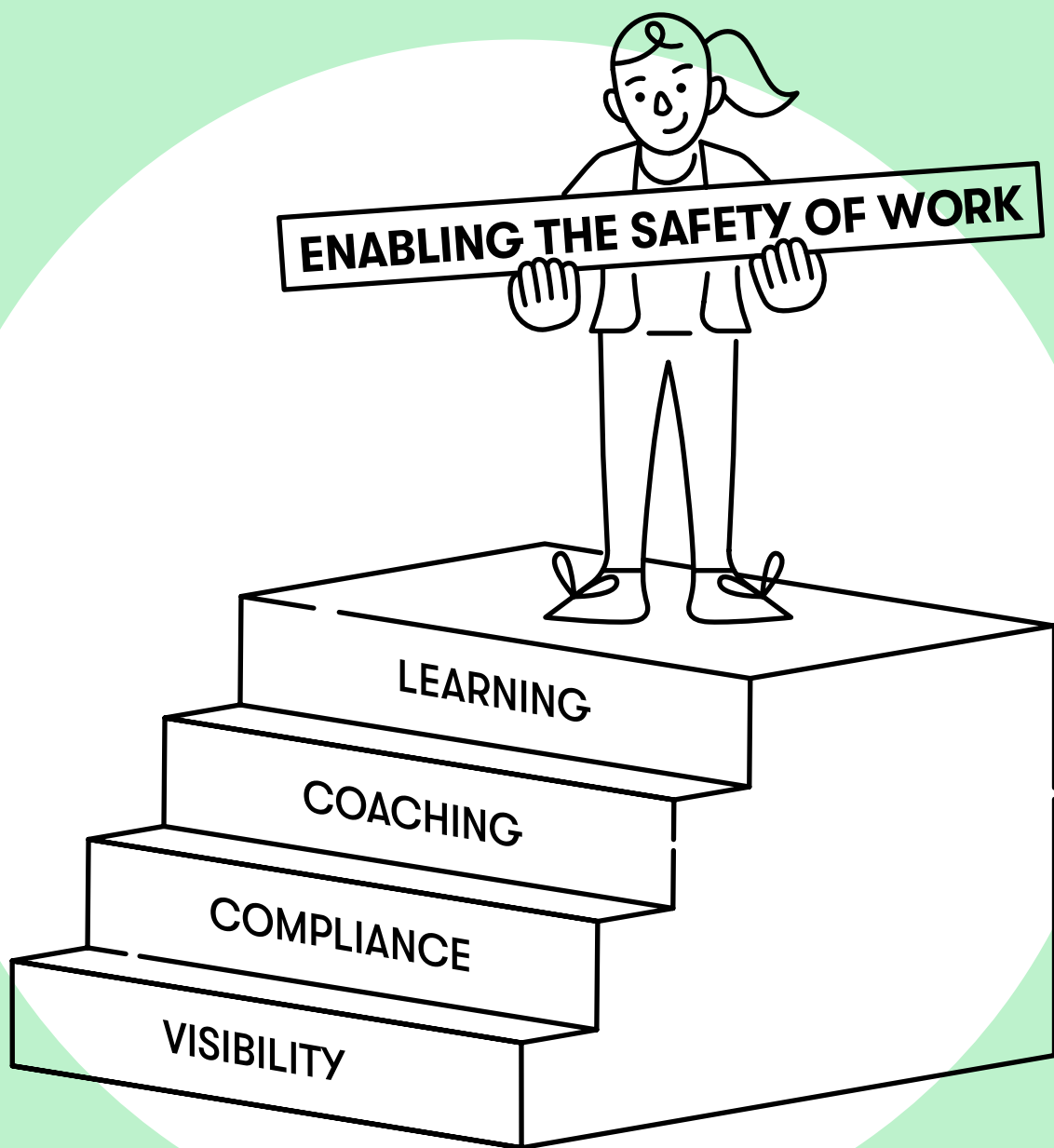


Forge Works.

From Visible Safety Leadership to Enabling the Safety of Work

Redesigning Field Leadership in High-Risk Industries



From a set of visible activities...



- From Visible Safety Leadership
- to Enabling the Safety of Work
- by Ryan Cunningham, Director
- of Forge Works Consulting. 2026.

Introduction

Field leadership is one of the most widely adopted practices in safety management across high-risk industries. Leaders are expected to spend time in the field, engage with frontline teams, reinforce standards, and demonstrate that safety matters. The intent is sound. Safety cannot be assured from a distance.

The reality of work is complex, dynamic, and shaped by local conditions, competing priorities, and real-time adaptation. Yet despite the scale of investment in field leadership programs, many organisations are not seeing meaningful improvement in how work is performed or how risk is managed. The same operational challenges persist: recurring constraints, unresolved trade-offs, fragmented coordination, and missed learning opportunities. Over time, field leadership can become highly visible, but weakly connected to the conditions that shape safe and reliable performance.

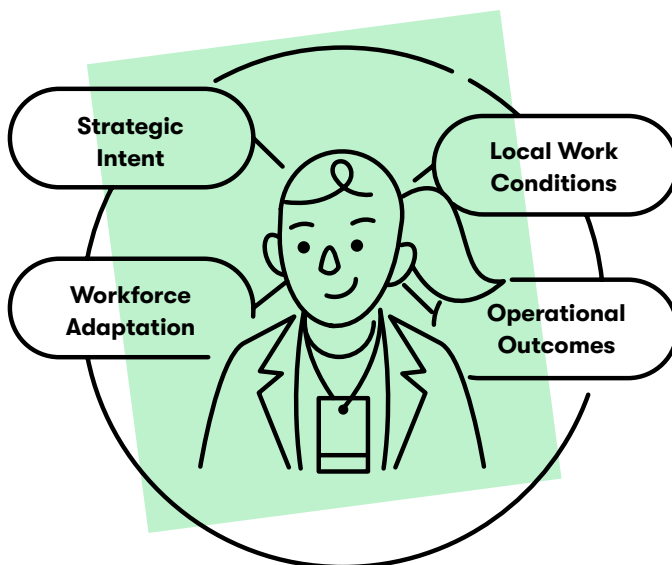
**This is not a failure of intent.
It is a failure of design.**

Most field leadership programs are built around observation, assurance, and behavioural reinforcement. They are effective at signalling priorities and reinforcing standards, but less effective at understanding work as it is actually done or influencing the system conditions that govern performance. As a result, organisations often optimise for activity rather than impact, measuring success through the volume of interactions rather than the quality of insight or resulting change.

