FMI Quarterly

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GROWING BUSINESS

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FEATURES

This Quarter: Growing Business

Dear Reader:

Most of us find bits of time to contemplate the meaning of life, ranging from its wonder and mystery to its surprises and sadness. Narrowing the focus a bit, consider economic life. The boring definition offered up by several references is that economic life is the period of time over which the net present value of an asset is maximized or, alternatively, the period of time that an asset is useful to its owner. In a somewhat grander context, however, economic life or successful business economics is essential to business success. If that notion is agreeable, then we might seek to identify the action that breathes economic life into a business enterprise. Specifically, what is that which stirs the engine of economic activity and causes the enterprise to survive and then thrive?

Many contenders might compete for the title of *What Matters Most*. Good people. Skilled production. Satisfied customers. Informative systems. Creative problem-solving. This list can become quite long. But consider this: Until a sale is made, a deal is done, a bid is awarded, a job is let … most of the assets on that list lie languishing. To get to the point, without business being developed, we will never get to enjoy the advantages of these other factors. Now unless you contemplate a business strategy based on a One-and-Done approach, where you never serve a repeat customer nor re-enter a once-served market, most any of the contenders for *What Matters Most* will play vital roles in the business development process. They are all important in sustaining economic life. However, the spark that ignites economic life for business is the product of effective business development activity. Which takes us to our theme for this issue, "growing business."

Longer pieces that deal directly with our theme include Lee Smither's article "Four Essential Steps in Acquiring Profitable Work." Lee advises that now is not the time to be cheap with business acquisition — in fact, now is the time to build superior business development capabilities.

Mike Clancy and David Madison team up and explain why employers must provide an environment where the best work acquirers are incentivized and valued in their article, “Paying the Piper: Incentivize Your Get-Work Employees.”

FMI Quarterly editor Kelley Chisholm interviews Dale Dhooge, senior risk engineer at Zurich, our sponsoring partner, in her article “Reputation Counts: Create a Culture of Safety in Your Company.

Newcomer Tyler Pare also stays on theme and offers advice on separating your company from its competition in his shorter piece, “Six Keys to Customer Service.”

As is consistent with our quarterly offerings, we bring you both longer and shorter articles that do not deal directly with our theme but offer valuable ideas and provoke useful thinking. Hunt Davis explains in “Acquisition Search Best Practices” how a smart acquisition can move both the acquiring and the acquired company to the next level. In “Deconstructing Chaos,” Jim Schug looks at how Chaos Theory can provide lessons learned to companies that recognize great opportunities around them in today’s volatile market. And Chris Daum offers hope that emerging trends indicate that a strong recovery for our industry is underway in his article “A Case for Optimism in the U.S. Construction Industry.”

In *FMI Quarterly*’s featured interview, “From College to CEO in 21 Years,” Kelley Chisholm talks with Mike Heitmann of Garney Construction and discovers how the company has maintained its main philosophies of embodying integrity and encouraging employees to reach their fullest potential.

Lastly, this issue of FMI Quarterly contains a reprint of a chapter from longtime contributor Steven Isaacs’ recently published book “Negotiate With Confidence: Field-Tested Ways to Get the Value You Deserve.” In “Marvelous Things You Ought to Know About Negotiations,” Steve discusses five practical tips that will help make a negotiation more successful.

Keep developing good business. Create healthy economic life. And give FMI a call if we can provide assistance in our areas of expertise. We have been helping improve economic life in our client base and in our industry for 60 years. If we haven’t done that for you, isn’t it about time?

Sincerely,

Jerry Jackson
FMI Quarterly Publisher and Senior Editor

Departments

BUSINESS DEVELOPMENT

Six Keys to Customer Service

In pursuit of a winning edge in today's hypercompetitive construction markets, contractors have trimmed margins, slashed overhead and burned the midnight oil. Still, many construction firms are struggling to maintain success. Providing superior customer service is an oft-forgotten strategy for separating yourself from the competition. It is a strategy that takes years of dedication and culture engineering. But you have to start somewhere. Here are six tips for building superior customer service.

WIN THE WAR, NOT THE BATTLE

Look for long-term solutions to short-term conflicts and disagreements.

Contractors are proud people, sometimes too proud for their own good. Some would rather lose money, in certain situations, than admit wrong or let clients think that they were right. Pride is not legal tender. Even if it were, it would be cents on the dollar to customer satisfaction.

Anyone with a spouse or significant other will tell you that certain arguments are not worth fighting. He or she cares more about the relationship than potentially "winning" the argument. Most of us will not end up marrying our clients. However, if we truly value the relationship that we have with them, we should take great strides to avoid conflict and aim to reach long-term solutions. Contractors are in business to make money. Why let petty arguments preclude profits?

BE FIRM, BUT FAIR

Do not be afraid to push back when feeling abused by your clients.

This advice may seem to contradict the first assertion. To clarify, you do not have to lose every battle. Just know that it is OK if you do not win them all. There is a thin line between being firm and destroying relationships, between acquiescing to small disagreements and becoming a pushover. The secret to the balancing act does not lie within these paragraphs. Years of negotiating experience and fundamental communication skills are required to disagree tactfully with clients.

Nevertheless, it behooves you to be assertive, when appropriate. Your clients will respect you for being firm, as long as you go about it in a civil manner and provide reason. This practice establishes that you are knowledgeable and represent the client's best interests.

EDUCATE THE CUSTOMER

You are the expert. Share your knowledge.

Sometimes clients do not want or care to know how the sausage is made. Many trade contractors know the frustrations of this all too well. Mastering the assembly of complex circuitries may be the lifelong passion of an electrician, but this level of detail does not resonate with most clients. The key is not to become numb to your clients' indifferences. They still want to know things, just maybe not the stuff that gets you out of bed in the morning.

Your customer's attention is focused most when you fail to deliver on the promises you made to them. Customers care when schedules run long and budgets soar high. Yet, when the customer is most interested, many contractors provide excuses, rather than education and solutions. It is natural to get defensive when the customer's watchdog barks at you. Stay calm. Failures are the most effective facilitators of learning (and teaching). When you perceive that you are in a crisis with a client, you may actually be in a unique position to sell honesty, integrity, knowledge and, most importantly, a solution.

When you perceive that you are in a crisis with a client, you may actually be in a unique position to sell honesty, integrity, knowledge and, most importantly, a solution.

CREATE BUY-IN

Customers appreciate being part of the solution.

Contractors often sell one solution to a problem, and one solution only. After all, they are the subject-matter experts. They know what is best for the client. However, clients prefer to be part of a solution, rather than prescribed to one. One-track solutions paint the client into a corner, where animal instinct can override logic and rationale. Clients may become defensive, dig in their heels and argue positions out of principle, even if they have lost faith in their arguments.

Providing choice to clients is very useful for creating buy-in. Options allow the client to be part of the process. Moreover, if both parties have their fingerprints on the decision-making process, there is less blame to apportion if, or when, things go awry. The mere presence of choice demonstrates to the client that you have devoted considerable time to working through an issue. Ultimately, you will probably arrive at the same conclusion. But the path of least resistance is through choice.

DELIVER BAD NEWS EARLY

Problems may be difficult to confront today, but sweeping them under the rug will not make them go away … they will get worse!

The sooner you address problems head-on and notify the client, the more likely an equitable solution can be reached. Pestering the client with every single issue is not recommended either. Always go the client with a set of solutions, not a bag of problems.

Generally, clients want contractors to notify them of an issue if it has a material impact on the budget or schedule. In concert with the client, define "material impact" and use that threshold consistently to determine when it is necessary to include the client in resolving a problem. This level of collaboration and open communication will build trust and further your relationship with the customer.

Additionally, contractors must have internal controls to ensure that the customer's point of contact is aware of project issues immediately. For example, if your project managers are kept in the dark, your client is liable to be uninformed as well. A jobsite foreman may reason, "I was supposed to tell the project manager about that issue, but I told purchasing, and it should have told the PM." This example illustrates a typical communication lapse that costs contractors time and money, and ultimately frustrates customers.

> **Be a project leader, not a project witness. That is, be proactive in leading the resources on the job while communicating regularly with the subcontractors and the customer.**

An internal escalation hierarchy is a good start. It may seem like common sense, but you would be surprised how few contractors actually have this mapped out. Define: Who is supposed to notify whom of what issues, and when, from foreman to superintendent, superintendent to project manager, project manager to customer. This will eliminate finger-pointing and prevent issues from slipping through the cracks. Leverage this structure by creating a sense of urgency among all project team members from the start of the job. Waiting until there is a crisis is too late to build consensus.

TAKE RESPONSIBILITY FOR MINIMIZING THE OVERALL RISK TO THE PROJECT

Even though the specifications might prove you were right, the negative impact on the success of the project will incur a cost on everyone.

Contractors have an ethical obligation to mitigate project costs and reduce risks. Depending on the state(s) in which you operate, this obligation may or may not be a legally binding fiduciary duty. Regardless, acting in the best interest of your clients pays huge dividends in the end.

Be a project leader, not a project witness. That is, be proactive in leading the resources on the job while communicating regularly with the subcontractors and the customer. Many project headaches and customer frustrations can be avoided or lessened through proper planning.

Contracting firms will say that they are great at customer service. “We do whatever it takes to make the customer happy.” Unfortunately, for some, “whatever it takes” means throwing a bunch of resources on a project that is behind schedule. That is not great customer service, but rather inefficiency symptomatic of poor planning. Planning is crucial. Being prepared for unforeseeable project challenges will protect you and your customers from unnecessary loss.

Competing on costs and differentiating on price is a strategy that has left many contractors in a tight spot. As contractors seek alternative differentiation strategies, building superior customer service rings true as a low-cost, low-risk strategy for creating value. Which customer service concepts will you implement in your organization to gain a competitive edge? ■

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Quarterly Interview

From College to CEO in 21 Years

Mike Heitmann

GARNEY CONSTRUCTION

Our attention to integrity has allowed us to stand out from the crowd and it has proven to be a huge component of our success.

Garney Construction is a 100% employee-owned construction company specializing in water and wastewater pipelines, treatment facilities, water storage tanks and industrial water systems. Garney builds these systems throughout the United States through traditional and alternate-procurement methods.

Mike Heitmann joined Garney Construction in March 1990, a couple of months before receiving his degree in architectural engineering with an emphasis in construction management from the University of Kansas. Twenty-one years later, he was promoted to president/CEO. *FMI Quarterly* spoke with Mike about his transition to CEO and how he has continued to maintain some of Garney's main philosophies, including embodying integrity and encouraging employees to reach their full potential.

Chisholm: Mike, tell us about your transition from when you first joined Garney Construction to becoming its CEO/president in 2011.

Heitmann: I started with Garney right out of college in 1990 and spent about three years traveling around the country building projects in northern Virginia, Arkansas, Florida and Alabama. At the end of that time, we found a niche in industrial water/wastewater projects that we were building in Florida, Alabama and Georgia. I set up a new office for Garney in southern Alabama and stayed there for 10 years running our southern operations and building industrial water/wastewater projects. In 2004 I moved back to Garney's headquarters in Kansas City.

Chisholm: What were you doing when you moved back to Kansas City?

Heitmann: When I came back to Kansas City, our office in southern Alabama was not logistically convenient for traveling, so we closed that office and opened one in Atlanta, which was a better location for the Southeast region. We hired a regional vice president to run our Atlanta office. My role continued to be that of overseeing our industrial operations as well as overall company marketing and business development.


Mike Heitmann

Chisholm: How long did it take Garney to start grooming you for your current position, and did you know that was going on at the time?

Heitmann: I don't know that I was necessarily "groomed" for the position. A number of individuals were all viable candidates for the position of CEO/president, but I don't think any of us necessarily were groomed for it. In the end, the officers went through a fairly lengthy process of preparing for that transition. We had a group of upper-level officers who were all retiring at the same time, so they spent about two years preparing for that and talking to the various candidates. In the end, they really let the new officer team come together to choose who they wanted to lead the company. I was fortunate enough to be chosen; but, really, there were a number of us who could have been chosen and it would have been just fine.

Chisholm: What were your biggest challenges for making the transition to CEO?

Heitmann: We manage our company a little differently than most companies of our type. Being 100% employee-owned, we try to reach consensus with the entire officer team on many issues and major decisions, because we all own the company. We do not want a small group of people or any one person making decisions that affect everybody's ownership stake. We try to achieve consensus on all of our major decisions.

I think the most difficult part is there are times where you cannot reach 100% consensus; nevertheless, you need to move forward. That can be difficult, challenging and a little stressful at times. Our process may be a little slower than that of most companies in terms of the decision-making and processes we go through strategically, but we believe getting consensus and buy-in from everybody is more important than moving forward without that buy-in.

Chisholm: How many people are on your officer team?

Heitmann: Twelve.

Chisholm: You mentioned that Garney is an employee-owned company. How does that affect your retention rates?

Heitmann: It greatly increases them. We have extremely high retention and low turnover. It is a direct result of being employee-owned. It is unique in any industry, particularly in heavy construction, to have field resources and crews that have been with you for many, many years. That is a huge component of our success.

Chisholm: How does that impact productivity at Garney?

Heitmann: Again, it increases it. Our pipe-laying crews and concrete crews have been working together for years and, in some cases, decades. They work together like a well-oiled machine. We know we have some of the highest production rates in the industry due to that.

Chisholm: When you are searching for new hires, since you are employee-owned, how do you ensure that they're going to fit into your culture?

Heitmann: We do not do any type of behavioral or personality type testing. It is really just a normal interview process and gut feel on whether or not we think individuals will fit into our organization. And not all of them do; but for the most part, people want to be part of something that is successful, and they want to be part of something that has a purpose. We feel we have that at Garney.

People will adapt and engage in the culture once they understand it. I think if you put people in the right situation, they are going to buy into it and commit themselves to it 100%. Like I said, not everybody works out. But for the most part, it is not difficult to find people who want to be part of a culture like this.

For the most part, people want to be part of something that is successful, and they want to be part of something that has a purpose. We feel we have that at Garney.

Chisholm: Which brings up a question: Where do you go to recruit new employees? Besides on your website, do you advertise on any of the big Internet jobsites? Are you going to universities?

Heitmann: We do the majority of our recruiting out of universities. Most employees, in terms of project management and superintendent positions, are hired exclusively out of universities. We do very little advertising on recruiting websites and we do not use recruiting or hiring services.

Chisholm: Once you bring somebody to Garney, what is the onboarding process like?

Heitmann: Most of our new hires are recent college graduates. Whether they follow the project management track or the superintendent track, we want them to spend some time in the field, laying pipe or pouring concrete.

After they have learned the basic safety aspects of the job, we want them to get their hands dirty and perform the crafts, because we feel that they are not going to become good project managers, superintendents or estimators if they do not understand what it takes to do the work in the field. We have our people spend time in the field initially, right out of college, and then after that they transition into more of their project management or superintendent roles. But the field experience is key for a successful onboarding process.

Chisholm: How much time do the new hires spend in the field?

Heitmann: It varies, but a minimum of three months. On the superintendent track, we try to keep them longer, maybe six months or more. On the project management side, it is usually less, usually between three and six months.

Chisholm: Garney's mission statement mentions allowing all employee owners to realize their full potential. How is this achieved? What sort of training and development opportunities do you give your employees?

Heitmann: That philosophy was something that Mr. Garney developed, and his intention was to encourage all employees to think like entrepreneurs. He always encouraged us to venture out and find ways to satisfy our customers, be profitable and improve our operations — to do whatever it takes.

Mr. Garney was always open to new suggestions, new ideas and new technology, and he always wanted us to spread our wings. If an employee felt he or she could go somewhere and run a profitable profit center, his reaction was, "Let's go do it. Let's set up an office." He was proactive about that and encouraged us to go out and be successful.

