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# Safety Is Not the Problem

## What Really Makes Work Unsafe

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PRINCIPAL HSE SPECIALIST

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# SAFETY IS NOT THE PROBLEM

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*What Really Makes Work Unsafe*

Pressure • Planning • Money • People • Supervision • Technology

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Principal HSE Specialist

Publisher Submission Edition

# SAFETY IS NOT THE PROBLEM

*What Really Makes Work Unsafe*

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First Edition

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This book is a professional field guide. It does not replace applicable laws, regulations, client standards, site procedures, manufacturer instructions, competent risk assessment, or professional judgment.

Examples are generalized to explain recurring safety-system patterns and are not intended to identify or criticize any specific organization, project, or individual.

## A Note to the Reader

This is not a procedure manual. It is a short field book about the gap between the way safety is designed and the way work actually happens.

The ideas come from practical construction, industrial and project experience. The examples are generalized where necessary to protect people and organizations. The lesson matters more than the name of the project.

The central argument is simple: unsafe work is rarely created by one person, one missing form, or one bad decision. Risk is shaped by planning, money, competence, leadership, timing, supervision, commercial pressure, and the quality of the system around the worker.

Instead of asking only, “Who violated the rule?”, this book asks a harder question: “What made this violation likely, normal, or convenient?”

You will not find another stack of checklists here. Each chapter ends with a short action and a self-check, but the purpose is not to create more paperwork. The purpose is to change what you notice, what you ask, and what you do next.

**HOW TO USE THIS BOOK** Read one chapter. Take one idea into a real job. Test it against what is actually happening. If the idea changes nothing at the workplace, it is not yet useful.

## Why I Wrote This Book

For years, I worked in the space between procedures and execution. I saw strong systems, experienced professionals, detailed permits, inspection records, training documents, dashboards, and audits. I also saw something that did not always fit the paperwork: equipment that looked different from its checklist, workers who signed a toolbox talk they did not fully understand, supervisors pushed to recover time, and contractors trying to deliver work inside commercial limits that had been set long before the crew arrived.

Those experiences changed the question I ask when I see unsafe work.

I still correct the immediate condition. A damaged sling must be removed. A confined-space entry without proper gas testing must stop. A missing life-critical control is not a philosophical discussion. But after the exposure is controlled, I ask another question: why did this situation make sense to someone at that moment?

Sometimes the answer is pressure. Sometimes it is money. Sometimes it is poor planning, weak supervision, language, procurement, repeated routine, fear of reporting, or a technology that creates more noise than control.

That is the subject of this book. Not how to write another safety rule, but how to see the operating conditions that make unsafe work predictable.

**THE QUESTION BEHIND THE BOOK** What if the visible safety problem is only the last link in a much longer chain?

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**HOW THE CHAPTERS CONNECT** Part I looks at where risk is created. Part II looks at the human and organizational conditions that shape daily work. Part III looks at technology, rapid decisions, and resilience when the project is not operating under ideal conditions.

## Introduction

# The Problem May Not Be Safety

**When something goes wrong, we usually look toward safety first. But many safety problems begin somewhere else.**

Why was the worker not wearing the right PPE? Why was the checklist incomplete? Why was the permit not followed? Where was the safety officer? Why did the supervisor allow it? These are reasonable questions, but they are often asked too late in the chain.

A worker may be the person standing closest to the hazard, but the conditions around that worker may have been created hours, days, or even months earlier.

Procurement may not have bought what was required. The project may have been underpriced. The schedule may have assumed that training, permits, inspection, access, or mobilization would happen faster than reality allows. The supervisor may be recovering time lost somewhere else. The contractor may be protecting a thin margin. The worker may have signed a toolbox talk delivered in a language he did not fully understand.

And sometimes everything looks excellent on paper. The permit is signed. The checklist is complete. The training record is available. The KPI dashboard is green. Yet the field condition is telling a different story.

This book is about that difference. It is about why intelligent people take risks, why good controls become rituals, why zero incidents can create false confidence, why commercial decisions become field conditions, and why technology helps but cannot replace a functioning system.

The argument running through every chapter is simple: safety is not a department. Safety is the outcome of how an organization plans, prices, buys, supervises, communicates, decides, and learns.

PART I

# Diagnose the System

Paperwork, authority, money, pressure, and reporting culture

## CHAPTER 1

# The Procedure Says Everything Is Fine

**A checklist can be complete while the equipment standing beside it is unsafe.**

## A Scene from the Field

I have stood beside equipment with a completed inspection record in my hand and a visible defect in front of me. The document said the item was satisfactory. The field said otherwise.

The defects were not exotic: a damaged power cord, a missing guard, a worn tire, a defective switch, a sling that should not have remained in service. The important question was not only, “Who signed this?” It was, “How did a control designed to find defects become a document that failed to see them?”

