

MINING IN TOUGHER TERRAIN

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This Quarter: On Mining

Dear Reader:

Welcome to our first issue for 2009. We certainly hope that this year will be a good one for you, your family and your organization. Every year provides an opportunity for reflection, renewal and reinvigoration. This quarter's issue of *FMI Quarterly* brings you the theme of strategic direction and business development. We hope that our work can help you sharpen your aim and build your backlog. As usual, we have included some non-theme articles as well.

A big salute to Cynthia Paul, long-time principal of FMI who heads our Business Development practice. Cynthia wrote several articles and arm-twisted a few other writers to help build content for our theme this quarter. Cynthia interviewed Patrick Bishop of Titan Consulting, an executive search and business development consulting firm that services the real estate development and construction industries, for "Becoming a Titan." Cynthia also brings us an inside-out look at how what we know about our customers ... is often dead wrong!

Steve Boughton shows us that responding to what customers value can avoid the commodity trap with his departmental article, "Uncovering Customer Value — Lessons from the Outside." Brian Brooks compares customer relationship management systems (CRMs) to hand drills in order to make points about information accuracy and good marketing. It must be the season for stretching metaphors as Randy Giggard likens good market research to due diligence in buying a Porsche 911.

Strategist Ken Roper continues his series on strategic planning with this installment that provides plenty of tips for more effective planning retreats.

Jeff Schulz contributes "Who's Bringing the Food to the Strategy Table?", which reinforces the critical role of business developers in strategy development within the typical construction organization. Tampa, Fla.-based FMI Consultant Tom Kort offers "Four Actions to Survive an Economic Downturn," as a way to avoid tempting, quick fixes that are ultimately unhealthy for your firm. Presenting a healthy approach to change are Louis Marines and Karen Newcombe of AMI. They continue the discussion with their article on "Managing Uncertainty Through Strategic Thinking."

Frequent contributor Kelley Chisholm engages John Rapaport of Component Assembly Systems in a discussion of how technology can be used to clarify the future. Ralph James builds the case for good documentation in project execution and ties into our theme of business development as he notes the importance of well-documented sales promises to avoid later conflict during construction. Senior Consultant Glenn Matteson documents both profits and pitfalls from efforts to build a paperless enterprise.

Finally, FMI Quarterly is pleased to bring you a seminal piece of research in "Profiles in Success — How Contractors Define and Achieve Success" by Phil Warner and others. Based on recent, original research led by Dr. Art Heimbach and executed by Phil Warner, Sabine Hoover and FMI's Research Services Group staff, you'll find this forensic piece regarding routes to successful contracting well worth your time.

While winter is upon us in many of our marketplaces, it won't be long before spring thaws, and the full throttle of construction. Take time to contemplate how some of our articles can impact your business for a rewarding new year. Our best wishes to you. Give us a call if you would like to discuss service possibilities.

Sincerely,

Jerry Jackson

FMI Quarterly Publisher and Senior Editor

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Departments

BUSINESS DEVELOPMENT

Uncovering Customer Value — Lessons from the Outside

It's a familiar story. Business developers complain of their struggles to get decision makers to focus on anything other than price. "They're only interested in the bottom figure." "They beat us up with the other guy's numbers." "We spend all this time on proposals, and all they do is flick to the numbers page." You're not alone in getting this same old story from your people. It's much the same outside the world of construction.

Suppliers in all industries struggle with exactly the same issues day in and day out. The commoditization and perceived commoditization of complex products and services is a fact of life, and no matter how hard you push to sell value, it's all too tempting to throw in the towel and fight for sales on price alone. Commodities are not good for anyone. Buyers who drive down prices in the short term think that they win, but in the long run it prevents suppliers from innovating and investing in new systems, people and processes. Let's face it — buyers get their pound of flesh, but only because we're shaving it off ounce by ounce. Death by a thousand cuts. The question becomes: How do you avoid the commodity trap?

A look into the world of automotive glass may help answer this question. This might sound pretty mundane and not comparable to construction. After all, what does a windshield do other than keep out the wind? This is the exact problem facing the major automotive glass companies. How do we demonstrate value and, therefore, maintain price, when few people think about, and even fewer care about, glass.

Let me offer some perspective. In the U.K., glass damage is generally covered by the insurance company, and so insurers hold great buying power. In the event of a breakage, the owner contacts an auto-glass replacement specialist, pays the specialist a small deductible, and the specialist replaces the glass and bills the balance to the insurance company. What could be simpler, and what could be less deserving of a price premium?

In reality, many options exist for the glass company (think "construction company") to differentiate itself from its competitors to land the job with the auto owner. The trick is to invest the necessary time and energy to think through the job process (get work, do work, keep score) and identify ways in

which your company can lessen the pain felt by prospective clients, and more importantly, how you can do it better than your competition.

Let's think through the job process or the specific steps involved in finishing the job. The business development process develops leads and turns those into work opportunities. Next, estimating, often in conjunction with preconstruction services, develops the proposal before the sales presentation is made. The job is awarded, and at some point, the successful contractor puts the shovel in the ground. Project management handles change orders, RFIs, scheduling, client communication and invoicing.

It's a daunting list. To make it easier, let's consider how you would put each process item into one of four available boxes: results, process quality, price and access costs. The trick is to invest the necessary time and energy to think through the job process (get work, do work, keep score) and identify ways in which your company can lessen the pain felt by prospective clients, and more importantly, how you can do it better than your competition.

Box 1: Results — the final

"as-delivered" product. This work product starts with the building, bridge, road, etc. but also includes all associated paperwork, warranty, training manuals, as-builts and just about anything the customer associates with your company. Think about everything you can do to meet the customer's expectations and deliver a high-quality, comprehensive work product.

Box 2: Process Quality — the net positive factors that helped improve the overall customer experience during the construction process. Are change orders managed effectively? Are schedule changes communicated in a timely fashion? Is operational disruption minimized? Is the interface with the client a pleasant experience?

Box 3: Price — the bottom line or direct financial cost to the customer. What did the customer pay?

Box 4: Access Costs — additional costs incurred by the client during the process. These are more than financial costs and include anything that steals time, resources or other opportunities. While there is no doubt a financial impact from these access costs, the customer most likely does not factor these costs into the total project-price assessment. How much extra time does a customer spend handling your invoices? How do schedule changes impact the operation? Are your senior managers available when needed? Are decisions reached quickly? Are physical conflicts — often of mechanical, electrical and plumbing installations — avoided, saving rework? Think about how all that time and effort builds up and quickly eclipses the savings made by choosing the lowest bidder.

So if price is only one of four boxes, why is it the major client focus? Remember what we said earlier: Buyers get a short-term benefit from commodities. The challenge for your organization is to start focusing clients on the other three boxes to ensure price is only one piece of the complete customer-value equation.

The four boxes are the foundation of customer value and come together in a simple equation:

If you can drive up everything that affects the top line and limit the impact of elements on the bottom, you're on your way to improving overall customer value. Price does not go away; but the implication is that by focusing on adding value in the non-price elements, decision makers will come to rely less on price as the sole decision-making criterion.

Remember the glass example? One vendor followed this same process and completely changed the way it sold to the major insurance companies. The vendor moved away from discussions on Average Invoice Price (a classic insurance metric and one where the vendor was not competitive) and focused on what filled the non-price boxes:

- Results: On-time technician attendance; time to complete the job; highest-quality adhesive material; use of original manufacturer glass (not generic).
- Process Quality: Time to answer calls; length of call; first-choice appointment availability; technician on-time arrival; installation time; drive-away time; technician appearance; technician/ customer interaction.
- Access costs: Ease of payment; contractual arrangements with the insurance client; national coverage; availability of glass in stock; warranty management; customer service and complaint management.

The auto-glass vendor took every one of these items and made them tangible in the client's mind, communicating capability and then demonstrating with data how it outperformed the competition. Some of it was financial, and some of it was time or safety. Others were simply customer-satisfaction measures. By focusing on these individual elements, the company was able to demonstrate to the insurance companies how its motorists would benefit from dealing with this specific auto-glass specialist and how satisfied motorists would reflect well on the insurance company. The upshot? The

ability to demonstrate higher levels of customer value allowed the company to differentiate itself from the competition on items other than price.

The challenge for any organization is to first identify how your own model fits into this equation and then promote those attributes to your advantage. Done properly, you will have a sound basis on which to approach your whole get-work efforts. What is the message in your marketing brochures? What do your project managers say about the company's capabilities? What is it you focus on during sales presentations? The more you find opportunities to exploit the whole value equation, the fewer opportunities you give people to revert to price.

While specific markets and businesses deal with unique challenges in helping customers to really understand value over price, all companies can benefit from a conversation about customer value. Begin by mapping out your specific processes and use a cross section of your people to start itemizing each area. Encourage employees to think in terms of the four boxes. Most important, make every issue tangible for the client, providing data-backed evidence where possible, and you're well on the way to avoiding the commodity trap.

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CONTRACTORS

Documentation Revisited

In public construction, we do not get paid for what we do. We get paid for what we document. Therefore, we often do more work than the amount for which we are paid. Sometimes this is intentional because our integrity requires that customers get full value, even 105%, but never 95% of what they bought. Most contractors are happy to do small favors for customers. Donated small favors might even cost less than processing the associated paperwork and hassle.

But our documentation rule, when carefully followed, can help us prevent unintentional donations. How often do we perform work that we

forget to document or that is not part of our scope? Business systems can offset our natural human forgetfulness. For example, systematically task someone to review contracted scope. This can also reduce the simple error of performing unnecessary work.

Construction personnel have historically expressed a general dislike of paperwork. "We are action people. Paperwork smells like In public construction, we do not get paid for what we do. We get paid for what we document.

inaction." Even our customer's superintendent may reinforce our dislike of paperwork. "Go ahead and do this work, and we will catch up the paperwork later." But contractors have been burned so often by this request that they are learning to document now, before work, which results in much better payment than informal agreement.

And when we reinforce proper documentation, we need to follow a few important guidelines that will help it stand up if challenged.

First, documentation must be done on a regular business form or in a regular business place. The best place is a bound daily log into which incidental pages cannot be appended. The log should describe who, what, where and when. Names and dates are very important. This log should be kept in a safe place and stored after the job. Old records can sometimes become very valuable.

Documentation on standard forms can show interesting trends. If we document frequently occurring punch-list items, we are in a position to attach their known problems with our pre-punch program, therefore cutting callback cost. If one customer continuously causes arguments over change order issues, we can better make our case while costing out this customer's behavior for future bidding strategy. If we own superior documentation from our jobs, we have more transparency in management decisions.