I think that is the intention behind that philosophy, but it also boils down to not holding people back, but empowering them to be successful by pushing down decision-making and keeping the organization flat. It is more of a mindset, from the top of the organization, to give our employees the freedom to be successful.

Chisholm: When it does come to employee training and development, is that done at each individual branch, or are you doing it at a central location?

Heitmann: We do both. In our six offices, we do regional training twice a year. And then once a year, we bring everybody to Kansas City and have training workshops for the entire company.

Chisholm: That must logistically be fun to plan, because you have so many employees.

Heitmann: Yes, it's a big effort. The training is important, but just as important is getting the people around each other, developing trust and relationships. Our crews and people move fluidly around the country. If they do not know and trust each other and don't have a good rapport, it is just not going to work as successfully. Spending time together and getting to know each other is a more important part of the training workshop than the training itself is.

When you develop a great culture, people want to perform well, not only for their own sense of accomplishment, but also because they do not want to let their peers down. It's a culture of knowing that everybody you work with owns the company.

Chisholm: What happens if an employee is not reaching his or her full potential?

Heitmann: The expectations are high at Garney. Occasionally, people have not lived up to that and moved on to other companies. The one thing that we are trying to convey is that we want people to perform and excel in their particular roles and take great pride in their work. Whether you are a backhoe operator, an accounts payable person or a project manager, as long as you're performing at your best, then Garney's going to perform at its best.

When employees are not performing at their best, we try to counsel them like any company would. But fortunately, we don't encounter that problem a lot. It's interesting that when you develop a great culture, people want to perform well, not only for their own sense of accomplishment, but also because they do not want to let their peers down. It's a culture of knowing that everybody you work with owns the company. When you're spending money, you're spending their money. When you're making money, you're making money for them. Our employees want to do really, really well for the company, but also for each other.

Chisholm: When people come onboard, is there a formal mentoring program?

Heitmann: It's not extremely formal, but we do have a program. Each person who comes onboard goes out in the field and is assigned a project manager who will become his or her mentor. The mentors act as a sounding board, because most of them have been through the exact same thing coming out of college and they understand everything that the new employees are going through. It works really well.

The key is finding the right mentors. We have many great employees, but not all of them are great mentors. So we must keep finding those people who like to teach, talk and listen, and match them up with the new, young talent.

Chisholm: What about interns? Do you offer internships?

Heitmann: We love interns. It allows them to get a feel for Garney and it allows Garney to get a feel for them. I estimate that 75% of our college hires are people who interned with our company.

Chisholm: What sort of projects do the interns work on?

Heitmann: Our focus is water and wastewater construction, so pipelines, treatment plants, pump stations, tanks; we have them working on all those type of projects.

Choosing integrity is going to be the shortest path to success, because ultimately, shortcuts will hurt you in the long run.

Chisholm: And does that happen in all of the branches?

Heitmann: Yes.

Chisholm: Your mission statement also talks about integrity being the shortest path to success. Tell us about integrity at Garney.

Heitmann: Integrity is another one of Mr. Garney's main philosophies that he drilled into us when we started with the company. He told us that, particularly in our industry, it is easy to take shortcuts. He always said you're going to be tempted and have opportunities where you can choose to make a decision that is without a high integrity. You may obtain a short-term gain with that decision, but in the long run, you and the company are going to lose. Therefore, choosing integrity is going to be the shortest path to success, because, ultimately, shortcuts will hurt you in the long run. And that is a huge part of Garney's brand.

If you ask owners and engineers in the water/wastewater industry what they think about Garney, we believe they are going to say that we have tremendous integrity. We have great experience, skills and know how to build pipeline and plants, but I think more importantly, they're going to say, "They treat us fair. They do what they say they're going to do. They don't take shortcuts." That is the type of quality that gets us repeat work, that gets us qualifications-based selection work. It really boils down to making the highest integrity decision that will always be the best decision in the end.

Chisholm: I assume you have ethics training for new hires, as well as the entire company, from time to time?

Heitmann: We don't necessarily have "ethics training," but we have it as a topic in our workshops. Again, it gets down to the culture. Once people understand our culture and that this is the way Garney does business, they quickly realize that if they don't follow that to a "T," they're not going to be at Garney.

Chisholm: That was going to be my next question, if there are any repercussions for not following that.

Heitmann: Yes. Any employee who does not embrace our philosophy of integrity will no longer work at Garney. Vendors want to work with contractors that have high integrity, as do owners and engineers. In our industry, this attention to integrity has allowed us to stand out from the crowd, and it has proven to be a huge component of our success.

Chisholm: With the economy supposedly beginning to rebound, do you see any specific challenges ahead?

Heitmann: In most areas of the country, the municipalities just do not have the funding to build projects that they need. That's the biggest problem. Projects are not being built and that is creating downward pressure on pricing, so it's still a very, very tough market. It looks like it is going to be very tough for at least a couple more years. We don't see it really starting to pick up until 2015 when we think municipalities will start getting their funding back.

Chisholm: During all of the recession, did you have to lay off anybody?

Heitmann: No. In fact, our company is bigger today than it was at the peak of the economy in 2007. Our employee count has not gone down at all. It's increased.

Chisholm: When your market does start to rebound, have you thought about attracting talent? Because that is going to be another big challenge, with so many of the baby boomers retiring.

Heitmann: It is. There is going to be a huge shortage of talent in the future. We think it is going to be less of a challenge for us than other companies because of our employee ownership. We have a lot less turnover and greater retention, so we think it's going to be more of a problem for our competitors. But nonetheless, it will be a major challenge.

We call it the accordion effect. Our resources will compress when we have less work. And then when the workload increases, our accordion stretches out. The reason we can do that well is that we have people that will do anything that they need to do to make the company successful. If their roles in the company change in order to keep everybody busy, then that's what they'll do.

Chisholm: You mentioned earlier that, when you became CEO, Garney was looking to fill a number of positions because a lot of people had retired. Looking at your website and the ages of some of key management, it's not going to happen soon, but it will happen again. Have you started thinking about who will replace you, or is it too early?

Heitmann: It's really too early. We just went through that. It's not that we don't have to worry about it, but it's certainly not a top priority for us right now because we've got a pretty stable officer team right now. But the time's going to come, as you said.

Maybe 10 years from now, we will seriously need to be starting that process. But I don't think it's anything we necessarily worry about. We certainly will plan diligently for it, but we've got such a strong foundation of talent below us and coming up through the ranks of Garney that we have 100% confidence that they will be able to transition into the new leadership team in the future without any problem at all. In fact, we have more of a concern of providing enough opportunities for our people.

As I previously mentioned, being 100% employee-owned, we have very low turnover, so one of our biggest challenges is finding opportunities for people and ways that they can be successful through organic growth. We'll be ready for the next succession.

We have people that will do anything that they need to do to make the company successful.

Chisholm: Have technological advances played a big part in Garney's success in any way?

Heitmann: Yes, to some extent. It probably hasn't had as much of an impact in our industry as others, but the biggest technology advances in our industry primarily deal with water treatment processes and types of filtration systems, etc. We continue to try to maintain a strong résumé of the latest technology installations. The new plants that are built want the latest and greatest types of filtration technology, and when we can show them that we've installed those systems, then it's a great benefit for us to have that experience.

In terms of the actual means and methods of installation, there are a few technological advances in terms of equipment, speed and fuel efficiency. But when it comes to laying pipe, we've laid it pretty much the same way for the last 50 years.

Chisholm: Do you do any work outside of the United States?

Heitmann: No. We've built two projects in the Bahamas — that was back in the early '90s — but that's the extent of it.

Chisholm: Do you have any plans to go global?

Heitmann: Not at this time. We do not want to deviate too far from our core expertise. When you are dealing with difficult ground conditions, deep excavations and all types of unknown factors, it is very risky. To go into areas that you are unfamiliar with and to venture into new territories is something that you just don't do as quickly and easily as you may in other types of construction. So we don't have any plans right now to go outside the U.S.

Chisholm: Thanks, Mike, for your time and insights about Garney Construction. We hope your values and philosophies continue to make the company successful. ■

Kelley Chisholm *is the editor of* FMI Quarterly. *She can be reached at 919.782.9264 or via email at kchisholm@fminet.com.*

Four Essential Steps in Acquiring Profitable Work

Now is not the time to be cheap with business acquisition — in fact, now is the time to build superior business development capabilities.

By Lee D. Smither

Acquiring work, in particular profitable work, in today's economic climate has never been more challenging. Competition is fierce and margins are painfully low. In spite of this, there are more than a few contracting firms that are profitable and several that are experiencing an increasingly higher bottom line.

One of the reasons for these better-than-average performances is the ability to acquire higher-quality work. This is not the simple result of being in a better regional market or better segment of the market, but rather having a more sophisticated and proactive methodology of building backlog.

Business development is a term and concept that is far removed from the world of Willy Loman, Arthur Miller's tragic central character in "The Death of a Salesman." Willy, the lonely purveyor on the road, pitching his wares to one potential buyer after another, has given way to complex, cross-functional team sales to multinational customers with multiple needs, buying practices and locations. The sales cycle is longer and less predictable; sales calls take more time and must be made to more people in order to develop business; buyers are becoming more sophisticated and, in some ways, jaded; and the procedures for purchasing have become dense, often to the point of being a barrier to forging any constructive dialogue. Furthermore, the role of the salesperson or account manager has become more difficult. The ability to navigate the internal network of the customer organization is as significant as building relationships within it.

Those companies that have mastered the art of acquiring better and more profitable work all execute four steps in their process of developing business:

1. Build relationships with the right customers proactively.
2. Target fewer projects to pursue and provide more resources in those pursuits to maximize chances of success.
3. Develop a customized win strategy for each targeted project that provides true differentiation.
4. Present the proposed solution in a customer-centric fashion that reinforces the unique value proposition to that unique customer.

Many companies will say they do these things already, but a majority of those companies are viewed as "commodity" service providers, proving these steps are not well-executed. Many business leaders pay lip service to these notions and make only superficial efforts to implement them in their organizations. Make no mistake, it is hard to inculcate these best practice steps into a routine transaction-oriented sales process. For companies that possess a quantity versus quality mentality, it is a fundamental change in strategy and philosophy. Believing that you can bid fewer jobs and win more of them requires intestinal fortitude when some are screaming, "If you don't bid, you can't win — so bid more!" While logically correct, FMI has discovered that in general, companies that implement these four steps with diligence are more strategic in the customers and projects they pursue, have more repeat business, higher hit rates and also are more likely to have above-average project profitability.

Believing that you can bid fewer jobs and win more of them requires intestinal fortitude.

Additionally, a brand image is formed as a result of the business development approach, whether it is intentional or by default, as companies are viewed as specialists, well-suited for this type of work, or generalists, who will build anything that comes along.

STEP ONE: BUILD RELATIONSHIPS WITH THE RIGHT CUSTOMERS PROACTIVELY

Clearly, this step begins with the discussion of "Where do we choose to play," meaning in which geographic areas will we concentrate our resources and in which segments of the market are we qualified to operate. Although this should be obvious, organizations must link their corporate strategy to business development (see Exhibit 1).

Thoughtful strategy connects the macro environment, which includes market climate, competitive positioning, customer buying practices and preferences, and

Exhibit 1

Linking Corporate Strategy to Business Development

Strategy Development	Customer Targeting	Relationship Building	Project Opportunity	Relationship Management
SWOT	Target Markets	Account Identification	Win Strategy	Deliver Expectations
Climate	Public Relations	Account Plans	Capture Plan	Consistent Contact
Customers	Brand Management		Value Proposition	Contractor of Choice
Competition	Company Positioning		Proposal Development	
			Presentation	

a company's internal strengths and capabilities to those target markets that are aligned with the corporate strategy of the company. This leads to which customers within each market are preferred, and account plans are put in place to capture market share. Building relationships often happens before a specific project becomes available. When a project does become available, it must be the right type of project that passes a go/no-go decision matrix built upon the company's overall market strategy. Once a project is won, customer expectations must be managed accordingly. Managing expectations is done best when a relationship is strong before the award. The strategic role of business development can be described as follows:

> Develop the right customers and win the right projects that you can best deliver, based upon your expertise and capabilities, which maximize the return on your resources and exceed the customer's performance expectations.

Although many would argue that the operations function turns promises into reality, business development can certainly set the table for success by managing expectations so that they are reasonable and achievable.

In short, strategy directs all of your subsequent marketing and sales efforts. Some will argue that in this current market, relationships do not matter; only price is important. Certainly, every contractor must be competitive; however, relationships allow you to get in early and perhaps shape the RFP in your favor. Better firms know that a strong relationship can make the difference between the eventual winner and second place. This is particularly true in health care, higher education and industrial markets. Most engineering and construction companies are oriented with a vertical market focus, such as health care, higher education, K–12, etc., and it is up to each account manager to ensure that he or she

Leadership must believe that the outcome will be better if you spend your efforts more wisely and use a rifle-shot approach to procurement instead of the proverbial shotgun.

develops deep relationships within the assigned vertical market sector. This allows the managers to understand the key issues confronting the customers in each market, along with significant procurement and market trends. A relationship network that encompasses influencers is also important. Some companies are very procurement-oriented and will not allow their operations people to have any say in the buying decision. This can be especially difficult and requires more work from the business development staff to overcome this number-only focus and develop others within the customer's organization who can influence the decision. Externally, economic development authorities can provide intelligence as to potential manufacturers that may be looking to build a new plant. Trustees, a university chancellor or institutional facilities architects or engineers can refer your company to another institution that is starting a building program or in the early stages of project development.

STEP TWO: TARGET FEWER PROJECTS TO PURSUE AND PROVIDE MORE RESOURCES TO MAXIMIZE THEIR CHANCE OF SUCCESS

Allocating scarce resources to fewer projects is really about focus — strategic focus. Too many companies chase too many projects and dilute the efforts given to any one project. Half-hearted pre-construction efforts and less than creative estimates add up to second- or third-place finishes. Many estimators complain of low morale and burnout in companies that have no strategy or focus as to what they should bid. Today, a hit rate of 10% or less is not uncommon for typical general contractors or construction managers. However, one E&C firm that focused its efforts to be more selective in the jobs it pursues increased its hit rate from 10% to 40% and lowered the numbers bids produced by 50%. The quality of its proposals improved while the percentage of losers dropped and profitability doubled. It takes an act of faith to do this because it is anathema to most contractors to pass up an opportunity. Leadership must believe that the outcome will be better if you spend your efforts more wisely and use a rifle-shot approach to procurement instead of the proverbial shotgun.

STEP THREE: DEVELOP A CUSTOMIZED WIN STRATEGY FOR EACH TARGETED PROJECT THAT PROVIDES TRUE DIFFERENTIATION

You must have a strategy to win more of the jobs you want. This approach encompasses highlights of your strengths and indirectly creates doubt about your competitor's ability to be as qualified as you are. Your win strategy must address the specific key issues that are important to the customer about this particular job, and that only can be done by having a thorough understanding of the customer, its buying motivation, organization, and goals and objectives for the project.

- How does this project fit into the bigger building program?
- Does it represent additional risk from past jobs?
- Will it require a contractor with 3-D engineering and BIM capabilities in order to be successful? If so, why?
- How does this give your company an edge?