## What Looked Like the Problem

At first glance, the problem looks like poor inspection or dishonesty. Sometimes it is. But repeated inspection creates another possibility: the checklist slowly changes purpose. Instead of verifying the physical condition, it becomes one of the documents needed to release the next step of work.

## What Was Really Happening

When one safety officer is expected to cover dozens of pieces of equipment, permits, field issues, and daily records, inspection quality can collapse into routine. The work becomes familiar. Yesterday's condition quietly becomes today's assumption.

The same gap appears in toolbox talks. A talk can be delivered, signed, and filed while the crew still cannot explain the hazard. The signature proves attendance. It does not prove understanding.

Language changes this further. In Singapore, I experienced a more structured entry model in which workers received approved orientation and assessment in languages they could understand before entering the industry. The lesson was not that one country has

a perfect system. The lesson was that understanding has to be designed, funded, and verified.

## What I Learned

The procedure is not automatically the problem. A technically correct control still needs time, competence, ownership, maintenance, and verification. Remove those conditions and the control survives on paper while its purpose disappears.

**USE THIS ON SITE TOMORROW** Take one completed inspection record and walk directly to the equipment. Do not audit the form. Compare the form with the physical condition. If the two stories differ, improve the ownership and verification process before adding another document.

**THINK & REACT** If the form disappeared tomorrow, would the safe behavior still happen?

**KEY TAKEAWAY** A control starts failing when completing it becomes more important than achieving its purpose.

### 60-SECOND FIELD SELF-CHECK | CHAPTER SCORE: \_\_\_\_ / 6

Score each statement: 0 = rarely/no, 1 = partly/sometimes, 2 = consistently/yes.

1. Do our completed records usually match the physical condition in the field?  
0 1 2
2. Can workers explain the control in their own words, not only show the signed record? 0 1 2
3. When a defect is found, is it closed before the next use or shift? 0 1 2

*One action I will test this week:* \_\_\_\_\_

## CHAPTER 2

## Who Really Controls Safety?

**The person exposed to the risk is not always the person who created the risk.**

### A Scene from the Field

Structural erection was progressing in a high-wind area. The required guy ropes were not available when the team wanted to continue. The pressure was familiar: keep the sequence moving and recover the lost time.

Temporary scaffold-pipe support was used. Overnight, the wind increased. The connected structure moved heavily and had to be stabilized with crane support. What was expected to save a few hours created roughly two to three days of stoppage, checking, and recovery.

### What Looked Like the Problem

At the workface, the visible problem was the temporary arrangement. But the unsafe condition started earlier: the required control was missing, the sequence was already under pressure, and the decision to continue transferred that pressure downward.

### What Was Really Happening

Pressure rarely begins with the worker. A client wants progress. The project manager protects a milestone. An engineer wants the activity completed. The supervisor wants the crew moving. The worker wants to finish the job and protect his livelihood.

Nobody needs to say, “Ignore safety.” Softer phrases are enough: Why are we waiting? Can we start preparation? It will only take ten minutes. The permit is coming.

Stop-work authority matters, but authority on a poster is not the same as authority in a hierarchy. The system should not depend on the least powerful person becoming the final barrier against a planning failure.

## What I Learned

The closer a problem gets to the worker, the harder it becomes to solve without cost. The better intervention is often one level earlier, where the missing resource, unrealistic sequence, or schedule pressure can still be changed.

**USE THIS ON SITE TOMORROW** The next time you see a shortcut, do not start with the worker. Ask one level up: What was this crew trying to achieve, what was missing, and who knew it was missing before the job started?

**THINK & REACT** If the worker is the first person expected to stop a bad plan, the control arrived too late.

**KEY TAKEAWAY** Sometimes the most important safety intervention is one decision level above the workforce.

### 60-SECOND FIELD SELF-CHECK | CHAPTER SCORE: \_\_\_\_ / 6

Score each statement: 0 = rarely/no, 1 = partly/sometimes, 2 = consistently/yes.

1. Can a supervisor say 'not ready' without being punished for delaying progress?   0   1   2
2. When pressure creates a shortcut, do we trace the pressure upward?   0   1   2
3. Are critical resources and controls physically ready before the crew starts?   0   1   2

*One action I will test this week:* \_\_\_\_\_

## CHAPTER 3

## Follow the Money, Find the Risk

**Every organization says safety is important. The budget shows when that importance becomes real.**

### A Scene from the Field

A project decided to bring sandblasting and painting in-house instead of relying entirely on an outside specialist. On paper, the decision looked efficient.

Then the real requirements arrived: suitable flooring, engineered ventilation, specialist PPE, medical considerations, temperature-controlled paint storage, electrical and fire protection, approved waste disposal, and wastewater handling. Work stopped for about two weeks while controls were corrected. Roughly 40 to 50 workers were left waiting.