Contemporary safety science points to a clearer path forward. Research across safety leadership, systems thinking, and resilience engineering shows that safe performance depends not only on compliance, but on the organisation's ability to understand work-as-done, manage variability, resolve trade-offs, and adapt to changing conditions. Leadership, in this context, is not just about presence in the field. It is about how effectively organisations translate insight from the field into better operational decisions.

This white paper argues that field leadership must evolve from a set of visible activities into an integrated organisational capability. It proposes a heuristic model for understanding the evolution of these programs, framing the different approaches not as distinct historical eras, but as overlapping logics that have each delivered genuine value. It also describes the critical capabilities, design principles, and measures of success needed to align field leadership with best practice. The implication is straightforward: the answer is not more field leadership, but field leadership better connected to how work is planned, resourced, and managed.

Organisations that make this shift are better positioned to move beyond the current performance plateau, strengthening both safety and operational reliability in the process.



The original problem field leadership programs were designed to solve

Field leadership programs emerged in response to a persistent operational challenge: safety expectations developed away from the worksite often did not translate cleanly into work-as-done. In high-risk industries, that gap matters even more. Work is shaped by conditions on the day, equipment and resource availability, production pressure, contractor and team interfaces, task complexity, and the need for people to adapt in real time. Formal systems can specify intent, but they cannot fully determine how work unfolds under complex, variable conditions.

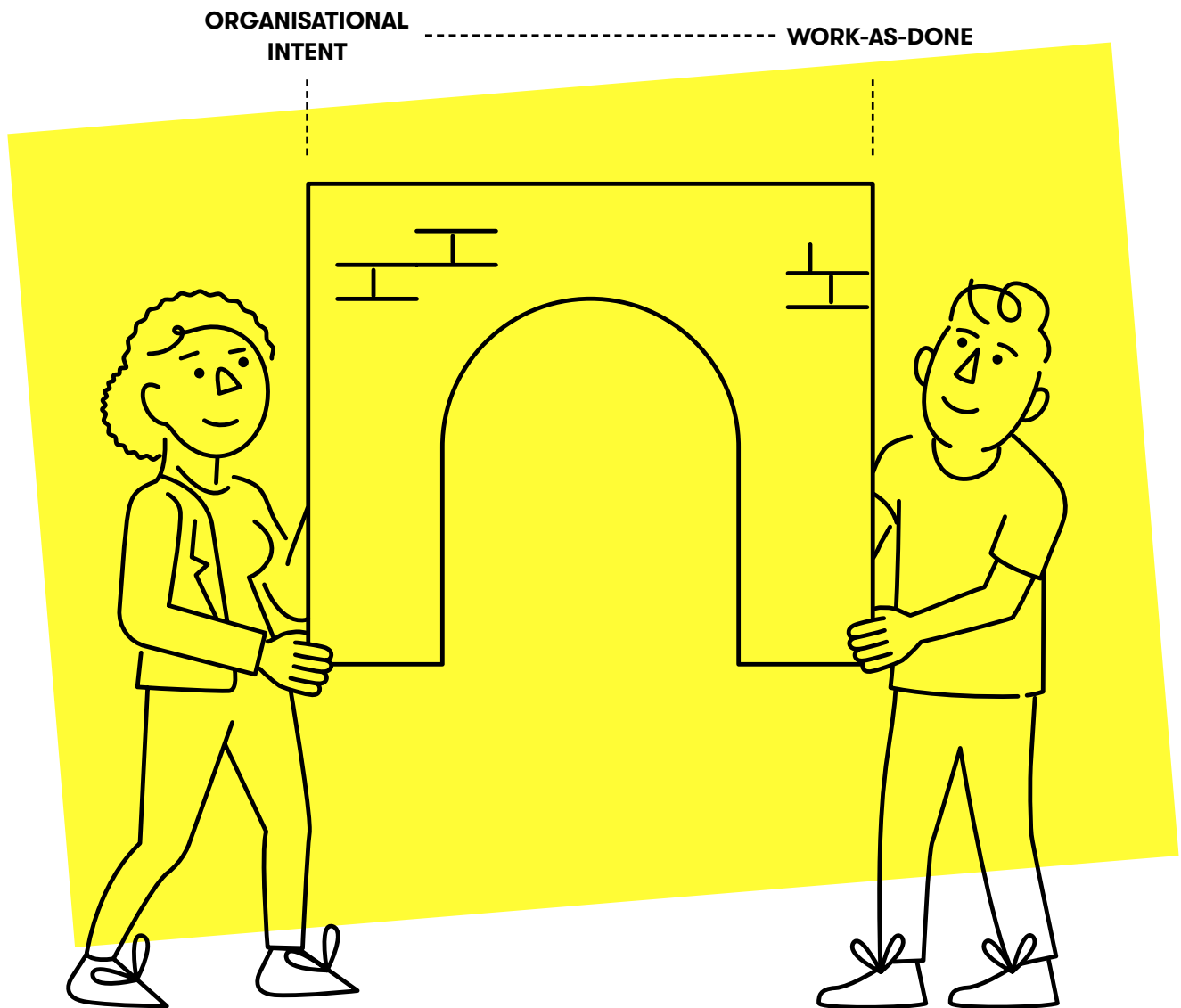
In that context, frontline and middle leaders became the bridge between organisational intent and work-as-done. Field leadership programs were designed to strengthen that bridge. Their purpose was to improve local oversight, reinforce key standards, surface emerging issues earlier, increase workforce engagement, and give management better visibility of what was happening where work was being performed. That original purpose made sense. It responded to a real operational need, not a management fad.

Critical gaps	What it meant in practice	Why field leadership
Translation gap	Rules, procedures, and expectations did not automatically become workable action at the point of work.	Leaders close to the job could interpret expectations, clarify priorities, and help teams apply consistent standards.
Visibility gap	Management often lacked insight into the constraints, pressures, and workarounds shaping day-to-day performance.	More frequent contact with the field gave organisations a better view of how work was being done.
Coordination gap	Risk often emerged across handovers, interfaces, contractors, and functions rather than within a single task or team.	Field leaders could identify breakdowns early, coordinate responses locally, and escalate issues when needed.
Trade-off gap	Safety had to be managed alongside production, time, cost, and operational continuity.	Leaders at the frontline could influence how competing demands were balanced in practice.
Learning gap	Organisations often learned too late, usually after incidents, breaches or lagging indicators.	Closer engagement with work created more opportunity to detect weak signals and respond earlier.