McDermott, a multinational E&C company focused in the offshore oil industry, develops a capture plan for each project as a part of its business acquisition process. It contains data on the customer organization's procurement practices, the individual involved in the buying decision, and its view of what is essential in an engineering and construction services provider. Since McDermott often provides front-end engineering and design (FEED) to support its solution, it will invest time in developing not only a technical but also a business solution. These jobs are typically large ($1 billion or more) and require 12 to 24 months of cultivation before the RFP actually hits the street. It is imperative that McDermott has a good relationship with the customer in order to gather all the pertinent information it can, as early as possible, in order to build a winning proposal. Being selective is also important when an average job may cost as much as $3 million to estimate and bid.

For CM firms that do not self-perform work or have no proprietary technical solution, the ability to set the company apart is more challenging. As one president told us, "In the CM world, you're just selling pretty faces." Technical competence in the front end of a project can be valuable and provide a customer with more useful information about how its project can be optimized for success. Pre-construction services are often a big part of developing a relationship with a new customer. Leading the client through feasibility analyses, conceptual estimates, budgeting and constructability reviews can create a preferential, consultative relationship where your company becomes more difficult to dislodge.

As Phil Southerland, president of KBR Building Services, states "Pre-con is huge in our mixed-use residential, health care and institutional markets — you have to be really strong here. It creates differentiation, and without that, then it's just shades of gray between us and our competition."

STEP FOUR: PRESENT THE PROPOSED SOLUTION IN A CUSTOMER-CENTRIC FASHION THAT REINFORCES ITS UNIQUE VALUE PROPOSITION

This is where the rubber meets the road and many contractors lose projects they should have won. A good presentation will not win a job by itself, but a bad one will lose the job. Here again, you need customer and project information. If you have properly prepared a win strategy for this customer's project opportunity and it reflects the points of differentiation that are important to the customer and not just you, your chances of winning have significantly increased. One of the biggest complaints we hear from customers is that contractors do not listen to them. This is a failure in business development. Issues regarding risk, schedule and price are obvious, but there are always other issues that matter to a customer and influence its buying decision. Whether it is minimal disruption of current operations at its hospital facility, safety of the students who are passing by, or community relations on a particularly sensitive project, all of these have influence. Value engineering is not just budget cost cutting, but truly provides a new plan for increasing square footage or usability due to creative thinking. This has real value if communicated to the customer, preferably before the proposal and presentation stage but at a minimum during that phase. Presentation times for projects are shorter than five to seven years ago when each candidate could expect 45 minutes to one hour to present his or her solution. It seems that 30 minutes is more the norm these days, and without a compelling presentation that highlights your differences, the customers will just read the paragraph on price. Good proposals and presentations have a story to tell, without it, the customer will assume that you are only different with your price. Some companies have developed better presentation skills through better software. For example, using Jump and Flash instead of just the usual PowerPoint slides will add interactivity and enhanced media to your presentation. Will eye candy really make a difference? Yes. Many people are visual learners, particularly younger customers. KBR Building Services has turned more of its technology over to young people, which has caused the company to migrate toward more video-based presentations and use advanced technology more fluidly in its daily interactions with customers. KBR has received positive feedback from customers who remarked of the company "raising the bar." Good content paired with a powerful delivery is always a potent combination.

A good presentation will not win a job by itself, but a bad one will lose the job. Here again, you need customer and project information.

While providing the low number is a legitimate strategy, if done without creative forethought and analysis, it can be dangerous in this current market. CM firms are taking jobs at less than 1% fee in some instances. In this race to the bottom, many contractors are losing money on enough jobs to offset the profits they make on others, and breakeven becomes the best they can hope to attain. Putting a good proposal and presentation together takes time and effort, and few companies will devote enough of either. In this market, doing these well is vital because you will need every arrow in your quiver to be on target. Just having quality work and the best people is an old, tired phrase that will get you nothing more than a yawn, even if it is true. Customers want to believe that you are truly different and that is why they should choose you. If you are not low or well-established in the marketplace, you have to redouble your efforts to distinguish your company in positive ways. As one buyer of construction services put it, "No one ever got fired for choosing Turner." Whether true or not, that statement underscores the difficulty of winning against a long-standing performer when you are seen as just another contractor and your price is virtually the same.

In conclusion, focusing on strategy that drives business acquisition efforts, better opportunities and more creative and powerful proposals, solutions, presentations and relationships is what separates the best from everyone else. There are companies today that are executing these four steps and are reaping better results. Their brand is reinforced through the application of these principles and the consistency with which they are employed. Customers know that they are getting a preferred provider and that is why those preferred providers are often competing on all the right jobs. It takes investment in people, processes and technology to get ahead of everyone else. Now is not the time to be cheap with business acquisition — in fact, now is the time to build superior business development capabilities. ■

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Deconstructing Chaos

Strategy is about identifying which priorities to focus on and make trade-offs to support. Contractors need to do fewer things — better.

By Jim Schug

Over the past several years, many clients have expressed concern regarding how to react to the uncertain and volatile market. Our business landscape has fundamentally changed. Company leaders must wrestle with forces within and outside of their control. Some recognize that even when markets return to their same level of strength as 2007, things will not be the same.

Take, for instance, the residential market. Contractors involved in building multifamily complexes in 2007 had too much work and an abundance of profit margins available on jobs. As the multifamily market begins its return, even if we return to a similar amount of work put in place as in 2007, profit margins will not be the same. The "good old days" are gone.

Leaders are challenged to see value in taking action today, as they prefer to wait until the market calms down. They are faced with external stimuli (outside of their control) that include changes to Federal Acquisition Regulations, EEOC enforcement, health insurance changes, new entrants to the market (sometimes global companies) and new technology requirements by owners. As if these were not challenging enough, internal changes have taken place, creating a maelstrom

Multiple external and internal changes can lead to a feeling of being caught up in some chaotic maelstrom.

of complexity. Internal changes are not completely isolated from external changes and may include change in company structure, shifted roles and responsibilities, new systems and enterprise resource planning tools and more. Some of these are deliberate decisions resulting from external stimuli (reductions in workforce followed a decrease in capital spending for key clients).

Multiple external and internal changes can lead to a feeling of being caught up in some chaotic maelstrom. Perhaps some lessons learned in Chaos Theory can be applied in times of rapid, discordant and unexpected change. Chaos Theory is a mathematical field of study with application in various disciplines. Chaos Theory holds that deterministic dynamic systems, which are considered otherwise predictable, will produce wild or unpredictable results when even small changes in random elements are introduced into initial conditions. Another way of describing this chaos is that small changes in the initial conditions result in long-term results that are impossible to predict (i.e., "the butterfly effect").

Does this theory have application in a construction environment? Consider a construction project, which at the point of estimating is considered a deterministic (predictable) dynamic system. In order for a system to fit Chaos Theory,[1] it must satisfy the three conditions listed on the left side of the table in Exhibit 1. On the right side are similar conditions of construction projects.

The table in Exhibit 1 justifies the anxieties of many superintendents and project managers. One foreman from a large general contractor mentioned, "I've always enjoyed the excitement and change in our line of work, but lately, we feel like we're caught in a tornado of challenges and there is no way out!" Each position in the company senses chaos differently.

Consider that at a higher level, the construction industry itself fits a similar set of chaos attributes. Note the table in Exhibit 2 comparing Chaos Theory to the construction market.

As Exhibit 2 describes, leadership teams direct their employees through a chaotic construction market. As the top executives of the company face chaos and

Exhibit 1
Chaos Theory Elements

Chaos System Elements	Construction Project Elements
Sensitive to initial conditions	Design, estimate and planning determine success
Mixed across the top dimension	Owners, designers, general contractors, subcontractors, specialty contractors and vendors must synchronize
Orbits must have density	Within each company involved above are separate dimensions of project managers, superintendents, estimators, foremen

Exhibit 2
Chaos and the Construction Market

Chaos System Elements	Construction Market Characteristics
Sensitive to initial conditions	Each company's culture, vision and leadership style are set by its founder. "That's the way we've always done it here."
Mixed across the top dimension	Continued new entrants to the marketplace compete for an ever-evolving and volatile set of construction projects at any given time.
Orbits must have density	Companies in the same market have varied relationships. They often compete, sometimes joint venture, subcontract or lead.

uncertainty in this market, middle management fights the chaos described above on construction projects. These two evolving spheres often lead to misalignment between strategy and operations. These two dimensions of chaos faced by contractors, coupled with the difficult market environment, lead to employee and morale attrition, project losses and troubled companies, as shown in Exhibit 3.

Being decisive in the midst of chaos is good. Chaotic times call for strong leaders. The answers are not all silver bullets and simple recipes. A CEO of a national specialty contractor recently mentioned, "The election, the fiscal cliff, tax code changes, health care requirements … when will the uncertainty end? I'm not sure that we can continue to wait to make crucial decisions." His point makes great sense and his sentiment is shared by many. Fortunately, there are methods to develop effective strategic decisions in this volatile market. We will look at those in a moment.

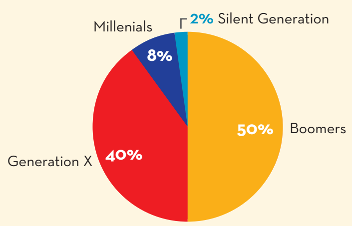
Exhibit 3
Two Dimensions of Chaos

Unfortunately, we often see another highly ineffective approach to todays' market. The opposite, and just as ineffective, approach to 'sitting and waiting' for the end of uncertainty is rapid-fire initiative proliferation. Many executives are trying disjointed initiatives in an effort to see what sticks. Employees in these organizations refer to this syndrome as flavor-of-the-month leadership. Rather than leading with a set of prioritized actions and focus, leaders shift company initiatives every time they read a new success story. In some cases, the ideas applied are survival-based and reactionary.

As the economy continues to muddle through challenges, sputter through political decisions and show varying signs of improvement, some leaders are stuck in the harsh reduction mentality adopted during the downturn. The maniacal search for areas to "cut back" in order to survive now conflicts with effective preparation for the future. Across the industry, companies have appropriately analyzed the general ledger and reduced the fat. At some point, the constant drumbeating to cut costs becomes an overused motif, like crying wolf. In some extreme cases, cutting the coffee budget can only get us so far, and nothing depresses morale quite like a missing that stout cup of Joe in the morning. Strategies developed two or three years ago to cut costs must be re-evaluated.

In the effort to get the most from every employee, tasking managers with multiple responsibilities is common. Previous reductions in force and new strategies improperly resourced in the name of lower cost have destroyed clarity across the company. As a result, corporate structures are unclear in some companies, and in others they are nonexistent or exist only on paper. FMI often asks managers what they are responsible for and how they know they are successful in those roles. Due to the changes over the past three years, most middle managers remain unclear about what is expected of them. Adding to the challenge of motivating our middle managers is today's multigenerational workforce (see Exhibit 4.) Generation Y employees (in their early 20s), Generation X employees (30- to 50-year-olds) and baby boomers each have unique perspectives, training, leadership and developmental needs. Unfortunately, many of the programs addressing these needs have disappeared in the name of cost cutting.

Exhibit 4
Construction Industry Employees by Generation



Other companies have attempted to push organizational improvement and efficiencies through lower estimates. The rationale seems, "If we tell the field they have to do it cheaper, it will happen." In most cases, projects are bid based upon only what the market price will bear instead of based on the cost to build the project. Bidding work 'tight' (a misnomer for underbidding work), includes hand-over meetings that do not have detailed explanations of how projects were bid because there was not any clear rationale in how the job was estimated to begin with. The sales team lacks rigorous discussions with field management on the front end of jobs. No longer do they use war-game means and methods to refine estimates moving forward. Any hand off that occurs between sales and execution is really hand-waving and vague discussion. We command the field to "hit these new project costs and productions." The misperception that simply handing off a lower number to the field after award of bid will create field efficiencies is absurd. It is akin to setting an aggressive weight loss goal on January 1 without developing a plan or changing eating or exercising habits and expecting great results. The only real result to expect is frustration and disappointment. Similarly, contractors are finding surprising (and disappointing) losses on projects. Chaos indeed!

THE WRONG QUESTION

Maybe we are looking for the answer to the wrong question. Rather than, "How do we cut costs further to compete effectively?" we should be asking, "How can we create an adaptable company that will profit in a price-driven market?"

One approach might be reduction-focused, through unceasing enforcement. The better approach is profit-focused, engaging experts across the company and ensuring clarity in priorities. To continue the weight loss comparison, this is similar to losing weight versus getting healthy. A focus on reducing calorie intake and rapid weight loss goal may be difficult and only temporary. Developing healthy and active habits make for a better and longer-lasting health benefit. Within the company, the two approaches (reduction-focused and profit-focused) are worlds apart in leadership tactics and make a significant bottom-line difference in this challenging economic environment.

The cost-cutting mentality often depresses morale and reduces field leaders to execution-based tasks only. The focus of efforts for middle management becomes, "Did you complete this form?" A fear of admitting weakness echoes across the company. Reductions in the workforce, although many times necessary, often lead to fear across the company. Employees carefully walk the boundary of their duties and responsibilities, or what they perceive to be the expectations of their roles. In the dynamic construction environment, leading skilled managers in this manner typically results in frustrated employees focused only on pay as motivation. A symptom of this disconnect is hearing senior leaders suggest that they just don't "get" young employees. "They aren't dedicated to the company."

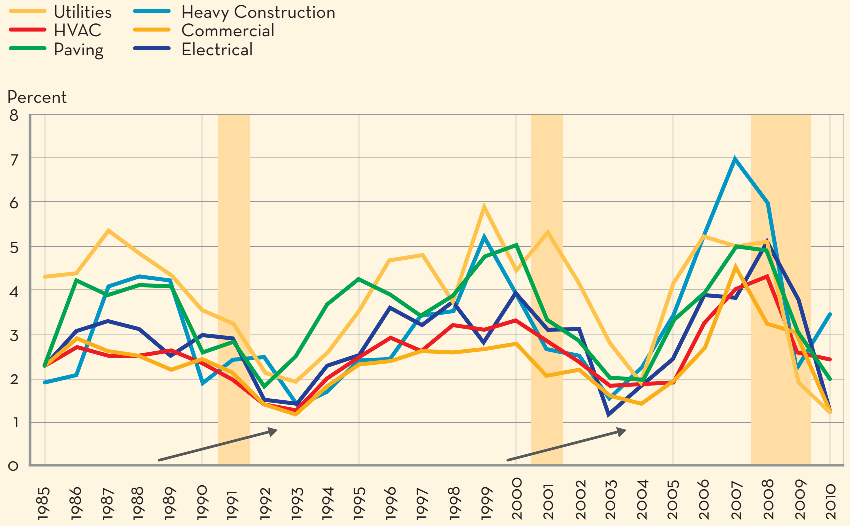
In some project meetings, this disconnect and lack of engagement appears. Take the project after-action review (sometimes called the post-job review) meeting. The purpose of this meeting is typically designed to:

- Identify areas on the project that the project team executed well and share these.
- Identify areas on the project that the company can improve upon in the future.
- Create a growth experience for the project team to understand what really happened.
- Reinforce a learning culture across the company.
- Create a library of best practices for similar projects in the future.

Instead, post-job reviews often miss the mark. They denigrate to either sword fights that result in wider differences between departments (taller silos) or numbingly ineffective discussions of how everything was out of our control. Neither results in any value for the company, nor does it address areas that can lead to improvement for the company leadership. As a result, companies are stuck in repeating failure unless demanded from the top. At that point, senior leaders often do not have a clear grasp of exactly what needs to change or the best method for change. The perception from the top of the company is that any change seems to require direct intercession every time by the top.

As described above, many adaptations required during the downturn magnified the chaos inherent in our industry and within our companies. As we look towards brighter days, it is no wonder why many contractors face their toughest years as the market

Exhibit 5
Industry Profit Chart Across Recessions by Sector



Source: Risk Management Associates

begins to recover. Exhibit 5 demonstrates that the lowest profitability is historically the first year after we climb out of a recession. Is it possible that, as contractors, we are not agile enough to recognize the shift around us, too slow to adjust to the market, or simply unable to execute change?

