

Closing the gap in mining productivity with operational excellence software

ABB Ability™ Operations Management System for mining helps you take the right actions for your operational performance objectives

Calibrate all mining-specific operational constraints in real time using flexible, purpose-built analytics, Execution System (MES) and Fleet Management System. Ensure more automated, safe, and dependable execution within a particular operational area and across the entire value chain.

Improved responsiveness to unplanned events

Reduced production variability

Increased productivity by up to 10%

Where are you and where do you want to be?

Utilization rate of mobile mining machines can be as low as

20–25% of available working time

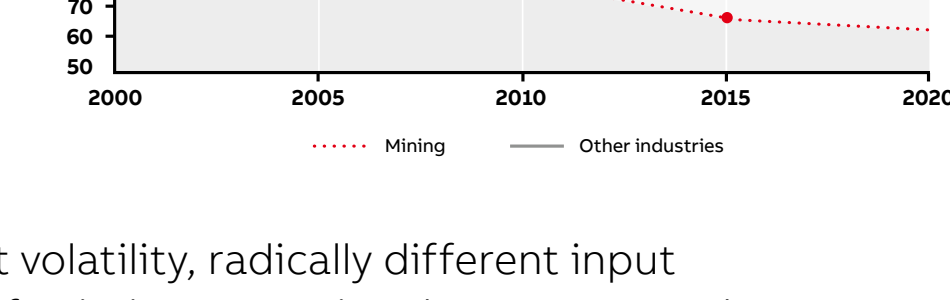
Mean Time Between Failures - MTBF of mining machines, can be as low as

8 hours

Utilization rate of mobile mining machines can be as low as

20–30% of available working time

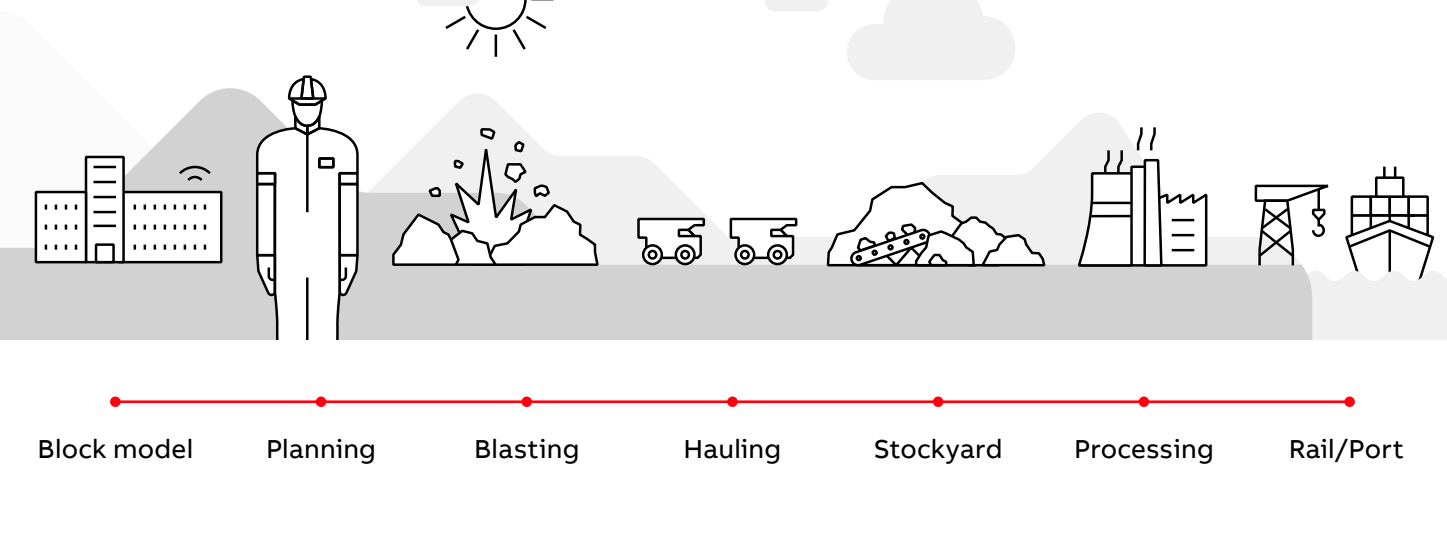
Productivity trend of mining industry vs. all other global industries