Table 1: Critical gaps field leadership programs were designed to solve

The underlying logic was straightforward: if formal systems alone cannot ensure safe and effective work under variable conditions, then leadership near the point of work becomes a necessary mechanism for shaping priorities in practice. The broader safety leadership literature supports this basic idea. As shown in intervention research (Zohar, 2002), when supervisory practices are redesigned to prioritise safety-oriented monitoring and rewarding interactions over competing goals such as speed and schedule, subunit safety records and perceptions of safety priority both improve.

This framing matters because, while the first generation of field leadership programs responded to real operational needs, over time their limitations became clear. Many early programs treated leadership presence, assurance, and reinforcement as the answer, when they were only the first mechanisms in a broader response.



The first generation: compliance, presence, and assurance

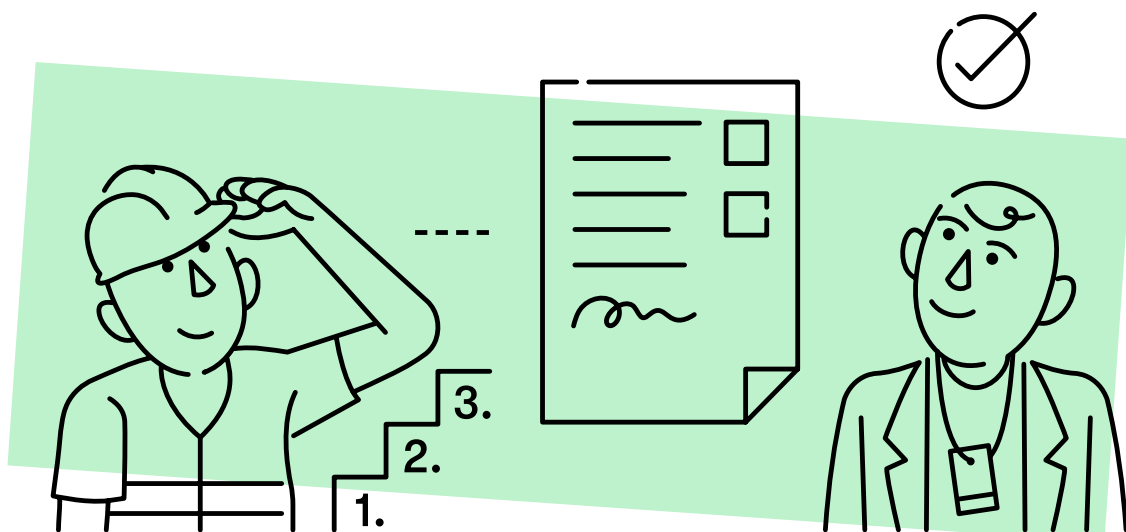
The first generation of field leadership programs was built around compliance, visibility and assurance. Leaders were expected to be present in the field, reinforce the importance of safety, check that work was being performed to standard, identify hazards and assign follow-up actions. In practice, this usually meant checklists, inspections, site walks, and safety interactions, with the assumption that visible, attentive leaders would make safety more salient and improve performance.

This model solved some genuine problems. It increased leadership visibility, made safety more prominent in day-to-day operations, and helped establish that leaders were accountable for more than policy review or incident response. In many organisations, it also improved consistency by creating repeatable routines for engagement in the field. This approach is supported by a meta-analytic review of safety leadership (Clarke, 2013), which showed that active transactional leadership, characterised by monitoring, proactive intervention, and correction, is positively associated with safety-related perceptions and is especially important for safety compliance.

But this model has flaws. Because its activities were easy to count, many programs drifted towards measuring whether leadership activity had occurred rather than whether work had improved. Over time, this often produced an audit and observation culture: more tours, more checks, more actions closed. Those activities can provide assurance, but assurance is not the same as operational improvement.

Contemporary safety research makes this distinction clearly: organisations often substitute evidence of safety work for evidence of the safety of work (Rae & Provan, 2019). In other words, activity is easier to demonstrate than effect.

That is the fairest critique of the first generation — it was not wrong, and it was not pointless. It was an important step in making leadership visible and safety expectations credible, but it often stopped at presence, checking and reinforcement. While it demonstrated that leaders were active, it provided limited insight into whether there is improvement in the conditions shaping safe and successful work. That tension set up the next phase in the evolution: a move away from visible enforcement alone and towards behaviour, culture and coaching.



The second generation: behaviour, culture, and coaching

As safety management evolved, many organisations moved beyond purely compliance-based field leadership towards models built around behaviour, culture and coaching. Leaders were expected to listen more, hold better quality conversations, reinforce positive behaviours and encourage people to speak up. The field leader became a shaper of culture, trust, and behavioural expectations at the frontline as well as a checker of standards.

This shift reflected a broader understanding of how leadership influences safety. Leadership does not only affect whether people comply with rules; it also shapes whether they participate, raise concerns, and engage with safety beyond minimum requirements. Clarke's meta-analytic review also supports this view, showing that leadership has an important relationship with both safety compliance and safety participation (Clarke, 2013).

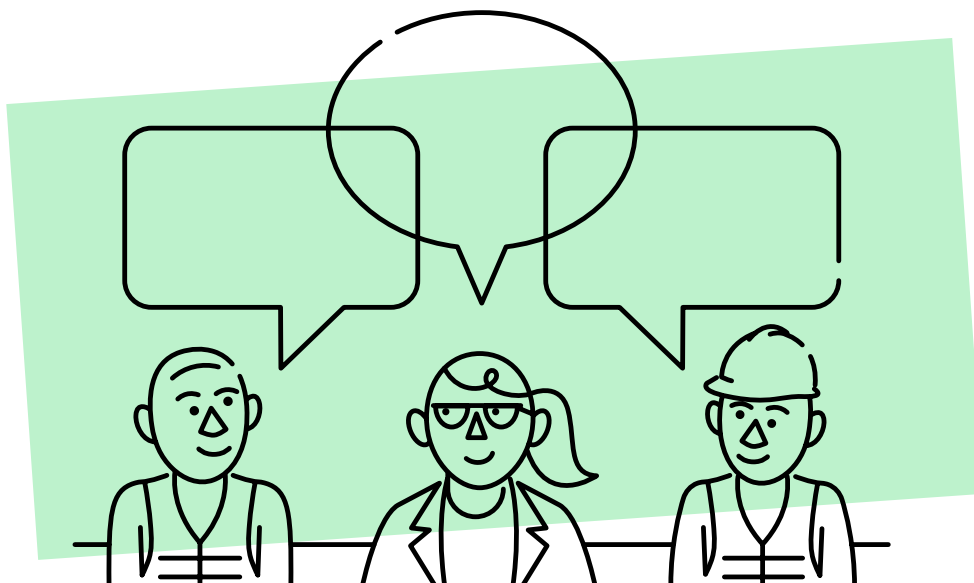
This was a meaningful step forward. It brought safety culture into the picture and made field leadership more relational and developmental. Research on safety-specific transformational leadership reinforced this direction, showing that leadership predicts occupational injuries indirectly through perceived safety climate, safety consciousness, and safety-related events (Barling et al., 2002).

