Strategic Sourcing and Procurement in Engineering and Construction

A Path to High Performance and Sustained Cost Efficiency

High performance. Delivered.
In many markets, horizons are once again dotted with new construction. Revenue from commercial, residential, public sector and infrastructure projects is growing again, reversing the retrenchment that followed the financial downturn. A 2013 survey found that executives in the global construction industry projected increases in capital expenditure on ‘new product developments’, ‘IT infrastructure developments’ and ‘machinery and equipment purchases’. In North America the top 400 contractors increased contracting revenue in 2013 by 4.8 percent to $324.16 billion from $309.45 billion, with growth in non-residential construction set to double from 2013 to 2014.

Yet, the return to building should not signal business as usual in engineering and construction. As in many sectors, engineering and construction (E&C) firms—both publicly and privately held—face new demands and heightened expectations to improve margins/shareholder returns and improve operations, all in an environment where project complexity is increasing. These new demands are in addition to the constant pressure to deliver projects on time and on budget.

One way E&C firms can get their own houses in shape is to closely examine their supply networks and procurement operations, with the objectives of optimizing costs and streamlining operations, both of which would improve their competitive position. In *Excellence in Infrastructure & Construction Procurement: A transformational approach to achieving high performance*, we examined how optimizing indirect spend can boost profit margins for E&C firms. While indirect cost savings are obviously beneficial, they pale in comparison to the amounts possible by addressing direct spend inefficiencies associated with the materials comprising built infrastructure.

This point of view examines why now is the right time—the perfect time—for E&C firms to focus on direct procurement, identify the barriers that traditionally stymied efforts to optimize enterprise-wide procurement, and propose solutions to overcome these challenges, including the benefits of partnering with third party procurement experts to expand capabilities.
Higher risks and expectations require deeper procurement capability

The E&C sector continues to change in significant ways, placing renewed pressure on profitability. Margin pressure is rapidly intensifying as infrastructure owners undertake larger and more complex projects. Further, where competition was once contained to local and regional markets, consolidation and the globalization of E&C firms are bringing larger and financially stronger competitors into the bid room. In turn, this translates to a need for superior, streamlined operating capabilities, including optimized procurement practices.

While access to capital remains somewhat constrained, expectations from developers and lenders are expanding. Both stakeholders look to E&C firms to contain and minimize costs while maintaining quality, increasing certainty of delivery, and providing visibility in costs and procurement risks. More and more owners are deploying new financing models that embed private construction managers to oversee contractors and sub-contractors to exert disciplined cost management.

The bottom line is that E&C firms are facing a lot of internal pressure to improve profitability and at the same time, external pressure to reduce price. The solution to relieving both these pressures is better procurement operations and project execution. Accordingly, firms must determine where opportunities exist to improve procurement, what capability gaps exist in the function, and how to fill them. Questions that are top of mind for executives at E&C firms include:

- Which categories of procurement have we examined—and truly optimized?
- Is our operating model aligned to leverage our company's scale and scope in order to get the best terms on materials?
- How does our procurement organization compare to our peer companies in the E&C sector and other industries?
- Are there better ways or better sources of information about our suppliers that we should use to rationalize bids/quotes from vendors and sub-contractors?
- How can we better mitigate both supply risk and commodity price risk for key material inputs?
- In which categories of indirect and direct spend have we seen the most variability and unpredictability and why?
- Are there opportunities to improve efficiencies and help minimize risk by taking on procurement of material traditionally left to sub-contractors?

Answering these questions is a necessary first step to capturing value from an enterprise-wide procurement improvement initiative.

Cost overruns due to unmanaged spend, unmitigated cost fluctuations or unplanned work stoppages can wipe out profit from even the most promising project; accordingly, firms need to be vigilant in controlling costs and constructing facilities as-bid. A misstep in a single category can tip the scales into the red.
Procurement: A function ripe for evolution

Many companies have whittled away at administrative and back office expenses, but those areas do not make up the majority of costs. Commonly, up to 70 percent of a construction company’s revenues can align to direct and indirect purchases, from construction materials and commodities to subcontracting services, as well as industrial supplies and project management tools. Accenture analysis found that for every $1B in addressable spend, potential savings up to $155M are possible with more disciplined and strategic sourcing. See Figure 1.

That improvement could flow through the balance sheet to increase profit margins, but it can also help drive top line revenue growth where companies reinvest these funds in delivering a more competitive and attractive price to owners, and thus generate more business. Consequently, far from being a cost reduction effort, there are revenue-enhancing, topline benefits to treating procurement as a core capability and optimizing spend.