Project execution does not have to reflect the chaos rampant in our industry. Chaos is prevalent in our industry for many reasons. We must limit the chaos that exists within our organizations. Most of this is self-inflicted. Companies that can focus their efforts on controllable initiatives will have an advantage and endure the challenges evident today. Effective leaders recognize what they can change and focus efforts, reducing wasted energies across their staff.

Exhibit 6
Inadequate Strategy Gear

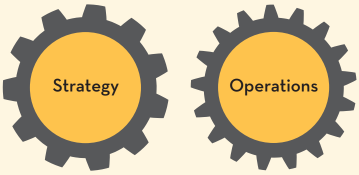
Project selection — where strategy meets operations

Much discussion can be made of sharing and communicating a strategy. If employees have a clear understanding of the company vision for the future and understand the urgency of the goal, they are much more likely to understand how their actions meet or defeat that strategy. Many firms do not spend adequate time developing their strategy, resulting in a freewheeling effect (see Exhibit 6). Consider the bicycle in granny gear — front pedals have little or no resistance and are easy to pedal, but it still demands considerable work and frequent repetitions per minute to turn the big Operations wheel. Little ground is covered, and senior leaders put forth extreme effort to get little progress or change in operations.

Similarly, companies that have a clearly communicated strategy and are consistent in follow-through require less energy to keep operations on the tracks. This is a double-edged sword. The key here is as much getting involvement, buy-in and excitement around the company plan for the future. Consistent execution is difficult as companies are challenged to avoid revenue-generating projects. A client developed a strategy to focus on high-end projects rich in licensing and certifications where manufacturing and industrial clients value their work. When the town council approved development of a big-box retail store, this company decided to go after that as well, a project well outside its strategy. Often effective strategy deployment is about saying no to initiatives and projects. This is difficult during a downturn.

Exhibit 7

Disconnect Between Strategy and Operations Gears



Where these gears meet is typically project selection. Go/no-go tools are often some of the most difficult to develop across the leadership team. According to Scott Razor, president of Zurich North America Construction, "20% to 40% of risks are typically insurable. The other 60% to 80% are operational risks." Taking on projects that do not fit the company's strategic plan, in order to chase revenue, increases that operational risk.

After the tumultuous pitches and dives of the recession, many companies see a disconnect between their strategic and operational gears, which are developed and executed in isolation. This results in margin erosion and shocking project losses that debilitate morale. Both strategy and operations turn in isolation with no connection (see Exhibit 7.) This is a common cause of confusion within organizations.

Exhibit 8

Effective Strategy and Operations Gears

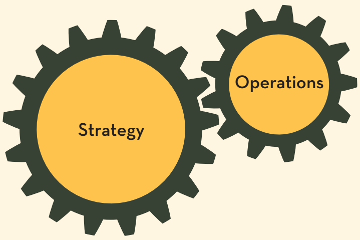


Exhibit 8 depicts a company where the operations and strategy gears are engaged. Effective strategy communicated and executed requires subtle shifts to match the market, pulling operations along. A large strategy gear also results in a much easier operational gear to turn. Every revolution of the operational gear is another project completed successfully. The diagram accentuates the importance of repeatable systems and best practices in operations.

BUILD A CULTURE OF MARGIN AGGRESSION

Football teams cannot win a Super Bowl with only a great defensive team. A team that highly recruits, develops plays and rehearses the defense at the cost of energy spent on the offensive team will lead to a weak quarterback and offensive line unable to score points. The team is effectively cutting its success factor in half. Instead, teams should take the field with the goal of scoring points and preventing their opponent from scoring. Likewise, our project teams must start and sustain an attitude of beating the estimated profit margin throughout the project. Too many companies just focus on preventing loss. This is endemic across the industry today. "We just need to make sure we don't have any bad jobs in 2013–2014 and we'll have good year." This is a recipe for disappointment and parallels the football team above. Project teams need to be oriented around improving the profit margin set as a goal on bid day.

Misinformation and lack of information are both forms of waste that great companies avoid in this new economy.

This aggressive attitude starts with company leadership. Leaders create challenges when they do not stick to the consistent company strategy. In other words, they do not effectively allocate the resources required to support the projects the company attacks. This might look like bidding work in new geographies and project types without the right resources or preparation. It creates a defensive attitude with their project teams.

COMMUNICATION AND INFORMATION ARE BIGGEST SOURCES OF WASTE

Most companies recognize the value in conducting meetings to transfer information across the organization. These meetings take a back seat to the whirlwind of daily activities and often do not happen as needed. This is certainly a leadership that does not set appropriate priorities for the company. In this case, leadership is not leading but letting the chaos of the day establish the priorities.

When a chief estimator says "We don't have time for pre-job planning meetings or to develop a hand-off binder," what is really being said is "We don't prioritize the importance of handing information off from the estimating team to the project management team in a rigorous method to ensure our project teams start projects even better-informed about the project than when we bid it."

One of the largest concerns of contractors today is a lack of effective communication and, as a result, poor information sharing. Misinformation and lack of information are both forms of waste that great companies avoid in this new economy. Misinformation and lack of information are some of those random elements and small changes that lead to wildly unpredictable outcomes. Chaos Theory in motion.

Know your cost and productions

Far too many companies that self-perform work have an inaccurate understanding of overhead and true cost that should be applied to projects. Some officers of the company understand the right amount of overhead and use intuitive cost rates; yet those bidding the work and pricing change orders do not have a deep understanding of them. Because of this oversight, our aggressive approach to win work is recorded as an estimated 4% profit margin, but includes an inaccurate calculation and record of overhead applied. It is no wonder why many companies have had "surprising" losses on projects at completion. At the post-job review, each department shrugs in disbelief, not knowing what truly happened.

Companies with the lowest overhead do not necessarily have the highest profit margin.

Knowing your true cost to build work based on historical costs and accurate estimates is the first step. The best pricing strategy to win work at an achievable production rate is a combination of art and science in some markets. The involvement of field managers (superintendents and lead foremen) before bid day often results in frustration for the office and field. Some clients suggest it is unproductive to pull a superintendent from the field to review a bid. A well-developed bid process would bring field experts in to discuss the best means and methods or approaches to help win the job. This collaborative approach results in an improved relationship between the office and field and improved profits on projects. It is well worth the investment of the superintendent's time.

Clarity and reality go hand in hand when the project team is involved in the bidding, handover and preparation of the job. An involved team sees integrity in the goals it has helped to set and strives to beat the estimated job budget.

Staffing and Structure

Companies with the lowest overhead do not necessarily have the highest profit margin. We must run businesses mindful of keeping costs in control, but there are vital positions that are a great investment.

Documentation requirements for projects have increased significantly, often pinning the project manager behind a desk in the process. Managing the customer is crucial, and ensuring that documentation is accurate and meets specifications often determines several profit points at the end of the project. Superintendents and foremen frequently are stretched out of their traditional mode-management and means-and-methods roles. Often, they are more involved in scheduling, subcontractor management and job-cost aspects due to the preoccupation of the project manager with documentation requirements. It is not hard to imagine how on a public works job accurately processing and following up on 10 different $15,000 claims can justify supporting an assistant project manager, project engineer or highly skilled administrative assistant. The reduction of this paperwork-intensive processing can also free the project manager to improve communications with the field and resource managers. Not every project or company can afford to staff project assistants on jobs, but done well, they are great mentoring and minor league farm teams to build a great future upon.

Most highly effective estimating departments use a layered system leveraging the right skill sets and experience with appropriate contributions towards winning work. Senior or lead estimators should be involved in conceptual estimating, compiling and reviewing work assembled for them. This is not a case of rank having its privileges, but recognition that some new college graduates cannot conduct these tasks, given their lack of experience. They can perform takeoffs, provide estimating software input and coordinate subcontractor bidding and other tasks that help them grow with exposure while ensuring the senior estimator is employed for his or her highest and best use. Without such application of our own resources, small shifts in inputs produce unpredictable shifts in outcomes. Chaos theory again.

Companies that are rigorous in holding a new project kickoff meeting attended by the CEO often do a world-class job in ensuring the company has analyzed the project from every angle possible before mobilization.

3 Ms: Meetings, Measurements and Metrics — A Telltale Sign

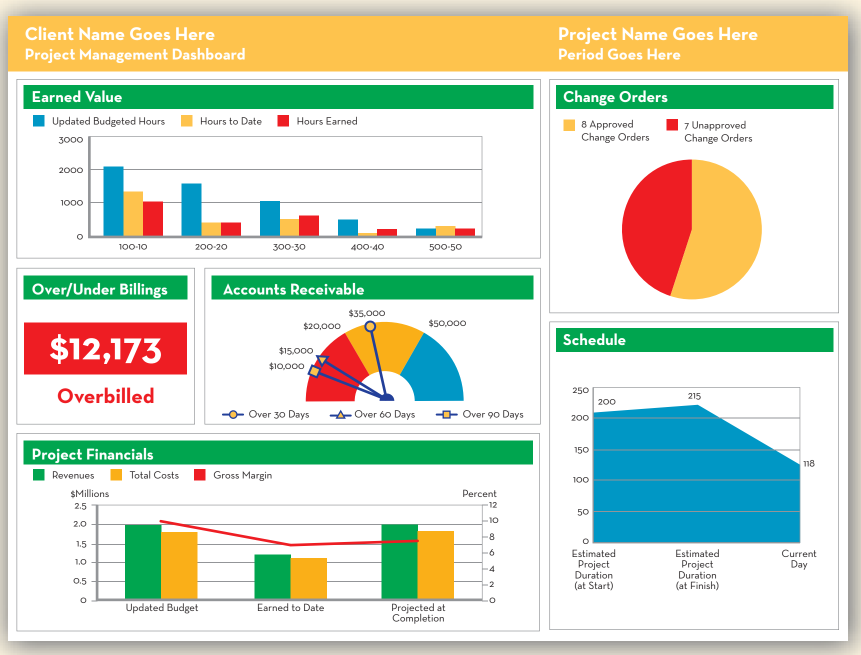
Meetings, measurements and metrics go a long way to inform your employees of priorities and what is important to the company senior leaders. A by-product of our increasingly technological industry is that many members of middle management often complain that they have too much data to manage. Best-in-class companies help their managers prioritize information and conduct analyses on the routine data with effective reports and documentation. Conducting focused meetings and developing regular project metrics and feedback measurements bring relevant data to the top of the pile for action. Some advanced software automatically blast important email reports to key leaders each week. Many companies develop a battle rhythm of these "3 Ms" to assist with time management across the company.

Companies that are rigorous in holding a new project kickoff meeting attended by the CEO often do a world-class job in ensuring the company has analyzed the project from every angle possible before mobilization. Too many meetings are prohibitive to an effective field orientation, but so are too few meetings. Some companies try to do both by conducting a staff meeting one day a week with everyone from project management and above in attendance. This standing meeting is ineffective, often leads to tangents and seldom gets to the level of detail needed for any one decision to be made.

Project metrics set priorities for leaders. Most effective dashboards should be limited to five to eight items and customized to each key position and role on the project. A superintendent dashboard should look different than that of the project manager or engineer. Some items covered may range from accounts receivable status, safety ratings, outstanding change order approvals, resource staff allocation, schedules, productivity feedback, projected costs and earned value, to name a few. Graphical metrics are best, providing quick-look information that can be zoomed down for more detail as needed, as shown in Exhibit 9. Many software suites are single-entry from bid, field manager time card entry, with integrated electronic invoices and approvals through payroll and project closeout. While not every company can afford expensive software suites, similar approaches can be developed with inexpensive investments. It is more about the process and how it is implemented than the software used to produce the information. Although amazing tools are available today, many contractors have expensive software sitting on the shelf with little or no investment in training, no reinforcement of compliance with software use, and lack of proper staffing and administrative support.

Personnel measurements often are poorly executed and misconstrued. Compensation should be tied to how effectively the project team beats the estimated profit margin. It should reinforce important company strategic elements (customer service, safety, schedule, bench strength development, etc.) Performance evaluations should occur at the conclusion of each job (when several months long) rather than one time per year. Too often, company leaders wait until the end of the year

Exhibit 9
Dashboard Example



when things slow down to provide feedback, and by then have lost track of any meaningful information or specific points to discuss. The project-based performance evaluation also allows for multiple sources of feedback as project teams often change during the year. At the annual review, a much more valuable discussion occurs as a result. Done effectively, 360-degree profiles, personality assessments and leadership development should be integrated for maximum effect. These tools should yield a consistent message to employees and enable focus on areas for further development. Unfortunately, some companies use a standard template form and cut-and-paste bullets copied from one evaluation to the next with little value for the rater or the employee looking for development. In the absence of consistent messages to each employee, we increase their sense of chaos in the environment in which they operate.

Two opposing forces are at work that need deliberate leadership: Retain and grow future leaders but improve the bottom line and reduce overhead costs. The top four concerns of executives from Deloitte's 2012 Talent Management Survey[2] results (in descending order by percent responses received):

1. Developing leaders and succession planning (30%)
2. Recruiting hard-to-find skill sets (29%)
3. Sustaining employee engagement/morale (25%)
4. Reducing employee headcount and costs (23%)

Not surprisingly, the style and leadership approach required to reduce employee headcount and costs is often opposite of the approach required for the top three priorities. Without understanding, both leaders and teams may perceive these conflicting approaches as evidence of chaos rather than tools with which to limit chaos.

LEADERSHIP

Done correctly, we empower project level managers and field leaders to improve profit. We can generate a climate open to sharing strengths and weaknesses for the sake of constant improvement. Implementing change effectively in this manner creates adaptable organizations that are not locked into just following orders.

From a leadership development perspective, great construction leaders today display authentic, self-aware leadership in order to build trust and clarity. They do not have all of the answers, but know the right answer lies within the company and put their energies into helping the company develop the best solutions. These leaders must develop and communicate a vision. Their chief skills are understanding, respect and awareness of the people they lead. They maintain agility in the face of changing circumstances around them, keeping vision and people at the front of priorities.

This is one of the most difficult markets to lead a business. There is more importance to helping project management teams develop situational understanding and clarity of a mediocre strategy than having a CEO announce a perfect strategy (if there is such a thing) in a memorandum. Effective change management is generated by great leadership at the top. The vision and culture is set and reinforced continually from this seat. Best-in-class teams often work together to identify effective market strategies and systems to execute effectively. In order to keep effective change and competitiveness in the market, the company must also create situational understanding across the field managers and project teams. Failure to engineer this agility successfully across the company results in an organization headed for a downward spiral, a victim of chaos theory.

During this volatile market, senior leaders lead most effectively by focusing the people in their organizations on controllable factors.

DECONSTRUCTING CHAOS

In essence, great companies in this volatile market recognize great opportunities around them. Uncertainty and lack of clarity can be an impediment, but for companies that can adjust quickly, they can take advantage of this challenge and pull ahead in the market. These companies lead by regularly deconstructing the chaos around them. A mentor once stated that leading an organization during an environment of complexity requires "simple plans repeated clearly and often." The essence of leadership is clear priorities and focused efforts. Steve Jobs once said he was as proud of the products they did not develop as the ones they did.[3] In some ways, the essence of strategy is deciding which initiatives not to pursue. Many in our industry will look back at the past five years and be proud of some projects they did not win. Strategy is about identifying which priorities to focus on and make trade-offs to support. Contractors need to do fewer things — better.

