

Supply Chain Risk Mitigation For Integrators

Insight from NSCA's Board of Directors



Supply Chain Risk Mitigation Strategies for Integrators – An NSCA Member Resource

Supply chain disruption has impacted systems integrators' operations across the project life cycle. To protect profitability and align client expectations with the current business realities, NSCA members have to be proactive in managing cashflow and other financial metrics – and provide customers and partners with clear communication about the measures you're taking. This document contains language members can use in proposals and contracts and provides recommendations for risk management.

As part of your risk mitigation efforts, please also reference NSCA's Financial Leadership 101 tool, available in NSCA's Essentials Online Library.

Updated language for proposals and contracts:

1. **FORCE MAJEURE:** If the contract becomes illegal or impossible to perform by either party due to acts of God, natural disaster, strikes, civil disorder, delays in transportation and/or supply chain, unexpected skilled labor shortage, or access to the project that prevents performance to the agreed upon schedules, this contract may be terminated for any one or more such reasons by written notice from one party to the other. Both parties shall make every reasonable attempt to reschedule the project within reasonable timelines. If cancelled, work performed to date along with expenses related to the contract shall be reimbursed to the systems integrator.
2. **WAIVER OF DELIVERY:** Waiver of remedies for delivery and usage. Example: Following every measure of best effort, if it remains impossible to fulfill the terms and conditions of the contract due to unexpected supply chain delays, <XYZ Integration> will require use the force majeure provisions within our purchase agreement <or _____ contract> to seek relief from liquidated damage or other fines, penalties, or claims. XYZ Integration will provide owner and their representatives with delivery status and communicate any reasonable alternatives to expedite material delivery.
3. **CHIP SHORTAGE:** Due to global semiconductor chip shortages, Seller is experiencing longer than normal lead times on equipment. As a result, Seller cannot guarantee lead times on equipment and will not be liable for any delays in equipment delivery to the extent caused by such shortages. However, Seller is working with its global suppliers on a daily basis to understand the impact of this chip shortage on delivery timelines and will use reasonable efforts to keep Buyer apprised of anticipated delivery timelines and delays. Should Buyer elect to purchase equipment immediately upon placement of order to mitigate delays, Seller will immediately bill Buyer upon placement of such order and Buyer shall pay for such equipment within the payment terms (e.g. net 30) specified herein, regardless of any other agreed upon billing terms or billing terms specified herein. Integrator will store such equipment in its warehouse until delivery to Buyer. Warranty on such equipment shall commence upon delivery of the equipment to Integrator's warehouse, notwithstanding any other agreed upon warranty terms or warranty terms specified herein.

4. **CONTRACT TERMINATION:** Should the contract terminate for any reason, the integrator shall be compensated for work performed, including pre-planning activities, design, CAD, shop drawings, staging, storage, material costs and other itemized costs associated with the project.

Recommendations for Proposal Validation, Pricing, and Terms & Conditions (T&Cs):

1. **Adjust/shorten proposal expiration dates.** Consider making proposals valid only for 30 days (many integrators are offering less than 30 days).
2. **Ensure payment terms protect you as an integrator.**
 - a. Move away from progress billing when working directly with the end user. Progress billing using percentage of completion will still be required when working through the construction channel.
 - b. Move to milestone billing when working directly with the end user.
 - i. Samples: 50/40/10 or 35/35/30 – upon authorization of contract, prior to equipment being ordered, upon completion and commissioning of the project
 - c. Track billings by payment terms (AIA, milestone, bill upon completion and others)
 - d. Eliminate bill upon completion terms within your contracts.
3. **Impose surcharges to cover increased freight and vendor product price increases.** Integrating this into your pricing model protects against moderate increases without forcing you to go back to your client with a surprise price hike.
4. **Request payment for equipment received in your warehouse** – specifically the equipment not affected by supply chain issues, which may be hostage to the long lead items of other products. This prevents you from becoming the bank for your customers, and may also reduce the risk of customers canceling their projects. Ensure your contracts have the provision for billing stored materials and providing a bonded warehouse if required.
5. **Actively review cost basis** (labor, cost of goods, re-design, shipping, other logistics). This can be an automated process. Look at the project timeline and price accordingly.
6. **Consider mobilization fees when pricing projects.** Charging for frequent trips to complete a project is key to labor allocation.
7. **Pipeline Reports: Automate this process.** Continue to look at aging quotes and revise as needed.
8. **Assess risk BEFORE signing a contract.** A risk assessment process can be especially effective for higher-cost or longer-staged projects – especially for the following: prevailing wage, tax treatment, site availability, use of subs, material substitutions and alternatives based upon back orders, etc.

Setting Expectations:

1. **Train sales teams to have frank conversations with clients to establish clear and correct expectations of the project.**
2. **Ensure your sales teams review all T&Cs in proposals and client agreements.** This provides an opportunity to communicate the why of the T&Cs.
3. **Create tasks for sales teams to monitor and review all proposals.** This requires constant communication with clients. Create processes to ensure this happens.
4. **Ensure service agreement T&Cs are up to date.** Instruct sales teams to proactively work with clients to renegotiate out-of-date service agreement T&Cs that may pose a risk to your company.
5. **Address supply chain issues directly with customers.** Your sales team shouldn't be afraid to acknowledge that supply chain issues may impact project success. Sell reality and not fear. Clients are all aware of supply chain disruptions.
6. **Provide your sales teams with a cross product/solution reference guide.** This will provide the client with quicker project times.
7. **Set Clear Internal expectations**
 - a. **Ensure Sales and Operations teams are on the same page.** Sales must clearly communicate client expectation internally to Operations team.
 - b. **Hold kickoff meetings with sales, operations, finance teams.** This is a key to mitigating risks from the start of the project.
 - c. **Have a defined plan – and ensure sales teams share it during Discovery.** Customers are more likely to feel comfortable with a company that has a plan to guide them through this storm. You want them to think, "We're going to have issues with anyone we choose, but at least these guys have a plan and seem to be navigating the waters pretty well."