A 15 percent reduction in non-labor costs is significant in any industry, of course. Given that, what's stopping E&C firms from taking a more expansive view of improving procurement? As Figure 2 illustrates, there are several barriers to enterprise-wide procurement improvement, including:

1. Preconceived role limitations. Many members of the procurement team view their role as getting quotes/estimates from suppliers, perhaps in a limited number of categories or for a limited number of projects. This narrow approach to sourcing does not view spend across the enterprise or portfolio. Thus, suppliers with multi-disciplinary capabilities from raw material production to logistics and distribution are used by different functions or siloes in the enterprise, rather than a company taking advantage of the broad-based offerings to support the whole enterprise or multiple projects.

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**Figure 1. Bottom Line Impact of Improving Procurement**

3-year average vs. world-class savings analysis

*$1B of external spend, services company

<table>
<thead>
<tr>
<th>Benchmark*</th>
<th>Impact on $1B of annual spend</th>
</tr>
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<tbody>
<tr>
<td>% spend managed</td>
<td>51%</td>
</tr>
<tr>
<td>% savings achieved</td>
<td>7.7%</td>
</tr>
<tr>
<td>% savings realized</td>
<td>61%</td>
</tr>
<tr>
<td>% continuous improvement and spot buy</td>
<td>0.5%</td>
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</tbody>
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**BOTTOM-LINE IMPACT**

- Average: $27MM
- World-class: $155MM
2. Inability to leverage scale through suppliers. Price leverage resulting from consolidation of enterprise-wide purchases in a category can benefit all stakeholders—the E&C firms themselves to subcontractors and suppliers.

3. Limited integration of and visibility into current supplier data. At many firms there are no resources dedicated to obtaining or synthesizing data on forward looking demand, trends in commodity prices, or suppliers. Thus, firms may not really understand the range of pricing available. It is easier and faster for procurement managers to rely on or default to the list of approved suppliers—the known quantities—and not rock the boat by suggesting alternatives, even if they offer a competitive or best service or product. While loyalty has its place, a mentality of "We always use Supplier X always in western region" can add costs rather than avoid them.

4. Lack of centralized information and analysis. Most firms operate on a decentralized basis—at least as it pertains to procuring materials and hiring subcontractors. In part this is an effort to control transportation costs, as well as to ensure compliance with local/state licensing requirements. Yet, the fragmentation and decentralized operations end up adding costs in the long-run because a full menu of potential suppliers is not considered, and price/scale efficiencies from consolidating volume are not captured.

Accenture research shows that while 60 percent of executives fund new investments by reducing indirect and non-product input costs, far fewer—a mere eight percent—view procurement as strategic, a disparity that is both perplexing and alarming given current market pressures. The good news is that more executives are realizing that spend optimization and cost innovation are key factors in helping drive profitable growth.

Procurement as a function and business driver is evolving, both by choice and necessity; it is becoming more strategic and requiring higher level skills in broad areas like negotiation and data and trend analysis, as well as the need for specialized category knowledge. Many E&C companies are not equipped with these advanced skills in their procurement functions, or, if they are, they prefer to deploy them in other areas. The question then becomes: how do E&C firms ensure they have the procurement skills they need to succeed now and in the future?

Figure 2. Barriers to Improving Procurement Capabilities and Processes

<table>
<thead>
<tr>
<th>Issue</th>
<th>Implication</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Limited Reach</td>
<td>49% of spend is untouched</td>
</tr>
<tr>
<td>2</td>
<td>Lack of Information; Limited Sub-Contractor Visibility</td>
<td>3–5% additional savings lost</td>
</tr>
<tr>
<td>3</td>
<td>Lack of Follow Through and Compliance</td>
<td>30% of negotiated savings are never realized</td>
</tr>
<tr>
<td>4</td>
<td>Limited Third Party/Sub-Contractor Access to Pricing</td>
<td>Resulting impact will vary by client and situation</td>
</tr>
</tbody>
</table>

“We weren't looking for just an anonymous service provider, but for a partner: a company, that brings along strong experience and success and that has the same cooperative mindset.”

Dr. Martin Rohr
Executive Board member
HOCHTIEF
Moving toward world-class procurement capabilities

E&C firms must respond in a way that will both satisfy business partners, and position their organizations for long-term success. Doing nothing is no longer an option—there is too much margin and market share at stake. Fortunately, companies have multiple paths to consider in evolving procurement capabilities and processes, from launching internal transformation efforts to leveraging third party procurement service providers.