During this volatile market, senior leaders lead most effectively by focusing the people in their organizations on controllable factors. As the great people in our industry are natural-born problem solvers on the jobsite, with effective leadership they can apply the same rigor off the jobsite to the strategic plans and operational designs of the troubled companies that employ them. This combined effort will continue to evolve companies in our industry through the market chaos we face and sustain long-term profitability. ■

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[1] Rothman, D. (2006.) Nonlinear Dynamics I: Chaos. MIT Open Courseware http://ocw.mit.edu (Accessed 12 Feb. 2013).

[2] Deloitte, Talent Edge 2020: Redrafting talent strategies for the uneven recovery.

[3] Morris, B. (2008). Steve Jobs Speaks Out. *Fortune Magazine.*

Paying the Piper: Incentivize Your Get-Work Employees

In a tight market for talented estimators and business developers, employers must provide an environment where the best work acquirers are incentivized and valued.

By Mike Clancy and David Madison

In the past several years, the construction industry has received a re-education in the importance of work acquisition to any successful construction company. Whether your firm is a national construction manager, a regional highway builder or a local mechanical contractor, the ability to sell work is more important than ever.

At the same time, the availability of highly skilled work-acquisition specialists remains tight. Everyone is looking to add a talented senior estimator or a highly effective business developer to the team. If you have one of these people on your staff, you are trying to ensure he or she is happy and not going anywhere.

FMI long has seen a well-designed performance management and incentive compensation program as a valuable tool to attract, retain and motivate the best talent. However, the construction industry as a whole has often struggled in implementing systems to track and manage individual performance. The further away from the field a person is positioned, the more difficult it becomes to quantify his or her (personal?) impact on project success.

In addition, the challenges with incentivizing employees in the sales function are many. It can be difficult to measure their efforts since the behaviors of great business development people, who are spending time out in the market and away from the office, can be indistinguishable at times from someone who is just avoiding the workplace. And when estimating metrics are tied too closely to the idea that the estimator's focus should be "getting bids out the door," they can lead to resulting behaviors that make it tough to land profitable projects.

BASIC ELEMENTS OF A PAY-FOR-PERFORMANCE METHODOLOGY

The first step in developing a strong incentive compensation plan is to develop an understanding of what motivates your employees. Not everyone has the same motivational factors. An employee's preference for money, security, prestige, advancement opportunities and a host of other motivating factors can vary in importance, based on the individual's personal life and career trajectory. It would be a mistake to believe that money works as a universal motivator, or that what incentivizes one estimator will work on all of them. Once you have an understanding of the individual's key motivators, it becomes much easier to drive the intended results by offering the proper mix of rewards.

Change in a business is often intimidating for employees and at no time more threatening than when it affects the employee's paycheck. Implementing a pay-for-performance plan requires a thorough vetting of the new system through scenario planning, gaming likely outcomes and demonstrating to the employee that prior-period payouts would have been enhanced under the contemplated plan. Most importantly, though, management must take the time needed to communicate the plan clearly to all employees affected. Employees who do not understand in detail how their behavior and performance drives their incentive opportunities will tend to perceive any performance management or incentive compensation system as though it were designed with the intent of limiting their compensation opportunities. Implementing the plan will require business managers to put on a "piper" hat of their own and show employees the benefits of the program. If those benefits cannot be communicated easily, or if they seem nebulous, the employees will not trust the program.

It would be a mistake to believe that money works as a universal motivator, or that what incentivizes one estimator will work on all of them.

While all companies would like to believe that they have a clearly articulated strategy behind which the entire company is united, the sad fact is most construction firms are made up of individuals with different levels of understanding of company strategy, conflicting understanding of what deployment of that strategy means in day-to-day action, and often vastly differing personal goals. FMI would argue that the overarching goal of a business development team should be to bring in profitable opportunities that align with the firm's operational capacity, while also supporting the strategic direction of the firm. In other words, not all business that could be developed is necessarily good business.

It is easy to use a three-legged stool analogy in evaluating opportunities to pursue. Any opportunity that is not: 1) profitable work, 2) work that aligns with the operational capabilities, and 3) work that aligns with the strategic direction of the firm, should not be pursued. More importantly, employees should not be rewarded or incentivized for bringing in one- and two-legged opportunities, lest the company's strategy falls prey to individual employees' desires to maximize personal compensation.

UNINTENDED CONSEQUENCES ABOUND

Although this concept seems simple, a poorly structured incentive plan can easily lead to unintended consequences. For the purpose of this article, we have chosen to highlight three of the most common examples of poor plan design. You will notice quickly that these examples correlate closely to our three-legged stool.

Bad Incentive 1: Being paid simply for bringing opportunities to the table or for "winning work" on bid day.

This tends to be the starting position of most firms as they are developing a compensation plan for their work-acquisition employees. While management intuitively senses that it probably is opening itself up for problems by incentivizing work won, the full depth of the issue usually only comes to light after a significant "win" that puts the operations team in a tough situation.

Unintended Consequence: Business development and estimating are rewarded in the short term, but operations struggles to bring the job in at a profit. Over the long term, the firm sacrifices profit for workload. Most firms identify the problem eventually and the "get-work" compensation system is changed, which often results in turnover of those roles. It is common to lose strong operational employees through this process. If their compensation is tied to profitability, they suffer from the resulting bids as well. In frustration, the firm decides that it is impossible to incentivize business development or estimating personnel and moves to discretionary bonuses for these roles.

Bad Incentive 2: The employee is paid for bringing in opportunities that the company will chase rather than opportunities that the firm already pursues.

This is the example of the firm that brings in a business developer with experience in a particular market sector, with the imperative to "go out and bring in opportunities." However, the firm lacks the operational resources or resumé to pursue and prosecute the work effectively.

Unintended Consequence: Business development brings all opportunities, good or bad, to the estimating table, eventually overwhelming the estimating team. An overwhelmed estimating team is a sub-optimal estimating team. The estimators end up bidding a large number of projects that the firm has no capability to perform and no legitimate reason to pursue.

The result is an organization that gets burned out on particular work types. The company comes to the realization that, "We can't win in that market," whether that market is higher education, health care or the public-bid market. The hired gun with the great market sector experience moves on to the next organization and the company returns to its comfort zone of doing the same old things the same old ways.

Business development employees, and work acquisition employees in general, thrive on short-term incentives and immediate results and rewards.

Bad Incentive 3: Business development or estimating employees are paid based on the profitability of a job at completion.

At first blush, this seems to be the right methodology. After all, we want our work-acquisition employees to be focused on bringing in profitable project opportunities. To the extent that they can control the types of projects brought to the table, this sort of incentive should encourage them to bring in the right types of projects.

Unintended Consequence: Business development must wait for its incentive and must rely on operations to deliver the project profitably. Some employees may grow impatient and leave while others may not like putting their incentives in the hands of the operations team.

If there are so many types of pay-for-performance programs that do not work, there must be some similarities between the types of incentives that are typically effective. FMI has seen some commonalities in what works and has identified several performance metrics that can be used to incentivize work-acquisition employees.

WHAT WORKS IN PERFORMANCE MANAGEMENT

Business development employees, and work acquisition employees in general, thrive on short-term incentives and immediate results and rewards. Depending on the nature of the business and the typical duration of jobs, employees may not get the gratification they need to stay motivated and pursue opportunities if they must wait until the end of a project life cycle or a fiscal year. Additionally, if incentives are tied too closely to landing particular projects or customers, undesirable behaviors may be the result. For example, the employee may adjust his or her priorities to maximize incentives rather than to maximize corporate profits (e.g., by over-focusing on those targeted customers and projects to the exclusion of other opportunities).

A well-designed incentive program for business development and estimating keeps the business strategy in mind. It also balances input- and output-driven measurements. An input measurement tracks the effort put in, while an output measurement tracks results. While there are many measurements that can be used, the ones implemented to best effect are listed below. A good performance management program will use several of these criteria to make up a scorecard against which to measure the business developer or estimator.[1]

Business Developer Performance Criteria

- **Time spent in marketing activities per target market segment.** This input measurement tracks the business developer's time spent in various marketing activities.
- **Total marketing dollars (salary and other) invested per targeted market segment.** This input measurement tracks return on the cash invested in developing business in a particular segment.
- **Gross profit dollars earned on key accounts.** This output measurement is an imperfect tool, since it requires the involvement of operations. However, when used as one of several measurement criteria, this is an effective performance metric.
- **New opportunities identified per quarter in a targeted market segment.** An input measurement used in a scorecard for business developers focused on new accounts.
- **New opportunities captured per quarter in a targeted market segment.** Another input measurement used to score business developers charged with exploiting certain market segments.
- **Time invested in proactive relationship development versus project chasing.** A way to measure whether the business developer is spending his or her time on the highest value activities. This is the most subjective factor listed in performance criteria. While totally objective criteria leave less grounds for argument, some subjectivity is inevitable in performance evaluation. Having clear understanding as to what relationship development means and which specific results constitute successful relationship development will go a long way toward reducing future arguments or dissatisfaction by a business developer or supervisor.

Estimator Performance Criteria

- **Dollars left on the table on bid day.** This measures the estimator's market awareness and bid accuracy, and ensures that the estimator does not take work too cheaply.
- **Gross profit won per dollar of estimating expense.** This metric will measure the return on the estimating investment made by the company.

- **Success, or capture, rate in a targeted market segment, project size and type.** This measures the estimator's performance in landing projects based on the project's characteristics and is an important test of market selection strategy. It also can be used to predict future performance in work acquisition based on past performance.
  - For example, if an estimator has a 30% capture rate on projects between $5 million and $20 million in size, the firm can use this information in budgeting based on the likely projects of that size in the marketplace.
- **Budget versus actual variance and profitability in a targeted market segment.** This is another output measurement to test the estimator's ability to develop solid, complete scopes of work.

THE FINAL STEP — TYING PERFORMANCE TO PAY

Once a company has developed a set of scoring criteria for its estimators and business developers that meets it strategic needs, the final step is tying this scorecard to the incentive compensation payout. There are many ways to make this connection, but they all reflect one of two core methodologies — the target bonus and the uncapped commission.

> **As the market for talented estimators and business developers continues to be tight, employers must provide an environment where the best work acquirers are incentivized and valued.**

A target bonus identifies a targeted dollar amount or percentage of salary that is established as a goal for the employee. This targeted amount should be compared to industry averages to ensure the incentive is aligned with what is available for the role in the broader market, lest it be too small to have any effect. In general, FMI has observed targeted bonus ranges between 15% and 25% of salary for estimators, with that range moving upward with the skill and expertise of the employee. For business developers, the range tends to start at 20% to 30% and increases depending on market sector knowledge and experience.

The uncapped commission most commonly is used with business development employees and tends to work best in organizations with strong management and project selection systems. The firm that has a clearly defined strategy and strong selection criteria will be better equipped to ensure that business development employees do not bring in marginal opportunities in an attempt to inflate their compensation artificially.

If a firm intends to commission its work-acquisition employees, a wise strategy is to reduce the commission for each successive project with the same client to ensure continued focus on developing new clients. This also recognizes the reality that while business development may land you the first opportunity with a client, it is the operations staff who secures future work through its performance. Many contractors use a sliding scale, where on the first project with a new client the business developer gets 100% of the target commission. Then, on each successive project, the commission is reduced by 20%, so that after the fifth project, the business development employee is completely out of the equation.

PAYING THE PIPER IS A STRATEGIC IMPERATIVE

As the market for talented estimators and business developers continues to be tight, employers must provide an environment where the best work acquirers are incentivized and valued. It is important to avoid making the kinds of mistakes in implementation seen in other organizations and to stick with metrics that measure the right inputs and outputs. The more your firm's performance management scorecards are set up to measure the right criteria and you incentivize the right behavior in your business developers and estimators, the greater the likelihood you will keep your best people and attract superior talent from the outside. ■

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[1] The role of the estimators is often, but not always, that of a business developer. In other words, not all estimators are business developers, even though they may support the business development effort.

Acquisition Search Best Practices

Choreographed effectively, a smart acquisition can move both the acquiring and the acquired company to the next level.

By Hunt Davis

Running an effective and successful acquisition search is a major undertaking for any business. Acquisitions have always been a means to maximize shareholder value and create a sustainable competitive advantage for firms. However, acquisitions of any size require substantial financial returns to create shareholder value and to justify the significant investment of managerial time, effort and financial resources necessary to complete a transaction. It is important for any firm considering an acquisition search to be aware of the different processes, strategies and best practices.

The current climate is ripe for acquisitions as firms are ready to spend the cash that has accumulated on their balance sheets over the last three years. Buyers are looking to continue to grow, and sellers, shaking off the boom and crash of years past, are back to evaluating their personal situations rather than reacting to economic fear. Identifying strategically valuable candidates can be done with the knowledge of one's objectives and recognizing the key assets being purchased. In service-based industries, like engineering and construction, the key assets in an acquisition include fragile intangibles like customer relationships, the leadership team, operational knowledge and company culture. A mishandled integration process can diminish or eliminate stockholder value and erode an organization's culture and talent.

FORMULATING AN ACQUISITION STRATEGY

At the outset of an acquisition search, the first step is clearly to define a strategy and objectives for the search (see Exhibit 1). Failure to have an explicit strategy can cause the search to feel as if one were trying to take a drink of water from a fire hose. One may come upon so much information that none of it is of any value to the searching firm. Having specific objectives and desired target firm characteristics in mind will increase the probability of a successful search. Different search strategies that a firm may choose to employ include identified target acquisitions, geographic target searches or sector-specific searches.

Exhibit 1
Acquisition Search Steps

While there is no magic formula for acquisition success, firms that make many acquisitions gain expertise simply by learning from past transactions. Some common themes emerge when examining multiple companies' acquisition histories. When formulating an acquisition strategy, consider the following:

- What are the key strengths of the target company? What should you not change?
- What perceived synergies exist between the two companies? Where can you add value?
- What is important to the other company's staff in terms of corporate policies, benefits and culture?
- Does the other company's name hold greater sway in its local market?
- How will the ownership structure of the target company affect the integration process and subsequent organizational structure?
- What are the costs of this acquisition? If you are bringing on new capabilities, will you need expanded facilities and/or overhead to manage them?
- If you plan to integrate the target company fully from the outset, is the cultural match strong enough? Are the operating platforms for accounting, human resources, etc., compatible?
- How can you best use the management of the target company in a new capacity?

IDENTIFIED TARGET ACQUISITION

An identified target transaction involves an acquisition in which the buyer has already identified the target and possibly has already engaged in preliminary discussions. These transactions often occur after the acquirer has become attracted to multiple aspects of the target's business, including brand name, customers, products and market territory.

Determining proper value, negotiating a purchase agreement and performing detailed due diligence are the three key process tasks in this scenario. Acquiring firms should have a clear idea of what they are purchasing, the fair market value of the assets and an understanding of the intangibles, including the management team, culture and brand name. Having this knowledge and key due diligence items enables acquiring firms to formulate the appropriate transaction value, structure and purchase agreement.

GEOGRAPHIC TARGET SEARCH

Geographic expansion can almost immediately result in a larger customer base and additional revenues. A geographic search could be an ancillary geography to grow a company's existing customer base or service area, or an entirely separate geography where there is ample existing work or the expectation for future work.

For this chosen strategy, a firm would combine its knowledge of the players in a chosen geography with additional search methods to formulate a list of potential targets. Resources used to create the prospect list include research databases, trade association memberships and industry relationships.

A high-level, preliminary due diligence study is undertaken prior to contacting the potential targets. This serves to educate the buyer regarding the different firms on the list and the scope of services offered. The list then goes through a "scrubbing" process in which some firms are removed, additional firms are added, and others are marked to hold off on contacting.

