



POINT OF VIEW

OX Management Operating System (MOS): The lost basics of mining operations

INTRODUCTION

When Doing More Doesn't Deliver More

In mining operations, more effort doesn't always equal better results.

Site leaders often lament, "**We're doing a lot, but we're not seeing enough on the bottom line.**"

Despite numerous improvement programs, significant capital investments, and process upgrades, many operations still struggle with **inconsistent performance, a culture of firefighting, and siloed departments.**

These issues frequently stem from one core cause, **a weak or fragmented Management Operating System (MOS).** Without a cohesive way to integrate planning, execution, monitoring, and improvement, even the best initiatives fail to deliver sustained bottom-line outcomes.

Common Pain Points: Symptoms of a Broken System

Many recurring challenges in mining operations are symptomatic of a **broken or underdeveloped MOS.**

Common symptoms include:

- **Siloed Departments** with misaligned priorities and inefficient handoffs
- **Daily meetings with no impact**, where lots of talk leads to little action – routine box-ticking rather than driving performance
- Leaders stuck in **reactive “firefighting” mode** instead of proactively managing and improving the operation
- **Poor visibility of actual vs. plan**, making it hard to pinpoint root causes and hold people accountable for results
- Frontline supervisors **buried in paperwork and data** instead of coaching their crews and solving on-the-ground problems
- **Improvement initiatives fizzle out** because they aren't embedded into the daily routine of the business

These challenges persist not due to a lack of effort or talent, but because **the management system doesn't support effective execution.**

On the surface each issue seems fixable, but the pieces are interconnected. Tweaking one routine in isolation can unintentionally disrupt another, breeding hesitation to change anything at all. **This complexity creates stagnation and traps the operation in “repeating the same practices.”**

The MOS: Your Operation's Nervous System

A Management Operating System functions like an operation's nervous system, **connecting each part of the operation to its brain.** It carries signals, coordinates activities, and triggers the right responses at the right times.

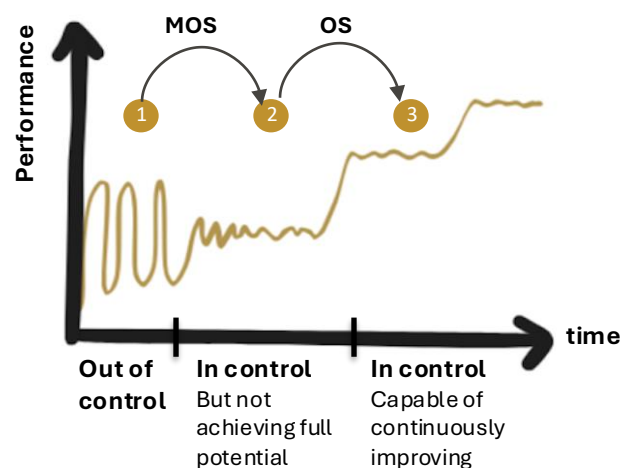
In practice, an MOS links strategic objectives with day-to-day execution across all departments. It's not just a set of reports or meetings – **it's a living framework of routines, tools, and behaviours that guide how work gets done.** A strong MOS ensures that decisions at every level, from the mine to the boardroom, are aligned, timely, and data driven.

OX Solutions views the MOS as **the foundation for effective leadership, empowered teams, and continuous improvement.** Our perspective is practical and field-tested: it's not about installing an abstract theory, it's about making your operation run better, shift after shift. In short, **the MOS is there to make things work** – helping your people deliver real results on the ground, day by day.

Difference Between OS and MOS

An **Operating System (OS)** is the broad “way the business works” to **reach its full potential.** It encompasses not only processes and tools, but also the principles, capabilities, and cultural elements that drive performance.

A **Management Operating System (MOS)**, by contrast, is a critical subset of the OS – it **establishes the fundamental management discipline that moves an operation from out of control to in control.** See image 1 below.