Additional Strategies:

1. **Stop chasing high-risk / low-margin opportunities.** Pass on projects that have low margin with high risk, such as liquidated damages. Consider adding a Gross Profit Percentage value to your listing of revenues by customer. It may not be advisable to keep chasing large-volume, but low-GP customers. Note: If the account will yield future recurring revenue, that calculus may change.
2. **Create product ordering guidelines for procurement.**
 - a. Establish restrictions and safeguards based on delivery timelines from vendors. You'll optimize warehouse capacity by purchasing long lead time products first and then purchasing products with shorter lead times based on project plan.
3. **Update your payment terms.** Continue to work with your top vendors to renegotiate new payment terms.
4. **Update warranties.** Work with vendors to extend warranties for equipment that cannot be installed due to the "missing piece."
5. **Optimize subcontractor labor.** Ensure you adjust your cost basis for subcontractor labor and review your quotes and agreements accordingly. Ensure the contract allows for the use of subs. If it does not, negotiate that provision prior to accepting the contract.
6. **Continue to offer alternative solutions/technologies/products to your clients.** Ensure the alternative is approved, tested and vetted. Have your design team continue to look at backlogs and redesign and flip where possible. Always configure and stage systems at your facility whenever you make a system chain product substitution.
7. **Adjust financing options to address end users' skepticism about uncertain project delivery times.** Uncertainty makes end users apprehensive about providing the cash for down payments as part of a project's payment terms. Amid rising inflation, cash is still king – so provide clients a well-designed financing offer. For example:
 - a. A system integrator can be paid up to 50% upon the signing of the agreement without the end user having to commit to making a large cash payout.
 - b. A finance company will make a payment to the system integrator on behalf of the end user, commencing the agreement, and allowing the project to accelerate to a start.
 - c. The end user will begin their responsibility for monthly repayments to the finance company, but the client doesn't have the large upfront cash obligation to the system integrator.
8. **Identify equipment in WIP which might be the very equipment needed to finish another project.** Create a worksheet that allows each PM to search the entire WIP to discover what may be missing to finish a project, and then negotiate with that PM for transfer of the equipment to their project. Be very careful to track serial numbers, licensing provisions, ownership status and other critical elements of this process.
9. **Respond to hostile supply chain-related emails in a way that de-escalates tension:**
 - a. Wait an hour before replying to a hostile email.
 - b. Don't be afraid to call the sender in addition to emailing your reply.
 - c. After a call, email the whole group a summary of actions to keep everyone in the loop.

10. **Monitor workforce utilization.** Now, more than ever, it's important to manage labor costs and adjust workforce capacity based on equipment availability to complete projects.
11. **Capitalize on unexpected labor availability.** Ensure your Operations team has a list of service and/or quick projects that can be addressed the opportunity arises.
12. **Add an internal working capital charge to projects that won't start for three months (or further out) if you are unable to include an inflationary price protection clause.** If the market won't bear an inflationary price protection scheme or clause, then you should at least count the cost internally of signing that contract.

Accounting (cashflow) Recommendations:

Excerpts from NSCA Financial Leadership 101 document

1. **Look at your current backlog.** Be creative in how you can move the backlog to cash!
2. **Prepare a "Backlog Burn Schedule"** that estimates by month the billings on each project listed on the Work-in-Progress Schedule. This shows monthly billings...assuming no new work is captured.
3. **Add a "Backlog Gross Profit Percent Column" to your Work-in-Progress Report** so you can track the trend of Gross Profit as you add new work to the schedule each month.
4. **Collections: Be proactive!** Dedicate a team member to collect payment of invoices. This starts with good terms, conditions and expectations set in place by the sales team. Including a heads-up on invoices and additional touch points from sales as well as accounting. Decrease the time of cash conversion.
5. **Continue to reduce days of sales outstanding (DSO).** Accounts receivable days should be under 54 days. Your customer mix will drive what this number should be and how it plays into cash flow (working capital total turns days); if you have more construction in your customer base, that DSO is likely to be higher due to retention and not paying until they are paid practices. If your system allows it, track DSO including and not including billed retention. Billed retention can skew DSO values if several large projects close out near the same time.
6. **Track a Rolling 90-Day DSO value to see the trend in collections.** One month's DSO can be skewed by an exceedingly large or small billing month, whereas the 90-day rolling average DSO better portrays collection trends.
7. **Ensure project managers look for accurate percentage of completion billing.** The most obvious example is under-billed WIP.

The above recommendations are provided by NSCA Board of Directors, NSCA Financial Leadership Committee, NSCA Member Advisory Council Members and Business Accelerators : Vector Firm, Navigate Management Consulting, Solutions360, GreatAmerica Finance and Revenueify.

*Copy editing and enhancements provided by NSCA Member Advisory Council member Supervox Agency.
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Archived Webinars:

- [Understanding Contracts and Intellectual Capital by Sid Bose](#)

- [Sales and Operations Planning: How to Get on the Same Page](#)

The above NSCA webinars are member benefits. Access them with your NSCA login.

- [Preserving Project Profitability](#)

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