The important first step of discussions is the initial contact with the potential target. It is beneficial to have an inside resource with a "foot in the door" at the target firm to increase the chance it would engage in discussions. Potential targets are often hesitant to enter discussions unless they have an existing relationship with the contact or are familiar with the inquiring party. If, after an initial telephone discussion, mutual interest remains, it is in the best interest of the acquiring firm to enter into a non-disclosure agreement to preserve confidentiality and schedule a meeting.

Geographic expansion can almost immediately result in a larger customer base and additional revenues.

Having a meeting at the outset is important for service-oriented industries, such as the engineering and construction industry, as fit and culture are two of the most important aspects of an acquisition where human assets are key to a successful future. Determining whether a strong fit exists should be discerned right away so that poor candidate fits can be eliminated without wasted time, effort and resources. Acquiring firms can then proceed with management meetings, interviews, site visits and data requests to gather information for analysis on targets with a strong fit. Valuation and structure are both secondary in this process, as the intangibles, culture and fit determine the success of the acquisition and integration.

When you are looking into expanding into a new territory by way of an acquisition, understanding the current competitive dynamic is essential in formulating the appropriate target, valuation and integration strategy. Key characteristics of the competitive landscape include understanding market-share information, bidding dynamics, price leaders/laggards and growth prospects of firms and the market itself. To generate the necessary return from expanding into a new market, a firm should conduct an analysis on how much, if any, incremental overhead will be required to continue running the business. Given the specific sector and target, some firms may be able to eliminate some of the "back-office" fixed overhead expenditures. However, the acquiring firm must assess its own overhead infrastructure and determine if it has the ability and capacity to take on the additional work and eliminate certain costs. In other instances, an acquiring firm may require the full and complete overhead infrastructure of the target to make the acquisition successful.

SECTOR-SPECIFIC TARGET SEARCH

Acquisitions can be the quickest way for a firm to expand its service offerings. Motivations for expanding an existing line of services can include going where there is capital spending, seeking vertical integration or simply diversification. The search process is run in the same manner as that used in exploring new geographies. Target lists are compiled and preliminary due diligence is conducted using research, company websites and industry knowledge to learn about potential targets. Considerable benefit accrues from involving someone in this search with a comprehensive knowledge of the services that the acquiring firm seeks to add. Often, firms looking to diversify also must explore new geographies for an acquisition, adding an additional level of due diligence to analyze and understand the region.

Vertical integration is a primary driver for companies desiring to add a new level of services. Acquisitions afford a firm the ability to quickly add and incorporate a new service into its business without having to generate the growth organically. Once again, overhead costs can influence the success or failure of the acquisition. Questions needing answers include the need for additional infrastructure support, managerial capacity to handle new services and the strategic benefits to be gained. Successful vertically integrated businesses are desirable as they can achieve favorable valuations at the point where ownership is ready to sell.

> **Acquisitions afford a firm the ability to quickly add and incorporate a new service into its business without having to generate the growth organically.**

CONCLUSION

Outside advisors with industry knowledge can bring significant value to a firm seeking to begin an acquisition search process. Timing is a vital issue in any successful acquisition as both buyer and seller must have proper motivation simultaneously. An industry-focused advisor brings specific knowledge and relationships that the firm can leverage to quickly identify strong potential target firms. Advisors often spend years cultivating relationships with buyers and sellers to be able to match them when the timing is right. Furthermore, a third party can act as a screen when contacting potential targets, preserving confidentiality and maximizing efficiency for acquiring firms.

Acquisition search strategies should be well developed at the beginning of the engagement to maximize the effectiveness and efficiency of the search. The search and subsequent acquisition process requires a substantial investment of a firm's managerial time, persistence and financial resources. Buyers need to be serious when engaging a potential target as they are approaching sellers hoping for an exclusive deal. Additional industry best practices for handling acquisitions include:

- Evaluate multiple transaction structures, such as asset sale versus stock sale and potential for 338(h) (10) election.
- Ensure that there are clear gains on either side of the equation. Determine what the target company has to achieve by joining your firm.
- Get to know the people who comprise the target company. Ensure that there is a strong cultural fit prior to completing the acquisition.
- Incentivize key staff post-acquisition to ensure their commitment and loyalty to the new company structure.

The growth of global mega-firms during the past decade has skewed attention toward ever-larger acquisitions in foreign markets, but strong domestic firms have much to gain through acquisitions also. The game is always changing, and small or medium-sized firms can capitalize upon the existing market presence of an acquired firm to move into new markets or expand their service offerings. Firms that are not highly acquisitive, but have a solid rationale for a purchase, should take heed to lessons learned by others, invest in formulating the acquisition strategy, and go for it. There is great value in organic growth; however, certain situations are better-suited for acquisitive growth. Choreographed effectively, a smart acquisition can move both the acquiring and the acquired company to the next level. ■

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Reputation Counts: Create a Culture of Safety in Your Company

The best safety programs within the best companies are ones that are run by management, not run by a safety department.

By Kelley Chisholm

FMI had the pleasure of speaking with Dale Dhooge, senior risk engineer at Zurich Construction, N.A., about how important it is for contractors to have a great safety record and solid reputation in order to get work.

Chisholm: How does a company incorporate risk management and safety into its marketing efforts?

Dhooge: If you look at things from the owners' perspectives, companies want to hire contractors and subcontractors that do not have safety issues and have a good reputation in the community. There is no faster way for a contractor to tarnish its public image than to have safety issues within the community, whether it is with the media, regulatory agencies or by word of mouth.

Chisholm: Let's say a company does have safety issues. How does it go about repairing its reputation?

Dhooge: First off, I think the management of the company must recognize that it needs to improve, and this starts first and foremost with senior leaders understanding that they need to enable the change to happen. Essentially, the management team must create a clear and visible expectation of safety. Reinforcement of the importance of safety throughout the organization is only achieved through personal accountability, commitment and involvement. The leaders of the organization must take part in the creation of the strategies, systems and methods for achieving high performance in safety. Visible engagement with the workforce is crucial.

All measurements, such as accidents, losses, experience modification rates (EMRs), etc., are outputs of a safety process. Management enables things to occur and targets areas to improve. Upper managers should ensure they define safety responsibilities of their line and middle management, measure the results of those responsibilities, and reward them for doing the right things. An advance level of safety will not happen without appropriate motivation. This includes an annual evaluation as part of the performance appraisal, reward and recognition systems, and applicable disciplinary actions if safety rules are violated or unsafe acts are not corrected quickly. Appropriate motivation must drive continuous improvement. An effective safety management system will result in visible improvement.

Chisholm: Who is responsible for the day-to-day implementation of the safety system?

Dhooge: Line management is responsible and accountable for the implementation of the safety system on a day-to-day basis. These individuals must set the example and communicate expectations to all employees that safety is an essential value. Line management must deliver the goals, expectations and improvement plans to the employees, with appropriate feedback mechanisms and employee involvement to ensure that results are achieved.

Training individuals who work within the organization is an integral component in the safety management system. This includes skills training, functional training, management awareness, basic safety awareness and injury/incident investigation. Each individual within the organization must know his or her role and responsibilities and how to undertake specific duties in order to ensure that the safety system runs effectively and efficiently.

Training individuals who work within the organization is an integral component in the safety management system.

Chisholm: How does Zurich help companies achieve this?

Dhooge: From the risk management perspective, we work with companies to help them understand opportunities they may have and get management onboard in leading the improvement process. We try to engage them upfront, because to change a company, management must understand and recognize that that change needs to occur.

We help managers understand that they need to have a safety dashboard that tells them if they are in or out of control on every project, just as they do with scheduling, budget and everything else. They need to manage it the same way as the other critical functions in their organization.

MANAGEMENT ACCOUNTABILITY AND BEHAVIOR CREATES A SAFETY CULTURE FOR EMPLOYEES

Management accountability drives managers to take proactive actions daily. This behavior creates a culture where “safety is so important, that all managers must do something about it every day.” When employees witness management’s behavior, their behaviors will follow.

Management Accountability. The term “accountability” means defining specific, activity-based objectives that must be met, measuring performance to determine if the objectives are being met and rewarding performance for meeting the objectives.

Two tools are used to measure safety performance: (1) activity measurements and (2) results measurements. Activity measures are used to determine what management is doing to prevent accidents from occurring. Results measures are used to assess the outcomes of the manager's actions (leading and lagging indicators).

Activity Measurements Examples	Results Measurements Examples	
	Leading Indicators	Lagging Indicators
• Are safety meetings being held? • Are safety inspections being done? • Is safety training being conducted? • Are accidents being investigated? • Are safety one-on-ones being held with employees?	• Are people working more safely than before? • Are physical conditions improving? • Are perception survey results improving?	• Are there fewer accidents than before? • Recordable • DACs or LDCs • First Aids

Management Behavior. If management values and believes in safety, its actions will demonstrate it. Some examples of management behavior include:

- What does management pay attention to? Does it give as much attention to safety as it does to quality, production and schedule? Does it review safety indicators?
- Does management ignore poor housekeeping? Does it allow witnessed, unsafe work practices to continue without addressing? Is safety mentioned in organizational meetings?
- How is management measured? Is production more important than employee safety in the evaluation process?

Safety Culture. Once management exhibits its commitment to safety, the cultural boundaries for safety are formed. Changes in safety culture that exhibit management commitment include a paradigm shift:

- From top-down control to bottom-up involvement
- From failure-oriented to achievement-oriented
- From fault-finding to fact-finding
- From lagging indicators to leading indicators

The safety culture is an ever-evolving and changing environment, dependent upon both management and employee behavior. If management behavior does not actively demonstrate that it values the health and safety of its employees, the cycle will be broken and unsafe employee behavior will follow.

Employee Behavior. Once employees truly believe that management is committed to safety and is held accountable for the provision of a safe workplace, employee behavior will change.

- Employees feel responsible for safety and do something about it on a daily basis.
- Employees go beyond the call to identify unsafe conditions and unsafe behaviors, and they intervene to correct them.
- Managers and peers support safe employee behavior with rewarding feedback.
- Employees feel responsible for the safety of their co-workers as well as themselves.

Chisholm: How does Zurich go about using risk management to promote its marketing?

Dhooge: We have a group of risk engineers and tools available to help bring the top level of safety to the companies that we work with. These risk engineers will work to put in place the safety processes and systems.

Chisholm: Can you go into more specifics about some of the tools that you use?

Dhooge: We look at the management processes involved. Whether we use Zurich's X-Ray or other similar safety management process assessments, we have products that dissect the management function and the safety process when it comes to the risk management processes of a company. Zurich Hazard Analysis is the ideal process for identifying, analyzing and addressing hazards and thus to reveal your risk exposure.

Zurich has tools that look at all of a company's processes and define what the hazards are in order to minimize those hazards and bring down the risk profile. We offer training classes and have many different programs we can put in place to help reduce the risks. The management of the company must embrace the need to improve. Zurich then can give them the tools that make it easy for managers to have the information to be involved in their safety system.

Chisholm: What is the Zurich Hazard Analysis?

Dhooge: The Zurich Hazard Analysis is a powerful methodology to systematically identify, address and manage all types of hazards or vulnerabilities and to address and manage the corresponding risks. We have been successfully applying and using it within our own company and with our customers for more than 20 years in various industries, commercial enterprises and, more recently, in the financial services industry as well as in public entities.

Chisholm: How long does the hazard analysis take?

Dhooge: It highly depends on the scope of the analysis. If we want to look at a simple overview of the management process, we have some assessments that would take about a day. This is an interview-type process where we talk to different levels of the organization to get an understanding of what their perceptions are of management involvement and progressive motivations. It's amazing when you have these simple conversations with people and you understand that, well, management may think that they're held responsible, but the people that are actually out there in the field don't even realize that they have some of these responsibilities.

Chisholm: Once you do the analysis, what is the next step?

Dhooge: We produce a report that gives examples of areas that you have opportunities to improve upon, with very specific outputs. If you do what is recommended, you are going to minimize this risk or improve this area within your safety system. Much of it is around communication, expectation setting, management involvement and, most importantly, a progressive motivation or accountability process in a company.

For example, if you measure proactive activities of supervisors, such as holding meetings, doing inspections and performing training — the whole idea is that they are going to do them more often, and their actions change the culture within the organization. It's not the words — it's the actions that are observed by employees that change the culture. You are moving the culture of the company by defining specific activities, measuring those activities and holding people responsible to do them.

The best safety programs within the best companies are ones that are run by management, not run by a safety department.

Chisholm: During the recession, with the reduction of the infrastructure and staff, did you see an increase in safety incidents and accidents?

Dhooge: My opinion is the best safety programs within the best companies are ones that are run by management, not run by a safety department. They may be supported by the safety department, which makes it easy for management to be involved.

I think most companies kept their best employees and I believe the projects and safety have gotten better because they have had their "A-Team" employees in charge and understand how important it is to have safety run from the management of the company. Any time you go through growth, you need to have a plan for involvement of the organization. I believe companies are going to begin to hire more and more people now, and getting people ingrained in that process and up to speed is always a challenge, and it takes some additional infrastructure to do that.

Chisholm: In addition to getting management onboard, what are some other things you need to do to ingrain safety into one's culture?

Dhooge: Each level in the organization should understand its two or three specific items that need to be done for safety that week, that month. Leadership, from senior management to the line supervision, should not have trouble answering the question, "What is your role in the safety process?" Whether leaders are talking to a project manager, superintendent, middle manager, director or VP, if they cannot answer, "A, B and C," there is a huge opportunity for them to start doing some very specific things to promote a safety culture.

For example, if you're a vice president, maybe you speak for a few minutes at a safety meeting, have lunch with some of the subs and ask how safety's going on their project. Then, as you get closer to the project, that is where the superintendent or foreman might do the actual audits or inspections. However, everybody should have defined two or three things he or she does to show involvement in the safety process. If you measure those two or three things, that's where you can start having more leading indicators, activity-based indicators, again versus those lagging results, which essentially is the output of a process.

We give management the tools to understand that there is opportunity for improvement, whether it is through benchmarking, doing an audit or assessment, or defining some actions.

Chisholm: With Zurich being a global company, is there a different approach to safety from North America to other parts of the world?

Dhooge: I think we still want to influence management to be involved and do the right things. There are certainly some different tools we may use, depending on the cultures that we're working in. But our overall process and mindset is continuous improvement from the risk management perspective, which starts with getting the enablement of management in a company — that they need to recognize that they need to improve. We give management the tools to understand that there is opportunity for improvement, whether it is through benchmarking, doing an audit or assessment, or defining some actions. The first thing is to make management realize that they can enable that change to happen. Again, results are an output of a process. To enable change, management needs to be involved and understand it, and then we can start moving to that phase of improvement.

Chisholm: Do you see where any language differences make a difference, specifically in the United States?

Dhooge: Depending on the types of work being done, I think there is certainly opportunity to have miscommunication, but I think similar things apply: Just showing the involvement and that management cares makes it important. It doesn't take long when you're in an organization to understand what people really care about, and that's why it's so important to get management engaged in this process. So it's not a safety group or a risk management group that's running it; it's the people that run the operations that have a vested interest in and show the actions to the whole organization. As far as the communication goes, that obviously has to occur, and we have to have the right tools in place so people understand the communication.

Chisholm: What kind of changes have you seen in the industry since you started, in regards to safety? Has technology played a part?

Dhooge: Yes, I think it really has. It's making the communication and the collection of the information much easier. Before, if people were doing certain types of processes, they would be collecting them on cards or papers. Now there are many online methods — on smartphones or other types of tools — that collect that information. So the collection of the information is just easier for the companies that are using that technology.