Second, documentation should be done at the time of the event being documented. If we try to catch up documentation on Friday for the situation

If we own superior documentation from our jobs, we have more transparency in management decisions. last Tuesday, our documentation can be challenged. This is because we might forget important details by Friday. It is still better to have late documentation than to have nothing since, in disputes, the party with the best documentation tends to win regardless of procedure. Rather than take a chance, document correctly.

Contemporaneous documentation increases report accuracy.
Construction is a world of distraction.
We are not insulated from sights and sounds — we live with rolling threats and thumping pile drivers, with

precarious heights and scary depths. Our attention, often quite properly, quickly moves away from that morning delay to that afternoon crisis. Noncontemporaneous documentation becomes understandable, but remains unwise.

When a sales promise is made without documentation, the seeds of unwarranted conflict during construction have been sewn. Business developers and estimators can easily be distracted from the need to document a promise at the time — after all, getting a job is exciting and attention usually quickly moves to schedules, etc., and away from the little promise just made to try and solidify the sale.

Third, documentation should be performed by an eyewitness. If a superintendent sees a delay, for example, and the project manager in the office receives the superintendent's report over the phone, the project

manager (not an eyewitness) can be challenged if he or she documents the delay. If the foreman realizes that out-of-scope work has been intentionally done and an appeal for payment is in order, the foreman's eyewitness description carries more weight,

even when a serious legal challenge has not been issued.

Eyewitness documentation can help develop future field leaders. Foremen who learn to log delays as they see them are building skills for their future. More importantly, these foremen are building a keen awareness of job details since eyewitness documentation requires a heightened observation level. This can become the basis for better job-cost understanding.

By tracking our unintentional, out of scope work, we can improve our business systems.

Participation in documentation by both crew members and crew leaders enhances understanding of construction activities as business activities. When their business activities are monetized, it becomes clear that a construction crew is a small business that needs to act like one.

The business form, immediate report and eyewitness guidelines clearly help us face challenges to our documentation, but they are also just good business practice. They improve the quality of our documentation for internal purposes. By tracking our unintentional, out-of-scope work, we can improve our business systems. Future estimates can contain more informed scopes. Mistakes for which we could not be paid on past jobs can be corrected for future jobs.

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MARKET INFORMATION

Drilling Data for Dollars

I was walking into a local home-improvement store, as I frequently do, to buy a drill. As I was entering the store, I considered the features, the amount of power I wanted and how much I was willing to spend. Then, a question popped into my head for which I didn't have a ready answer. The question was simply: "Why am I really buying this drill?" As any tool-loving person will tell you, the answer was that I just needed (or more likely, wanted) a new drill.

But was it really the drill I wanted, or the holes that would be made by the drill? What I realized was that I wanted the drill, but I needed the holes. Drills do a good job of creating holes of all sizes in virtually any material. You could use a drill to cut a sheet of plywood in half, but it would take a long time, and better tools exist for the job.

The connection is that Customer Relationship Management (CRM) systems are somewhat like drills; CRM systems are great tools for the jobs for which they are created to perform. Like drills, there are many different types of CRM systems. In simple terms, CRM systems manage information about current and potential customers, the relationships between those customers, and

the relationships between your employees and those customers.

Customer service continues to be one of the sustainable differentiators between businesses in our industry. Companies winning in this environment are providing exceptional customer service by empowering their employees with knowledge that they, in turn, use to nurture those customer relationships.

Whether you are considering a CRM purchase or are in the middle of implementing one, consider the following steps to CRM success.

Be clear about the goals of the CRM system.

Many studies conducted to answer the question about why CRM implementations fail have found a prevalent factor to be that management believes the CRM system is "cutting wood" when the CRM was set up to "drill holes." Have you ever heard CRM users say, "The CRM system doesn't work the way I do so I can't use it." Maybe you've heard, "I don't use the system because I can never find the information I need to do my job." Statements like these are strong indicators that your CRM system wasn't implemented as originally intended. Make sure that all of the stakeholders are on the same page with the definition of CRM at your organization and its intended goals.

Make sure the information in the system is accurate.

This seems to be one of the toughest parts of any CRM implementation, and it usually has to do with "ownership" of the client or the client data. Just as the wrong bit will produce the wrong-sized hole, bad information can result in inappropriate interactions with the client. It's important to define a single person who can actually change the data for a specific company or person in the system. While many people can advise data changes in their updates, the gatekeeper for the account verifies the accuracy and timeliness of the information. This person will serve as the arbiter between the many "owners" of the client information. For a company with many client records and contacts within each client, this is not a one-person job. It is easy to overwhelm employees with this task, but every gatekeeper must take his or her role seriously. Giving thought and planning to this role upfront will pay huge dividends over time.

Figure out ways to minimize the investment needed by system users.

The relationships you have with your customers are a never-ending set of conversations, events and contacts. Every time one of your employees interacts with a customer, an exchange of information and knowledge occurs. Sometimes this information is inconsequential, but in many cases, this knowledge is critical.

It's extremely important to innovate methods to capture this knowledge without adding unnecessary steps or complexity to your employees' workday. Some of these solutions can be simple; others will be more complex. The cost of not taking the time to think through these potential measures and then putting them in place will be the misuse and nonuse of the system, and ultimately, the loss of that knowledge. One way to somewhat simplify updates is to link personal data managers (Outlook, for example) to the CRM. This way, appointments, phone number changes and newly acquired notes on the client etc. can be synchronized with information in the CRM. Still, the gatekeeper for an account should have final authority over what is permanently entered for that account. For larger companies with larger clients, many people may have contact with the same client. You need input from all, but you need conscientious gatekeeping as well.

Continually measure, provide feedback and add new value.

As with any system, the CRM should always be fresh and add value to your organization and customers. Constantly measure the success of the system and market those facts internally, whether good or bad. Listen to both your employees and customers for ideas on how to improve the CRM system. A CRM that adds continual value can positively impact your business in unpredictable ways. A high-value CRM might improve customer satisfaction or increase backlog. These types of metrics can and should be measured as part of the project. Benefits like a stronger market perception or employee satisfaction may be more difficult to correlate to a CRM system, but chances are it did play a positive role.

Most everyone agrees that knowledge is a critical success factor in today's business environment. Further, great customer experiences are essential for maximizing the long-term value of our customer relationships and therefore our businesses.

Companies that are effectively capturing the exchange of knowledge between our organizations and clients and then storing the relevant information in logical systems soon will have a leg up on their competitors. These logical systems will turn into common knowledge frameworks. CRM systems are key components of this framework.

By the way, I did buy the biggest, baddest drill they had in stock. ■

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Quarterly Interview

Becoming a Titan

Patrick M. Bishop

CEO, TITAN CONSULTING

"The reason we've been successful is because we genuinely build relationships with people."



FMI Quarterly recently spoke with Titan CEO Patrick M. Bishop who started the firm after his work as an executive vice president at an Engineering News-Record top 40 firm where he started an internal recruiting department and developed a training program to teach the company about the hiring process. In four years, Bishop led the team that interviewed

more than 2,000 people to hire just 213, which perhaps best illustrates his successful business development philosophy. He worked to identify what makes a person successful at the organization and then mapped those traits against every candidate interviewed. When Patrick left the firm to start Titan, 94% of the people that his team interviewed and hired were still working at the company. We asked Patrick about his experience.

FMI Quarterly: Titan is a unique search firm. Tell our readers about Titan and your work.

Bishop: We work in several areas. The first is executive placement. Clients retain us to help identify, recruit and hire talented professionals in the marketplace to either replace departed talent or to add additional resources because their company is growing or restructuring. This talent can range from the organization's CEO to its senior leadership that is defining the company's future.

The second area in which we concentrate is adding an outside, experienced perspective to help firms retain existing organizational talent. Firms will hire us to perform an evaluation of their key employees and advise them on the best ways to retain key personnel and also train and develop senior management on the recruitment and hiring process. In this way, we equip senior management with the knowledge and tools to hire and retain their staff going forward, rather than always having to use outside resources. While this may seem contradictory to our first work concentration, we don't think it is. If we build solid client relationships, then when an outside resource is needed, they will trust us to aid in the process.

The third aspect of our business is consulting on business development. We evaluate a company's current business development process. We ask: Is the company competitive, and if not, why? In many companies, the components that make up the business development process are some of the thinnest areas in the organizations. We work to strengthen this function in our clients' organization. We help our clients to see that certain investments, such as market research and improved communication processes, will positively impact organizational behavior.

FMI Quarterly: Knowing what you know about finding, developing and retaining business development talent, what advice do you offer firms who want to take their business development efforts to the next level?

Bishop: I would ask: Do you truly understand the culture of your organization and what makes it special? What do you do that's different from everyone else, and why do clients choose your firm? Once you answer those questions, the next step is to understand the specific role you want business development to play in the organization. If you believe that business development is about sales, then hire salespeople. Salespeople work

towards the deal first, then the relationship. If you want to build relationships with your clients, you need people who understand and believe that building a relationship is paramount to the success of your organization. I've met BD people who claim they will bring work and relationships with them to a new company. I caution anyone to test the validity of those claims. It's just not possible. Introductions can be made, but ultimately a client will choose your firm based on the service you provide. A potential client won't pick your firm because of the BD person; a client will select your firm because you can perform. The most effective business development people understand operations and how the construction process works. If you are a small organization, develop a system where BD personnel are required to "get" the work and build it. Remember, this business is about relationships, and

TITAN CONSULTING is a fully retained executive search and business development consulting firm that services the real-estate development and construction industries. The consultants at Titan have interviewed more than 6,000 professionals and have been responsible for more than 1,000 successful hires. These professionals have also helped companies secure hundreds of millions of dollars worth of projects ranging from the difficult small renovation projects to projects valued at more than \$150 million. Titan consultants have also helped companies develop retention programs and development plans for the continued growth of key talent within organizations. With offices in Florida and Massachusetts, Titan (www.titanhcs.com) services clients both nationally and internationally. Titan's unique brand of professionals with industry experience and its relationship-first approach set it apart from the typical boutique recruiting and consulting firms.

they don't start in the middle of construction. They start years before the shovel hits the ground. Have a BD person lead the project and the business development effort then. If you are going to go out and hire someone, be careful. I can't stress this enough. You have to identify someone who is a fit with your corporate culture. This person represents the outside face of your organization. If this person is constantly changing, what does this say about the organization? Ask yourself: "Is this the person that best represents my organization? Does he or she have our values, our

A striking difference between business development and operations is that BD can be assigned responsibility for winning or losing a job.

vision?" Once you have the person, consider how you are going to keep the individual engaged long-term. Most companies leave out this part, and it's very simple. It has everything to do with communication. Talk to your BD staff. Where do they want to go in their careers? What are their expectations? Can you provide the long-term growth that they need and not just what your company needs? The only way to know is to continually communicate with your team. In return, employees will feel that you are invested in them and will be less likely to leave.

