

GUIDEBOOK 101

**From Trust
to Transparency:
Building Resilient
Multi-Tier Supplier
Networks**

Introduction

Most companies know their Tier 1 suppliers pretty well. After all, they work with these businesses regularly, and track their performance. However, the ability to engage with all Tier 1 suppliers is challenging due to resources, competing priorities, and scale.

Add the challenge of needing to obtain visibility to Tier 2 to address risk and many organizations have little to no real view. As global supply chains grow more complex and interconnected, new layers of companies keep feeding into those suppliers. This dynamic situation stretches most organizations in terms of resources, process capabilities, and technology.

The companies themselves aren't always to blame. They may desire more information from additional tiers, but poor processes, poor supplier relationships, and confidentiality concerns can hinder the ability to expand the access to important information. Add time zones, language barriers, and disconnected platforms to the mix, and even well-managed organizations never gain a full picture of the risk and challenges they face.

This limited view leaves businesses reacting to problems instead of anticipating them. When a disruption hits a lower-tier supplier, for example, the impact can start rippling through the network long before anyone even sees it coming. Data from

credible industry studies shows how common that blind spot is. According to McKinsey & Co., 10% of companies had zero transparency across any tier, 60% have Tier 1 visibility and less than one-third (30%) have it beyond Tier 1.

“This should be a concern because major disruptions often start deep in the supply chain,” McKinsey states. “And once companies experience a supply chain disruption, it takes them an average of two weeks to plan and execute a response—much longer than the typical weekly cycle for sales and operations execution.”

In other words, without sub-tier visibility, companies are missing a core element of risk management. This deficiency impacts their ability to implement proactive risk management strategies to identify and respond to compliance, financial, geopolitical, and environmental, social and governance (ESG) risk areas.

In this Guidebook 101, we discuss how segmentation, risk prioritization, and smarter supplier management strategies can help uncover hidden vulnerabilities and bottlenecks before they disrupt operations. We'll also look at how companies can stop reacting to problems and start managing risk in real time by extending visibility deeper into their supply base.

BEYOND TIER 1 Where Real Risk Begins

Most companies still manage their supply chains the way they did decades ago: by focusing only on their largest, Tier-1 suppliers. That approach follows the familiar 80/20 rule, where 20% of suppliers account for 80% of a company's spend. With limited people, tools, and time, many procurement teams keep their attention on that top 20% and assume either the rest of the network will take care of itself or hope for the best. After all, there are only so many available resources (people and time) to evaluate each tier of a global supply chain.

Unfortunately, neither approach is adequate in today's complex and fluid global economy. Risk and disruptions exist everywhere. As the whole world saw during the global pandemic, Tier-1 suppliers make up only a fraction of the total network that produces the materials, parts, and services behind any finished product and service. Each Tier contributes to the creation and delivery of value. Each plays a role in performance and the ability of companies to sustain performance.

"It's really not products and services that compete, it's your supply chains that compete," says Caldwell Hart, Principal of procurement and supply chain management at Avetta. "Having a great product doesn't mean much if you can't get the right materials when you need them.

That's why visibility across Tier-1, Tier-2, and Tier-3 suppliers is so critical. As is gaining visibility into adjacent supply chains."

Take nickel as an example. A manufacturer might know exactly which suppliers provide its metal parts, but that same nickel is also a key material in electric vehicle (EV) batteries. If demand spikes or production slows in the EV market, those fluctuations

can disrupt other industries such as aerospace and industrial manufacturing who may rely on nickel alloys for critical components. Without visibility across those deeper tiers, companies often miss the shared dependencies that make their supply chains vulnerable.

"If companies don't start to peel back the layers of the onion and understand not just a small portion of Tier 1, but also who's supplying their Tier 1s and Tier 2s," says Caldwell Hart, "they'll never know where the real risks are and or what combination of risks pose the greatest threat."

Organizations that stop at the surface may overlook critical suppliers, underestimate their exposure and focus on the wrong priorities, but a deeper look reveals vulnerabilities and helps pinpoint the relationships that deserve the most attention.

"It's really not products and services that compete, it's your supply chains that compete...Having a great product doesn't mean much if you can't get the right materials when you need them. That's why visibility across Tier-1, Tier-2, and Tier-3 suppliers is so critical. As is gaining visibility into adjacent supply chains."