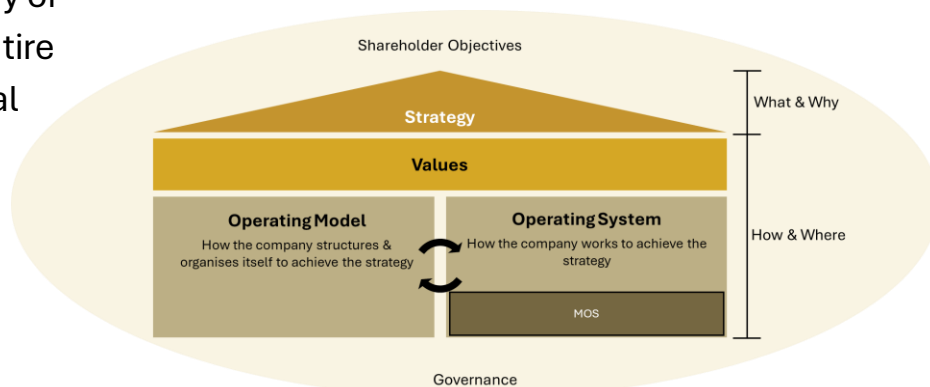
The MOS puts in place **the core rhythms, routines, and tools** (often structured around the classic Plan–Do–Check–Adjust cycle) **to synchronize work across the value chain**. All activities – from real-time control in the pit, to daily and weekly coordination between departments, to monthly and annual planning – are linked so that everyone is rowing in the same direction. The **MOS defines how plans are cascaded, how performance is monitored, and how issues are escalated and resolved**. These routines create a steady drumbeat in the operation (daily huddles, short-interval control, KPI tracking, etc.) that keeps things stable, responsive, and under control.

With a solid MOS foundation in place, the broader Operating System can take the business further. A full OS layers on the human and high-performance aspects: it develops people’s capabilities, instils a culture of continuous improvement, and deploys more advanced operational excellence tools. For example, an OS might incorporate Lean practices like 5S and daily Kaizen, use Theory of Constraints to optimise the entire value chain, or apply Statistical Process Control to reduce variability. It also puts safety and employee engagement at the centre.

In essence, **if the MOS gets the operation under control and aligned, the OS builds on it to drive beyond stability** – empowering people and optimising the whole system to reach the operation’s full potential.

OS and OM: Together Turning Strategy into Action

Whilst the OS/MOS is a critical enabler to successful strategy execution, **mining operations need the Operating System to work harmoniously with the Operating Model**. The Operating Model defines the structural blueprint of the business - its core capabilities, how the business is divided (departments), roles and responsibilities - ensuring the organization is aligned around the activities that drive value. In parallel, **the OS/MOS activates the Operating Model through the business processes, rhythms, routines, and behaviours** that translate strategy into action. Together, they provide the structure and discipline required to execute with clarity, focus, and continuous improvement. See image 2 below.



Our Approach: Designing and Embedding a Fit-for-Purpose MOS

At OX Solutions, **we don't do one-size-fits-all**. We partner with mining executives and site leaders to assess what's working, identify what's not, and **co-design a MOS that fits your operation's unique realities**. Rather than imposing a generic model, we build on your existing strengths and close the gaps that are holding you back. Our approach to MOS design and implementation is guided by a few core principles:

- **Clarity of Purpose:** Every element of the MOS – each meeting, report, and KPI – must have a clear purpose tied to business goals. Nothing is done “because we always have” or for its own sake. If a routine or metric doesn't drive value or inform decisions, we cut it or reshape it. This keeps the system lean, focused, and meaningful.
- **Integrated Routines:** All management routines are connected across departments and time horizons. Long-term plans set the context for monthly and weekly targets, which in turn dictate daily actions. We break down silos so that planning and execution are vertically and horizontally aligned.

Critically, we ensure each level of the organisation is focused on the right things – people concentrate on the metrics and tasks they can control, rather than chasing high-level indicators they can't directly influence.

