2015 Annual Perspective

The Owner-Contractor Conundrum

The owner-contractor conundrum is a disconnect of expectations and accountability that creates a formula for poor project performance.

In our 2015 Annual Perspective, we explore how the owner-contractor conundrum came to be, describe its effects, and offer ideas as to how the current marketplace presents opportunities to improve it.

Westney Consulting Group

1800 West Loop South, Suite 1200 | Houston, TX 77027 | (713) 861-0800

www.westney.com

In the last 20 years, the industry has created an owner-contractor conundrum that drives unwanted project results

Today we frequently hear owners say that they cannot trust contractors to deliver; contractors say that owners are so deep in their business that they have lost control over project delivery. The issue is a disconnect of expectations and accountability, which creates a formula for poor project performance.

This conundrum has its roots in commercial terms and risk. Looking back, various forms of partnering between owners and contractors were supposed to transform the capital project industry into one of lean owner project delivery organizations. Contractors would then fill some of the historic owner's roles with a work force that was more flexible. These relationships would also allow embedding the contractor into project teams early, and it was believed that this would bring improved alignment to the owners' overall project performance objectives.

While the idealistic vision was win-win, the actual implementation was lose-lose. The owners and especially their sourcing groups, focused on driving contractors to take the lowest possible mark-up, or cost recovery multiplier, to win a contract and the resulting continuous work. The economics of the lowest possible mark-up drove contractors to reduce any non-essential overhead, and to increase the chargeable time of the people assigned to the contract. Overhead reduction was frequently achieved by redeploying expert risk management resources (e.g. planning, estimating, and risk analysis) from overhead to recoverable projects. The contractors' bench strength in engineering and construction, another significant overhead, was also reduced or eliminated for the same reason. This evolved into a situation where the contractors furnished people who fit the job descriptions but, not surprisingly, avoided any financial risk for performance. Cost and completion risk moved primarily to the owners.

There were sometimes pain and gain concepts, but these were mostly ineffective because they were inconsistent with the realities of the "relationship" and were often gamed. "Re-baselining" became a multiple event on most projects.

Starting in 2004, mark-ups began to rise due to demand, but contractors had no incentive to return to risk taking. In fact, Wall Street rewarded contractors for not taking risk. Recently, KBR's stock price increased after announcing that they would no longer take risks. It is interesting to note that, with regard to contractor performance, we've seen a doubling of detail design work-hours per piece of major equipment.

The reaction to this conundrum has been an increasing owner reliance on audits and detailed "box-checking," along with a bureaucracy to make sure that contractors are doing their job correctly. While a certain amount of assurance activity is good, there is a tipping point beyond which contractors feel dis-empowered to deliver project results, and therefore no longer accountable. Those contractors who are willing to take delivery risks, and thus must retain a higher level of control, are often described by owners as arrogant and inflexible.

Naturally, in the absence of contractor accountability for production, the management of detail engineering and construction production rates falls heavily to the owner. We find many owners ill-prepared to take the responsibility for engineering deliverables and construction installation rates. Moreover, production rate is also affected by owner-directed detail procurement.

Front-end loading, and a good FEED review process, are essential to project success. While stage gate processes have benefits, the focus needs to be on assessing project development progress, ensuring ongoing alignment on project goals and drivers, and establishing clear accountability for delivery going forward. The question bears asking: **have we created a bureaucracy that makes project management, risk assumption and, perhaps more importantly, significant contractor accountability very difficult to achieve?**

Now is the time to work on the owner-contractor conundrum

Historically, when demand has dropped, the owner's normal practice has been to drive contractors to take greater risk. Contractors have generally accepted these risks in order to assure ongoing business volume or cash flow. In so doing, they have often incurred significant and sometimes catastrophic losses; which, in some cases, have either driven them out of business or to a new, more risk-averse management.

Below are some concepts that could actually turn this into an opportunity for mutual gain.

First, owners must secure the specific expertise to define the execution of the project in the early stages, including a realistic and aligned understanding (across all executive stakeholders) of the project cost and schedule, its specific risks, and the capabilities of the owner to manage/control key aspects based on these risks. Owners should "shape" the project based on a broad agreement of these aspects across these critical stakeholder groups and individuals. Owners should not depend on contractors for shaping estimates and schedules, but must independently develop a view of realistic expectations.

Second, there needs to be an owner-directed contracting plan grounded in deep knowledge of the project, owner capabilities, contractors' performance on similar projects, and the contractors' current capabilities and capacity to perform the work. This contracting plan must be developed early (i.e. pre-FEED) and consider all phases of the project.