The money had not been saved. It had simply returned later, at the most expensive time.

### What Looked Like the Problem

During execution, the issue looked like an HSE demand that suddenly increased cost. In reality, most of those costs were always part of doing the work properly. They had simply not been captured when the decision was made.

### What Was Really Happening

Project bids usually price the visible work carefully: manpower, concrete, steel, cranes, equipment, and productivity. Safety is often less detailed. Welfare, training, specialist detection, standby manpower, temporary controls, waste routes, and competent supervision can disappear into a miscellaneous allowance.

The same thing happens with people. If the project budgets for the cheapest available HSE manpower but expects experienced professionals who can coach supervisors, challenge planning, and manage complex interfaces, the gap will appear later as weak field presence, repeated issues, and management time.

## What I Learned

A safety cost omitted during bidding does not vanish. It changes form. It comes back as delay, compromise, rework, idle manpower, or emergency procurement.

**USE THIS ON SITE TOMORROW** Before the next urgent HSE purchase or manpower request, ask: Is this genuinely a new requirement, or was it always necessary and simply never priced?

**THINK & REACT** When safety becomes 'too expensive' during execution, look back at the tender assumptions.

**KEY TAKEAWAY** The budget does not just fund safety. It helps create the conditions in which safe work is possible.

### 60-SECOND FIELD SELF-CHECK | CHAPTER SCORE: \_\_\_\_ / 6

Score each statement: 0 = rarely/no, 1 = partly/sometimes, 2 = consistently/yes.

1. Are the real HSE costs visible during bidding rather than discovered during execution? 0 1 2
2. Are training, welfare, competent manpower, and specialist controls properly resourced? 0 1 2
3. When an HSE purchase becomes urgent, do we ask why it was not planned earlier? 0 1 2

*One action I will test this week:* \_\_\_\_\_

## CHAPTER 4

## Why Good People Take Bad Risks

**Knowing the rule does not make a person immune to urgency, habit, or pressure.**

### A Small Personal Example

I normally used the designated pedestrian gate. One day an urgent call pulled my attention toward the faster route through the adjacent vehicle gate. No vehicle was moving. The distance was short. I knew the rule, but I still took the shortcut.

Nothing happened. That is exactly why the example matters.

### What Looked Like the Problem

If someone had seen only the act, the easy explanation would have been carelessness or complacency. But the decision did not come from a lack of knowledge. It came from urgency combined with a low perceived probability of harm.

### What Was Really Happening

People make fast mental trades all the time: I know the rule, but nothing is moving. It is only five minutes. I have done this before. The chance is small.

Repeated success strengthens the shortcut. When nothing bad happens, the mind can interpret that outcome as proof that the shortcut is acceptable rather than evidence that the person was fortunate.

This does not mean every deviation should be treated as reasonable. High-consequence uncertainty is different. A confined-space entry without proper gas testing, a lift without the required competence, or damaged critical equipment is not the place to rely on experience and luck.

## What I Learned

When competent people take unsafe shortcuts, training may not be the missing ingredient. Sometimes the system has made the unsafe option faster, easier, or more rewarding than the safe one.

**USE THIS ON SITE TOMORROW** When a competent person takes a shortcut, ask without accusing: What did this shortcut save you—time, walking, waiting, approval, effort, or embarrassment? The answer usually points toward the condition that needs to change.

**THINK & REACT** Do not use 'complacency' as the end of an investigation. Ask what made the behavior attractive.

**KEY TAKEAWAY** The unsafe act is often a rational shortcut inside an irrational system.

### 60-SECOND FIELD SELF-CHECK | CHAPTER SCORE: \_\_\_\_ / 6

Score each statement: 0 = rarely/no, 1 = partly/sometimes, 2 = consistently/yes.

1. When a competent person takes a shortcut, do we ask what the shortcut saved them?    0   1   2
2. Do we remove the condition that makes the unsafe option easier?    0   1   2
3. Are we careful not to use 'complacency' as the final explanation?    0   1   2

*One action I will test this week:* \_\_\_\_\_

## CHAPTER 5

## When Safety Becomes Policing

**If people become quiet when HSE arrives, the system may be collecting compliance while losing information.**

### A Scene from the Field

Ask a worker privately about drinking water, toilets, shelter, access, or a recurring unsafe condition and the answer can be very different from the answer given in front of the supervisor.

I have seen workers hesitate, look toward the person who controls their daily work, and then say everything is fine. Later, away from that pressure, the real issue comes out.

The lesson is uncomfortable: people do not report based only on what the policy says. They report based on what they expect will happen to them after they speak.

### What Looked Like the Problem

A clean report can look like a healthy site. It can also mean that people have learned which problems are safe to mention and which are safer to keep quiet.