- **Simple Elegance:** Simplicity drives adoption. We design MOS routines and tools to achieve their purpose with the least complexity. Dashboards and reports are intuitive and user-friendly. Meeting agendas and templates are straightforward. By stripping out unnecessary complexity, we make it easy for your people to do the right thing. A simple, elegant system is far more likely to be embraced on site and sustained over the long haul – because complexity is the enemy of execution.

Core Elements of an Effective MOS

Every effective MOS is underpinned by the disciplined application of the **Plan–Do–Check–Adjust (PDCA)** cycle. In practice, this means:

Plan: Align targets and plans across all time horizons. From life-of-mine strategy and annual budgets down to weekly production schedules and daily shift plans, every level's plan should connect to the level above and below. Long-term objectives drive short-term actions.

Planning is collaborative and grounded in reality, ensuring each department and team knows what they need to achieve and buys into the plan.

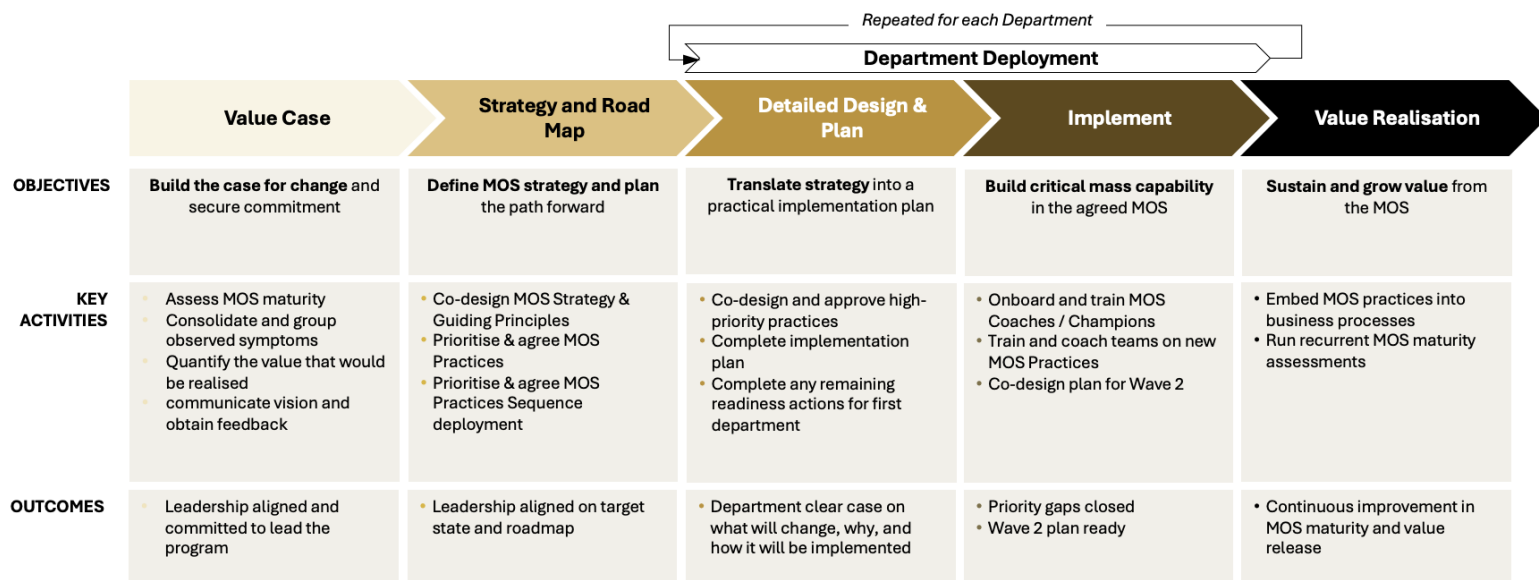
- **Do:** Execute the plan with discipline. Clearly define roles, responsibilities, and standard operating procedures to ensure consistency in how work is done. Use practical tools like visual management boards, crew huddles, and short-interval control to manage work in real time. Frontline leaders are empowered to make on-the-spot decisions and adjustments, keeping the operation running safely and on track every shift.
- **Check:** Constantly monitor performance against the plan. Use real-time data and a focused set of key performance indicators to spot deviations early. Dashboards, shift reports, and tiered review meetings (from crew toolboxes to management debriefs) give everyone a clear view of where things stand. This transparency surfaces issues while they're still small and encourages accountability at all levels – no surprises, no finger-pointing, just facts and feedback.