A: Launching an Internal Transformation Initiative

Accenture’s experience shows that successful transformation initiatives are undertaken after a thorough review and diagnostic. For procurement, that means looking at all major spend categories and benchmarking performance (costs) against industry leaders. There are compelling data and clear opportunities to close significant gaps with internal transformation initiatives, keeping a few key success factors in mind:

- Strong and continuous leadership/sponsorship. A mandate for procurement transformation has to come from the top, meaning the CPO, CFO and CEO. A clear goal and compelling benefit need to be communicated and reinforced.
- Recalibration of incentives. Project managers are used to having a high level of control and latitude in choosing suppliers. Motivating them to embrace change and participate in centralized/consolidated procurement will require new incentive models to reward them for the savings they control.
- Clear delineation of roles. Policies are executed by people, so it is imperative that roles, responsibilities and accountabilities for each category and sub-category are clear.
- Refined procurement operating model. Successful transformations address four critical operating pillars—strategy, people, processes and tools. All need to work in harmony and be refined to support the overall goals established.
- Change management. Constant reinforcement, feedback and communication about the ‘what and why’ of the transformation, pilot/testing, and integration of new processes are needed to build and sustain momentum for positive change.
- Defined service level improvement goals. Transformation leaders need to set expectations between procurement and the business and operating units in the enterprise, reflected in key performance metrics measuring cost and supplier performance.

These are the basic building blocks of a successful procurement transformation. Although summarized here, Accenture has used them to help many companies successfully evolve their procurement functions, close critical capability gaps and inject procurement innovation into their operating models (see sidebar). It is possible to strengthen the bottom line and capture substantial spend reductions with a methodical, disciplined enterprise-wide approach.

Partnering with HOCHTIEF to Transform Procurement Operations

As a company, HOCHTIEF was always on the lookout for innovative ways to remain a lean organization while improving operational effectiveness, including procurement processes. The company retained Accenture to help it consolidate the procurement of non-strategic goods and services, which had historically been managed by individual organizational entities. Consolidating these parallel procurement activities in a shared services environment would reduce costs and provide greater visibility into the company’s procurement activities and expenses.

Accenture provided the global capabilities and relentless focus needed to deliver significant bottom-line value for HOCHTIEF. Under a multi-year services agreement, Accenture managed the purchase of goods and services in 16 material categories including IT hardware, office supplies, furniture, tools and security items. Accenture deployed a highly skilled team of procurement specialists and established a new set of processes to source products and services centrally for HOCHTIEF companies in Germany, Austria and Luxembourg. An extensive communication effort was rolled out to keep employees informed about the changes ahead, describe the new system being put in place, and answer any questions they might have.

The successful launch of the new procurement platform and processes allowed the company to meet its goals, and stay in the vanguard of procurement innovation in the construction industry.
B: Leveraging Procurement Service Providers

E&C firms are, by definition, in the business of building. Procurement is a core capability, but not the essence of how companies are evaluated. Yet, the Everest Research Institute recently found that the P&L impact of procurement outsourcing is five times greater than other BPO initiatives like HR or F&A, going far beyond straightforward transactional cost reductions. Accordingly, it makes sense to divide the tasks of procurement between internal teams and external experts. Third-party procurement experts can focus on specific high-value categories or all categories; either approach can yield substantial savings while freeing internal capacity to devote to other procurement activities.

**Benefits Expected**

Collaborating with a service provider and employing a divide and conquer approach to procurement optimization can benefit companies on multiple levels, specifically:

- **Improving the depth and breadth of procurement skills companies have at their disposal, without the complications of recruiting, training and managing more employees.** The best service providers help clients adopt and implement rigorous approaches such as zero-based budgeting and 'no exception' compliance standards to inject further budgeting discipline, increase visibility and capture more savings opportunities.

- **Allowing companies to reduce enterprise costs overall because they can more easily work across functional silos and barriers to consolidate and optimize a broader range of category and sub-category spend.**

- **Enabling better bidding—both for internal spend and projects—because specialists with comprehensive information about categories and vendors expand the range of supplier options and supply greater cost certainty.** Estimators can complete projections based upon what the company will spend on a future project vs. what has been spent in the past.

- **Better matching and scaling of construction bidding capabilities to the ebb and flow of project volume.** Using “on-demand”, third-party capabilities means that they can be ramped up or down more quickly than internal resources can be redeployed as project/business volume shifts.

- **Using sourcing know-how, procurement expertise, and flexibility (as a differentiator and a service) in large, complex, multi-year projects—including joint ventures.**

By enlisting the services of third-party procurement experts like those at Accenture, E&C firms stand to gain the cost and operating benefits that companies in other industrial manufacturing sectors have realized for years.

**What to Look for in a Procurement Service Provider**

The comfort of dealing with known quantities/vendors is just one of the main reasons E&C firms have not transformed their procurement operations. This begs the question of what to look for in a procurement service partner. Key criteria in evaluating a potential partner include:

**Relevance and Experience.** Look for organizations who can offer experts dedicated to the most problematic or important categories for your company. Procurement service providers have been around for years, so compare the relative experience of vendors and select those with proven results and deep industry experience. These vendors will be able to understand the strategy, context and challenges faced by your company.

