

Sandvik's digital & electrified maturity assessment

This self-assessment is designed to help your team understand where your mining operation is today and where you can create momentum next. It's not a report card, but a snapshot you can use to focus effort, start conversations, and track progress across your enterprise-wide objectives.

How the scale works – For each statement, choose the number (1–4) that best reflects how your operation implements the following items:

1 = Very low or not yet implemented

2 = Early or partial implementation

3 = Well-established or generally in place

4 = Highly advanced or fully embedded

Tip: Try to think about what actually happens day-to-day rather than what's written in policy or planned for the future.

1 Data from key assets (fleet, process, tailings, safety, energy) is integrated and visible in near real time.

1) Very low or not yet implemented

2) Early or partial implementation

3) Well-established or generally in place

4) Highly advanced or fully embedded

2 Core systems (mine planning, maintenance, safety, geology, processing) are connected and share data seamlessly.

1) Very low or not yet implemented

2) Early or partial implementation

3) Well-established or generally in place

4) Highly advanced or fully embedded

3 Site teams use dashboards or analytics to monitor performance and identify improvement opportunities.

1) Very low or not yet implemented

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4 Key processes (e.g., drilling/blasting, loading, hauling, processing) are supported by some level of automation or optimization.

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|---|--------------------------------------|
| 1) Very low or not yet implemented | 2) Early or partial implementation |
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5 Digital initiatives are explicitly linked to site KPIs such as safety, throughput, cost, or emissions.

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|---|--------------------------------------|
| 1) Very low or not yet implemented | 2) Early or partial implementation |
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6 Standard work and operating procedures are documented and consistently followed across shifts.

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|---|--------------------------------------|
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7 Staff are trained and supported to use digital tools, and digital literacy is part of ongoing development.

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|---|--------------------------------------|
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8 Connectivity, cybersecurity, and hardware are reliable enough to support advanced digital tools and applications.

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|---|--------------------------------------|
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9 The site regularly reviews digital performance and adjusts its roadmap based on data and feedback.

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|---|--------------------------------------|
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10 Site leadership actively sponsors digital initiatives and allocates budget and time for them.

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|---|--------------------------------------|
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11 Digital tools are used to monitor and reduce safety and environmental risk (e.g., sensors, alerts, reports).

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|---|--------------------------------------|
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12 The site regularly pilots new digital solutions (AI, automation, IoT) in controlled experiments with clear goals.

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|---|--------------------------------------|
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Scoring & Output

Foundation, 12–23 pts: Your mine site is **laying the foundation** for a more connected, electrified operation. Operations are still largely operator-driven, with limited integration across systems and processes. Electrification and automation may already exist in pockets, but they're not yet standardized, connected, or managed at a systems level. Data tends to be fragmented, tools are often used in isolation, and decision-making relies more on experience than on real-time insights.

This is a good starting point to identify a few high-impact areas to focus on first.

Focus moving toward Acceleration:

- Strengthen data visibility and connectivity across key assets.
- Document and standardize core workflows and operating procedures.
- Launch a small number of targeted pilots (e.g., electrified haulage, basic automation, or performance dashboards) that link directly to safety, cost, or throughput goals.

Acceleration, 24–35 pts: Your mine site is **accelerating** from experimentation to execution. Digital tools and sustainable practices are becoming embedded in daily operations, and integration across systems is improving. You're shifting from "proof of concept" to "how do we scale it safely and consistently?"

At this stage, many core processes are supported by connected systems and analytics. Operators work alongside automation and electrification in more predictable, repeatable ways, and decision-making is increasingly data-driven. However, advanced capabilities (e.g., predictive analytics, closed-loop optimization, or enterprise-wide digital governance) are still emerging rather than fully mature.

Focus moving toward Optimization:

- Expand automation and electrification across more equipment and processes.
- Tighten the link between digital initiatives and site-wide KPIs (safety, productivity, emissions, cost).
- Invest in skills, governance, and change management so that digital becomes a normalized way of working rather than a project.

Optimization, 36+ pts: Your mine site is operating at a high level of digital and sustainable maturity. Integration, automation, and electrification are not exceptions—they are how the site thinks, plans, and executes. Decision-making is proactive, data-driven, and supported by advanced analytics and predictive tools.

Here, workflows are standardized and digitally supported across shifts and functions. Safety, environmental, and performance data flow into a unified view, enabling continuous optimization. The site regularly experiments with new technologies and shares best practices across the broader enterprise, turning digital and sustainability into a strategic advantage.

Focus beyond Optimization:

- Refine and re-optimize existing digital and sustainable assets for maximum ROI.
- Explore advanced use cases (e.g., AI-driven anomaly detection, autonomous operations, or integrated ESG performance tracking).
- Become a "digital champion" site that coaches and enables other sites to accelerate their own journeys.