— Caldwell Hart,
Principal of procurement
and supply chain management,
Avetta

STEP ONE

Bridge Trust and Transparency

Many companies rely on trust when it comes to their largest suppliers. The thinking goes that if a Tier-1 partner is large and established, it must have its risks under control. This assumption exposes the company to costly risks as size alone provides no evidence of process maturity or level of risk. Many well-known suppliers lack robust risk management practices or clear visibility into their own networks.

Hart says that's where many organizations go wrong. "You may have a large established Tier-1 supplier or a supplier that you have a long-term relationship with. In either case this supplier may lack a good risk management process. If you are responsible for procurement, are you going to leave your future in the hands of a partner for whom you really have no evidence of their understanding of risk management? The reality is that they may not even know what the real risks or problem is."

Building transparency starts with engagement. Companies that have two-way communication with their suppliers establish a basis for strong visibility. This exercise takes time, consistency, and trust built through open dialogue. Hart says supplier hesitancy is fairly common,

especially when suppliers worry that sharing data could weaken their position in future negotiations. This is more prevalent when the relationship is viewed as transactional. Others simply don't have the systems or processes needed to provide accurate, timely, and complete information.

Ultimately, good collaboration transforms visibility from a concept into something practical. "You can't build transparency in isolation," says Hart. "It takes communication, collaboration, and trust at every level of the supply chain." Companies making meaningful progress treat visibility as a shared effort. They use digital tools that let buyers and suppliers access the same data in real-time, helping both sides spot potential issues early and address them together. This level of collaboration leads to high levels of performance.

Multi-tier visibility happens when suppliers are an integral part of the process. True collaboration takes time and commitment. For risk management to be proactive, collaboration represents a fundamental requirement rather than an optional activity. "You have to do it; it's table stakes in today's dynamic business environment," says Hart, who points out that the disruptions most

*"You can't build
transparency in isolation...
It takes communication,
collaboration, and trust
at every level of
the supply chain."*

*– Caldwell Hart,
Principal of procurement
and supply chain management,
Avetta*

companies remember like the pandemic, trade tariffs, and supply shortages weren't isolated events. They were part of a constant cycle of overlapping risks that can all hit at once, exposing weak links companies didn't even know existed. He encourages companies to look back over the past 10 plus years. The list of risks and disruptions affecting supply chain performance is well documented.

By building transparency across every tier, companies develop robust balanced strategies to address short-term, medium-term and longer-term actions. Not only are they able to effectively tackle the "now" but they are able to prepare for what may be coming next. "You need more minds at the table," Hart says. "Your suppliers have to be part of the conversation. They offer valuable insights and information that you alone do not have access to."

That collaboration works best when it drives real results. The most resilient supply chains

are built on verified information. Information is power. To be effective in gathering, analyzing, and using information you must be synced across three essential pillars: people, process, and technology. Together, they form a feedback loop where insights drive collaboration.

"Information creates opportunity," says Hart, "but only when the stakeholders align on goals and use shared data to spot risks, test scenarios and act." The goal isn't to just monitor suppliers but to use real insight to identify the root cause of performance impacts.

This allows us to redesign the supply chain, develop new relationships, adjust strategies and create a resilient future. This represents a cyclical process. By following the proven continuous improvement model of "Plan, Do, Check, Act" leading organizations identify, adapt, and adjust before risks become actual disruptions.



STEP TWO

Sort Suppliers and Categories by Risk

Building visibility across multiple tiers starts with knowing where to look first. The reality is that not all suppliers or categories carry the same level of risk, and treating them equally can be a waste of time and resources. With good segmentation, companies can readily learn both “who” and “what” pose the greatest exposure.

“Start with your Tier-1 supply base and categories,” Hart advises. “Some suppliers have proprietary technology or rely on specific raw materials that make them a higher risk, while others belong to categories that carry broad exposure, like semiconductors.”

Effective segmentation takes two views: supplier-level and category-level. The first focuses on critical partners essential to operations. The second looks at broader groups that can introduce risk across the business. Mapping both reveals where bottlenecks exist and where dependency runs deeper than spend alone suggests. Another important element is understanding the impacts on the corporation’s goals. Not the functional goal, but the corporation.

Next, assess risk factors like financial health, compliance, operational stability, and market complexity. Assess whether suppliers are strategic, bottleneck, leverage, or transactional. Each classification guides how the company monitors and manages the relationship.