However, many programs in this phase remained too focused on individuals. Even when the language shifted to coaching, trust and engagement, the implied solution was often to improve worker attitudes, behaviours or willingness to speak up, rather than to improve the operational conditions shaping those responses.

Better conversations helped, but they did not necessarily change planning quality, coordination, resourcing or trade-off management.

The broader literature points to this limitation. Shared transformational leadership has been linked with both safety compliance and safety participation, but its effects vary with perceived organisational support (Lyubykh et al., 2022). That suggests leadership behaviour does not operate in isolation. The surrounding system matters. In parallel, longitudinal research in construction suggests that safety leadership behaviours can be learned and reinforced through role modelling between site managers and supervisors (Larsman et al., 2024). This helps explain why coaching-based approaches can spread through local leadership relationships, but also why they may plateau when the wider operating environment does not change.

The second generation was a real improvement. It recognised that leadership shapes culture and participation, and it made field leadership more human and more credible. But while it improved the tone of leadership, it often failed to improve the conditions of work.

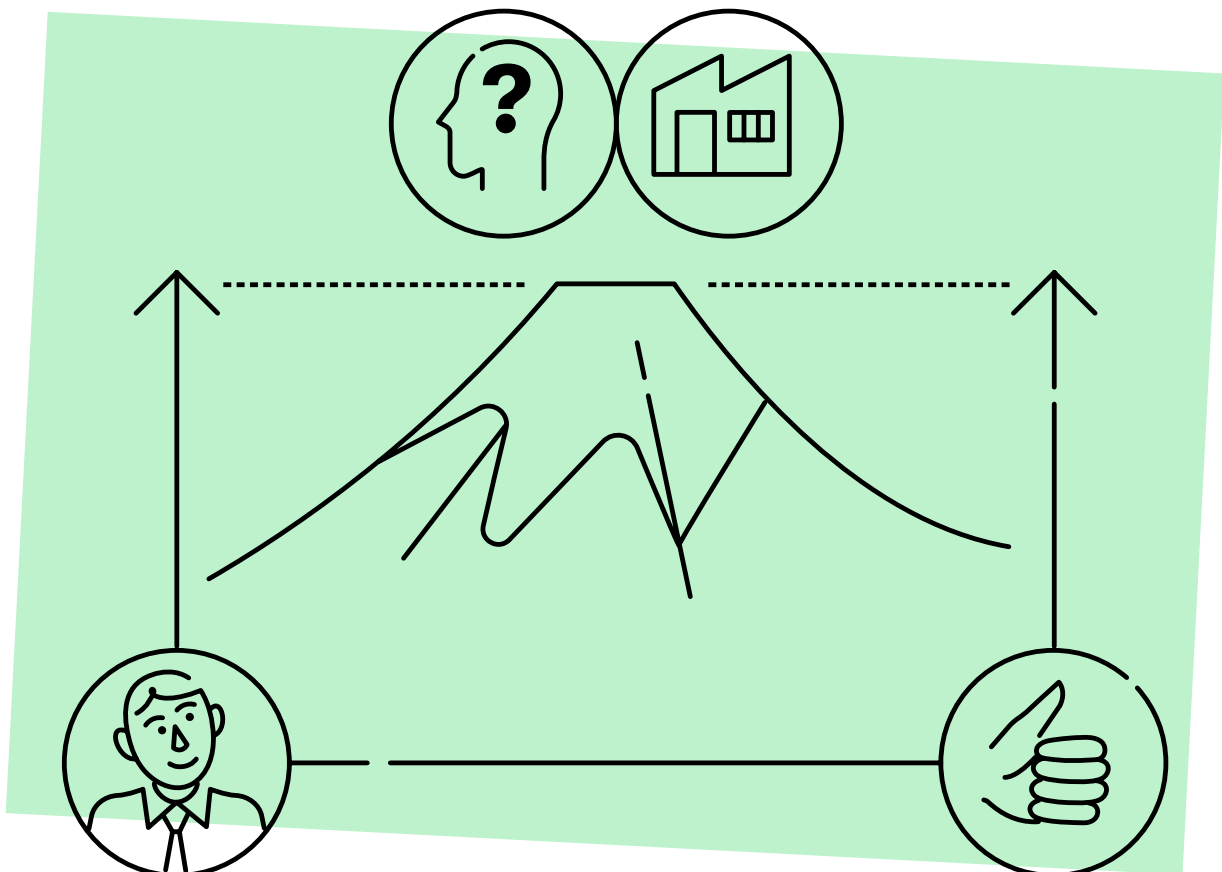


Why many current programs plateau

Despite substantial investment in training, expectations and field engagement, many field leadership programs eventually plateau. Leaders continue to complete visits, observations and conversations, yet the underlying conditions that shape performance remain largely unchanged. For example, a site may log hundreds of field visits each month with high action-closure rates, yet continue to experience the same planning, resourcing, and coordination issues. In this scenario, the program is functioning as designed but not improving the conditions that shape work. This rarely reflects a flaw in leadership intent; it is a structural feature of programs designed around visible safety activity.

In practice, programs measure activity rather than effect. Field visits become largely symbolic, insights are collected but rarely translated into system-level change, engagement content turns generic, and unresolved production–safety conflicts persist. Checking dominates understanding, and safety remains separate from core operational management. These are common organisational traps that recur across industries and operating models.