FMI Quarterly: What makes sourcing, onboarding, growing and retaining business development people different?

Bishop: The only difference should be the desired career path. The first step is to create a well-defined job description with the specific duties and responsibilities required of the role. Just because a BD representative wants to run the department doesn't mean that person should. This person has built relationships through, most likely, years of networking. Again, by sitting down and communicating the pros and cons of this type of career move, you will learn the person's true career desires. If the individual still wants to move into management, task him or her with finding a replacement. It is a learning opportunity for the employee and yet another way to test out the individual's desire. The day-to-day board meetings and outings will now be attended by the replacement.

A striking difference between business development and operations is that BD can be assigned responsibility for winning or losing a job. The BD person may have an excellent relationship with a client, but the project is assigned to the B or C team, and the client awards the project to your competition that put its A team on it. Attributing a BD person's success strictly to jobs won is a dangerous measurement that can derail the morale and stability of the BD organization.

FMI Quarterly: How do you see the get-work process changing in the industry?

Bishop: Given our current economic climate, I think you'll see that the companies who have invested in building client relationships and who have under-promised and over-delivered are going to separate themselves from the pack. You'll see companies who have focused on specific sectors dominate those sectors, while other companies scramble to fill the backlog. How can a general contractor doing public work, commercial and residential compete with a contractor focused strictly on health care projects when pursuing a major hospital expansion project? Given the market, some GCs will get nervous and try to make it a price and schedule game. If you do your research on clients, you will know what is most important to them. If it's price,

Given our current economic climate, I think you'll see that the companies who have invested in building client relationships and who have under-promised and over-delivered are going to separate themselves from the pack.

they'll go to the lowest guy. The get-work process is going to rely heavily on research, both market as well as client research. Companies that make the investment will be in front as the economy rebounds.

FMI Quarterly: So how do you respond to contractors when they say the push continues to be towards price and less toward relationships?

Bishop: They are reacting to their gut and fear. They have not made the investments in research and relationship development to really understand what makes a client tick. We've all seen a construction company take a job for a miniscule fee, cut its general conditions and then finish the job at a price higher than the number we originally gave the client. You can't be afraid to use

your experience when developing a client relationship. I know a contractor that will say to a client, "Here's the price, my fee and the schedule." If the client balks, he will respond, "If you want it cheaper and faster, go use Company X." He gets more work this way because he has put a premium value on the services he provides and isn't shy about letting the client know that. His clients respect his honesty, and the company does more than a half billion dollars work a year on a repeat basis. So I'd challenge the company that says it's about price rather than relationships.

FMI Quarterly: What does it take to get and keep business development people focused and motivated for the long term?

Bishop: To keep people motivated for the long term, you have to communicate your plan and goals for the organization; but more importantly, people need to feel part of that process. If you say to a BD person, "I expect you to get \$300 million worth of work this year," that person should give you a skeptical or, at least, confused look. Remember, people like to know how they'll benefit personally, financially and professionally by meeting or exceeding the corporate goals. A key difference between successful contractors and those that don't know how or why they're growing is that the successful contractors include business development in the operational business planning process. Companies should include both operations and business development people in the same meeting and task them with challenging each other. Too many times operations will throw out a revenue number that isn't based on something practical like hit/miss ratios, specific project tracking and targets or market research. Business development professionals should be positioned to challenge operations' goals, and operations should be able to do the same with business development. If a business development representative expects to capture 100% of the work he or she is chasing, operations needs to explain why this isn't practical and challenge the individual to chase more work or to reevaluate the goal. There need to be fundamental answers as to why projections and numbers make sense, instead of just throwing these out there because that's what everyone feels the owner of the company wants to hear.

FMI Quarterly: How do companies translate their go-to-market strategy into understanding what kind of business development talent they need?

Bishop: Companies that don't have experience in health care, for instance, and want to be in that market segment, will ask their business development person who has been working in the commercial sector to start chasing health care projects. It's a failing proposition. He or she has no relationships with facilities managers, project managers or architects who specialize in health care. So he or she is working backwards, not even from the ground level.

A company that wants to be a dominant player in health care should assess its current operational talent. Does it have staff with experience in health care? If not, the company should start there, not with business development. A good business development professional will get you in front of health care clients, but what good is that if you have no one to build what they need? You'll look foolish in front of that client. So the go-to-market strategy starts with putting the operational talent in place in order to make a compelling case for why a client should choose your firm for its project. Once that team is in place, getting the right business development professional is the next step. Just because a person has relationships in health care doesn't mean that the individual fits into your corporate culture. Identify the top people in the market segment for your strategy, and then start to build relationships with those people. Ask: What does my company have to offer that the BD professional's current company doesn't?

FMI Quarterly: What should companies be doing to grow and retain existing business development resources?

Bishop: One of the first things they should be doing is market research. If you are not incorporating market research into your business development resources, you are going by your gut, which can be successful for the short term, but is not a successful long-term strategy. Market research will give you a market view for the next three to five years. It is worth the investment. How many contractors might be better off right now if they had performed market research a couple of years ago? They could have used that research to identify the emerging markets or markets with limited competition.

Here again, companies should be incorporating more of their operational talent into the business development process. Make business development part of operations' job. If it's not, business development can seem like a chore, rather than an essential part of their job. Operations should know the process of responding to an RFP, how proposals are written, how to develop competitive strategy, etc. By limiting the tools to one department, the full talent of the company is also limited.

Finally, business development is about networking and relationships. Companies should know their competitors' clients and business development professionals. Business development people run into each other at outside functions, but they have no incentive to build these relationships and may even fear doing so since these individuals represent potential replacements for their positions. Senior management needs to be developing these

Market research will give you a market view for the next three to five years. It is worth the investment. relationships so that when it comes time to grow the department, you know with whom you want to grow it.

FMI Quarterly: What are common mistakes firms make when looking for and finding new people?

Bishop: The most common mistake that firms make is using a reactionary hiring process. Companies often don't start to think about hiring until someone gives notice or an unexpected project award is made. Companies should always be networking, talking to subs and

architects and finding out who is the best operational talent in the market. Start to build relationships with these people. I knew some of my current talent for seven or more years before I was able to convince them to join our team.

The next most common and often troubling mistake that firms make is to hire the first person rather than the person who best fits the corporate culture and who will contribute to organizational growth. Not only are you hurting your own company, but you are also putting the individual's career and reputation at risk. How does it look when that person has prior career stability but only lasts six months in your company?

What a firm should realize is that the recruitment process generally should be seen as a three- to nine-month process beginning with identifying a need, sourcing, recruiting, hiring and eventually onboarding. Your business plan should tell you how many people and what positions you need to add. Start the process with these time frames.

Don't forget to include your turnover rate in staffing. Even if your company plan includes no growth for 2010, you would still need to hire about 15% of your total staff in 2009 since that is the average turnover rate in the construction industry.

FMI Quarterly: You've been very successful at getting long-term employees to switch companies. What's your secret?

Bishop: If I told you the secret, companies wouldn't need Titan Consulting anymore. Seriously

We care about what the employees we are talking to want in their career and are driven to see if we can make that happen.

though, the reason we've been successful is because we genuinely build relationships with people. We care about what the employees we are talking to want in their career and are driven to see if we can make that happen. I've never talked to someone and said, "Hey, I've got a great opportunity for you." I hate that. I don't know anything about this person, and yet, somehow I know there is a better opportunity than the person's current position? I am honest from the start and just share my history, my successes and my failures. I ask about the great things at the person's current company, and we start to build a relationship. I want to learn what the person would change and his or her career path. About 90% of people answer "yes," they do know where they are going. That's the benefit of pride. But then, when I ask how they are going to get there, they can't explain it. That's where I can help. I've advised many of those individuals to go back to their employer and ask for a career path to be mapped out. Some employers won't do this, and some of those people will come back to me for career advice and help finding a career opportunity not available at their current company. I'm not better than anyone else. But I do wake up every morning determined to change someone's career for the better. That's the difference. I don't wake up saying, "I'm going to do X number of placements today."

FMI Quarterly: What tips can you offer about onboarding top talent?

Bishop: You have to realize that onboarding is not a one-day orientation process. Onboarding is critical to a person's success at the organization, and it starts during the recruiting process. That person is telling you the reasons why he or she wants to come work for your organization, and you are making promises in return. Stay in touch with the person after the hiring process, and make sure all new hires have everything they need to perform their jobs from day one — whether it is a laptop, cell phone, car, gas card, etc. Through

Titan is different because the consultants at Titan have operational experience in construction and development. Everyone at Titan has been involved in a construction or development company. successful onboarding, you build on the positive first impression that won these new hires. Assign new hires a mentor — someone who has been with the organization for more than five years and who knows the ins and outs of the company. More important, make sure this person wants to function as a mentor. Mentors need to believe that they are a key asset in the success of this individual. Mentors should meet regularly with their new hires and provide detailed feedback.

Finally, a senior staff member should meet quarterly with each new hire during the first year of employment to gather direct feedback, learn in what areas the individual needs to improve and to ensure new hires are receiving necessary training.

Employees will feel that you are genuinely interested in their career, and you will be, by making the necessary time required to do successful onboarding.

FMI Quarterly: Business development is all about differentiation. So how is Titan different?

Bishop: Titan is different because the consultants at Titan have operational experience in construction and development. Everyone at Titan has been involved in a construction or development company. We have commercial brokers, business development people and project managers. The reason this stands out is that technical competency is something that you should expect from any candidate presented to you. Often, that's not the case. At Titan, we meet every candidate face to face, before we present that person to a client. That's what a client is paying us for: to be an extension of his or her firm and facilitate the hiring process. How can we do that if all we do is send resumes? The key differentiators for us are a fundamental knowledge of the construction and development industry; experience within the industry; the approach towards identification, selection and hiring; and a true belief in building a long-term relationship.

