Confidence Builder

Focus on contractors and suppliers to manage construction risks.

By Sidd Mukherjee, PMP

If a crystal ball that could predict all project risks existed, perhaps no one would want it more than project managers for construction megaprojects. Unfortunately, even as these projects grow more complex and laden with risks—thanks to dynamic factors like shifting shareholder expectations, regional uncertainties, disruptive technologies and environmental scrutiny—this omniscient tool remains a dream.

The good news is that a number of risks can be controlled or influenced through the right management of contractors and suppliers. This is because 70 to 75 percent of expenditures in capital megaprojects in the heavy engineering sector are made through these vendors.

Here are the techniques for building risk control:

Contractor Screening: Many project managers are surprised how big of a role this plays in risk management. While safety statistics, performance records, prior experience and availability are the obvious selection criteria, others are often overlooked: financial stability, client feedback, cultural fit and even peer feedback.

A few years ago, I had to decide to eliminate the lowest bidder on a project because the bidder's financial statements indicated its debts were going up, revenues were falling and management salaries kept increasing. Obviously, the bidder was recklessly pricing the work to win. Hiring such a contractor is risky. If it became insolvent during the project, we would suffer delays and end up paying the subcontractors.

When engaging a new contractor for a critical activity, I always make sure someone from the project team contacts its past clients to get an opinion of its performance. (The prospective contractor's permission is solicited prior to contacting its clients.)

Bid Evaluation: This step is not just about building mathematical tables that score either the technical capability of different bidders or compare the prices. It should also include efforts to bring all bidders on the same platform for comparison and seek clarifications on any ambiguous aspects of the bid. An added precautionary step is to quantify the risks that arise as the bids are being evaluated. For instance, if I'm considering a new contractor, I know that schedule progress could become a risk because the contractor is unfamiliar with the work site. I quantify such risks by adding a few extra weeks for completion and adding a contingency amount for those extra weeks of work.

As part of the evaluation process, I also always organize an interview session with the key personnel of the short-listed bidders. This not only screens for technical competency but also checks that the leadership team is a group we can work well with.

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Contract Administration: All the hard work and savings realized in the award phase of a project can dissolve if costs balloon way beyond budget. To keep the cost baseline maintained, project managers have to manage the performance of the contractor groups. It starts with onboarding the contractor properly. Two-way feedback and regular team-building exercises can also help during the administration phase. So will timely payment and regular performance reviews.

Of course, even better than maintaining the cost baseline is getting the work completed below budget through incentivization and practicing supplier relationship management techniques with the contractor. Achieving this will require establishing key performance indicators and joint risk management, plus developing early warning indicators and an incentive plan for innovative techniques. It also involves developing the contractor's capabilities.

Support Framework: Although all cars have the same basic mechanisms, superior support systems in a high-end car enable better engine performance and turn stability. Similarly, contracting approaches may be comparable across projects, but the support framework has to be superior on a megaproject. This includes having the right people, user-friendly automation tools, consistent processes and balanced governance. These four items are the wheels that provide traction and keep the project moving.

Application of Risk Mitigation Tools: These tools act as a safety net in case the above steps fail or in case of any catastrophic event during the project execution. They can be broadly classified into the following groups:

- Securities: parent company guarantee, bond, letter of credit
- Insurance: general liability, comprehensive, cargo, workers' compensation, etc.
- Indemnification: people, property, third parties, pollution, etc.
- Retention and holdback: building a reserve fund by holding back contractor payments (subject to agreement of contractor)

At the start of the project, it is important for project managers to know the details of coverage and applicability of all these risk mitigation tools.

By properly collaborating with contractors and the internal support groups, project managers can steer through uncertainties and risks in an organized way, instead of taking a "we'll cross that bridge when we come to it" approach—which tends to lead to chaos. **PM**

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