The mining industry is not keeping up with others in terms of productivity

A combination of market volatility, radically different input economics, limitations of existing operational processes and measurement approaches have been hindering the industry's ability to address the challenge.

| | | | |
|-------------------------------|-------------------------|-------------------------------|-------------------------|
| Increasingly challenging ores | Labor shortages | Low productivity | Plant variability |
| License to operate | Raising operating costs | Remote, hazardous environment | Pressure to decarbonize |



Mine planners struggling to deliver believable plans and practical scheduling of resources due to lack of visibility into ongoing activities in the mine.

Processing plant operators unaware of the targets and their changes, struggling to identify root cause of anomalies in real time. Communicating tasks verbally or on paper.

Haulage dispatchers struggling with mismatch between fleet and process plant capacity, cycle time variability, low MTBF* due to missing visibility on real-time operations and machine tools location.

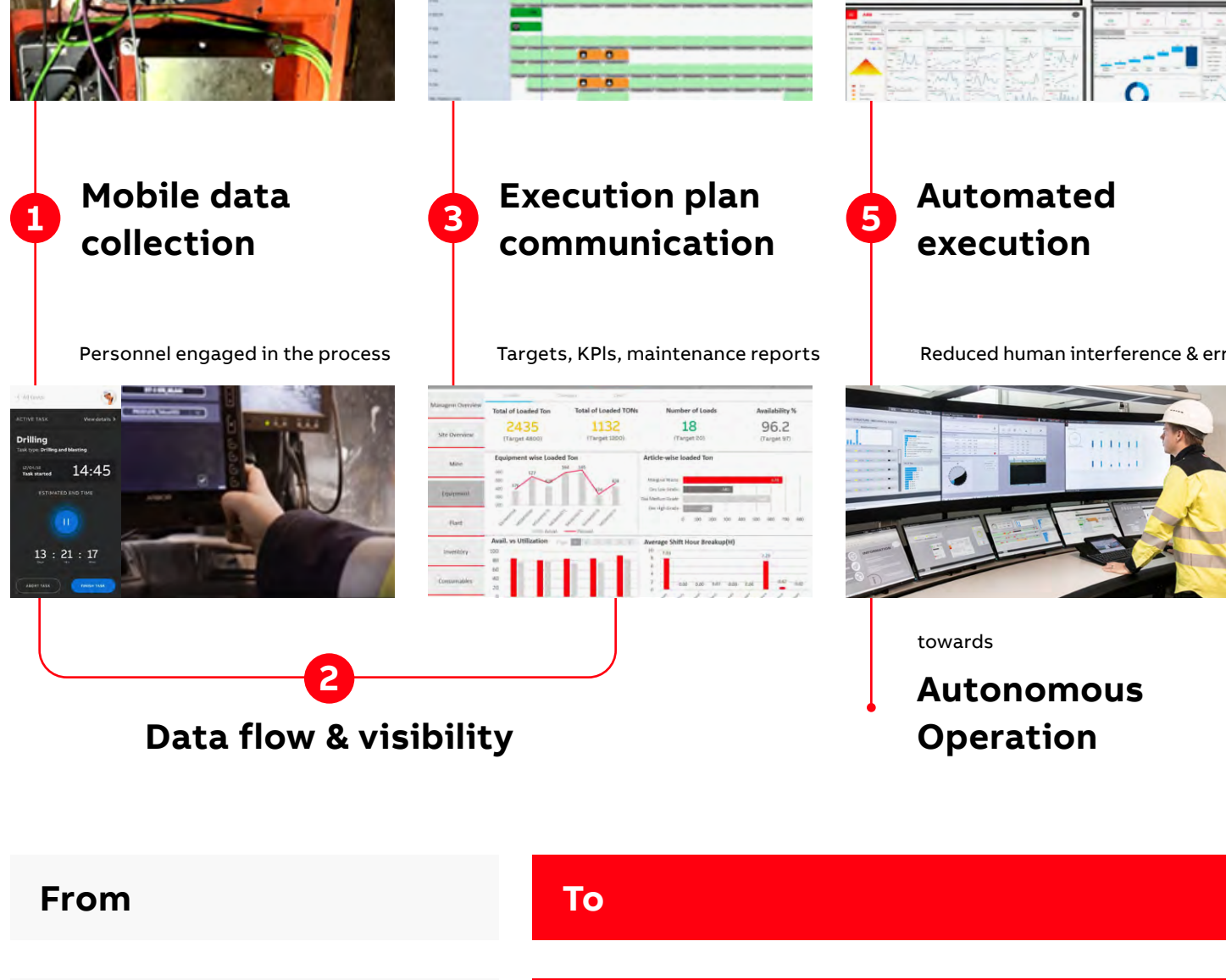
Shift supervisors and operators not delivering against the plan due to unrealistic expectations or when circumstances change during the execution. Communicating on paper, radio, shift meetings.

