How Strategic Questions Revealed a Multi-Million-Dollar Risk Hidden in Plain Sight

EXECUTIVE SUMMARY

A routine moisture survey on a 1.1-million-square-foot reroofing project revealed a multi-million-dollar risk: structurally compromised insulation that would void warranty coverage and create years of performance problems.

The difference? Asking fundamental questions no one else had incentive to ask—before materials were delivered and millions were committed.



The Setup

A well-established commercial roofing contractor had landed a significant project: reroofing 1.1 million square feet at a major manufacturing facility for a global luxury automobile brand. The scope seemed straightforward—recover the existing roofs with new materials, secure a 20-year warranty, and strengthen a relationship with a marquee client.

My team was brought in for what appeared to be a simple technical task: conduct an infrared moisture survey to quantify the amount of wet insulation present within the existing roof systems. This would allow the contractor to determine which areas could be recovered and which would need full tear-off and replacement. The contractor's assumption was logical—minimal moisture damage meant a slam-dunk recovery project. Lower cost for the client, less invasive work, full warranty coverage, and a successful project for all parties.

The team included two consultants: one focused on the technical moisture survey work, the other on strategic assessment. While the technical consultant confirmed that very little insulation was wet (good news for the recovery approach), the strategic questions that followed revealed something far more concerning.

The Questions That Changed Everything

Sometimes the most important questions are the most basic ones. When no one with decision-making authority can answer fundamental questions about a multi-million-dollar project, that's not just an information gap—it's a warning sign.

"What's the existing roof system?"

The project manager, who was already managing other roofing projects at the same facility, didn't know. This wasn't incompetence—he was focused on execution, not system archaeology. But without understanding what we were building on top of, we couldn't evaluate whether the recovery approach would actually work.

"What's the reroofing specification?"

"Well, I don't know about a proper specification," the PM explained. "But we're going to recover all eligible areas with quarter-inch polystyrene fan-fold cover board and then secure the new TPO membrane by induction welding." A general approach, but not a specification developed for this specific building's needs.

"What's driving this project?"

No clear answer. The roofs were "old", and the client had budget for new ones. But were they leaking? What was the actual problem being solved? What did success look like beyond "new roof installed"?

"Are the roofs leaking now?"

The PM didn't know.

The pattern was clear: everyone was focused on execution. No one had verified the fundamentals. No one had questioned whether the planned approach matched the actual conditions or the client's true objectives.

The Discovery

While taking core samples for the moisture survey, the technical consultant found something concerning: the existing roof system used fiberglass insulation, and it collapsed when core samples were taken with hand tools.

This discovery triggered a different kind of analysis. The technical question, "Will this insulation support construction traffic?", had a clear answer: **no**. But the strategic question went deeper: "What are the business consequences of proceeding with recovery over compromised substrate?"

Understanding those consequences required connecting technical realities to business impacts through the entire chain of cause and effect:

Step 1: Construction Traffic

Imagine rolls of membrane being moved across the roof. Bundles of insulation on carts. Materials being staged and repositioned throughout the installation. All of that weight and movement on insulation that collapses when cored with hand tools.

Step 2: Structural Damage

The fiberglass insulation would compress and collapse in multiple locations, creating low spots throughout the new roof system.

Step 3: Water Accumulation

Those low spots would become ponds—standing water that doesn't drain properly. In roofing, standing water isn't just an aesthetic problem; it's a performance failure waiting to happen.

Step 4: The Fatal Flaw

Here's where it gets worse: the fasteners securing the roof membrane would be positioned according to the original design. But with collapsed insulation creating low spots, those fasteners would now be "tented" under the membrane, pulled tight in the middle of ponding water. Each fastener becomes a potential leak point, a stress concentration right where water accumulates.

Step 5: Warranty Void

These aren't material defects. They are design failures resulting from installing a recovery system over inadequate substrate. The 20-year, no-dollar-limit warranty the client was counting on? Worthless for this type of failure.

Step 6: The Cascade Begins

Within a couple of years: leaks appear. The auto manufacturer calls the contractor. Repairs are made, but more leaks develop. The pattern continues. What was supposed to be a warranted roof system becomes an ongoing expense and point of friction.