Going back to our discussion about price, most potential clients tell me that they only work with contingent firms, meaning they don't pay unless they hire someone through the recruiter. We are a retained firm, which means a firm will pay us on a monthly basis to perform search or consulting services. I have to be honest and tell clients that there's a reason a recruiter is willing to work for free, and it's because the individual doesn't want to be held accountable. I've challenged my clients, who at first scoff at the idea of paying a retainer. I ask how many proposals they have sent out in the past year where they have been willing to work for free, and nothing to be paid to them until the job was completed and only if the client liked the job and moved into the building? Not one of them produced a proposal or even said that he or she offered to work for free. Then why should Titan?

We believe in what we do and how we do it, and we should be compensated for it just like any good construction firm believes it should be paid for its services. Again, what we are doing is differentiating ourselves by building a relationship with a client that puts a value on the process of hiring and retaining people instead of just hiring bodies. We won't work with everybody,

only those that are committed to understanding how we can help their firm and are willing to let their guard down for some fresh ideas and advice from an outside expert.

By being different and finding our "white space," we have identified a market niche in clients that are willing to use a firm that has experience in their industry, are willing to pay a premium for that service and want a long-term relationship. Trust me, those clients are out there; but if you don't believe in what you're doing, I guess you're willing to work for free.

FMI Quarterly: It's clear companies will need to invest in building client relationships and delivering on promises to

We won't work with everybody, only those that are committed to understanding how we can help their firm and are willing to let their guard down for some fresh ideas and advice from an outside expert.

differentiate themselves. Titan Consulting certainly understands the value of a strong customer focus and is a model for other firms who want to become a titan in their own market. Patrick, thank you for sharing your experience with our readers. ■

Four Actions to Survive an Economic Downturn

In a tight economy, contractors that drive the best strategy, utilize operational best practices, manage the customer experience and focus on cash flow will survive the downturn.

By Tom Kort

rist thoughts in an economic downturn are about survival.

Reacting to this, contractors may cut people, overhead,
equipment and systems, or pursue work outside their

firm's core competencies just to prop up backlog. These quick fixes do

little to keep the firm healthy. Instead, contractors will fare far better

by working to address economic changes.

The following four actions offer contractors the best opportunity to survive an economic recession:

- 1. Develop and execute the right business strategy,
- 2. Focus on providing a great "customer experience,"
- 3. Implement operational best practices and
- 4. Manage cash flow aggressively.

DEVELOP AND EXECUTE THE RIGHT BUSINESS STRATEGY

Most senior managers of construction firms do not adequately define their company's business strategy. At the start of a recession, they are unprepared to execute the right actions. By taking the time to define their strategy, they improve the likelihood that all significant actions will be driven by strategy, not chance.

Better construction companies set goals, develop strategies to achieve those goals and then execute them. The best leaders act upon their vision of the company in five years through a strategic plan to reach long-term goals and an annual business plan to drive budgeted performance.

What does it mean to be strategic? Strategic thinking is a high-level, even lofty activity, which is not necessarily restricted to the senior executive. It may be a participative process that draws on the thoughts and experiences of the best and brightest talents within an organization, regardless of rank. Strategic thinking generally implies planning and working toward a set of defined goals, with some ultimate and ambitious vision in mind. The intent is to outthink and outperform competitors, while engaging the hearts and minds of the leadership team that must execute the resulting plans. Setting the vision could include conversations aimed at defining what characteristics would enable your company to become the

Strategic thinking is a high-level, even lofty activity, which is not necessarily restricted to the senior executive.

go-to contractor in your market. One characteristic might be that you can attract and retain the best people. If that is part of the desired outcome, what strategy would enable you to become more attractive as an organization? Another step might consider what actions will provide the ultimate customer experience. Companies who are go-to resources provide much better customer experiences than those provided by the faceless contractors in the marketplace.

Tactical work involves identifying the individual and near-term action steps

necessary to turn this vision into reality. By taking the right actions, you significantly improve your position as the go-to contractor, increase your visibility as a company that attracts and retains the best people, and provide the very best customer experience. You will then hold a tremendous strategic advantage over your competition.

A second component of a contractor's business strategy is its business planning. More tactical in nature, it sets out the game plan for achieving the financial goals of the annual operating budget. Most managers complete an annual budget for their construction firms, but many fall short of true business planning by failing to sufficiently develop the detailed business plan that articulates goals and identifies the actions required. Without a business plan to drive the budget, no planned tactics exist to achieve the financial goals for the coming year.

Without clearly defined tactics driven by strategies and an executable plan of action, a contractor is even more vulnerable to the effects of an economic downturn.

FOCUS ON PROVIDING A GREAT "CUSTOMER EXPERIENCE"

A key component of that strategy should be to provide a great customer experience. The term "customer experience" represents the net result of all the interactions and experiences a customer has with your company. His or her overall experience with your organization becomes the perception of you that he or she

retain. For example, if the project team on your new customer's project does a poor job of communicating with the customer — by providing few, meaningful updates; not meeting the schedule; not delivering on promises, etc., — then the customer will have a bad experience and maintain a negative perception of your company. Unlike this example, successful organizations do an exceptional job of managing that customer experience.

In the 2006 best-selling book "Mavericks at Work" by William Taylor and Polly Labarre, references were made periodically to DPR Construction, a construction firm located in Redwood City, Calif., as well as other cities across the country with revenues well in excess of \$1 billion. At DPR, a mission statement is developed for each project, "urging members of the team to demonstrate zeal and commitment every day and to embrace an energetic and unflagging pursuit of project success" (159). Company managers conduct in-depth interviews of project participants, including customers, periodically throughout the life of a project to understand what can be done better. Interviews seek customers' answers to the following questions:

- Are we performing quality work?
- Do we maintain good relations and open communication?
- Is the performance of our job superintendents and foremen exemplary?
- Do we incorporate suggestions to improve quality and productivity?
- Are we proactive in solving job-related issues?
- Are we meeting your schedule?
- Do our people demonstrate integrity and dependability?
- Did we perform project closeout in an efficient and timely manner?
- Did we deliver what was expected?
- How would you rate your overall experience with our company?

Being able to provide a great customer experience is a competitive advantage. Putting psychological distance between your company and the next, in the customer's mind, builds your perceived value. With greater value follows greater profits — even in hard-bid situations.

IMPLEMENT OPERATIONAL BEST PRACTICES

Most construction firms grow their operational practices organically over time and distance. Many have never adequately defined their operational best practices. Thinking through your firm's strong suits will help you avoid the temptation to stray from these best practices in tough economic times. Operational strengths vary by firm, but may include the following:

- Client and project selection
- Pre-construction planning
- Short-interval planning
- Daily crew huddles
- Zero-injury workplace
- Job closeout
- Post-job review

Let's consider the first two examples to see their impact on financial performance.

Client and project selection

It is not unusual to find that a contractor's largest customer or a project pursued is inherently unprofitable. Before deciding to bid on a project, first evaluate the prospective customer. Consider the customer's:

- · Fairness, integrity and professionalism
- Expediency of decisions
- Contract terms and conditions
- Clarity, accuracy and completeness of plans
- Ability and willingness to pay on time
- Attitude toward change orders

Next, consider the project:

- Is the project the right size?
- Is it the right duration?
- What is the complexity?
- Do we have a project manager available to run it?
- What are the self-performance opportunities?
- How many competitors will bid?
- Do we have the needed knowledge and experience?
- Do we have a unique competitive advantage?
- What is the intensity of the schedule?
- Is there sufficient skilled labor available?

Assign a score to each new project opportunity. Avoid poor project and customer scores, and establish the discipline of selecting the best work and customers.

Pre-construction planning

Arguably the most impactful of any operational best practice, pre-construction planning is about preparing the job to be a success, prior to the job start. Identify:

- The sequence of construction that provides the best safety, quality and profitability
- Production and performance expectations
- Long lead-time materials required
- Potential change-order issues
- Potential problems
- 60-day milestone goals
- The equipment to use and when to move it off the job

By working through potential project issues prior to the job start, your project team will be prepared for those problems as well as unforeseen issues that will inevitably arise. The exercise in pre-construction planning primes personnel to problem-solve and removes known obstacles, conserving their energies for on-the-job issues.

At the conclusion of the planning session, project members should know how they will beat the budget and meet or beat the schedule.

MANAGE CASH FLOW

Managing cash flow becomes even more important in a slow economy. Your customers will attempt to use you as a financing source in tight times, by holding your invoices and drawing out payments. Letting a customer take 90 days to pay sets a precedent. The risk is that the customer will continue to extend payment terms in the future.

Keys to cash flow management include:

- A well-documented collection policy that is understood by your customers and everyone in your company
- An individual assigned to collect each account
- Monthly and even weekly accounts-receivable reports
- Former customers for whom you refuse to do work due to poor payment
- A system for immediate identification of nonpayment
- Weekly status reports and follow-up action plans on all overdue accounts

Companies may see their average collection period increase by 50% or more during slow economic periods. Add declining work volume and narrowing margins to that, and companies are at risk of failing before the economic upswing.

CLIFFHANGERS

Observers see contractors going out of business in a poor economy and attribute the economy to their demise. In fact, the construction industry traditionally has low profit margins. The profitability of the last few years is an exception. While the top-tier firms plan and execute operational best practices, the majority of the industry does not. The rest of the industry is made up of firms whose profitability is so low they are continually tottering on the edge of failure. A bad economy simply pushes them over.

In a great economy, just about anyone can make money. When the economy gets tight, those that drive the best strategy, utilize operational best practices, manage the customer experience and focus on cash flow will survive the downturn.

Should You, Can You Go Paperless?

To realize the full benefits, contractors should treat going paperless as a significant undertaking with demonstrable payoff.

By Glenn Matteson

ontractors have dreamed of eliminating paper and all the baggage that it carries for a long time. The temptation has been there since the computer, and especially the Internet and e-mail have hit our businesses. As one general contractor put it: "I have more wood in the paper on this project than in the building."

The paperless vision eliminates entire rooms of file storage. Countless hours of administration are eliminated. Changes and disputes are resolved instantly — just think of the mistakes eliminated through digital documentation, the speed of transmittal or the efficiency of single-point data entry. Data is massaged, sliced, diced and transformed into actionable information. Information drives decisions. Decisions generate profits. As Louis Armstrong crooned, "Ah, what a wonderful world it would be."