The theory of graceful extensibility helps explain the underlying dynamic. Systems do not become safer simply by increasing control activity; they become safer when they develop the capacity to continue adapting — even as the nature of the challenge changes — without collapsing under pressure (Woods, 2018). Programs that prioritise counted activity strengthen assurance but do little to build broader operational capability. This is the core failure mode: visible effort without meaningful improvement. Redesign must target the system mechanisms that turn field insight into planning, coordination, escalation, and learning.



What contemporary safety science says works in field leadership

A key point of alignment in the contemporary safety literature is that control-heavy models are not sufficient on their own. Standards and oversight still matter, but they cannot fully determine safe performance in environments where conditions shift, goals compete, and people must adapt in real time.

It is critical for leaders to understand that performance variability is not inherently bad. In everyday work, it is normal and often necessary; it enables the systems to function and workers to create successful outcomes by adapting to the conditions of normal work. The Safety-II and Resilience Engineering literature argues that work-as-done will always differ, to some degree, from work-as-imagined, especially under changing demands and resource constraints. This is why safety management must do more than enforce conformance. It must help the organisation understand how work is being done, how people are adjusting, where trade-offs are being made, and what support is needed to keep that variation safe.

This has direct implications for field leadership. The task is no longer just to check whether work matches the plan. It is also to understand how the job is actually being carried out, where pressure or friction is building, and what support people need to keep the work safe and effective. In other words, the task expands. Checking the work remains part of the role, but the larger contribution is helping the system function well under real operating conditions.

Importantly, this is not a case of replacing compliance with conversation. The research does not support that kind of "either-or" framing. The evidence consistently shows that both active transactional leadership and transformational leadership matter for safety, but in different ways – the former more strongly linked to compliance, the latter to participation and culture (Clarke, 2013; Ghasemi et al., 2025).

Modern field leadership should not become anti-compliance or anti-operational discipline. It should combine disciplined follow-through with greater participation, inquiry and support.

The broader systems literature adds the next step: if performance variability is normal, then safety management should not aim to suppress all variation blindly; it should facilitate safe variation. That means strengthening anticipation of disturbances, readiness to respond, synchronisation across teams, and proactive learning about emerging conditions.

Woods (2018) describes this through the theory of graceful extensibility: systems are safer not because they eliminate surprise, but because they can anticipate bottlenecks, learn about changing disturbances before acute events occur, and extend their adaptive capacity when pressure rises. Provan et al. (2020) make a complementary argument: effective safety management cannot rely on centralised control alone. It also needs the capacity to support informed local adaptation – helping people respond to changing conditions and coordinate action in real time. They describe this as guided adaptability, an approach that builds on centralised control and extends it into the adaptive space.

This is why field leadership has to be understood as part of a wider organisational system. Training leaders matters, but training alone is not enough if the surrounding system still rewards checking, counting, and closure over learning and operational improvement.



What best-practice field leadership now looks like

A modern field leadership program should be designed as an operational capability, not just a leadership initiative or a schedule of safety activities. Its purpose is to strengthen how the organisation understands, coordinates, supports, and improves work under variable conditions.

Leaders need more than presence and communication skills; they need capability in inquiry, work understanding, trade-off management, escalation, coordination, learning, and the intelligent use of signals from the field. Their role is to help operations function well with a clear safety lens, rather than to perform safety work as a separate activity.

Capability area	What good looks like in practice	Common legacy trap
Understanding work-as-done	<ul style="list-style-type: none"> • Explore how work is actually carried out, including local constraints, adjustments, dependencies and friction points. • Treat variation as something to understand, not automatically suppress. • Recognise that performance variability is normal in complex operations. 	Checking whether work matches the procedure and stopping there.
High-quality inquiry and listening	<ul style="list-style-type: none"> • Use field engagement to surface what is making the job harder or easier. • Surface emerging trade-offs. • Identify what support teams need to succeed. 	Scripted conversations, generic observation cards and shallow engagement.
Operational coordination across interfaces	<ul style="list-style-type: none"> • Help resolve issues across shifts, contractors, functions and levels of decision-making. • Improve synchronisation in the operational system. 	Treating safety as a one-team or one-task issue.
Managing trade-offs and escalation	<ul style="list-style-type: none"> • Identify when production, time, cost and safety are starting to conflict. • Use escalation pathways that can genuinely re-plan work, reset resources or resolve competing priorities. 	Leaving production-safety tensions unresolved while asking leaders to 'manage it locally'.
Learning from normal work and supporting local decision-making	<ul style="list-style-type: none"> • Run regular structured debriefs, learning teams, and sense-making processes. • Focus on normal work, recurring frictions, and early signals of deterioration. • Help people know when to follow the plan, when to adapt, and when to escalate. 	Assuming all variation is non-compliance and only learning after something has gone wrong enough to be reportable.
Turning field insight into system change	<ul style="list-style-type: none"> • Create change from the insights generated. • Ensure improvement actions target planning quality, resourcing, coordination, control effectiveness, work design, or decision-making. 	Counting visits without changing the systems or conditions for work.

Table 2: Essential capabilities for mature field leadership

Taken together, best-practice field leadership functions as an operational capability. It still includes standards and oversight, but these sit within a broader approach that combines control with adaptability, and measures success by whether work becomes easier to do safely and well.

In practice:

a weak signal becomes a system change

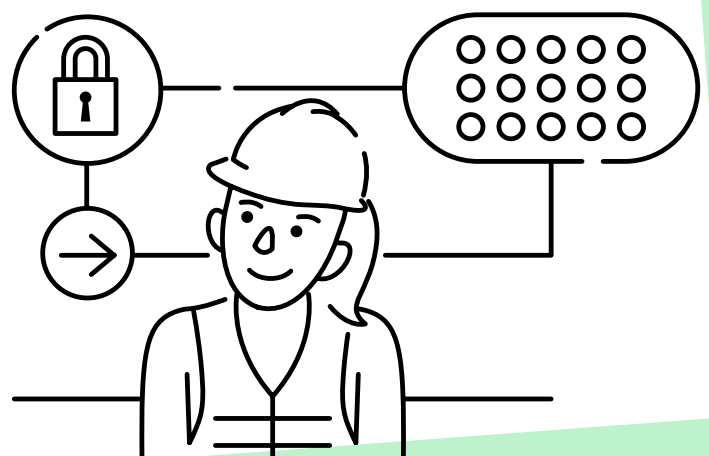
The following is a real-world example of this in practice from a drilling organisation in the mining industry. It highlights the type of operational learning and systemic change field Leadership programs should be driving.