Third, risk sharing schemes should be implemented only when coupled with a mutually understood scope, clear rules of engagement and, most importantly, a clear acceptance of accountability for results.

Fourth, the risk allocation scheme should encourage contractors to accept the natural risks that they can control far better than the owner, and do so for reasonable rewards.

Contractors need to be incentivized to rebuild their risk management capability, and feel comfortable that assuming the accountability for delivery will be in their control. To do this, owners must be willing to demonstrate reasonable owner behavior and appropriate contractor compensation. This means reaching the right balance between cost and value received, in order to achieve a win-win scenario. For the owners, this will not be easy, as the valuation of the service is difficult to assess when compared with the strategy to drive down rates, which many owner procurement/sourcing organizations are incentivized to implement. But, this is achievable if the larger view of overall lower capital facility cost is weighed against the value received from lower rates. We believe that, with some help, most owners can find that balance.

Another aspect of the previous attempt at owner-contractor relationships that caused them to degrade over time was the lack of competition. Single sourcing work eventually led to an atmosphere of distrust and complacency that was the kiss-of-death for these relationships. We believe that competition must be maintained in this new era of relationships. Owners should engage at least two contractors in developing these relationships in order to avoid this syndrome. While it is more work for the owner to both set up and maintain these ongoing relationships, it is well worth the effort if project results can be improved. Trust cannot be created by contracts, but must be built by performance over time.

Owners that Deliver

Some owners are managing the owner-contractor conundrum and consistently delivering good projects. Characteristics and practices of these owner organizations include:

1. A core of highly experienced and competent project people.
2. Use of project work processes as organizing tools and risk mitigation strategies, not as a cookbook for success.
3. Early organizational alignment and commitment on what the project will include, enabling a cost and time effective FEED and a low probability of changes during execution.
4. Successful owner / contractor relationships based on clear expectations of behavior and delivery. Contractors are confident that the owner will behave predictably and treat them fairly, allowing them to control the production processes. Owners are confident that the contractor will deliver as agreed, based on pre-established and stable requirements.
5. Contracting plans and practices that fit the characteristics of the project and the current project market.

These owners are very clear on what aspects of the project they want to control, largely based on requirements defined during the front end. This allows them to turn over large aspects of accountability (and control) to their selected contractor, who is tasked to deliver a facility with the expectation of few modifications.

Project overview performance metrics for the US Gulf Coast

First offered in 2014 as a means to improve industry knowledge and project planning, Westney began sharing our high-level view of key metrics for the US Gulf Coast, which can serve as the basis for your own project overview analysis. Below is our view for 2015.

Work-Hours

2015 Expectations Work-Hours per Unit	Unit	Lower Temp / Pressure / Corrosion / Equip Count Projects	Higher Temp / Pressure / Corrosion / Equip Count Projects	Recently Observed Projects
Engineering and Home Office Construction	Pieces of Major Equipment	2,300	3,500 (1)	2300 to 4,400 (1)
Concrete	Cubic Yard (2)	12	16	12 to 22
Structural Steel	Ton	35	45	30 to 55
Pipe	Center Line Linear Foot	2.7	4.0	2.7 to 7.6
Electrical	Linear Foot	0.25	0.35	0.23 to 0.45
Instruments	Each	25	35	35 to 40

(1) Excludes LNG which is much higher at ~8,000 hours per piece of major equipment
(2) Inclusive of area paving

Cost

2015 Expectations All-in Contractors Rates	Low Rate (1)	Fair Price (2)
Engineering and Home Office Construction – Houston (Ex. Travel and Accommodation)	$75	$140
Engineering and Home Office Construction – High Value Center (Ex. Co-located Project Supervision and T&A)	$42	$45
Construction	$90	$100

(1) The Low Rate represents services provided for no risk, generally continuous work or project hiring and minimal functional support
(2) The Fair Price represents contractors taking risks and maintaining resources for supervision continuality, functional support, skills advancement and risk management

Independent Value Assurance™

The observations provided in this perspective are derived largely from Westney's Independent Value Assurance™ (IVA) engagements, such as Predictability Calibration® and Risk Resolution®.

With clients more strongly focused on gaining early alignment on realistic estimates of cost and schedule, our IVA services now include Predictive Project Analytics™. This is an early, top-down view of a project that utilizes our project experience and market insights to develop independent estimates of cost, time, and work-hours.

If you would like to discuss the contents of our 2015 Annual Perspective, or hear more about the type of work that we do, please reach out to us at info@westney.com.

Westney Consulting Group

1800 West Loop South, Suite 1200 | Houston, TX 77027 | (713) 861-0800

www.westney.com