In addition to these advantages, going paperless can raise productivity, increase accuracy and create a lower cost of doing business. But it also sends a strong signal to customers that a company is investing in reducing its corporate footprint and practicing corporate social responsibility in this age of green. It further demonstrates technological advancement, and with that comes efficiency.

Reality, however, is a little different; going paperless has many different connotations. Collaboration with subs, GCs, design professionals, owners and others can be a limiting factor. Besides practical considerations, truly profound

Going paperless is a rather profound change that can achieve a strategic competitive advantage for organizations in a highly aggressive and mature industry.

changes need to occur within an organization to achieve this goal. Change management, then, becomes essential with needed elements including a well-thought-out plan with measurable objectives, process maps for before and after the change, quantifiable results and critical buy-in from others. Benefits have to be not only communicated but also demonstrated internally in order for teams to take the initiative and implement the required changes. Champions will be needed. Executive management will continue in its traditional leadership and create and articulate the vision and goals, align the troops behind the vision and goals, and provide the motivation needed.

Going paperless is a rather profound change that can achieve a strategic competitive advantage for organizations in a highly aggressive and mature industry.

While technology, including the advent of the personal computer, spreadsheets, scheduling software and some project administration programs, has helped the administrative aspect of construction project management, management of construction projects has not changed a great deal in the past 20 years. It is still largely driven by paper input and paper output. Time sheets, production logs, quantity counts, cost reports, material requisitions or releases, labor leveling, equipment transfers, etc., etc. A contractor may use a variety of software programs to estimate and manage projects, report financials, control accounting and operate communications.

Today, these programs tend to talk to one another better than in the past, but integration and implementation can be painful. It is often not so much the technical integration of the software, but the people using the programs. The key is a thorough understanding of core and support processes. The detailed steps required vary with every contractor. Unfortunately, they also tend to vary within a business. While this may not be an issue now especially in companies with capable people skilled at managing their processes — it may become one in

trying to address these disparate processes programmatically. Flexibility and autonomy is sacrificed for efficiency.

Given these challenges to going paperless, a few rules are worth considering.

RULE 1: INSIST ON COMPLETE EXECUTIVE SUPPORT.

If top management is the least bit ambivalent towards the endeavor or caves when the crackerjack project manager or superintendent refuses to give up "his way, his spreadsheets," the change effort is doomed from the start. It only takes a few highly visible naysayers to torpedo a change like this.

RULE 2: MAP EXISTING PAPER PROCESSES.

Most successful contractors that have been in business for any length of time have adequate to very good paper processes in place. While there is probably always room for a little improvement, don't spend dollars to chase dimes. Making a

flowchart of company processes is not complicated at the start. The challenge is in the details. Begin by separating the processes into their basic functions like opportunity selection or marketing, preconstruction services, estimating, budgeting, job cost and control, scheduling, labor loading, project administration, financial reporting, equipment and/or tool management, etc. Create separate flowcharts for each. These can be linked later, when and where appropriate. Develop small teams for each. Three to four people work well. Teach them how to make

While there is probably always room for a little improvement, don't spend dollars to chase dimes.

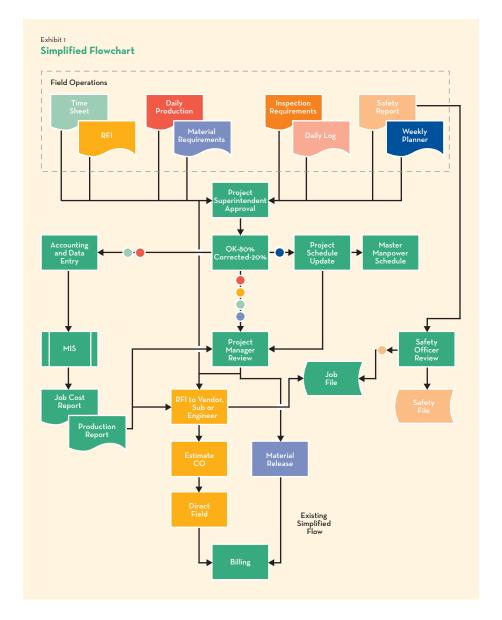
flowcharts, preferably with some standard charting software. Once the basic processes are mapped at a high level, have each team break the individual, high-level process into its specific actions and identify the corresponding reports and forms associated with each.

Even performing this exercise in a mechanistic fashion will offer improvements and value, without an eventual move to going paperless. The reason is that as creatures of habit, the exercise will find forms, steps or procedures being performed regardless of their value, but instead, from past use and a mentality of "that's the way we've always done it." Flowcharting is a common method employed in many process improvement initiatives. (See Exhibit 1.)

Defining processes, however, is not enough to determine the ROI of going paperless. Electronic and digital management creates a velocity or speed of information that needs to be leveraged.

RULE 3: DETERMINE THE COST AND DURATION OF THE DEFINED PROCESSES.

A traditional method is activity-based costing, or ABC. Each step in the flow chart consumes resources or incurs cost. Each step should be analyzed to determine how long the process takes since time can be money too. Resources are typically



people, so determine who is involved with the process. To ensure all individuals are included, ABC basics state that full-time equivalents (FTEs) need to be defined; so individuals should be "counted" even if they are only partially engaged in the process. For example, the process of completing, submitting, verifying and entering labor hours into a cost system can be broken into FTEs. Step one: The field supervisor fills in a time sheet requiring 20 minutes or one-third of a supervisor's hourly FTE. Step two: The FTEs required for delivery and collection are added. Step three: The detailed steps occurring in the office are measured in FTEs and continue until the process is complete. For example: Who touches the paper? Who supplies a service to the paper, i.e., verification, correction, keystroking, etc.? An important aspect to measure is the amount of time spent waiting in a process. No FTEs are actually employed, but waiting time is required. Processing the time sheet on a weekly basis is an example. Since payroll is a weekly activity, time sheets are often only collected once per week. The FTE required to fill in a

time sheet by a supervisor is brief, but seven days occur between the supervisor's activities. Would more timely information be more valuable? This value needs to be identified, estimated and included in the calculations. When complete, the process will have a total duration of time, value of waiting and the FTEs or total cost to complete the process.

The technology to go paperless is varied. Some important considerations in selecting a technology or set of complementary technologies are:

- Will it completely address all processes included in the flowchart?
- Will it address all flowcharts?
- What is the ease of use and acceptance by personnel?
- Is it compatible with existing systems?
- How flexible is it in making future changes to processes?
- What is the level of control and ease of maintaining the technology?
- What is the cost of the technology (include one-time implementation, occasional updating and continuous or recurring costs)?

The answers to these questions will reveal where and how paperless technology will impact the flowchart. Redraw the charts using the technology. Identify the steps eliminated, durations shortened and FTEs reduced to clearly estimate the initial setup and ongoing investments.

RULE 4: DETERMINE IF THE ONGOING SAVINGS ARE GREATER THAN BOTH THE INITIAL INVESTMENT AND THE RECURRING COST OF THE TECHNOLOGY.

Implementing a "paperless" system can be challenging, but if planned correctly, it can be fast and efficient. Like any other strategic initiative, the implementation requires commitments from key constituents. These commitments include real time invested and "political capital" from executives to reinforce with the entire organization that the time and money being spent is its desired strategy. A team leader is needed. This is not necessarily the IT manager, and perhaps more effective is someone with rank and a direct stake in the processes. A senior project person or operations manager is ideal. A champion is a must. Individuals from each group, or department, affected such as operations (or estimating, if appropriate),

accounting, IT, etc., should be represented. Executive sponsorship is needed. This executive need not participate on a regular basis, but should oversee the progress and hold the team accountable. In fact, too much direct involvement in the planning stages by an executive can take away some "ownership" developed by managers. The time invested by all parties should be included in the ROI calculation.

To make the transition to a paperless process, assign the four rules

Implementing a "paperless" system can be challenging, but if planned correctly, it can be fast and efficient.

identified here to teams of two or three people, especially the mapping. A visual representation of the process is much more powerful, especially for people within this industry. Treat the implementation like any company project. Meet on a

regular basis. Determine a realistic schedule to create the maps and work to meet it. Keep the budget in mind and document costs. Prepare a succinct final recommendation to proceed (or not) with empirical ROI numbers. Include in that recommendation an implementation schedule and plan. Include provisions for ongoing changes to the new system(s); as others get involved and use the technology, improvements will be added. As with any important company project, the process requires a significant amount of upfront work. The payback will make this initial investment valuable. The challenge most contractors face is dedicating the time of the project champion and other team members. It is often an initiative on top of their

Going paperless is a sea change. The process is more than a systems implementation. People have to change how they do things as well. The role of the champion can not be underestimated.

regular duties. That's why it's important to select a good champion — one who sees the potential results to be meaningful. Going paperless is a sea change. The process is more than a systems implementation. People have to change how they do things as well. The role of the champion cannot be underestimated. The concept of using a "bellcow" as a champion is a great way to start. The bellcow is a leader within the heard, respected by his or her peers and willing to make the needed changes. The real value in the bellcow approach is the person's ability to work through others to sell the new concept and corresponding changes — a much

more effective approach than senior management forcing it.

Another effective approach is to adopt a project champion who others would think is an unlikely project supporter. This person might initially challenge, or be critical of, the change. Converting the individual from opposition to an early-adopter status will require some one-on-one coaching, but by the individual's acceptance and embracing of the change will impress the rest of the organization. A great example of this type of championing occurred with a large site contractor. The contractor decided to test a

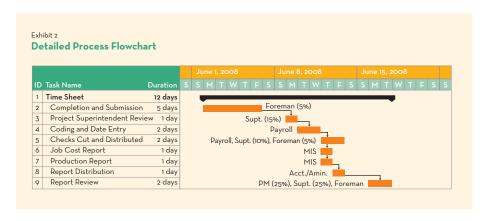
paperless technology and approach within its equipment maintenance department. The contractor asked Fred, the biggest curmudgeon, anti-computer mechanic, to give it a try. Two weeks later, Fred had become the company trainer for the technology. "If Fred can do it, anybody can," became its motto! Implementation in the field went twice as fast as anticipated, and equipment repair time was reduced by more than 30%.

Exhibit 2 shows some high-level process flows from the field to the office in their "as-is" state. Each of these processes should be broken down in detail with example forms, reports and documents collected. Refer back to Rule 2. (You must map your existing paper processes.) Efficiencies from paperless implementation should then be applied and the processes remapped. (Rule 3: Determine the cost and duration of the defined processes.)