### What Was Really Happening

Different layers of the project experience different incentives. Client HSE, main-contractor HSE, and subcontractor HSE may all care about safety, but they are not exposed to the same commercial and organizational pressure.

When every bad message creates blame, paperwork, or personal consequences, the system teaches silence. Near misses remain within the crew. Welfare concerns disappear. Unsafe improvisations are corrected quietly before the next inspection.

Serious deliberate disregard still needs consequences. The mistake is using the same policing response for honest early reporting, uncertainty, minor error, deliberate bypass, and falsification.

## What I Learned

Psychological safety is not a soft extra. It is part of information quality. If people do not feel safe bringing bad news early, management will receive the news later—usually when it is more expensive.

**USE THIS ON SITE TOMORROW** Speak to one worker away from the immediate supervisor. Ask: What makes your job harder or less safe today? If the worker tells you something useful, close the loop without exposing the person unnecessarily.

**THINK & REACT** Do people bring problems to HSE early, or only after the problem becomes visible?

**KEY TAKEAWAY** A system that punishes every bad message will eventually receive only good news.

### 60-SECOND FIELD SELF-CHECK | CHAPTER SCORE: \_\_\_\_ / 6

Score each statement: 0 = rarely/no, 1 = partly/sometimes, 2 = consistently/yes.

1. Can workers raise bad news without fear of retaliation or unwanted attention?    0   1   2
2. Do we separate honest early reporting from deliberate life-critical bypass?  
0   1   2
3. Do near misses create learning outside the immediate crew?    0   1   2

*One action I will test this week:* \_\_\_\_\_

PART II

# Change the Conditions

Supervision, data, workability, and contractor systems

## CHAPTER 6

## The Supervisor Is the Real Safety System

**A worker may see the safety officer for ten minutes.  
He works with his supervisor for ten hours.**

### A Scene from the Field

I have watched crews attend the morning toolbox talk, sign the sheet, and then struggle to explain the main hazard of the task they were about to perform.

They knew how to do the job. What they did not always know was what could change during the shift and make the job unsafe.

### What Looked Like the Problem

The natural response is to improve the toolbox-talk material or ask HSE to deliver more awareness. But that can miss the person who shapes the crew's behavior for the rest of the day.

### What Was Really Happening

The supervisor translates the system. Procedures do not speak directly to the worker. The supervisor decides where the crew stands, when the job starts, which condition deserves a stop, whether a missing resource can wait, and how schedule pressure is interpreted.

This is also where language and cultural differences become operational. A short discussion in the language workers understand, using the hazards of the actual job, can be more useful than a longer generic presentation.

The strongest supervisors do something else: they absorb pressure. They do not simply pass every demand downward to the crew.

### What I Learned

If the supervisor is measured almost entirely on production, the safety system will eventually feel that pressure. Frontline leadership has to include preparation quality, repeat issues, closeout, and the authority to say the task is not ready.

**USE THIS ON SITE TOMORROW** At the next toolbox talk, ask two workers—not the supervisor—what can hurt them today and what condition would make them stop. Their answers tell you whether the message reached the workforce.

**THINK & REACT** If HSE keeps correcting the same crew, look at the supervisor's operating environment before adding another awareness campaign.

**KEY TAKEAWAY** Safety culture reaches the worker through the supervisor long before it reaches him through a policy.

#### 60-SECOND FIELD SELF-CHECK | CHAPTER SCORE: \_\_\_\_ / 6

Score each statement: 0 = rarely/no, 1 = partly/sometimes, 2 = consistently/yes.

1. Can supervisors explain today's real hazard instead of reading a generic topic?   0   1   2
2. Can they delay unready work without losing management support?   0   1   2
3. Does the crew understand the message in a language and form that actually works?   0   1   2

*One action I will test this week:* \_\_\_\_\_

## CHAPTER 7

## Zero Does Not Always Mean Safe

**Zero injuries can be a good result. It is not proof that risk is zero.**

### A Scene from the Field

On one project, the major high-risk activities looked strong in the statistics. Lifting, scaffolding, work at height, and excavation were receiving attention. The overall picture looked good.

At the same time, field personnel could see a persistent weakness in housekeeping, material management, local marking, and access. An engineer later stepped onto an uneven, poorly controlled surface, fell, and fractured his hand.

The injury did not come from the category that management was watching most closely. It came from the weakness hidden inside the average.

### What Looked Like the Problem

The dashboard was not necessarily false. The problem was that the overall score was too comfortable. Strong categories diluted the weak one.

### What Was Really Happening

The same problem appears in reporting. Short-duration contractors may see formal incident reporting as a threat to schedule, reputation, or payment. Minor events stay outside the system. Near misses disappear because nobody wants the investigation burden.