Plant managers and C-Suite leaders lacking timely and actionable insights about the reasons behind differences in performance levels, safety and compliance.

Higher mining productivity is obtainable through the digitalization

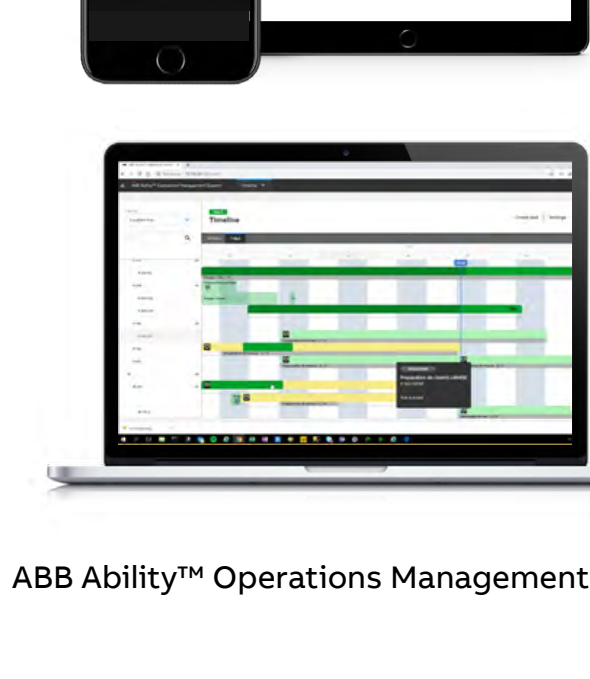
Mining operator: "I can reduce cost per ton, keep production on plan, provide contracted material quantities & qualities much faster and more reliably – automatically optimized for market conditions & available resources"

5 steps to digitalizing the mining value chain



| From | To |
|---|--|
| <p>Traditional way</p> <p>People & equipment status on paper, radio, shift meetings</p> <p>Disturbances – power outages, missed drilling cycles, unplanned maintenance cause delays, overtime, reduced financial returns</p> <p>Mine planners spending 30% on planning, 30% on rescheduling, 40% on manual data inputs and reporting (>2000 events per shift)</p> <p>Disparate systems, lack of coordination & visibility</p> | <p>Digital solutions</p> <p>All resources across the mine tracked remotely (personnel, machines, their characteristics, trip distances), tasks scheduled and dispatched on-line</p> <p>Deviations to plan, activity bottlenecks highlighted to operator in real time. Replanning in seconds instead of hours, supported by «what if» analysis</p> <p>Single source of truth from multiple sites, end-to-end value chain visibility, automated reporting, benchmarking improve collaboration & decisions</p> <p>ERP integration & automated data exchange optimize material blend quality, stockyard space utilization and shorten ship/train waiting time</p> |

Ready to increase your business value?