A field conversation on a surface drilling rig identified a design flaw with the mast support bars. Crews described the adjustment holes as being spaced further apart than the threaded adjustment allowed, making it difficult to level the rig and align the supports across varying ground conditions and mast angles. The real risk was that a support leg could engage on only one or two threads, reducing the load it could hold if a ram failed. That issue had never appeared in any event, inspection, or audit record. It only became visible when someone asked how the job was really done.

The outcome was a design change request: additional adjustment holes so the bars could be positively locked across a wider range of operating conditions. A weak signal, surfaced through a field leadership inquiry, converted into a system change.

This learning didn't come from an incident, nor would it have surfaced in a routine compliance walk or observation card. It came from a leader engaging with how work was actually being done, and it led to a system change rather than action directed at individuals.



Program design implications: what to stop, start, and strengthen

A practical redesign usually requires three moves.



First, stop over-emphasising visible activity as proof of effectiveness.

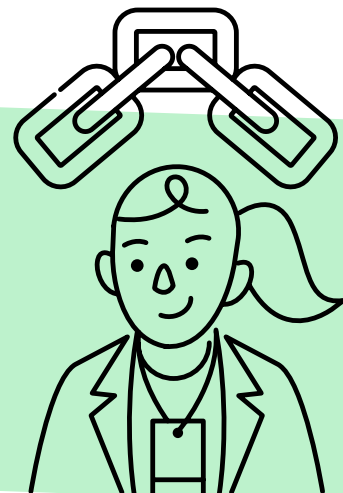
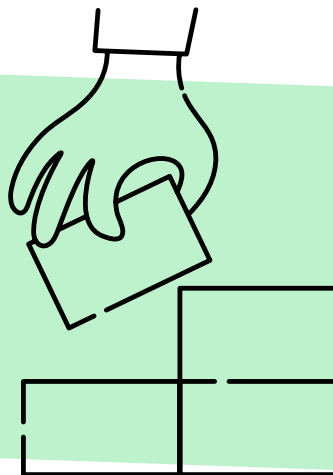


Second, start building robust mechanisms for inquiry, coordination, trade-off resolution, and learning from normal work.



Third, strengthen the systems around leaders so field insight results in better organisational decisions, not just more logged actions.

Together, these moves reposition field leadership as an operational capability rather than a standalone program.

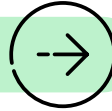


1 STOP



- Counting the number of visits as a proxy for effectiveness of field interactions. Activity is easy to count, but it is not an effective indicator of proactive safety or operational improvement.
- Scripted conversations with weak follow-through. Safety conversations become ritualised when they are detached from operational decisions or fail to result in meaningful change.
- Generic observation cards and hazard spotting in isolation. These can reinforce attention, but on their own they rarely explain why work is becoming difficult or where the system is creating pressure.
- Safety activities separated from operational decisions. When safety sits beside operations instead of inside planning and execution, leaders collect insight without being able to change the conditions underneath it.
- Using lagging outcomes as the main test of success for these programs. Injury rates matter, but they are too late and too blunt to guide day-to-day field leadership design.

2 START



- Conducting inquiry into constraints, goal conflicts, and weak signals. Engagement should surface what is making work harder, where goals are colliding, and what early signs suggest rising risk.
- Using learning teams and structured debriefs. Mature programs learn from normal work, not only incidents. Everyday adaptations are the basis for understanding both success and failure.
- Holding cross-functional reviews of how work is planned and adjusted. Risk emerges across handovers, interfaces, and competing demands, so field leadership needs a pathway into planning, resourcing, and coordination discussions.
- Creating escalation pathways that can re-plan work or reset resources. Leaders need a practical way to respond when local adaptation is no longer enough and when production-safety tensions need to be resolved above the frontline.
- Co-designing with frontline workers. Work-as-done can only be understood with the people doing the work. Mature redesign requires involving field experts in the design of questions, routines, escalation paths, and learning loops.

3 STRENGTHEN



- Frontline leader capability. Leaders still need to reinforce standards and follow through, but they also need skill in inquiry, listening, escalation, coordination, empathy and learning.
- Open communication and psychological safety. Better field leadership depends on people being willing to speak up about weak signals, tensions, and workarounds.
- Coordination across roles and teams. Field leadership should improve synchronisation across supervisors, contractors, functions, and management layers, rather than treating safety as a one-team issue.
- Operational slack and readiness to respond. Systems cope better when they can anticipate bottlenecks, stretch capacity, and respond before critical failure.
- Predictive and qualitative measures. Measures including quality of inquiry, unresolved trade-offs, recurring friction points, coordination issues, weak signals, and the proportion of field insights that lead to system change.
- Systems and tools for capturing and converting operational insight into action. Ensure field observations are systematically translated into decisions, changes, and improvements.

For most organisations, the focus will be on how to redesign their existing field leadership programs, so they contribute more directly to operational learning and improvement. That starts with being honest about which elements continue to add value, which have become ritualised, and which are simply consuming time without improving operational understanding or decision-making.

Measuring success: how to know the program is working

One of the clearest weaknesses in many field leadership programs is how success is measured. It is easy to count visits, observations, action close-outs, and participation in safety activities, and then assume the program is working because activity levels are high. But those measures do not show whether field leadership is improving how work is understood, how issues move through the system, or whether the conditions of work are actually changing. That is the problem identified in the distinction between safety work and the safety of work: evidence of activity can too easily stand in for evidence that operational safety is improving (Rae & Provan, 2019).

A better model for measuring success needs to provide a holistic view across the program through three lenses: the quality of practice, the quality of the processes and systems it activates, and the extent to which it drives operational learning. In this suggested model, indicators are useful because they generate operational data and qualitative insight that help the organisation monitor, learn, and anticipate — not just confirm that activity occurred.

Indicator type	Why it matters
1 Indicators of practice	These show whether field leadership is being carried out in a way that is purposeful, relevant, and capable of surfacing operational insight.
2 Indicators of response	These show whether the organisation is converting field insight into actions, and whether the processes and systems are effective.
3 Indicators of improvement	These show whether field leadership is improving the conditions under which work is planned, supported, and carried out.