When reporting has consequences, zero can become something people protect instead of something leaders examine.

### What I Learned

Numbers are useful when they lead us toward the weak signal. They become dangerous when they reassure us before we ask what the average is hiding.

**USE THIS ON SITE TOMORROW** Take the greenest dashboard you have and ask: Which single category is weakest underneath this average? Then walk that category in the field before discussing the overall score.

**THINK & REACT** When incident numbers look unusually perfect, ask whether people feel safe reporting bad news.

**KEY TAKEAWAY** Good statistics summarize the past. Good safety management uses them to discover what the average may be hiding.

### 60-SECOND FIELD SELF-CHECK | CHAPTER SCORE: \_\_\_\_ / 6

Score each statement: 0 = rarely/no, 1 = partly/sometimes, 2 = consistently/yes.

1. Do we review weak risk categories separately instead of relying on one overall score?   0   1   2
2. Do people feel safe reporting first-aid cases, near misses, and small failures?  
0   1   2
3. Do repeated observations and overdue closeouts influence management decisions?   0   1   2

*One action I will test this week:* \_\_\_\_\_

## CHAPTER 8

## Make Safety Workable

**A control that cannot be performed properly is eventually reduced to a signature.**

### A Scene from the Field

Imagine one safety officer supporting 50 or 60 pieces of equipment while also managing permits, field observations, toolbox talks, and day-to-day coordination.

A procedure may still require a detailed daily inspection of every item. On paper, that sounds rigorous. In practice, the time available begins to shrink until inspection becomes a rapid glance and a signature.

### What Looked Like the Problem

The obvious response is to tell the safety officer to inspect better. But the workload may already make a good inspection physically impossible.

### What Was Really Happening

The operator often knows the equipment better than the form ever can. He notices the abnormal sound, the new leak, the worn tire, the change in the controls, and the attachment that no longer feels right.

That does not eliminate competent inspection. It changes ownership. Operator pre-use checks, competent periodic inspection, maintenance closure, and HSE assurance are different layers with different purposes.

When the system puts all ownership on HSE, people closest to the equipment can start waiting for the 'official' inspection instead of acting when they first see the defect.

### What I Learned

Workable safety is not about making the standard weaker. It is about giving the right control to the right person at a frequency and depth that can actually be performed.

**USE THIS ON SITE TOMORROW** Shadow one repetitive safety process from start to finish. Watch the time available, the person doing it, the information they use, and what happens after a defect is found. Wherever people are signing faster than they are checking, redesign the workflow.

**THINK & REACT** Do not make safety easier by lowering the standard. Make the standard easier to execute correctly.

**KEY TAKEAWAY** Workable safety is control designed around how the work actually happens.

**60-SECOND FIELD SELF-CHECK | CHAPTER SCORE: \_\_\_\_ / 6**

Score each statement: 0 = rarely/no, 1 = partly/sometimes, 2 = consistently/yes.

1. Can the required control realistically be performed with the time and manpower available?   0   1   2
2. Is ownership placed with the person closest to the equipment or activity?   0  
1   2
3. When a defect is reported, is closure visible and timely?   0   1   2

*One action I will test this week:* \_\_\_\_\_

## CHAPTER 9

## Contractors Follow the System We Create

**Contractor behavior is shaped by more than rules. It is shaped by the environment we ask contractors to operate inside.**

### A Recurring Field Pattern

Repeated contractor observations can create a familiar cycle: inspection, warning, temporary correction, then the same issue again a few days later.

The easy conclusion is attitude. Sometimes that conclusion is right. But I have also seen the same pattern linked to missing materials, slow procurement, unclear scope, thin commercial margins, weak supervision, short package durations, and pressure to keep work moving.

### What Looked Like the Problem

The visible problem belonged to the contractor. The conditions behind it often belonged to the wider project system.

### What Was Really Happening

A contractor with a six-week package behaves differently from a long-term strategic partner. A subcontractor that believes an incident report may delay its final invoice experiences reporting differently from the client who wants complete transparency.

Procurement and contracting decisions also matter. If barricades, welfare, training, standby personnel, specialist equipment, or competent supervision were not properly scoped and priced, the field team will eventually be asked to deliver the standard without the resources that standard assumes.

This does not remove contractor accountability. It makes the diagnosis more accurate.

## What I Learned

Repeated non-compliance has different causes: unwillingness, lack of competence, lack of resources, or a commercial system that makes proper compliance difficult. Each cause needs a different response.

**USE THIS ON SITE TOMORROW** Pick one repeated contractor observation. Before issuing the next warning, ask four questions: Do they know what to do? Can they do it? Do they have what they need? Does the commercial or schedule system punish them for doing it properly?