The existing simplified flowchart in Exhibit 1 is a high-level view of the major processes managed by field operations. Each process in the chart should be broken down into more detail with every piece of paper identified, the individual responsible for handling it and the typical duration. Note the document symbols at the top of flowchart. These represent pieces of paper generated by the field. Establishing duration and resources used or FTEs is simple when using a scheduling program. Exhibit 2

specifies the time-sheet process as depicted in the flowchart. Duration of the tasks and the approximate, fully burdened FTE cost percentages are listed with each FTE handling the task. For example, Exhibit 2 shows the foreman dedicates 5% of his weekly time to complete and submit time sheets.

Notice that a typical time sheet, manually completed on a daily basis and submitted on Friday, requires more than one week to process and return actionable



The cost of going paperless depends on the specific solution or technology adopted. Remember that both one-time and recurring costs are included in this process change.

information to operations and the field manager. When we apply the monthly FTE cost factors shown in Exhibit 3, we get a more complete picture of the impact from the current manual process. Here we assume the foreman will not be able to save any time by completing a paper or electronic time sheet. The superintendent, however, typically spends a measurable amount of time collecting, correcting and editing time sheets from several foremen. We are assuming a modest 5% reduction in the superintendents' activity. The FTE for a payroll clerk is eliminated. MIS, accounting and administrative FTEs are not reduced. The project manager will save some time and

effort on the analysis, so a 5% reduction is planned for the project managers.

The cost of going paperless depends on the specific solution or technology adopted. Remember that both one-time and recurring costs are included in this process change. One-time costs might include consultants, programming for software integration and technology purchases. Recurring costs will include any ongoing charges resulting from the technology and will typically outweigh the one-time costs quickly. FMI's experience shows that about \$180 to \$200 per month per device will cover all the amortized hardware, software and communication fees. The example contractor above would require 25 devices, one for each field

Exhibit	3	
FTE	Cost	Factors

FTE Cost Factors			Daily Dollars		
Foreman	22	26	211	1,056	4,224
Superintendent	37	44	355	1,776	7,104
Payroll	18	22	173	864	3,456
MIS	19	23	182	912	3,648
Accounting/Administration	18	22	173	864	3,456
PM	33	40	317	1,584	6,336

FTE Cost Factors	Manual FTEs Percent				Total Paperless Dollars
Foreman	5	20	4,224	5	4,224
Superintendent	15	5	5,328	10	3,552
Payroll	100	1	3,456	0	0
MIS	2	1	73	2	73
Accounting/Administration	2	2	138	2	138
PM	25	5	7,920	20	6,336
			21,139		14,323

manager and the one-time software integration. Its recurring cost would be about \$5,000 per month (25 x \$200). Savings in FTEs for just time sheets would be approximately \$6,800. This contractor would now need to analyze all the other "paper" or manual processes happening and include any savings from those FTEs. The cost is fixed at \$5,000 per month with the current labor hours.

The change will not only enhance the timeliness of weekly reporting but also the accuracy of the time sheets. The FTE calculations take into account corrections and edits. What's not measured is is the impact of receiving, processing and acting on results from the prior day rather than the prior week. This can have a major impact, which should be monitored to show reductions to overall schedules, savings on general conditions, early completion bonuses, less rework, higher labor productivity and increased opportunity to do more work in the same period of time. Then, compare the cost savings against the investment of paperless technology. (Rule 4: The ongoing savings must exceed the recurring cost in the technology.) The one-time costs will be paid back; use these measures to determine the specific payback period from those savings over the one-time costs. Turning a paperless vision into reality saves money. But its real value comes from the resulting increased communication speed and improved quality of communication. Better decisions will be made faster, which can lead to a strategic competitive advantage. To realize the full benefits, contractors should treat going paperless as a significant undertaking with demonstrable payoff. The process changes required are fundamental, and successful adoption by everyone is critical for success.

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Who's Bringing the Food to the Strategy Table?

If you want your backlog to be full and to have the most profitable, sustainable future possible, don't limit your business development team's involvement

By Jeff Schulz

oon organizations trying to achieve sustainable success will rely more heavily on business development personnel to help craft the strategic plan. In fact, business developers will play a greater role in defining the company's optimum future state than any other corporate function.

Demand-side economics have stalled construction's momentum. Convincing customers to buy what you sell is going the way of asbestos, the steam engine and carbon paper. Firms that win in the future will excel at creating what the customer envisions — and the way to know what the marketplace is envisioning is by listening to your business development department. The Business Development Impact Cycle is a four-step process designed to actively engage the business development function in crafting your firm's winning strategy.

Business development used to not matter a great deal. Construction was pretty simple. To get started in the business, you fixed a leak for a friend or helped him build a patio. He told his friends and soon you were doing work for them. Enough work that before you knew it, you found yourself driving around town with magnetic signs on your pickup's doors stating that you owned an eponymous construction firm with a grand total of one employee. Not long after, you had so much business, you were drowning in it; so you hired someone to help hold the two-by-fours and the other end of the chalk line. Then you hired

someone to answer phones and handle the paperwork. The snowball rolled on and your nuclear family became insufficient to support a successful business. You onboarded some new help.

This works for a while. However, the word-of-mouth wave that you were riding broke; after all, sound only travels so far. This wave, which was simply meeting your unsophisticated customers' expectations, was your only business development effort. In other words, you were making the minimum required selling effort. Now getting enough business is no longer simple, and you are forced to transition into competing with the big dogs for food. This requires you to actually pay attention to developing business. You have a staff you want to keep. You have quality people you need to retain. You have bills to pay and mouths to feed. What do you do? The old way is to work harder; but that is like

driving at night without your head-lights on. Pushing the accelerator to the floor as you do during the daylight will not only fail to encourage the morning sun to rise sooner, but also it emphatically increases your chance of failure. Yet, this is analogous to what many do in the construction industry. They think that by doing what they did when the sun shone on them and what the market demanded they build, that they can continue to work

when the market changes. In fact, you should take a breath, slow down, realign yourself for the new conditions and go safely on your way. Using your business development department to plan for the future is the answer.

THE "DRIVE BUSINESS FALLACY"

Business development is looked at often as an unnecessary evil by the rest of the company. They don't do "real" work. They are never in the office. They eat a lot of fancy meals, play golf too often and go to sporting events and concerts. They aren't in the field operating the backhoe, tying off on the high steel or tamping soil. Business Development (BD) is tolerated so long as there is a backlog.

What it is, most assuredly, is necessary. Even contractors who are wise enough to understand the absolute necessity of business development still miss the benefits from a great BD effort. They view it as the mechanism to find potential customers and drive new business. But, this is too focused and narrow. The thinking is: "Once business development performs its BD hocus pocus, I expect to see some plans to bid. Then, BD needs to get back out there and bring in some more." Contractors view the sales and marketing team as fishermen. "Go get me some fish. It shouldn't be too hard; two-thirds of the earth is covered by water."

THE BUSINESS DEVELOPMENT IMPACT CYCLE

Potential Customers

These potential customers that BD is supposed to reel in are part of the marketplace, and each one has valuable information — information that other

companies would pay for. These individuals are members of the community that provide opportunities for you to employ your work force and generate profits. This tacit network of peers shapes the environment and creates the future business world in which your company will operate. They provide the food you wish

to eat. And by not fully utilizing your business development team to help you craft your strategy, this information provides you no value. Your advantage is given away. Your asset is wasted.

Business development is frequently pigeonholed into focusing solely on meeting potential customers. The idea is: If they have business, we want it. How do you set a more methodical approach? The answer: Follow the Business Development Impact Cycle. (See Exhibit 1.)



In addition to potential customers,

the other nodes of the Business Development Impact Cycle are Existing Clients, Market Knowledge Equity and Corporate Strategy. Each node builds upon the last to keep the cycle going and build profits for your firm.

Existing Customers

Besides potential customers, existing customers represent an often untapped source of new business. This fact is often forgotten, even by some top-performing firms. By failing to task business development with leading the customer interaction past the search for new customers, tremendous benefit is lost.

Let's see how we can screw up our treatment of existing customers. We'll call it "the customer hot potato." Initially, contact was made between one of your salespeople and a potential customer. In order to do business, there had to be a relationship. And relationships are not company-to-company or even person-tocompany. The reality is they are person-to-person or saleswoman Jill who went

Business development is frequently pigeonholed into focusing solely on meeting potential customers.

golfing with client Joe. Granted, it was on your company's dime; but your company didn't go, Jill did. Even the Verizon television commercials have the same guy as the focal point. It is the *individual* who is supported by the network of Verizon.

What happens when client Joe feels comfortable with saleswoman Jill and her representation of your firm and decides to risk his hard-earned cash and his livelihood by entrusting you with turning his multimillion dollar dream into reality? Let's toss

that hot potato! Client Joe is lucky if Jill even shows up to introduce him to a nameless, faceless project manager whom he has never met. Jill says "good-bye," never talking to her customer again ... unless Joe has another potential job — then maybe. This is how numerous organizations treat new customers: like a hot potato that will burn your hands if handled too long. While transitioning the customer relationship management to the project manager may make sense from a business process standpoint, how does it make customers feel? Like they aren't special. Like their project is really any project. Maybe even a bit betrayed. But what can Joe do now?

He already gave you his business. He might have some regret, and in the back of his mind, he may now doubt that he can trust you. What about the first change order? Will he wonder if it is legitimate? Maybe he will think that it is inflated. Worse yet, what about his next project? You were so close to getting him to love you, now he feels jilted. At this point, you are no better than any other firm, whose name he can pick out of the phone book or read on a job-site crane. You had the inside track for future work, but now you've allowed your competition back into the game. If only you had locked up that client, making him so happy no competitor could overturn the relationship. But like a jilted lover, will the client enthusiastically engage you again?

It is not hard to discern why some owners play customer hot potato. Business development is overhead. Building upon the fallacy that all overhead is bad, wasting overheard dollars on nonessential business development is just horrendous. What is more wasteful than having a business development person work with business that has already been developed — the existing customer? Get her back out there and work to develop undeveloped business!

This does not mean that your business development staffer now needs to spend the same amount of time with existing clients as he or she did acquiring those customers; but there should be regular contact if those clients will offer you future business opportunities. This existing client still has needs and purposes that can be met best through a solid, sustained relationship with your business development person.