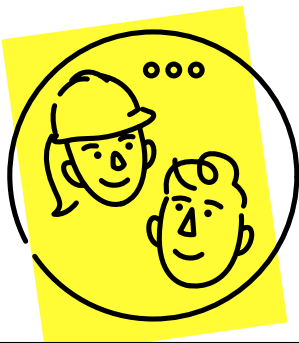
Table 3: Suggested metrics for field leadership programs

This is a stronger model because it follows the real chain of influence. First, leaders need to engage well. Second, that engagement needs to drive escalation, coordination, and decision-making. Third, those processes need to translate into changed operating conditions.

It also gives executives and safety leaders a more useful dashboard. At the first level, they can ask whether leaders are spending time in the field in ways that surface real information. At the second, they can ask whether the organisation is acting on that information quickly and well. At the third, they can ask whether recurring friction, overload, coordination problems, and weak controls are actually being reduced.

Implementing this model can be challenging, and the approach and timing will vary based on each organisation's current program, operating context, and readiness to rethink how success is measured. Not every indicator needs to be in place from day one — the shift in intent matters more than the speed of adoption. Measurement should be asking whether field leadership is producing genuine operational insight, whether the organisation is acting on it, and whether the conditions of work are improving. These are fundamentally different questions from asking whether leaders completed their scheduled visits, and they generate fundamentally different organisational responses.

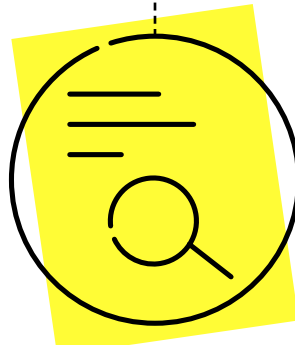
Measuring success



1

INDICATORS OF PRACTICE

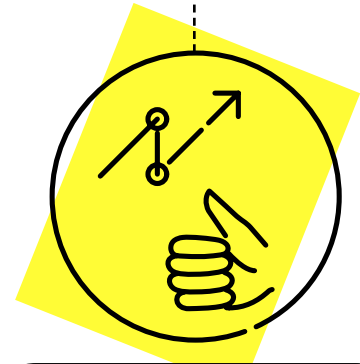
- quality of inquiry (score against a simple classification)
- time in field as proportion of role
- percentage of interactions focused on work-as-done: adaptations and trade-offs (time vs safety, production vs quality)
- proportion of engagements that identify a meaningful operational constraint or issue
- frequency of structured debriefs or after-action reviews
- weak-signal capture rate and quality
- proportion of interactions where frontline raises a concern or challenge
- percentage of issues raised proactively vs post-incident



2

INDICATORS OF RESPONSE

- follow-through cycle time on issues raised
- decision latency: time from issue detection to operational decision
- signal-to-action conversion: proportion of weak signals that trigger review, re-planning, resource changes or control review
- escalation quality: proportion of escalations that clearly define the trade-off, constraint or coordination risk and receive a decision at the right level
- constraint visibility: recurring friction points identified across jobs, crews or sites
- repeat signal recurrence after action
- percentage of field issues closed with evidence of operational change
- number of work design changes triggered by field insight



3

INDICATORS OF IMPROVEMENT

- number of recurring operational constraints resolved
- trends in the percentage of teams reporting “stretch” or overload
- measurable improvement in planning quality for repeat or high-risk jobs
- measurable improvement in critical control reliability and availability under real operating conditions
- reduction in repeat coordination failures across shifts, contractors or functions
- reduction in unresolved production-safety conflicts
- reduction in repeat workarounds for known operational constraints
- worker-rated usefulness of interactions

Implications for executives, safety teams, and operational leaders

Donovan et al. (2017) argue that safety leadership is a systems phenomenon, shaped across multiple levels rather than located in a single role. Their study highlights the importance of vertical integration and open information flow across those levels for effective decision-making and safe outcomes. The evolution of field leadership therefore has implications beyond individual leader capability. It is also an organisational design exercise.



EXECUTIVES

For executives, the implication is clear:

set the purpose of field leadership more precisely and participate in it in a way that improves the system, beyond simply demonstrating commitment. If executives continue to reward visibility, activity counts, and symbolic assurance, the program will keep producing exactly that. If they want better operational safety, they need to reduce conflicting signals around production and safety, demand better indicators than visit counts, and resource the capacity to re-plan work, resolve trade-offs, and respond early to emerging risk.

Executives set the conditions and resolve goal conflict.

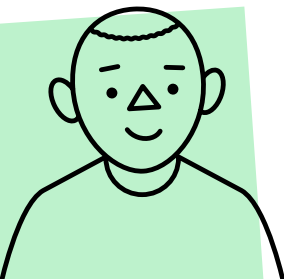
For safety teams, the role must evolve.

The safety function needs to be an enabler of better learning: rather than administering safety activity at a distance, they need to be more focused on helping the organisation understand work-as-done, surface weak signals, improve information flow, and turn field insight into better operational decisions.

Safety teams enable learning, foresight, and better system response.



SAFETY TEAMS



OPERATIONAL LEADERS

And for operational leaders, the message is practical.

Field leadership should not be treated as a separate safety program layered on top of the job. It should be part of how work is planned, initiated, coordinated, monitored, and adjusted. Operational leaders are the people who turn insight from the field into changes in planning, resourcing, sequencing, escalation, and support.