- **Adjust:** Take action based on what the “Check” phase reveals. Every gap or shortfall should trigger a concrete corrective action with a clear owner and timeline. If a problem can't be resolved at one level, it's promptly escalated to the next level of management, so it gets the attention and resources needed. We use structured problem-solving (for example, a quick root cause analysis or a Kaizen blitz) to address underlying causes, not just patch symptoms. By closing the loop and following through on improvements, the MOS becomes a dynamic engine for continuous improvement rather than a static reporting system.

Together, **Plan, Do, Check, and Adjust** create a closed-loop management system that drives alignment, control, and relentless improvement across the operation.

Deployment Journey: From Concept to Capability

Implementing a fit-for-purpose MOS is a journey – one that builds capability and delivers value in stages. OX Solutions guides clients through this journey using five key phases. See diagram below.



- 1. Value Case:** We start by assessing your current MOS maturity and pinpointing the biggest pain points. In this phase we quantify the value trapped by those issues and visualise “what good looks like.” The goal is to build a compelling case for change and secure executive commitment by answering the question: *Why invest in MOS now?*
- 2. Strategy & Roadmap:** Next, we co-design the MOS strategy and a practical roadmap for deployment. We establish guiding principles and define the target future state of your MOS. We also prioritise which management practices or areas to tackle first and in what sequence (e.g. which departments or processes to roll out in waves). The outcome is a clear, leader-endorsed plan that bridges the gap from today’s reality to the desired future state – with everyone aligned on where we’re headed.
- 3. Detailed Design & Plan:** In this phase, we roll up our sleeves and design the specific MOS elements for the high-priority areas. This means working closely with your team to develop new routines, tools, and accountability structures in detail. We also prepare the organisation for change – communicating the what, why, and how for each new element. By the end of this phase, every stakeholder knows exactly what will change, what’s expected of them, and how we’ll execute the rollout.
- 4. Implementation:** This is where the plan comes to life on the ground. We work on-site to build critical mass and momentum. Our team train and coach your internal MOS champions and frontline leaders as they adopt the new ways of working.

We embed the MOS practices through side-by-side support

attending meetings, coaching supervisors, fine-tuning tools, and solving issues in real time. Early wins are captured and celebrated to build confidence. Meanwhile, we're already preparing the next wave of implementation, ensuring the change rolls out methodically across the operation.

5. **Value Realisation:** Once the core MOS is in place, we shift focus to sustaining and amplifying the gains. We integrate the MOS into your standard business processes – from onboarding and training programs to performance management and continuous improvement cycles – so that the MOS becomes “the way we work” rather than a one-time project. We also conduct periodic MOS health checks or maturity assessments to track progress and identify new improvement opportunities. The ultimate goal is a self-sustaining MOS that continuously delivers value, long after the initial project team has stepped back.

This phased journey ensures **the Management Operating System evolves from a concept on paper to a fully embedded capability on site.**

By progressing step by step, we align stakeholders at each stage, make change stick, and steadily unlock value without overwhelming the organisation.