**Knowledge of Industry.** Every sector has its own traditions and mindset about procurement, making deep knowledge and direct experience in the sector crucial. Providers that try to apply structures and methods to E&C borrowed from other industries generally fail to maximize savings or efficiencies because the methods do not reflect the unique aspects of E&C work and project-based organizations. The most valuable partners have deep industry knowledge, as well as an informed, current perspective on the unique procurement problems the E&C sector faces, and a clear understanding of stakeholders’ processes.

**Value-added Insights.** The best service providers are resourceful data scientists who are able to access and synthesize large data sets to generate insights into and performance information about suppliers. In fact, Accenture’s recent acquisition of Procurian was driven, in part, by that company’s world-class market intelligence capability. Procurement service providers should have a demonstrated commitment to developing ongoing market intelligence (for services, subcontractors, materials and equipment) that can translate to more accurate bids for E&C companies. Vendors should also have in place clear processes and tactics to communicate news, changes...
and analytic results to the procurement team, even down to the tactical level of compiling up-to-date databases and catalogs of materials to support more informed, competitive bidding.

**Breadth.** Even if a service provider is focused on a subset of categories, they should be knowledgeable about how global procurement processes flow and fit together. For example, Accenture’s end-to-end procurement service span the three main areas of procurement, from sourcing and category management, to procure-to-pay operations and source-to-pay. See Figure 3.

**Figure 3.** End-to-End Procurement Processes

**Value Proposition**

**Sourcing and Category Management (S&CM)** ensures increased visibility, year on year category plans, analytics and insight resulting in better deals and contracts leveraging Accenture’s expertise and scale.

**Procure to Pay (P2P)**—Business process transformation and improved efficiency results in improved compliance, ensuring savings stick. Providing better visibility and controls throughout the enterprise with process efficiencies reduces operating costs of 20-50%.

**Source to Pay (S2P)** leverages both S&CM and P2P maximizing the value of closed-loop and an end-to-end processes, driving compliance and locking in realized savings.
Sustainability and Enablement. It’s fairly easy for an experienced procurement manager—internal or external—to find the lowest cost supplier at any given point in time. But cost is just one aspect of strategic sourcing. E&C firms would benefit more from collaborating with service providers who can help them design a strategic, dynamic procurement approach that flexes with business cycles and opportunities and builds in trade-off analysis.

In Accenture’s experience, a high performing procurement organization combines superior sourcing with complementary capabilities in areas such as market intelligence, demand planning, supplier enablement, relationship management, and closed-loop spend management. See Figure 4.

Figure 4. Procurement Transformation Components

High-Performance Sourcing Methodology and Engine
A complete source-to-pay offer focused on driving real business outcomes by leveraging the outsourcing concept to reduce costs and improve performance and compliance.

Supplier Relationship Management
Accenture defines this as the systematic management of supplier relationships to optimize the value delivered through the relationship over their life cycle.

Material Component Rationalization
Application of a formal method to identify candidates for Material rationalization to eliminate cost, complexity, procurement spend, quality issues, and supply chain impacts. Rationalizing the Material Catalog can have significant benefits to Procurement and Operations.

Analytics, Reporting and Performance Management
A comprehensive approach to end-to-end management of data through analytics design, decision support, integration with the business, reporting and target setting.

Closed-Loop Spend Management
Visibility, category ownership, demand management, strategic sourcing, integration with budgets, procure to pay operations and control & monitoring drive best in class selling, general and administrative (SG&A) performance.

Organization and Human Performance Design
This includes transforming and integrating the organization and team structure of the procurement group for maximum efficiency, visibility and impact. Also focuses on human performance design such as training, job-level design, incentives and performance strategies.

Procurement service providers should have a demonstrated commitment to developing ongoing market intelligence (for services, subcontractors, materials and equipment) that can translate to more accurate bids for E&C companies.
Conclusion

It is tough to ignore the savings possible by improving procurement operations; to do so means profits are left on the table. Our work demonstrates that cost optimization and substantial improvements in procurement efficiencies are possible for E&C firms in a broad range of indirect and direct procurement categories. Yet, to make procurement organizations high performing, the support of suppliers is required, which many E&C firms overlook on the assumption that suppliers will revolt.

Our experience proves that the opposite response is more likely: large national suppliers, in particular, are highly motivated to participate in procurement transformation because they want a bigger share of wallet currently taken by small, local focused businesses. More volume allows them to leverage their supply chains most effectively. In that way, procurement improvement initiatives started within E&C firms will have a multiplicative, ripple effect throughout the supply network. Given the potential win-win for E&C firms and their suppliers, there is no reason to delay the journey towards procurement optimization.

Notes


2 Tulacz, Gary J. “ENR The Top 400” ENR. 19/26 May 2014: 17. Print.
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