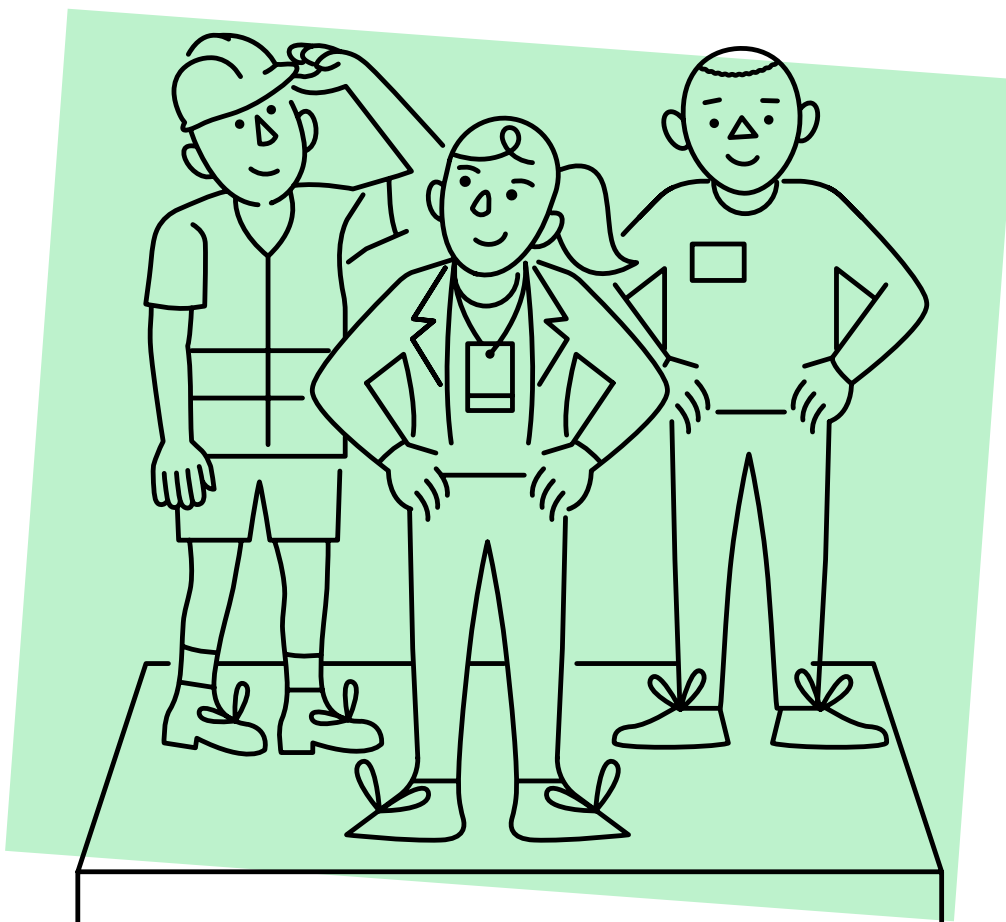
Operational leaders integrate intentions into real management of work.

Across all three groups, the common implication is that redesign has to happen across the system. The more mature organisations will be those that treat field leadership as one part of a broader effort to guide, enable, and execute work more successfully.

Conclusion

Field leadership programs will not disappear from high-risk industries, nor should they. Leadership near the point of work remains crucial for shaping priorities, relationships, adaptation, and performance in practice. But the future of field leadership programs will not be defined by the number of visits completed, conversations logged, or observations recorded – it will be defined by whether programs help organisations understand work more deeply, respond more intelligently, and improve conditions for safe and successful performance every day. That is the core tenet of this paper.

- The limits of centralised control become clear in complex, changing operations. Standards and compliance still matter, but organisations also need the capacity to guide adaptation, understand work-as-done, and create foresight about changing work conditions and risk. The future of field leadership lies in operational integration. For organisations willing to make that shift, the upside is significant: field leadership that genuinely enables the safety of work.

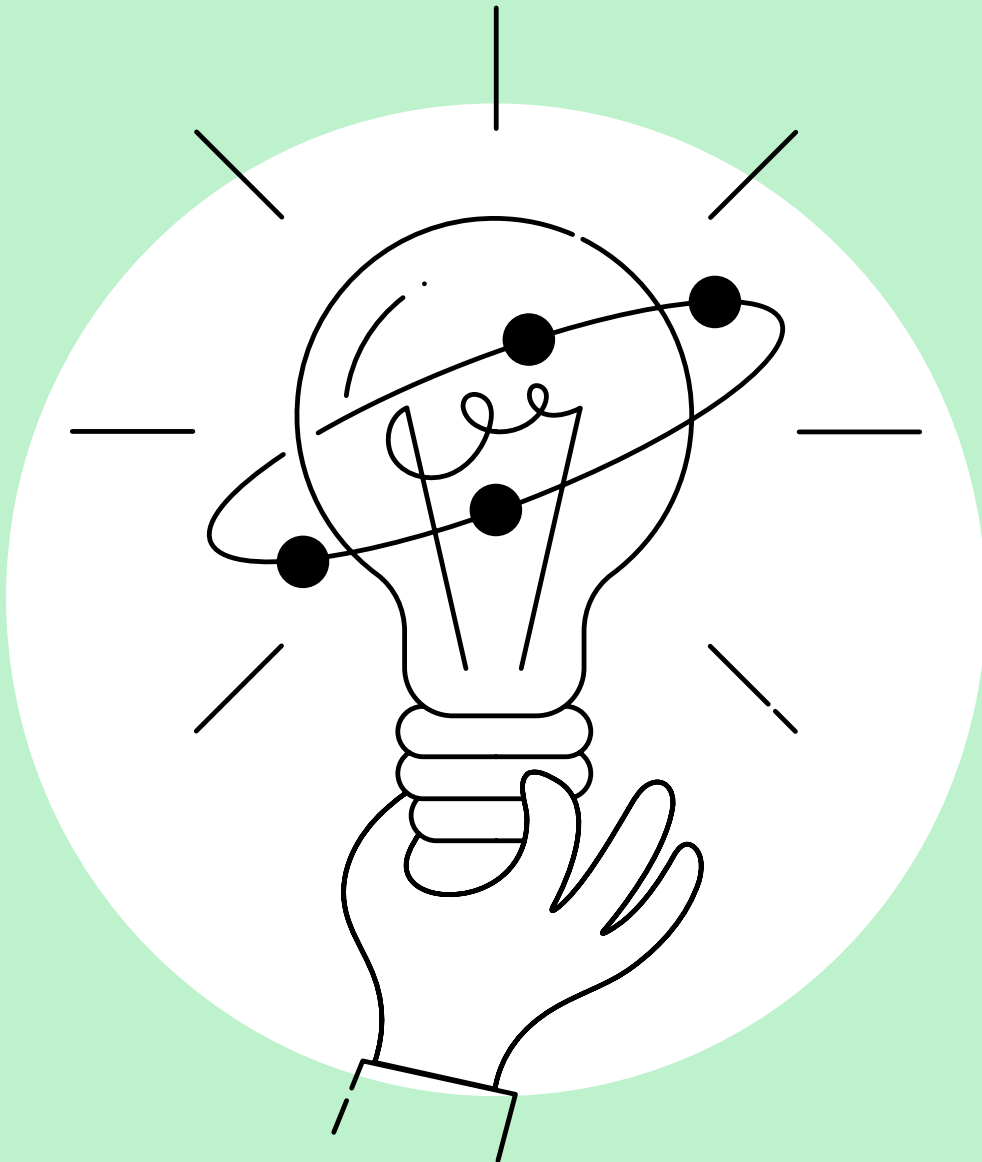


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