What Good Looks Like

When a MOS is functioning effectively, **the difference is both visible and palpable across the operation.** You'll notice several things:

- **Aligned and Accountable Teams:** Work flows smoothly according to plan, and each shift hits its production targets more often than not. If targets are missed, everyone knows why because performance is tracked and understood in real time. Visual management tools (like up-to-date KPI boards) are highly visible, and actions decided in meetings are completed. In a well-run MOS, every department and crew operates in sync toward shared objectives.
- **Effective, Fact-Based Communication:** There's a common language of performance on site. Teams and leaders speak with clarity about goals, current performance, and issues. Meetings at every level start on time and have a purpose – they focus on data, trends, and solutions instead of anecdotes or blame.

Problems and delays are discussed openly using facts, and there's a culture of saying "Let's figure this out" rather than hoping issues will disappear.

- **A Proactive, Disciplined Culture:**

The overall atmosphere is one of calm control. Instead of rushing from crisis to crisis, the operation runs with a steady, deliberate rhythm. People anticipate potential issues (like a maintenance delay or a bottleneck in the mill) and address them before they become major problems. When something does go wrong, it's identified quickly in the daily reviews and tackled through structured problem-solving, not ad-hoc firefighting. Escalation paths are clear and used appropriately, so small issues get resolved and big issues get the attention they need – nothing falls through the cracks.

- **Empowered People and Pride in Performance:** Perhaps the most important sign of a great MOS is the mindset of the people. Leaders are visibly engaged on the frontlines – coaching crews, reinforcing standards, and checking on progress in the field rather than being chained to their desks.

Frontline employees feel supported and empowered to suggest improvements because they know leadership will listen and the system will back them up. There's a clear sense of pride and ownership: teams are proud of hitting their targets and *knowing why* they hit them. Trust in the system grows, because people see that the MOS helps them succeed instead of burdening them with red tape. In short, a good MOS brings focus, discipline, and momentum – everyone feels aligned, in control, and proud of how the operation is running.

Why OX Solutions?

OX Solutions brings a **distinctive approach to designing and implementing Management Operating Systems in mining**. Our team combines deep mining industry expertise with hands-on operational experience. We've walked in your shoes and understand the nuances of running an operation. This means the MOS we design for you is **rigorous in theory but also battle-tested in practice** – we tailor it to be realistic and effective in the field, not just on a whiteboard. And we don't just hand over a report of recommendations; **we work alongside your people** to turn those recommendations into real outcomes.

What truly sets us apart is our people-first, partnership-driven philosophy. We know that even the best system will only deliver results if your team embraces it. That's why we focus on capability building and cultural alignment at every step. **We coach your leaders and frontline champions** to adopt and own the new routines and behaviours. We make sure that the **MOS isn't something we enforce, but something your team believes in.** Moreover, our commitment doesn't end when the "design" is done – we stick around through implementation, fine-tuning, and sustainment to ensure the MOS actually works and keeps working. At OX Solutions, **our success is measured by your operation's tangible results.** We take pride in translating a great MOS into an improved, productive and safer operation with real cost savings for your business.

CONCLUSION

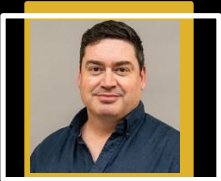
In today's mining environment, operational excellence cannot be left to chance. A robust, fit-for-purpose Management Operating System provides **a better way to run the operation** – it is the foundation for consistent execution and continuous improvement.

With a strong MOS in place, **leaders can align their teams, maintain control over day-to-day production, and focus on what truly moves the dial** (instead of constantly reacting to the latest problem). In short, the MOS enables the business to run in a proactive, controlled manner rather than by heroic effort.

Mining operations that invest in their MOS position themselves for long-term success. **They shift from reactive to proactive, from fragmented to aligned, and from effort-based to outcome-driven** management. OX Solutions is passionate about helping operations make that shift. We partner with you on the ground to simplify and streamline your management system, unlock performance improvements, and build a culture of operational discipline that lasts. If you're ready to embrace a better way to run your operation, **OX Solutions is ready to help you make it happen.**



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