Step 7: Relationship Destruction

Eventually, the luxury auto manufacturer (the kind of marquee client every contractor wants to build a long-term relationship with) becomes frustrated with constant issues on a "new" roof. What could have been a beautiful business relationship becomes tarnished. Legal disputes. Reputation damage. The contractor loses not just this client, but potentially others who hear about the problems.

All of this was visible before a single material was delivered, before the six- to eight-week lead time began, before millions of dollars were committed to an approach that wouldn't deliver what the client actually needed.

Why This Matters: The External Perspective Advantage

The project manager wasn't incompetent. He was doing his job—managing execution on a defined scope of work. But he was embedded in a system with specific pressures, assumptions, and blind spots.

Internal teams operate under constraints that external strategists don't face:

Execution Pressure

When you're managing multiple active projects, your focus is on delivering the work in front of you, not questioning fundamental assumptions that others have already made.

Political Constraints

"What's actually driving this project?" ... "Are we solving the right problem?" These questions can feel like challenging your superiors' judgment or your client's decisions. There's social and political risk in asking questions that suggest the current plan might be flawed.

Assumed Knowledge

When you work within an organization or on ongoing client relationships, there's an assumption that someone else has already asked and answered the basic questions. The specifications exist somewhere. Someone verified the fundamentals. It would be redundant (or insulting) to ask again.

Normalized Risk

When the same patterns repeat, they stop looking like risks and start looking like "how things are done." Compressed timelines, incomplete specifications, assumptions about existing conditions—these become background noise rather than warning signs.

An external strategist can bring different advantages:

Organizational Independence

External strategists can question fundamental assumptions without navigating internal politics or risking working relationships. "What's the existing system?" becomes due diligence rather than a challenge to someone's competence or judgment.

Pattern Recognition Across Industries and Domains

Similar dynamics destroy projects repeatedly, regardless of technical domain. Authority confusion, misaligned stakeholder expectations, execution focus without strategic clarity—these patterns transcend specific industries.

No Sunk-Cost Bias

External strategists aren't invested in the current plan. If analysis reveals that the approach needs to change, there's no reason to defend previous decisions or preserve existing commitments.

Strategic vs. Technical Lens

While technical expertise matters, the critical insight here wasn't about roofing systems—it was about connecting technical realities to business consequences. It was about asking "What happens next?" and "What happens after that?" in a way that reveals cascading risks.

The Strategic Value of Early Questions

Timing matters enormously in risk management. This risk was identified 6-8 weeks before materials were delivered, well before construction began. At that point, multiple options were still available:

- Modify the approach to include substrate reinforcement or selective replacement
- Tear off and replace areas with compromised insulation
- Proceed with the original plan but with full awareness of the warranty implications and future costs
- Revisit the project objectives with the client to ensure the solution matched their actual needs

Once materials are ordered, options narrow. Once construction begins, costs of change multiply. Once the roof is installed and problems emerge, you're in crisis-management mode—expensive, relationship-damaging, reputation-harming crisis management.

The cost of this early discovery? A consulting fee measured in thousands of dollars. The cost of mid-project discovery? Change orders, delays, scope expansion, measured in hundreds of thousands. The cost of post-completion discovery? Years of leak repairs, warranty disputes, legal fees, and a destroyed relationship with a marquee client—measured in millions.

This is the prevention paradox: when you identify and address risks early, you never see the disaster you avoided. There's no dramatic save, no visible crisis management, no heroic intervention. Just a problem that never materializes because someone asked the right questions at the right time.

What This Demonstrates

Strategic risk assessment isn't primarily about having all the answers or bringing specialized domain expertise (though both can help). It's about:

Asking questions no one else has the incentive or perspective to ask

Because you're not constrained by execution pressure, political dynamics, or normalized risk.

Connecting technical realities to business consequences

Understanding how a hand-pressure test on insulation translates to warranty voids, legal disputes, and relationship damage.

Creating options while you still have them

Identifying risks when the timeline still allows for thoughtful response rather than reactive crisis management.

Seeing patterns across contexts

Recognizing that "everyone's focused on execution, no one verified the fundamentals" is a warning sign whether you're reroofing a manufacturing facility, implementing enterprise software, or launching a new product line.

The most valuable interventions often look mundane. No dramatic rescue. No brilliant technical insight. Just someone asking, "What's the existing system?" and following the implications through to their logical conclusion.

Sometimes the most important strategic work is simply asking the questions everyone else assumed someone else had already answered.