**THINK & REACT** If the same issue survives several inspections, the problem may be upstream of the workforce.

**KEY TAKEAWAY** Contractors respond to the system of time, money, oversight, and consequences around the rules.

### 60-SECOND FIELD SELF-CHECK | CHAPTER SCORE: \_\_\_\_ / 6

Score each statement: 0 = rarely/no, 1 = partly/sometimes, 2 = consistently/yes.

1. Are critical HSE resources explicit in contractor scope and mobilization? 0 1 2
2. Do we distinguish unwillingness from lack of competence, resources, or commercial support? 0 1 2
3. When the same contractor issue repeats, do we change the surrounding system as well? 0 1 2

*One action I will test this week:* \_\_\_\_\_

PART III

# Use Tools Without Losing Judgment

Technology, rapid decisions, and resilience under non-ideal  
conditions

## CHAPTER 10

## Technology Cannot Rescue a Weak System

**Do not let the dashboard replace supervision, the alarm replace planning, or the sensor replace competence.**

### A Scene from the Field

Proximity-warning systems can be excellent controls. They can also become background noise.

When alarms repeatedly activate during normal interaction between excavators, dump trucks, and nearby vehicles, operators hear the same warning again and again. The first alarm gets attention. The fiftieth may get irritation. Eventually, some operators start ignoring, muting, or disconnecting the system.

### What Looked Like the Problem

The device was installed, so the project could say the technology existed. But installation is not the same as control.

### What Was Really Happening

AI cameras provide a similar lesson. They can identify line-of-fire exposure, unsafe proximity, PPE gaps, and other conditions. That visibility is valuable. But the camera often sees the exposure after it has started. It supports reaction and learning; it does not plan the job or physically prevent the worker from entering the danger zone.

Smart helmets and connected devices can add location, SOS, fall detection, and other features. At large scale, however, they also create cost, charging, replacement, maintenance, administration, data ownership, privacy, and trust questions.

Predictive analytics can become powerful when near-miss, permit, observation, and equipment data are reliable. Poor data does not become good simply because an algorithm processes it.

## What I Learned

Technology works best when it strengthens a human system that already knows who will respond, what action follows the alert, and what happens when the technology fails.

**USE THIS ON SITE TOMORROW** Pick one safety technology already on site and ask the crew: What do you do when it alarms? If the answers vary, the technology is not yet a control—it is only a device.

**THINK & REACT** If the technology is switched off tomorrow, would the basic planning, supervision, and stop-work system still protect people?

**KEY TAKEAWAY** Technology should strengthen a functioning system, not become the reason the basic system was never fixed.

### 60-SECOND FIELD SELF-CHECK | CHAPTER SCORE: \_\_\_\_ / 6

Score each statement: 0 = rarely/no, 1 = partly/sometimes, 2 = consistently/yes.

1. Does every safety technology have a named person who responds to its alerts? 0 1 2
2. Have nuisance alarms, maintenance, data quality, privacy, and user trust been considered? 0 1 2
3. Would the basic safety system still protect people if the technology failed tomorrow? 0 1 2

*One action I will test this week:* \_\_\_\_\_

## CHAPTER 11

## The Ten-Minute Decision

**Some of the most important safety decisions happen before anyone has time to call a meeting.**

### The Moment Before the Decision

A crew is ready. Equipment is waiting. Production is pushing. One condition is not exactly as planned. Someone asks, “Can we continue?”

This is where experience matters, but experience needs a boundary.

### What I Ask First

My first screen is consequence: What is the worst credible outcome if this control fails?

If the gap involves a life-critical control or catastrophic uncertainty, the answer is stop. Confined-space entry without proper atmospheric testing, damaged critical lifting gear, an unreliable lifting point, missing fall protection, or missing mandatory competence is not the place to negotiate with urgency.

For lower-consequence conditions, judgment may allow temporary compensating controls. But the gap must be understood, the exposure must be controllable, someone competent must own the decision, and normal control must return.

### Why This Matters

Field decisions are rarely made inside ideal conditions. The danger is not flexibility itself. The danger is allowing convenience to redefine what is acceptable, especially when the possible consequence is fatal or permanently disabling.

### What I Learned

Urgency should never be the evidence that a risk is acceptable. The higher the consequence, the less room there is for improvisation.

**USE THIS ON SITE TOMORROW** When someone asks, 'Can we just continue?', answer with a different question: What is the worst credible consequence if this control fails? That question changes the quality of the decision.

**THINK & REACT** Flexibility belongs where consequence is controllable. Life-critical uncertainty belongs on stop.

**KEY TAKEAWAY** A fast decision still needs a clear boundary between adaptation and unacceptable uncertainty.

**60-SECOND FIELD SELF-CHECK | CHAPTER SCORE: \_\_\_\_ / 6**

Score each statement: 0 = rarely/no, 1 = partly/sometimes, 2 = consistently/yes.