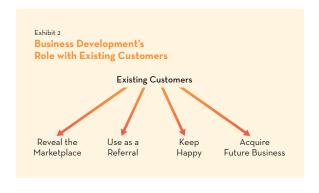
The Raymond Group is a highly successful trade contractor in the western United States with offices in Northern and Southern California as well as in Las Vegas. California Construction in its December 2007 issue selected three Raymond projects to include in its top "36 Best in California" projects. If you have visited Vegas, you have probably seen the company's work in the Palazzo and the mammoth City Center. How is The Raymond Group able to be so successful despite these trying times? Kim Lorch, vice president with the Las Vegas unit,

puts it simply, "Really work on developing relationships with customers. That is how you separate yourself. That is the key."

Business development plays four major roles: Keep customers happy, use customers as references, acquire future business and understand the marketplace and its future direction. (See Exhibit 2.) All of these roles can be satisfied with a great deal of trust. Integrity-based trust leads to repeat business, which leads to profits. Without repeat business and without trust built from your long-standing relationship, profits

vanish. And they vanish out of your pocket and into the pockets of your competition.

You don't have to do anything egregious to lose those relationships and those profits; to lose them is a matter of having built up that trust and then dissolving the



relationship. When Joe has an issue, he will stifle it because he no longer has a bond with someone in your organization. When a change order to use #7 rebar instead of #8 comes to his desk, he might still sign it, but it won't be an automatic removal of the pen cap. He will chew on it a second, thinking, "I know this is deductive, but is it enough?" You have neglected to show Joe that your firm is all he needs and that you will cater to him. Now he and all his future projects are fair game for your competitors. In this market, where backlogs are drying up and the market is imbued with competition, is this customer loyalty an advantage that you can

Business development plays four major roles: Keep customers happy, use customers as references, acquire future business and understand the marketplace and its future direction. throw away? And all for the low cost of a few phone calls and some face time?

Don't overlook these existing customers, who, like potential customers, also belong to the community of owners that should drive the business development efforts at your firm. They provide knowledge to you as do the potential customers; but this knowledge should be deeper if you have built up the trust. They will tell you more of what they are seeing, what they are hearing. They are willing to share more of their discussions with other businesspeople and your competitors (competitors they chose you over). They might even go so far as to find out information for you.

They also can provide references for you on other projects. If you are

trying to get on a shortlist or prove your merit, having someone who is passionate about your work recite his satisfaction and support your causes is a tremendous asset. It may be the necessary boost you need to receive your invitation to the bidding party for someone else's project.

Market Knowledge Equity

The market knowledge gained by your business development staff will not appear on the balance sheet directly, but it will have as significant an impact as any other company asset. BD staff have had their ears to the ground and have been in contact with those shaping the future. Your BD staff knows what is going on out there. They hear about the GC coming to town to erect the new medical office building, or MOB. They hear rumors about the proposed subdivision. They learned from one contact about the factory moving into town.

Each of the nodes in the Business Development Impact Cycle build on one another. For example: What can you hope to gain from having a great relationship with your existing clients? Market Knowledge Equity. To explain, let's return to

The market knowledge gained by your business development staff will not appear on the balance sheet directly, but it will have as significant an impact as any other company asset. Vegas. Everyone would love to have work on The Strip. Any new project on this popular, four-mile stretch of the largest hotel, casino and resort properties in the world is gigantic. The next big thing has to dwarf the last big thing. Every new project often means doing something that no one has ever done before. Why doesn't everyone work there then? Because of the competition. The hit rate is low and alternative work with MOBs, residential, office buildings and strip malls is drying up. Miss out on The Strip and your Vegas work takes a nosedive. Vegas is a classic case of a high-risk/high-reward gamble.

However, you have an ace up your sleeve. The continued client interaction of your BD team and continuous

building of trust gives you early warning and provides you an opportunity to get ahead of the competition. Now you can create a plan of attack. There is time to gather information and to both identify your critical weaknesses and remedy them. You can upgrade your human resources either by training your engineers and journeymen, or by hiring experts with a résumé. You can craft value-engineering ideas. Your purchasing department can obtain quotes from new suppliers. The PMs can design a desirable build-schedule and optimize the resource load. Your controller can make sure the bonding capacity is sufficient and plan for cash-flow needs. But, most importantly, you can go beyond determining the key success factors. You can look into what is important to the client and find out what are his concerns. If it is a new client or owner's rep, you can begin the process of

Sometimes Market Knowledge Equity means uncovering things that make life a little more complicated.

building relationships and making allies. By the time your rivals have a clue, you are so far ahead, they have no hope of landing the work.

True, you might be able to get an idea of what is on the horizon by word of mouth, but so can your competitors. What everyone knows is seldom worth knowing. Information is like anything else: It is more valuable when it is rare.

"Business development does include the social aspect, but it goes far beyond that," explained Raymond

Group's Kim Lorch. "The owners, GCs or other trades rely on us to be able to deliver their vision. They have an end result they want, but need help with getting there. Business development is critical in allowing us to know what is important to our customer. This knowledge allows us to become a 'partner' with the owner in finding the most cost-effective ways to achieve their vision. Business development clarifies that vision and then utilizes the experts within Raymond to create budgets and schedules. This allows our operations team to do what they do best: to bring to reality the varied, changing and complex visions of owners."

The Raymond Group is viewed as an industry resource with significant market knowledge critical for accomplishing these large, innovative projects. "The MGM City Center project is a great example of this. The GC and the designer wanted us on that project because they knew that Raymond would actively work to develop the construction materials and methods to support the owner's vision, guarantee the budget and provide the operational expertise to bring the project in as expected."

Sometimes Market Knowledge Equity means uncovering things that make life a little more complicated. You discover from this relationship that you have to change. Just as those people who made world-class buggy whips had to change with the advent of the car, your buggy whips just don't have any value to anyone except museums.

Driving Corporate Strategy

You've aced the first three steps. Potential customers were transitioned to current clients, and the relationship

has formed. You maintain communication with both groups and glean tremendous market knowledge equity. You are in your client's confidence. Information is shared upstream and downstream. Everything is seashells and balloons, right?

Nope. The critical last mile has not been traveled. However, with a proper mind-set, the last mile, while not easy, is a very plausible mile.

I am sure you can imagine a similar story to this. "We have the best high-rise window installation crew in Sarasota. No one from Tampa to Naples can touch us. Ask anyone. I don't care that my BD guy says we need to change. We are on the Gulf, and we do high-rise windows. It has

been good to us for 50 years. Besides, we don't know anything else." This could easily be the boasting of a peer operating on Florida's Gulf Coast. And you know what? He might be right. He could be at the apogee of high-rise glazing greatness; but without listening to the marketplace, he will likely participate in the collapse.

In a situation like this, the Sarasota window installer probably sensed what was coming. He and his business development chief listened to their clients. But they didn't act. They didn't change their ways. They were the best at glazing for high-rises. There is something to be said about going with what you know. But if no one wants to buy what you are good at, what good is it? Operations rules the day, and the rest of the firm rues the decision.

To realign their strategy, business development personnel need to be able to apply this market knowledge equity as the driving force behind their new strategic plan. Management needs to direct the company not through the rearview mirror, but instead through the windshield with headlights on high. They need to aggregate the data acquired from the close relationships the BD team has with its clients. Combined with experience, input from market surveys, web sites, newspapers, trade magazines and other informational sources, this input allows management to find a viable and profitable vision that aligns with the company values. Now create strategies and goals to get there. Then implement the changes necessary to achieve the newly defined direction. Get training for the field. Update the IT Network. Apply those relationships to acquire new business.

Sounds tough? It is. Sound impossible? It might help to know that the company that invented the first fully integrated loader-backhoe, JI Case, first

Many contractors wear the proverbial blinders and they add business development earplugs. produced threshers. It had to relocate its office because the original location wasn't conducive to its success. Today the company is a worldwide manufacturer of construction equipment. Successful companies don't always stay what they were or even where they were.

Many contractors wear the proverbial blinders and they add business development earplugs. They just focus on what they know and fail to listen to the BD experts who understand the direction the marketplace is heading. They mistakenly believe that business development is simply for developing new business, not for also maintaining customer relationships, not for gaining Market Knowledge Equity. Certainly not for crafting strategy. They cling to the belief that

all that is needed for ensuring the future is the "real construction" operation. They assume that just because they are healthy now, that their environment is not polluted. But if someone breathes second-hand fumes long enough, he runs the risk of suffering the same outcome as a smoker.

If you want your backlog to be full and to have the most profitable, sustainable future possible, don't limit your business development team's involvement. Encourage them to build continuing, deep relationships with their existing clients. Then, when devising your strategic direction, let the business development team bring

If you want your backlog to be full and to have the most profitable, sustainable future possible, don't limit your business development team's involvement.

their Market Knowledge Equity to the table. After all, it is not about where you have been; it is about where you are going. And who knows better in which direction to head than your market-savvy business development team?

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Bridging the Project Information Chasm with CASim

Led by the vision of John Rapaport, Component Assembly Systems (CAS) developed its own software and process, which allows it to see in real time if production is being met and adjust.

By Kelley Chisholm

magine on Thursday being able to see into the future and know that you will run out of drywall by 3:00 p.m. the following Monday, giving you the ability to immediately adjust your labor and refocus skills where they are needed. You are probably wondering, "Where do I get this crystal ball that will ultimately save my company countless dollars?" One specialty contractor found a way to look into the future, and instead of using a crystal ball to see what may happen at various stages of a project, it developed a technology platform that does this.

In 1993 John A. Rapaport, director of operations and general counsel for Component Assembly Systems Inc., spearheaded the company's efforts to digitize and modernize its technology infrastructure. Through his vision, the company was able to develop its own proprietary software known as CASim, which tracks and updates progress on its projects using the latest web-based technologies. It allows users to access all information residing within the company, regardless of software application, from a web-based interface. It also tracks payroll, codes and

COMPONENT ASSEMBLY SYSTEMS INC. (CAS) was founded in 1964 by H. Lewis Rapaport as Score Carpentry and performed its first project at the New York World's Fair, building a kitchen at the DuPont Gas Pavilion for \$139. Today, Lew Rapaport is the chairman and CEO of CAS, a company with six offices serving more than eight states, including New York, Massachusetts, New Jersey, Washington, D.C., Connecticut, Nevada, Pennsylvania and Maryland. With a bonding capacity of \$500 million, CAS is among the nation's leaders in interior construction, from drywall partitions, acoustical and specialty ceilings and millwork installation to other carpentry and drywall-related services. CAS has successfully completed more than \$3 billion worth of projects including the Ronald Reagan Building and the Washington, D.C., Convention Center; the Bank of America Tower and Foley Square Courthouse in New York; Millennium Place and the TD Banknorth Garden in Boston; the Borgata Casino Hotel and Terminal C-3 at Newark Liberty International Airport in New Jersey; and the new Wynn Encore in Las Vegas.