Chisholm: Thank you for your insights on creating a safety culture in one's firm.

Owners want to hire contractors that do not have safety issues. To establish a companywide safety culture, top management must lead the way and be proactive in its approach to safety. ■

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A Case for Optimism in the U.S. Construction Industry

The idea that North American energy independence is achievable has major geopolitical implications for our country.

By W. Chris Daum

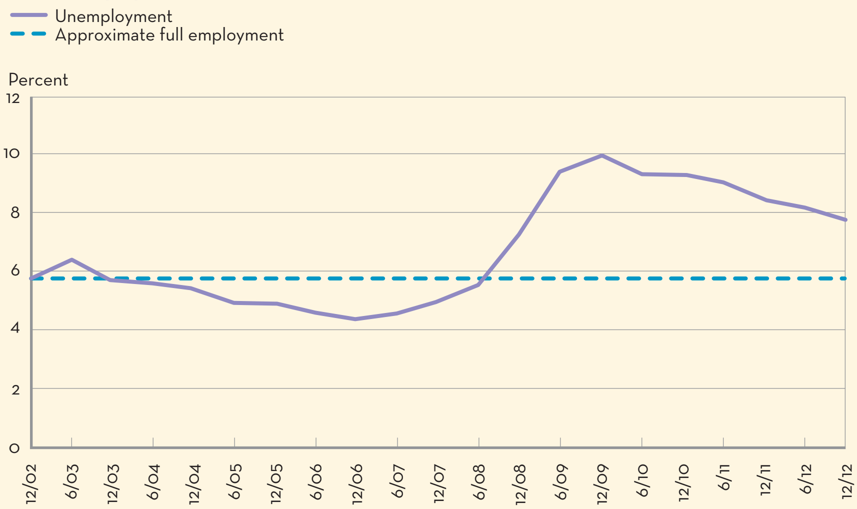
The construction industry downturn that followed the Great Recession proved to be the most severe and prolonged decline in most of our lifetimes. For the last 24 months, most of our industry has bumped along the bottom of the cycle and has shown few signs, if any, of a pending, robust recovery.

Meanwhile, the adversarial political climate in Washington and ineffectual federal policies have failed to stimulate strong Gross Domestic Product (GDP) growth and rising employment, but have managed to increase the national debt to more than $16 trillion — equivalent to the total U.S. annual GDP.

LOSS OF MIDDLE-SKILL JOBS

The broader economy is not performing much better. The federal government's official unemployment rate as of March 13, 2013, was 7.7%, and the real unemployment rate is likely closer to 10% (see Exhibit 1). Moreover, manufacturing employment in the U.S. has declined by 19.6%, or 2.9 million jobs, over the past decade. Since the end of the Great Recession in June 2009, the manufacturing sector has added only 230,000 jobs. The loss of manufacturing and other middle-skill jobs in the U.S. workforce is a primary factor behind our nation's shrinking middle class, which has been the mainstay of our economy for a century.

Exhibit 1
U.S. Unemployment



IS AMERICA IN DECLINE?

Instead of optimism, editorial pages and cable news talk shows continuously debate the decline of America's political and economic leadership, while touting the rise of China and other developing economies. A December 9, 2012, Washington Post editorial made the case that the economy has created a "lost generation," and a 2012 Gallup Poll reported 53% of Americans consider China the world's dominant economy. Can this be true? Is the U.S. a declining economic power?

The answer to such questions in the past usually came in the form of robust recovery that time after time propelled the U.S. forward as the world's largest economy. Since WWII, the main drivers of each recovery have been federal spending, technical innovation, residential housing and/or consumer spending. Unfortunately, none of these forces will be the catalyst to get America and its construction economy growing faster in 2013.

NO MORE FEDERAL STIMULUS

In order to have sustained economic growth with full employment (less than 6.5% unemployment), U.S. GDP growth must rise to more than 3%. It is clear that federal stimulus spending and a decade-long funding of two wars has had limited, if any, sustained impact on the private-sector economy. Looking ahead, as the political drama of sequester plays out in Washington, D.C., it is fairly safe to assume that further government stimulus, let alone a robust multiyear transportation bill, are highly unlikely. In the near term, federal spending is unlikely to be the next driver of engineering and construction activity.

NO REPLAY OF THE TECH BUBBLE OR REAL ESTATE BOOM

In the first half of the 1990s, rapid growth of information technology, together with a strong stock market, resulted in a sustained business investment in technology and capital equipment, which drove U.S. economic expansion. Growth during the second half of the decade was fueled largely by a sharp rise in consumer spending and productivity gains from information technology. Following the brief "tech recession" of 2001, the residential housing sector, fueled by federal policies that kept interest rates low and cheap credit available, drove economic growth.

It has been seven years since residential construction took a nosedive into an empty swimming pool. In spite of unprecedented devaluations of residential real estate and years of historically low mortgage rates, annual housing starts remain less than 50% of their historical norms and only recently have been trending higher. Furthermore, even though housing affordability remains near its all-time high, 50 million homeowners remain behind in their mortgages. That the housing market is beginning to recover is a positive sign, but any substantial upturn will be a byproduct of falling unemployment and rising wages.

RECORD HIGH CONSUMER DEBT

American consumers have shed $1.3 trillion, or 10%, of housing (mortgage) debt since 2008. The federal government, mortgage bondholders and U.S. banking industry absorbed these losses. Unfortunately, U.S. households still owe more than $11.3 trillion in total debt, an amount that is 50% more than a decade ago. Non-mortgage consumer debt has recently reached an all-time record level of $2.8 trillion, due mainly to increases in student and auto loans. At the macro level, the American consumer is tapped out, if not under water financially. Unless wages rise and unemployment falls dramatically, consumer spending will not be a catalyst that drives the construction industry.

IN DEFENSE OF THE U.S. ECONOMY

While it may be a safe conclusion that none of the above factors will drive strong growth in the near term, it is too soon to wave the white flag and surrender U.S. economic dominance to the world's other economies. For instance, Goldman Sachs pointed out the following statistics in its recent "2013 Outlook."

- U.S. economic output is more than 2.0 times that of China, 2.5 times of Japan and 4.5 times of Germany.
- The U.S. has 5.0 times the arable land of China and 2.0 times that of Brazil. Only Russia has more arable land and water resources than the United States.
- American stocks outperformed European, Japanese and emerging economy stocks by a wide margin from 2009 through 2012.
- The U.S. leads the world in innovation and performs the largest amount of research and development (31%).
- The U.S. still has a young and growing population of skilled workers compared to China, Japan and Russia. By 2035, China will have more people older than 65 than the United State population — and China has almost no social welfare structure.
- A Gallup Poll of 151 countries reported that among those people seeking to move, the U.S. is the top destination of choice.

How will the U.S. economy remain pre-eminent in the years ahead, and what will drive economic growth and construction spending? The answer is both unconventional and promising.

THE CASE FOR AN UNCONVENTIONAL RECOVERY

The U.S. possesses some of world's largest reserves of oil and natural gas. This fact has been known for decades. The challenge always has been how to extract the resources economically. Fortunately, recent technical advances in horizontal drilling and recovery methods involving hydraulic fracturing have made these resources accessible, transforming the global energy landscape and, more importantly, the U.S. economy. U.S. oil and gas production is booming and will have a major effect on nearly all sectors of the economy, particularly engineering and construction. While there is vocal opposition to hydraulic fracturing due to concern over potential groundwater contamination as well as air quality issues associated with drilling near population centers, these environmental challenges have had little or no effect in slowing the rate of domestic exploration and production.

U.S. oil and gas production is booming and will have a major effect on nearly all sectors of the economy, particularly engineering and construction.

TRADITIONAL PARADIGMS CONCERNING THE U.S. AND ENERGY

The U.S. is both a producer and the world's largest consumer of crude oil products. U.S. oil consumption has exceeded production for decades, resulting in the country being a net importer of oil. Similarly, although the U.S. has one of the largest proven reserves of natural gas, it is a net importer of liquefied natural gas (LNG). Natural Gas Liquids (NGLs) from crude oil (associated gases) and natural gas production are valuable due to their use in petrochemical-based manufacturing. The U.S. is a large producer and supplier of NGLs to both domestic and international petrochemical manufacturers.

For decades, the established paradigm has been that the U.S. is dependent on imported foreign oil and increasingly less competitive against foreign suppliers and manufacturers of petrochemical and petroleum-based manufactured goods. As a result, the country's petroleum and downstream petrochemical infrastructure has been in steady decline, due to underinvestment caused by competitive inequities and other factors, such as cost-prohibitive environmental regulations. Until recently, politicians, economists and corporate strategists assumed these trends were irreversible.

Fortunately, the established paradigm no longer holds true.

THE U.S. BECOMES THE WORLD'S LARGEST PRODUCER OF LIQUID PETROLEUM PRODUCTS

Much of the U.S. oil and gas reserves is trapped in tight formations called shale plays. Recent innovations in horizontal drilling technologies and hydraulic fracturing methods allow U.S. exploration and production companies to cost effectively extract crude oil, liquid petroleum gases (LPG) and natural gas from these shale plays. The ability to extract these resources economically has profound global implications.

Development activity in these oil and gas or gas-only shale plays is well under way, which is driving up domestic production. Exhibit 2 shows the relative size and approximate number of remaining locations to be developed within six of the most prominent U.S. shale plays.

U.S. crude oil imports have declined by more than 2 million barrels per day since 2005. During this period, the U.S. has gone from being a net importer to a net exporter of refined petroleum products (see Exhibit 3). More significantly, the U.S. is now second only to Saudi Arabia as the world's low-cost producer of ethane, a natural gas liquid (NGL) that is the primary "building block" for the

Exhibit 2

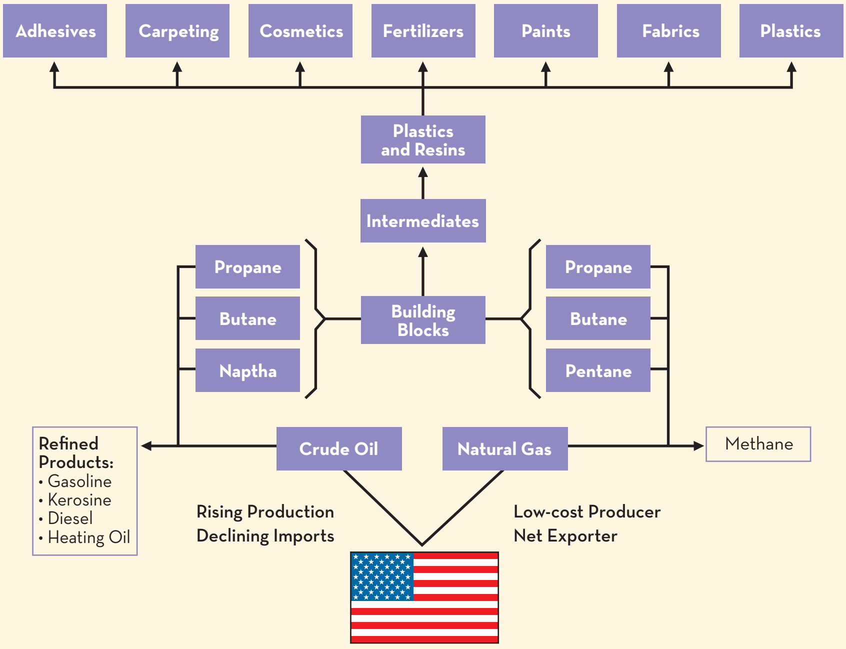
Six Prominent U.S. Shale Plays

Shale Play	Acres Millions	Remaining Locations	Wells/Year	Years Remaining
Eagle Ford	10.0	100,000	2,500	40
Mississippian Lime	6.5	30,000+	600	50
Barnett	4.0	30,000	1,000	30
Haynesford	3.5	50,000	1,000	30
Utica	15.0	175,000	1,650	100
Marcellus	13.0	50,000	600	80
Bakken	9.4	45,000	1,000	45

Source: Enterprise Products Partners, LP and FMI estimates

Exhibit 3

Petrochemical Value Chain



many intermediate chemicals, plastics and resins used to manufacturer thousands of consumer products.

Natural gas prices in the U.S. are one-fifth of the cost in Western Europe and one-eighth the cost in China. The economic implications for U.S.-based energy producers, the petrochemical industry, utilities and industrial manufacturers are enormous.

ENERGY IS THE NEW DRIVER OF U.S. ENGINEERING AND CONSTRUCTION

The benefits of increased domestic energy production extend well beyond the U.S. oil and gas industry and are having an immediate positive impact on U.S. heavy industry, power generation, transportation and consumer product manufacturing. These activities are being funded by private-sector investment and are having significant economic impact on a growing number of regions throughout the United States. This private-sector-funded activity will be the lead driver of growth in U.S. engineering and construction activity for the next several years. The following are a few relevant facts to consider:

- The U.S. has more than 100 years of proven natural gas reserves. The amount of reserves continues to grow each year. Much of these reserves is in unconventional shale plays in parts of the country that lack exploration and production infrastructure.
- There is a massive build-out of oil and gas infrastructure under way, including production wells, gathering pipelines, gas process facilities, takeaway pipelines, compressor stations, transmission pipelines, fractionation plants and downstream processing and refinery facilities.
- U.S. consumption of liquid petroleum products is projected to remain fairly constant over the next decade, according to the U.S. Energy Information Agency and PIRA Energy Group.
- The U.S. is on pace to achieve near energy independence as early as 2020. By then, any shortfall in crude oil consumption will be sourced from Canada or Mexico.
- Over the past seven years, the U.S. has gone from being a high-cost producer to the world's low-cost producer of natural gas liquids (NGLs). The U.S. is both a consumer and exporter of NGLs and refined petroleum products.
- NGLs are the primary feedstock in petrochemical manufacturing. NGLs and electricity account for as much as 80% of the total input cost.
- There are approximately 4,700 major industrial capital and maintenance projects under way in 2013, totaling $285 billion. $55 billion of these projects are located in Texas and Louisiana.
- Natural gas (methane) is a low-cost fuel source for power generation and has fewer emissions than coal. Natural gas is forecast to account for 80% of all added generating capacity through 2035.
- The majority of the 12 U.S.-based LNG import terminals are idle due to abundant domestic supply — operators of these terminals are seeking to convert these facilities to handle export of LNG and refined products.
- There is currently no global market for natural gas, and U.S. exports of liquefied natural gas (LNG) are restricted to re-export of imported LNG —

only at three facilities in Texas and Louisiana. New export terminal permits have been filed in the Northeast and Pacific Northwest.
- Global demand for energy outside the U.S. will grow by 33% through 2035.
- Worldwide demand for electricity will increase by 70% by 2035.
- U.S. coal exports have grown by more than 100% in the previous three years as European and Asian demand continues to rise. There are currently nine new export facilities planned in the continental U.S.

The implications of these energy-related trends for the U.S. engineering and construction industry are significant. Design firms, pipeline contractors and multitrade industrial firms are experiencing tremendous demand for their services. Many U.S. and Canadian pipeline and industrial firms are growing as much as 50% per year. Already there is a growing level of concern regarding how to address shortages of skilled labor in both Western Canada and the U.S. Gulf region.

OPPORTUNITIES FOR NORTH AMERICAN DESIGN AND CONSTRUCTION FIRMS

Growth opportunities for North American engineering and construction firms extend well beyond the oil and gas and downstream refinery markets. Consider the strategic and business development implications of the following trends and scenarios:

TREND 1: Unprecedented capital investment in industrial infrastructure

Five ethane plants totaling $35 billion of construction are slated for the Texas Gulf Coast. These plants alone will consume an extraordinary amount of open-shop industrial trade labor, raising the following questions:

- What are the implications to owners with additional projects in development, in respect to securing available labor and controlling costs?
- Will wage inflation due to skilled labor shortages along the Gulf Coast pull open-shop labor away from Western Canada and other parts of the United States?
- Are there opportunities for self-performing union firms to offer compelling value propositions in open-shop markets due to having negotiated wage rates and the ability to scale?
- What do Canadian owners do to source qualified skilled labor to projects in the oil sands if U.S. labor supply is tight?

