Digital Community Forum	Localised Supply Chain Sourcing			

Agile Mining Operations Digital Roadmap