1. Do we stop immediately when a life-critical control is missing or uncertain?  
0 1 2
2. Do we ask about worst credible consequence before asking how to keep going? 0 1 2
3. Are temporary deviations clearly owned, controlled, and returned to normal? 0 1 2

*One action I will test this week:* \_\_\_\_\_

## CHAPTER 12

## Safety Is a Business System

**A resilient safety system assumes that real work will sometimes be non-ideal.**

### A Scene from High-Tempo Work

During restoration work with very large manpower and continuous activity, normal office-based permit and review cycles could not always match the pace of execution.

The answer was not to abandon control. Permit issuers and receivers moved closer to the workface. Risk assessments were discussed where the work was happening. SIMOPS and catastrophic-potential activities received the strongest attention first. Gas testing, competent lifting, fire watch, isolation, and other life-critical controls remained non-negotiable.

Lower-risk administrative and housekeeping issues were stabilized progressively as the operation moved from emergency response toward normal project conditions.

### What Looked Like the Problem

From a distance, any temporary adaptation can look like a bypass. The real question is whether the intent of the control has been preserved and whether the adaptation is governed, temporary, and proportionate to the risk.

### What Was Really Happening

Procedures are usually written for stable conditions. Real projects are not always stable. Material is late. Weather changes. Scope shifts. Equipment fails. Restoration creates urgency. Interfaces multiply.

Resilience means deciding what must never relax, what can be adapted temporarily, who has the authority to make that decision, and when the temporary mode ends.

That last point matters. An emergency method that remains after the emergency becomes normalization of deviation.

## What I Learned

A safety system is mature when it can protect its essential intent under pressure without pretending that every condition is ideal. That requires cross-functional decisions, not HSE acting alone.

**USE THIS ON SITE TOMORROW** Ask the leadership team: If tomorrow becomes abnormal—late material, weather, urgent restoration, sudden SIMOPS—what will we protect first, what can we adapt, who can authorize it, and what ends the temporary mode?

**THINK & REACT** A temporary emergency method that continues after the emergency is no longer resilience. It is normalization of deviation.

**KEY TAKEAWAY** Resilience is not bypassing the system. It is preserving the intent of the system when reality refuses to stay ideal.

### 60-SECOND FIELD SELF-CHECK | CHAPTER SCORE: \_\_\_\_ / 6

Score each statement: 0 = rarely/no, 1 = partly/sometimes, 2 = consistently/yes.

1. Can the system operate safely when conditions become non-ideal?    0   1   2
2. Are life-critical controls protected even during urgent or restoration work?  
0   1   2
3. Is there a clear trigger to end temporary mode and capture lessons learned?  
0   1   2

*One action I will test this week:* \_\_\_\_\_

## Final Chapter

# See the System, Not Just the Act

**Correct the unsafe condition. Then understand why the condition was possible.**

Across every chapter, the same pattern appears. The visible event is at the end of a chain. The damaged equipment, the shortcut, the under-reported near miss, the weak toolbox talk, the delayed control, the nuisance alarm, and the rushed decision are symptoms. The system behind them is the deeper story.

This does not remove personal responsibility. Workers, supervisors, engineers, managers, contractors, and HSE professionals all have duties. But responsibility becomes useful only when it helps us prevent the same condition from returning.

A mature safety professional moves between two views. The first is immediate control: stop the exposure, correct the equipment, secure the area, and protect the person. The second is system understanding: why was this condition possible, normal, attractive, or repeated?

The first view prevents today's incident. The second view prevents tomorrow's repetition.

## A Field Philosophy

**SEE** — Look beyond the immediate unsafe act.

**ASK** — What created the condition?

**UNDERSTAND** — Identify the pressure, resource, competence, and decision behind it.

**PRIORITIZE** — Protect life-critical controls first.

**SIMPLIFY** — Make the safe way workable.

**INFLUENCE** — Work with the people who control time, money, manpower, and sequence.

**MEASURE** — Use data to expose weakness, not decorate performance.

**LEARN** — Turn abnormal events, near misses, and field experience into system improvement.

**ONE FIELD QUESTION TO KEEP** The next time you see an unsafe condition, correct it first. Then ask: Why did this make sense to someone? Wherever that question leads—worker, supervisor, planner, procurement, contract, budget, schedule, or leadership signal—that is where the deeper safety work begins.

**KEY TAKEAWAY** Safety is not about proving that work was controlled. It is about creating conditions in which work can succeed without sacrificing people.

## Closing Practice

# A 30/60/90-Day Way to Start

**Do not start by launching another program. Start by changing the way you look at the work.**

## First 30 Days — Observe

Choose one recurring process: equipment inspection, toolbox talks, permit readiness, near-miss reporting, contractor mobilization, or defect closure. Watch how it really happens from start to finish. Compare the intended control with the field behavior. Do not redesign anything until you understand the gap.