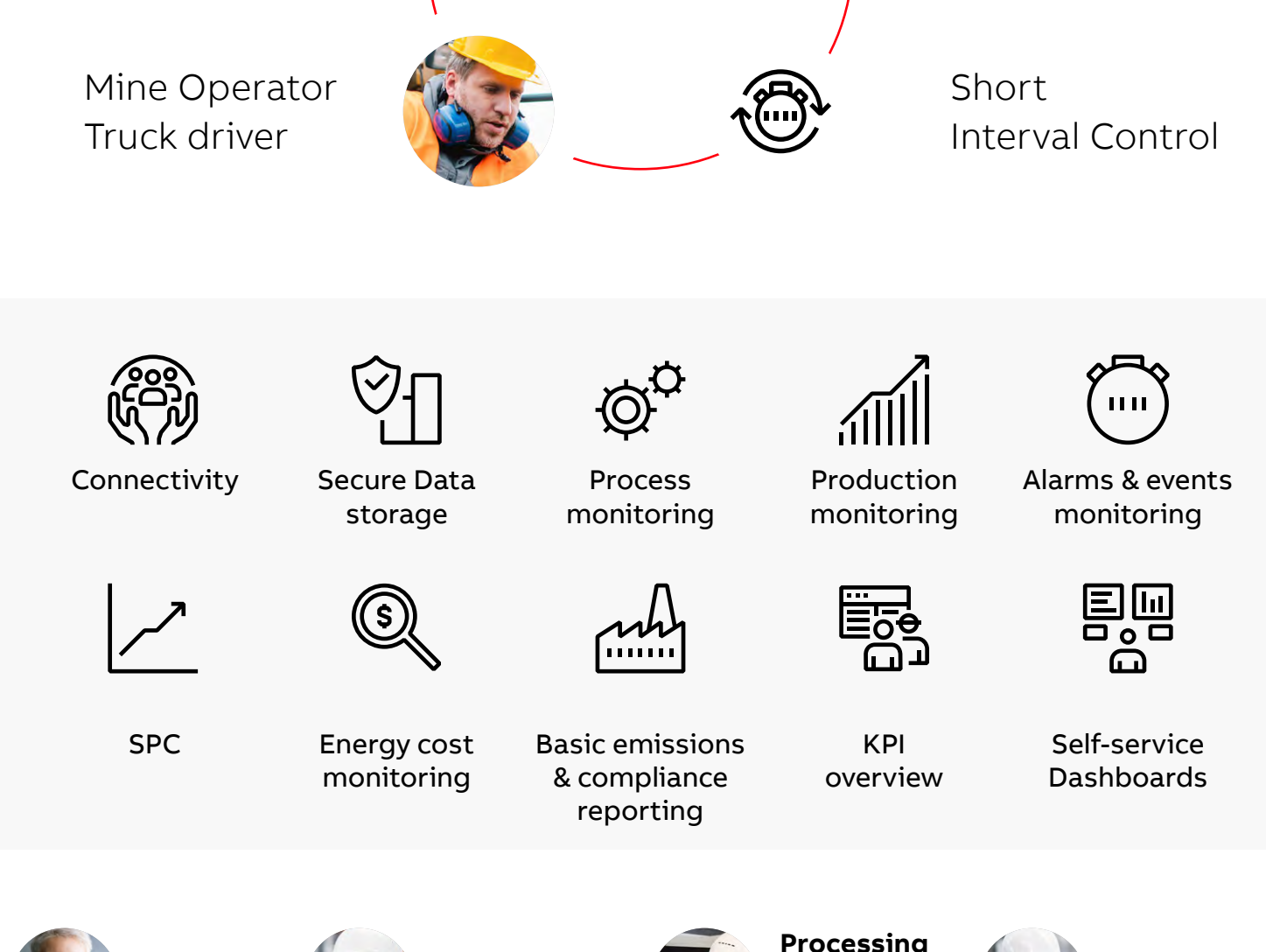
- End-to-end visibility and costs**
Drive overall productivity through better use of resources, competitiveness and cost control to achieve your business goals.
- Quality and consistency**
Ensure error-free, consistent processes for dependable delivery of on-specification product quality and customer satisfaction.
- Agile execution**
Gain more agility to adjust production volume and delivery, optimize throughput, speed up response to unexpected events.

ABB Ability™ Operations Management System for mining

Start your journey to true operational excellence today

See how our mining clients are closing the loop between short-term planning and real-time operations while improving the overall transparency with ABB Ability™ Operations Management System for mining.

Reach out to ABB using the "Contact us" section on [this page](#).



- 25%** Cost savings from integrations – interoperability
- 25%** reduction of scheduling time
- 20%** Less personnel overtime annually

ABB Ability™ Industrial Software Solutions that revolve around you