TREND 2: Current and potential revitalization of stagnant or declining regional economies

In addition to Texas and Oklahoma, much of the new unconventional oil and gas production is taking place in regions of the country where there is limited infrastructure. The regions include the Bakken Shale play in North Dakota and Montana, Utica Shale in Ohio and Marcellus Shale in Pennsylvania. Questions to consider include:

- In addition to upstream and midstream energy construction (pipelines, stations and processing plants), what are the civil, residential and commercial construction opportunities for housing, retail, education and civil infrastructure in these markets?

- North Dakota's population is growing for the first time in decades. What about population centers in North Central Pennsylvania and Western New York, such as Elmira, Corning, Binghamton, Scranton and Wilkes-Barre? These declining industrial towns are being revitalized based on a new energy-based economy.

TREND 3: The transition of North America toward energy independence

North America is moving rapidly toward energy independence, and the U.S. may soon become the largest producer of liquid petroleum in the world and a net exporter of LNG and natural gas liquids. The advantages of low-cost electricity and petrochemical feedstocks are drawing petrochemical, chemical and industrial manufacturing back to the United States. Consider the following:

- How likely are these predictions of a major U.S. manufacturing renaissance to come true, and what is the implication for U.S. industrial construction for the next decade?
- Much of the oil and gas production is taking place in the Upper Plains and Midwestern regions that are traditional strongholds of middle-skill union labor. Is this an opportunity for these industrial communities and labor organizations to reverse years of decline through proactive measures to capitalize on these trends?
- Other than the Gulf Coast, where will industrial manufacturers, such as BASF, Dow, Dupont, General Electric and Air Products, invest?
- How will the transition by the U.S. market from a net importer of energy to a net exporter of energy affect global trade and national defense priorities?

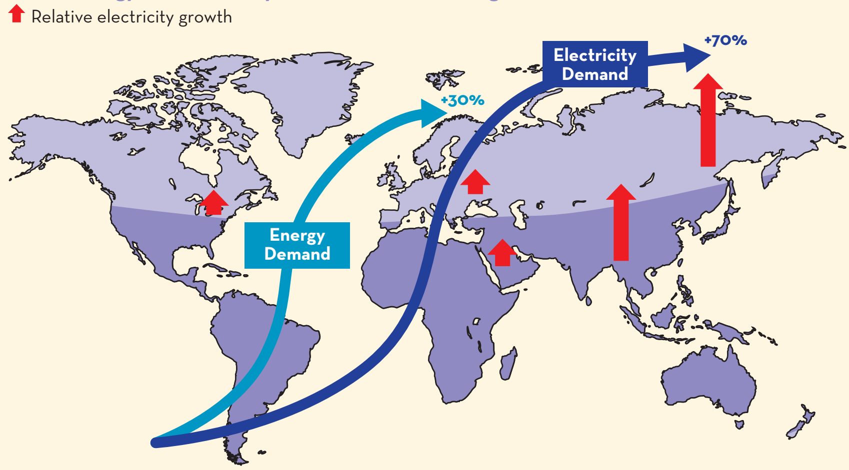
TREND 4: A sustainable competitive advantage for U.S. manufacturing

China, India and other large population countries with expanding economies and rising middle-class populations have tremendous demand for electricity and energy (see Exhibit 4). North America has an abundance of coal and cheap and cleaner-burning natural gas and major cost advantages over China and India, which have neither asset.

- How will the balance of trade manufacturing output be affected by this new reality?
- Will U.S. coal-fired power plants be decommissioned or converted to natural gas faster than current predictions? What are the implications for design and construction of simple and combined cycle power generation and associated transmission and substation construction?
- What is the impact overall for the growth of renewal generation from wind, solar and biomass, with U.S. carbon emissions declining due to energy conservation initiatives and the growth of natural gas as a primary fuel source?

Exhibit 4

Global Energy and Electricity Demand Growth Through 2035



Source: International Energy Agency, December 2012

TREND 5: Private investment in U.S. transportation and port infrastructure

Oil transportation via truck and rail is scaling rapidly. Oil and petroleum transported by rail grew 46% in 2012. There are nine new coal export facilities planned in the U.S. and five existing plants undergoing expansion. There are at least five new export terminals in the permitting process, two newly approved LNG storage terminals in Mississippi and several more on the horizon. The total investment in intermodal transportation and port infrastructure totals in the tens of billions of dollars.

- How can design and construction firms that lack intermodal transportation, marine and port infrastructure experience participate in these markets?

CONCLUSION

The previous recession was severe and the recovery for the engineering and construction industry has been slow. However, the potential for a sustained recovery led by private-sector investment in energy infrastructure is becoming more of a reality each month. The idea that North American energy independence is achievable has major geopolitical implications for our country. The fact that the U.S. is on the verge of being a net exporter of oil and gas to energy-dependent and fast-growing developing countries makes U.S. industry globally competitive and could very well be the solution to our national debt, trade deficit and employment challenges. Knowing that the U.S. engineering and construction firms are primary beneficiaries of these emerging trends is reason to be optimistic that a strong recovery for our industry is under way. ■

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Marvelous Things You Ought to Know About Negotiations

Excerpted from the new book "Negotiate With Confidence: Field-Tested Ways To Get the Value You Deserve"[1] by FMI division manager Steven J. Isaacs.

By Steve Isaacs

In this chapter of Steve's book, he discusses five practical tips that will help make a negotiation more successful. These concepts are based on his direct experience in the field as a design firm leader, conducting hundreds of negotiations.

NUMBER OF PEOPLE TO TAKE TO A NEGOTIATION

How many people should you bring to a negotiation?

An old hit song says that, "One is the loneliest number that you'll ever do." This is really true. There is so much going on during a negotiation:

- Remembering your interests
- Focusing on their interests
- Controlling your own behavior
- Watching their behavior ...

... that the concept of going alone is clearly a weak idea.

What about bringing a larger group, say six or seven people? Even during a simple role-playing exercise in my FMI Effective Negotiations class it is impossible to get that many people to stay on the same page. In a group that size, the entire group may not share the same interests, even though they represent one firm. Also, the more people you have, the more likely that someone will say the wrong thing, publicly disagree with his own team, or commit some other faux pas that detracts from the negotiation.

The beauty of sending three to a negotiation is that one person can track your firm's interests, one can keep track of the other side's interests, and the third person can be the observer.

If your choices are to go alone or go with six people, the loner has the advantage over the group.

The song goes on to say that, "Two can be as bad as one, it's the loneliest number since the number one."

Sending two people to a negotiation offers opportunities for each individual to have a better view of all aspects of the negotiation, both the substance of the discussion and the behavior — but then who is watching out for your interests?

The beauty of sending three to a negotiation is that one person can track your firm's interests, one can keep track of the other side's interests, and the third person can be the observer. It is the observer's role to stay out of the action and watch the dynamics. The observer on your team is almost always the one to recommend a time out or a trip to the balcony. This may seem like you are sending someone along to simply sit there, but having an observer is key, as shown in the Case Study: The Importance of Bringing an Observer.

SPEED AND PACING

Have you ever sent a proposal in to a client that has not responded back to you for weeks or months? Suddenly a call comes in from them, usually on Friday at about 11:00 a.m. You've got people sitting and waiting to get to work on this project, and now the call comes and the client says, "Oh my gosh, I'm sorry I haven't called you but we're ready to go, we want to start on Monday. Just take ten percent off the fee and we can get this thing started."

Have you ever had a call like this? It's a trick. They know you have people sitting and waiting. They are hoping you're so anxious to get them working that you're going to rush into an agreement without thinking and say, "Yes." This ties back to the rule we discussed earlier in the book, Don't React.

So what do you do in this situation? I had one of these calls from a client in another part of the state.

"That's great," I said. "We want to get started on Monday, too. I'll be there in three hours."

CASE STUDY: THE IMPORTANCE OF BRINGING AN OBSERVER

I went with a team from my firm on a trip to China to negotiate with an organization. There was a translator working with us. The leader of my firm and the leader of the Chinese organization were speaking to each other through the translator, and I was the team observer.

As I watched the leader of the Chinese organization, it became obvious to me that he understood English. He was using the time that the translator spent explaining what we had said to come up with responses. The effect of this was that he responded to us very quickly after the translator finished, speeding up the pace and making my team feel pressured. We were struggling to come up with responses as quickly as he did, but did not have the advantage of time to think things through.

As the observer I called a break, took my team out of the room, and explained what I had observed. They were so focused on following the conversation that they had not observed the other side closely enough to see what I saw.

We needed to shift tactics to even out the advantage of the other side, so we stopped trying to respond immediately after the translator had finished as the other side was doing — we slowed down our responses and made sure we took adequate time to be thoughtful.

"What are you coming here for?" they asked.

"Well, clearly we've opened up the negotiation and it's urgent. I'll be there in three hours. I'll just run to the airport, get on a shuttle and I'll be there. If this is urgent and you need to start on Monday, I want to help you out."

"Maybe we can meet next week," they said.

"Okay, I thought it was urgent, but if you want to meet next week that's okay," I said.

In the back of your mind you may be thinking, "Well, can't I just give in on this so we can start on Monday?" But remember, it's a trick, they don't really need to start on Monday, and your response is, "No, we have to sit down and talk about this." It may come in different forms, but it is a trick. Call them on it.

At the start of the Effective Negotiations class I always ask the students to list their expectations for the class. We write them on a flip chart and hang it on the wall for the duration of the program. In one of the classes a student said his goal was to "learn to negotiate faster."

After going through the first day of lessons and exercises, this student walked to the front of the room, crossed out the word "faster" and changed it to "learn to negotiate slower".

One of the fundamental tactics of a positional negotiator is that of pushing to go fast during the negotiation.

If you remember our section on preparation, we discussed the value of taking the time required for preparation. The value proposition we share also applies to the actual negotiation. In a negotiation, speeding up the negotiation is normally a trick. The need to thoroughly consider each item, recall your preparation, focus on achieving your interest and developing creative options take time. The process should not be rushed.

Just as in driving, in negotiations, speed kills.

We have found that tremendous amounts of revenue are left behind by design professionals due to an unwillingness to request additional funds for out-of-scope work.

IF YOU DON'T ASK…

Do you know who the loser is in a self-negotiation?

There's an old story about a city slicker who is out driving in the country on a Sunday afternoon. A few miles after passing a gas station he runs over a nail and gets a flat tire. He opens the trunk but he doesn't have a tire iron and ends up hiking three miles back to the gas station. As he walks he starts thinking, "These country gas stations are all alike, they charge you an arm and a leg for being open on Sunday." This idea makes him a little angry. "They won't like me anyway," he goes on, "because I'm wearing a suit, and they'll probably charge me extra for being from the city." He gets even madder. The longer he walks the angrier he gets about the outrageous amount the gas station is going to charge him to borrow a tire iron. When he finally reaches the gas station he walks up to the startled attendant, throws money in his face, and yells, "There! And you can keep your stupid tire iron, I don't want it anyway!"

He never even asked.

What I have learned over the years about car mechanics is that when you go in and they tell you the price, always ask them, "Can you do any better?" Nearly all of them will say, "Well, let's see, we can take 10 percent off." Or more! In the past, America had a non-bartering culture. You went to a retail store, looked at the price tag, and paid that price if you wanted the item. One of the few items where negotiation was involved was car buying, which made it one of the most hated activities in the U.S. Everyone loved getting a new car, but hated having to buy it because it involved negotiating with someone who was a lot more skilled at negotiation than you were.

Today, due to many influences, Americans are slowly learning how to barter and such negotiations are becoming more commonplace. Businesses and retail stores are now more willing to negotiate than ever before.

However, if you don't ask you will never know if the item you are buying is negotiable.

OUT-OF-SCOPE WORK

We have found that tremendous amounts of revenue are left behind by design professionals due to an unwillingness to request additional funds for out-of-scope work.

Architects and engineers have developed an extensive list of justifications for not pursuing additional services:

- We don't want to be accused of nickel-and-diming.

- We have to maintain the client relationship.
- We don't want to get into a fight.
- We forgot to define what was out-of-scope.

All of these excuses are symptoms of avoidance. Do you really think that the client has never had to go to one of their own clients at some point and say, "We're happy to do X for you, but it falls outside our agreement and will be billed separately"? Of course he has, it is a normal part of business.

An even more important consideration is this: What is the client's BATNA for this out-of-scope item? They probably do not have one. If you cannot negotiate a settlement over an out-of-scope item, what are the client's alternatives?

For example, if you are designing a building and the client wants to rearrange a floor when you are well into the documentation phase, what BATNA do they have if you clarify that this is out-of-scope and you need to negotiate a separate fee for this work? Will the client really cancel the project at this point, go back to square one, issue a new RFP and hire another firm? Of course not. The client has a problem to be solved, they hired you to solve it because they felt like your firm had the best solution for their needs. They want to work with you, they chose you.

A key to successfully negotiating out of scope items is to identify them immediately. A question to immediately ask when an item is identified is:

"How do you want to handle that?"

Normal response: "Handle what?"

"We have just been talking about an effort that is out of scope. Do you want us to:

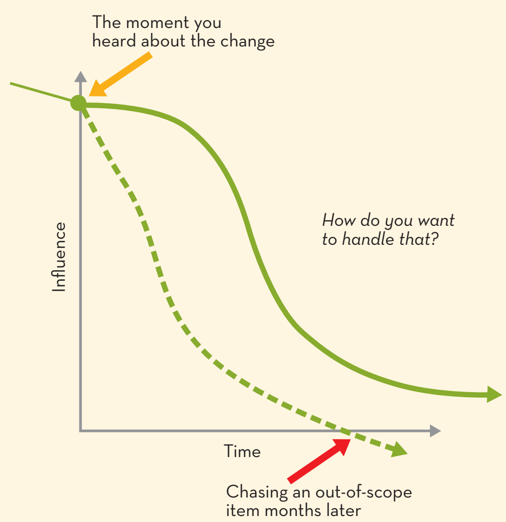
- Submit a proposal and have it approved before we begin work?
- Send you an email that we are working on this out of scope item and get your written approval to proceed?
- Open a new number to track this effort?"

Exhibit 1 shows the chance of getting appropriately compensated for an out-of-scope item over time.

By the way, the concept "if we wait until later to ask for compensation it will be better" is just plain wrong. It never works and never will.

It does not hurt if you already defined how to handle out-of-scope

Exhibit 1
Chance of Getting Paid For An Out-of-Scope Item Over Time



items during your negotiation, because that is one of your interests.

IT'S NOT A PIE, IT'S AN AMOEBA

Many negotiations books and courses talk about "making the pie bigger." However, I don't believe this metaphor represents what happens in an interest-based negotiation.

A better way to represent a negotiation is to compare it to an amoeba.

The amoeba has a flexible shape, and its shape changes based on the direction it wants to go, and where it finds the least resistance in its environment.

Similarly, a negotiation is a search for the areas of least resistance in order to expand our interests. The final shape of a negotiation is based on where both parties found opportunities to expand, and necessities where they had to contract. It's not a perfectly round pie, but an irregular, organic amoeba shape determined by the discovery of mutual interests. ■

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[1] The book is available from Greenway Communications at http://store.di.net/.

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