## Days 31–60 — Remove One Upstream Cause

Choose one repeated problem and fix the condition behind it: missing material, unclear ownership, slow procurement, language, unrealistic timing, inadequate supervision, or a reporting consequence. Measure whether the repeated issue reduces.

## Days 61–90 — Build the Learning Loop

Take one useful lesson from a near miss, abnormal condition, repeated observation, or field decision and feed it back into planning, bidding, supervision, mobilization, or procurement. If the lesson stays inside HSE, the organization has not learned yet.

**USE THIS AFTER 90 DAYS** Ask supervisors and workers one question: What has become easier to do safely? Their answer is a better test of improvement than the number of new forms issued.

# Your Field System Self-Check

This is a reflection tool, not an audit, certification, or validated safety rating.

Add the 12 chapter self-check scores. Maximum score: 72.

| Total Score | What It Suggests | Your Next Focus                                                                                                                                                                                 |
|-------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0–24        | Needs Attention  | Several conditions may depend too heavily on individual effort, informal workarounds, or paperwork. Start with readiness, ownership, and reporting culture.                                     |
| 25–48       | Developing       | Many controls exist, but they may become inconsistent under pressure. Find repeated weak conditions and remove the upstream causes.                                                             |
| 49–60       | Working          | The system generally supports safe work. Focus on the lowest-scoring chapters and test how the system performs when conditions become non-ideal.                                                |
| 61–72       | Stronger         | The operating system appears comparatively strong in this self-check. Keep testing weak signals, reporting honesty, and the ability to absorb pressure without relaxing life-critical controls. |

Do not chase the highest total. Look first at the three chapters with the lowest scores. Those are the conditions most likely to make unsafe work predictable.

My three priorities:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

## Plain-Language Glossary

**Compensating control:** An additional temporary control used when the normal arrangement cannot be fully applied, without weakening life-critical requirements.

**Life-critical control:** A control whose failure can directly expose a person to fatal or permanently disabling harm.

**Non-ideal condition:** A real operating situation where time, resources, environment, or sequence differ from the normal planned condition.

**Readiness:** Whether the people, equipment, access, permits, interfaces, and critical controls are genuinely in place before work starts.

**Residual risk:** The risk that remains after reasonable controls have been applied.

**SIMOPS:** Simultaneous operations: different activities occurring close enough in time or space to interact with each other.

**Workface:** The physical location where the task is actually being performed.

## About the Author

Shajahan Abdul Salam, CSP, CMIOSH, ASP, ISEP Practitioner, and Registered Environmental Practitioner (REnvP), is a Principal HSE Specialist with more than a decade of international experience across construction, industrial, infrastructure, and high-risk project environments.

His work has involved contractor governance, field compliance, high-risk activity control, restoration work, digital HSE, safety analytics, and practical safety-system improvement across multinational workforces and complex project interfaces.

This book reflects a field perspective developed through years of working between written systems and real execution—with workers, supervisors, contractors, clients, engineers, and project leadership under both normal and high-pressure conditions.

The purpose is not to criticize any organization or replace established standards. It is to help practitioners see the operating conditions behind unsafe work and make safety more workable, more honest, and more useful.

# Safety Is **Not** the Problem

## What Really Makes Work Unsafe

Workplace accidents are often seen as the result of unsafe workers. But is that really the truth? Through real project experiences, field observations and practical insights, this book reveals how unsafe conditions are created long before the work starts – in planning, procurement, design, supervision, schedules, commercial pressure and decision-making.

*Safety Is Not the Problem* challenges common beliefs, highlights the real causes behind unsafe work and provides practical lessons for building safer, healthier and more productive workplaces.

### Key Themes Inside



Real project case studies from construction, oil & gas and industrial projects



How planning, budget, schedule and supervision influence safety outcomes



Practical strategies that work on the ground



Human, organizational and technological factors



Insights for building a sustainable safety culture

*“A practical, honest and thought-provoking book that helps us look beyond the surface and understand the true factors that create unsafe work.”*

FOR HSE PROFESSIONALS,  
ENGINEERS, PROJECT MANAGERS,  
CONTRACTORS, AND EVERYONE  
WHO CARES ABOUT PEOPLE  
AT WORK



### About the Author

Shajahan Abdul Salam, CSP, CMIOSH is a Principal HSE Specialist with 14+ years of international experience in construction, oil & gas and infrastructure projects. He is a Certified Safety Professional (CSP), Chartered Member of IOSH (CMIOSH), Associate Safety Professional (ASP), ISEP Practitioner and Registered Environmental Practitioner (REnvP). Through real-world experience, research and innovation, he is committed to promoting safer, healthier and more sustainable workplaces.

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