“If you don’t understand your Tier 1 structure, you can’t begin to engage Tier 2,” says Hart. “It’s about building engagement models with the right suppliers first, then helping them cascade that same visibility into their own networks.”

Prioritization keeps resources focused where they matter most. High-risk, high-impact suppliers need close oversight while lower-risk or easily replaced partners can be monitored with a lighter touch.

Relying on spend alone, however, can create blind spots. A small supplier might not account for much spend, for example, but can still be critical if its component or service appears in most products. “If that supplier fails,” Hart notes, “the impact reaches far beyond its size.”

Effective segmentation takes two views: supplier-level and category-level. The first focuses on critical partners essential to operations. The second looks at broader groups that can introduce risk across the business. Mapping both reveals where bottlenecks exist and where dependency runs deeper than spend alone suggests.

STEP THREE

Turn Data into Action

Managing a complex supply network without the right tools is like operating without a map. The best insights come from both systems and people: engineers, buyers, and sales teams can spot risks long before those issues appear on any dashboard. That's why smart organizations capture those observations, feed them into shared systems, and turn them into usable intelligence.



Technology helps connect those dots. Cloud-based platforms bring supplier data together and help organizations qualify, onboard, and monitor performance. Audit trails, dashboards, and automated alerts turn raw data into information which then leads to action, showing where performance is strong and where problems could start. Artificial intelligence (AI) speeds up that process, and what

once took months now takes hours.

“AI can pull information from multiple systems, organize it, and deliver usable insights faster than ever before,” says Hart. For example, Avetta’s platform uses connected data to map supplier relationships and uncover dependencies that used to take weeks to trace manually. Companies see how each supplier fits into the bigger picture and how one issue can ripple across multiple tiers. Hart remembers a time when that kind of visibility was almost impossible.

“Twenty-five years ago, it took us six months to collect and analyze our spend data let alone evaluate risks,” he says. “Now, we can do the same work in a few hours or days and refresh it regularly if we want to. We can test our assumptions and assess past impacts.” That shift from static reporting to real-time insight helps teams adjust to changing conditions instead of reacting to them after the fact.

“Twenty-five years ago, it took us six months to collect and analyze our spend data let alone evaluate risks...Now, we can do the same work in a few hours or days and refresh it regularly if we want to. We can test our assumptions and assess past impacts.”

*– Caldwell Hart,
Principal of
procurement
and supply chain
management, Avetta*

STEP FOUR

Break the Cycle of Crisis Management

Many companies still find themselves moving from one disruption to the next. Fires get put out, operations stabilize for a moment, and then the next crisis starts. That reactive approach keeps teams busy but rarely builds lasting resilience.

Breaking the cycle of crisis management starts with a mindset shift. Instead of reacting to every disruption, companies need to anticipate the next one. That means turning data into foresight, not just reports. Using continuous monitoring and real-time visibility, teams can spot weak links early, act faster, and build systems that bounce back on their own. True resilience isn't about recovery; it's about prevention.

“Organizations have the power to design sustained performance into their supply chains instead of just reacting

to what's happening in and around them,” says Hart. “When companies start using information to act and change, and not just to cope, they break the cycle. Organizations have the power to act. Many collect, analyze, and monitor, but fail to translate this information into tangible actions that address more than short term mitigation.”

Resilience starts with visibility, collaboration, and the discipline to turn information into action. When teams use technology to connect people and processes across all tiers, they spot risks sooner, adapt faster, and prevent disruptions from becoming real problems. In the end, multi-tier visibility isn't just about seeing more. It's about building a supply chain that runs smarter and responds quickly under pressure in the short term, but more importantly takes actions to design vulnerabilities out ensuring agility, flexibility, and operational excellence.

About Avetta

Backed by the world's largest supply chain risk network, Avetta helps clients achieve deeper visibility, stronger compliance, and measurable safety improvements across every tier. Avetta makes it straightforward to expand oversight without complexity.

Gain visibility down to the subcontractor level.

Request a demo at avetta.com/book-a-demo.



Caldwell Hart, CPSM, CPSD, is Principal, Procurement and Supply Chain Management on the Advisory Services team at Avetta, a leader in supply chain risk management software. Caldwell is focused on SCM/procurement optimization; supply chain risk management; sustainable procurement and ESG strategies; and the application of enabling technology to drive impactful improvements to cost, quality, lead-times, OTD and working capital.



avetta.com