

HOT TIP

How to choose a “Best Value” supplier for complex electronic enclosures

Choosing a supplier to provide electronic enclosures goes far beyond lowest price. You’re choosing a strategic partner who will join you in making your complex program succeed.

Undoubtedly you’ll review several proposals from potential suppliers before making a *best value* decision and choosing a supplier. In making this *best value* decision, you’ll need to consider seven different aspects of risk. As you compare candidate suppliers within each of these categories, you’ll often find that several of the candidates are basically equal in a specific category. The same is true when you’re reviewing resumes in order to fill a critical staffing position. When you stack candidates up against each other, the real question is, “all other things being equal, is there anything that separates one candidate from the pack?” Scoring each candidate supplier in each of the seven risk categories will help you make the correct *best value* decision.



Let’s take a quick look at the risk categories.

Price Risk: People like to look at price first in order to narrow down their choices. This is O.K., but don’t get silly about relatively minor price differences. Typically, the enclosure amounts to only 5% of the final cost of the end-item to be delivered. The other 95% of that final price tag is driven by the electronics and software. Given that, if the top three proposals (A, B & C) are within 5-10% of each other, price is basically a wash. Prospective suppliers A, B and C are in violent agreement about the cost to produce the enclosure. If the price variation of your top three enclosure prospects is +/- 5%, and the enclosure only represents 5% of the cost of the end-item deliverable, then the impact to end-item pricing amounts to only .25% or 0.0025 of the final cost of the end-item. Even if you chose the most expensive supplier of the three, the worst you could do is increase total cost by 0.0025. There isn’t a lot of bottom line risk here and this is absolutely no threat to the success of the program or to profit margins. **TIP:** Identify several candidates that are reasonably close on price and then move on to assess other components of risk that **REALLY CAN BRING THE PROGRAM TO ITS KNEES!**

Performance Risk: Does each candidate have a track record of making products that work? If they build it for you, will it function as required? There is no point getting the best terms if a supplier can’t pass this simple go/no-go test.

Quality Risk: Quality is huge. It’s your reputation on this program and hopefully similar programs in the future. It separates world-class organizations from the average ones. Will everything fit? Will the enclosure

be delivered with flawless workmanship? Are the manufacturing processes in control (ISO certified & managed) so that enclosure #10 is just as good as enclosure #1, and that enclosure #100 that you'll need five years from now is just as good as enclosure #10? Falling short on quality will cost rework effort, delivery delays, incentive payments and potentially future work. Compared to the 0.0025 that pricing variation can cost you, quality problems can impose **crippling costs**. **TIP:** Tracking quality through use of a quality scorecard is a fair and objective method for assessing quality risk across candidate suppliers. Just make sure the scorecard is accurate.

Delivery Risk: Delivery risk is also critical to effectively managing overall risk and cost and has several considerations. The first harkens back to quality and manufacturing processes that are in control. If these processes are not in control, why would you believe a supplier could deliver on his shipping promises? Know what percentage of the required manufacturing processes are performed in-house. If a candidate supplier has to outsource for sheet metal, machining, metal chemical treatment (chromate conversion coating, passivation of stainless steel, etc.), welding, painting, etc., he doesn't have control over the quality, delivery or cost for those outside processes and this greatly increases risk and cost. The second involves capacity. Does the supplier have the manufacturing muscle to take on the workload? Small suppliers or ones that already have their existing capacity largely allocated may be able to produce only the prototypes or a few Low Rate Initial Production (LRIP) units easily. Tasking them with producing enclosures in significant quantities will likely over strain their capacity and result in systemic late deliveries. **TIP:** The more processes that a candidate supplier performs in-house, the less the risk.

Technical Risk: Technical risk is really about competency. It's similar to Performance Risk, but the focus is on the skill sets of the candidate supplier, not the product itself. Does the candidate supplier understand the MIL-Standards and MIL-Specification in the requirements statement? Are they certified to perform the necessary special processes required? Do they have the experience, tooling, equipment and engineering wherewithal to deliver a solution?

Business Risk: It's all about business health! Can you count on a candidate supplier to stay in business for the duration of a program; for the long run? How would you rate their capital reserves and credit worthiness? Do they have a robust and diverse base of customers and programs that provide tremendous stability and staying power or do they rely on short-term jobs and a few critical path programs to generate revenues to keep them in business? A tall pillar of promises resting on a narrow base will surely fall over. Do they add capabilities (technical & capacity related) by routinely investing in their operation or acquiring complementary companies or are they just treading water, stagnant? Do they remain steady and strong and even grow during economic down-turns or does their financial stability fluctuate with the volatility of the markets? Does the candidate supplier effectively manage it's suppliers to success or does it use them as excuses for not delivering on time? **TIP:** Partner with suppliers who are doing what it takes to be healthy in the long-term; investing in new capabilities & capacity; maintaining a diverse and balanced workload portfolio.

Intangible Risk: Partnering is strategic! Partnering implies a mutual agreement to support one another in the long run, to provide feedback on issues, to learn and grow from each other throughout the ups and downs, to compromise and adapt **to succeed together**. Choosing a supplier that you'll use once or twice for a quick price discount and then you shed that supplier for the next discount opportunity is not partnering. It's not strategic. You're simply using them so that you can succeed in the short-term at their expense. This is not world-class and it does not foster world-class partnerships. How responsive is a candidate supplier? Do you get a phone call or e-mail back immediately on your issues or do you wait for days to hear from them? Do they provide meaningful real-time status or do you have to beg to find out if they are on schedule? Are they easy to work with and flexible when changes are needed or do they create an administrative burden and nickel-dime cost impacts every time adjustments are needed? Do they work with you or do they work for themselves? **TIP:** The word you're looking for is **AGILITY!** Does the candidate supplier possess the agility required to seamlessly move with the shifting priorities on your strategic program, making your life

easier in the long-run? It's hard to value Intangible Risk, but in many ways it's the most important risk category of all. A strategic partner will find ways to succeed ... to **GIT-R-DONE**.