CAS is a leader in technology innovation for the construction industry, winning the coveted Gold Vision Award from Constructech magazine for its software program known as CASim (Component Assembly Systems Information Manager), a risk management/project-focused web-based tool that allows the company to see its position on any project and adjust to the realities of the construction industry's ever-changing variables. For more information on the company's full history, go to www.componentassembly.com.

adjusts budgets, with new information added into the system daily.

One of the drivers behind CASim was the desire for all estimators, project managers, executives, foremen, field supervisors and purchasing and accounting staff to be on the same page, able to see the same information that relates to their positions, from anywhere. CAS found that much of the information on budgets and estimates was not making it from estimating to project management to the field and then back to accounting and estimating. Rapaport and Systems Analyst John Lord linked estimating and other databases within their cost accounting data and insisted that the information input be accurate and reliable.

Another driver was the need to identify challenges early in the project, giving management a streamlined view of operations and the opportunity to take timely action. The program flags problems and highlights trends that often were missed in the past.

FMI interviewed John Rapaport to learn more about the cutting-edge technology at Component Assembly Systems.

FMI Quarterly: Please give our readers a general overview of what CASim is and how it works.

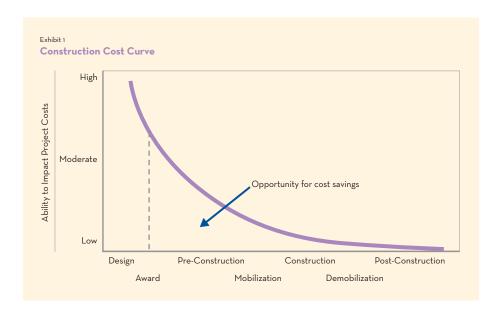
Rapaport: We purchased a job-cost accounting software package from C/F Data Systems in the summer of 1993. That November, John Lord, who we hired as a systems analyst, analyzed how we processed data, how we looked at our jobs, etc. When we first started looking at C/F Data Systems, we noticed that we could do a lot to analyze our labor codes. Historically, we took our labor codes and put them through our payroll system, whether we were doing framing, sheetrock installation, etc. We used these codes to process our payroll, but were not necessarily analyzing the actual hours of each labor code against budgets. I am talking about original budgets. We have 200 or 300 hours to frame a floor in the budget from the estimate, and we want to know how we are doing against actuals. It is a pretty basic concept, but many subcontractors don't do this correctly, as I am finding out through industry forums. We challenged the company; my dad, CEO Lew Rapaport; and President Art Doerner. We simply asked, "Why are we calling in all of these labor codes if we're not analyzing them to the budget to see how we're doing at a certain percent complete?" To their credit, they recognized

the need to move forward with this idea, and it set us off on our journey of the last 15 years. The concept was to get an accurate percent complete every month or so, depending on the length of the job, and to know at 15% complete where we stand on a project. Labor in our union contracting world in New York, for instance, is approximately 70% of the cost of the project. In another, less expensive, market, it may be 60% to 50% of the cost. It's a big moving target, and we wanted to analyze it at different project points to see if we were winning or losing on the various labor codes. While this sounds like a simple concept, in reality it is not that easy to



take an estimate based on quantity and the quality of building elements, calculate the associated labor and build it into a budget, adjust the budget for changes and then analyze it along the way.

Often, subcontractors do not know if they're winning or losing on a job until it is almost over, which is too late to adjust. We looked at the FMI Construction Cost Curve (see Exhibit 1) and designed ways to affect change at the beginning of and during the construction process. Since we were unaware of the impact the





labor inefficiencies were having on the bottom line, some of these changes were brand new to us. FMI's curve is great, and we love it, but for our company, we wanted to make it a little less flat at the bottom. The acronym "CASim" stands for Component Assembly Systems Information Manager. With this tool and the other related work built around it, we have proven that we can affect change during the project.

FMI Quarterly: Please explain the actual processes.

Rapaport: We implemented a software estimating tool that includes the quantity takeoff. We scan in

the drawings, and they become tiff images. Then we color the drawings for the quantities of the walls and the ceilings. Often the estimators use two or three screens while they are working on this part. Next, we transfer takeoff data into Quick Bid, which performs the production analysis to estimate how long it will take to do the work. We can see what are the pricing and production rates for installing the various assemblies, all the way down to the screws. During the bidding stage, we present the color drawings to the client to help clarify our bid in a scope meeting. The architects like the colored drawings since they are so clean and include a legend

of all the different wall types and quantities. We've been doing this for 10 years or more, and it took a few years to implement this into the associated databases.

One of the keys with estimating and accounting software is to align the databases correctly. We recruited a graduate from Purdue's master's of engineering program, Beatriz Banchs, who reworked our databases within the estimating environment. She eventually started our offshore office in Venezuela. It is so important to recruit smart people and high-level thinkers who can take your data and organize it into a coherent project

It is so important to recruit smart people and high-level thinkers who can take your data and organize it into a coherent project budget.

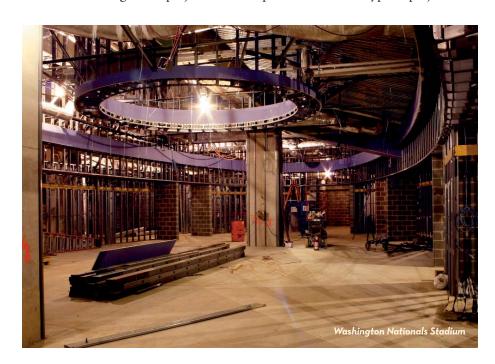
budget. We are building templates within the estimating software and also libraries of information for ease of analysis both during the estimating and project set-up process. Once we get a job, we have a hand-off meeting from estimating to project management. This is a very important meeting. The estimator cleans up

the bid to make it clear, including all labor codes and variables within the project. It is handed off to the project manager in a formal meeting in which others can sit and review the plans. Project personnel now understand what the bid entails so they can set up a budget. The data is then entered into a spreadsheet and is massaged to reflect that we will not be tracking 200 different codes in the field. We combine certain codes so the field is not focusing on tracking codes. For example, when we frame walls, we may have column framing near regular framing, with the same crew doing both. So even though we figure columns at a different production rate, we'll combine the rates for ease of tracking. We will note the difference in production rates and bring this up in the kick-off meeting.

FMI Quarterly: Tell us about the kick-off meeting.

Rapaport: Between the hand-off and kick-off meetings, we created another meeting called the budget set-up meeting, where we create labor codes in consultation with the field. This is the first time the field gets involved, and we ask the foremen and other key people who will be running the project to determine, with the project manager, the labor codes we will track. This step is critical because if foremen call in the codes incorrectly, then all the data and the analysis are wrong. We show the field how we are going to build the job, and how they are to use the codes to mirror the way the labor crews are working on the job. For instance, if we're caulking a wall and also putting the drywall boards up at the same time, we want to combine the two codes since the same crew is doing both. The field understands that by ensuring the cleanliness of the data, they will receive accurate feedback, critical to the outcome of their projects.

Once the codes are established, we hold the official kick-off meeting with the executives, field staff, assistant project manager, project manager, estimator and safety representative. We go through the whole job and scope of the work. We look at a rendering of the project, the floor plans, the size and type of project, the



schedule in terms of start and finish dates and the CASim labor codes that we'll be tracking. We also discuss issues that came up in the hand-off and pre-kickoff meetings. Usually this meeting lasts at least two hours, maybe longer, but it is very important since we are looking at constructability issues, quality, labor, etc. At that point, the job is kicked off, and the next meeting is a status meeting, somewhere between 10% to 15% complete because we have enough information to start analysis. We perform this analysis in hours, dollars and production rates, in terms of how we are doing on all of the labor codes. It really gives us a heads up on how

We've had jobs where we saw early on that we were not making the numbers, so we changed up some of the framing sequencing and labor and were able to get back on track with the budget, which has saved us millions of dollars over the past six years.

we're doing overall; and by the next meeting, which is 25% complete, we really get a good idea of where we're going with the codes. If there is a problem, we'll change the labor. We'll look at why we're not getting the production. Was the estimate incorrect? Did we miss something? Is the field not producing as we thought it would? We've had jobs where we saw early on that we were not making the numbers, so we changed up some of the framing sequencing and labor and were able to get back on track with the budget, which has saved us millions of dollars over the past six years.

FMI Quarterly: How long did it take to get CASim up and running?

Rapaport: In the late 1990s we did some "static" versions of CASim using software known as PowerBuilder and Crystal Reports that were built on top of C/F Data Systems job cost accounting and payroll systems. The

current web version, which came out in 2002, took two years to design with more than 100 drill-down screens. Minimal training is involved, as the system is intuitive and user friendly. Different security levels allow a foreman to access hours and production rates while a project manager can see all the dollars, but only for his projects. Someone running an office would see all the jobs in that office. We were fortunate to win a 2006 Gold Vision Award from *Constructech* magazine for our efforts.

FMI Quarterly: How did employees initially react to the system? Has that changed over time?

Rapaport: Initially, the reaction was: "What is this, and how will it affect my job? Will it create unnecessary work or possibly uncover things that I'd rather have hidden?" Historically, in our industry, people have hidden things because they don't want to be the bearers of bad news. One of the reasons we developed and



implemented this software is because of this lack of transparency in the subcontracting business. We were victims of this like many other companies. Bringing in the field was the key. The field was never before included in any system, and they are the ones who are watching the store every day. We've enabled a partnership between the field and the office that has galvanized our work force to produce better-performing projects and more confidence in our current and future work.

We built the status meetings around the system, and they create a centerpiece for discussion that just wasn't there before. The foremen have passwords and can get into CASim and see the hours and how we're doing, which is updated weekly. The percent complete is calculated at 15% on the labor codes, and then there's a

total at the bottom for the whole job. The status meetings become a place, at every 15% to 20% interval, where we sit around and discuss all of this data. We look at pictures of the job and issues that have come up like schedule issues. We enhance project tracking and labor analysis through these discussions. The average job has five to six status meetings. We have a closeout meeting at the end where we discuss what was good, what was bad and what we learned. The estimators participate in the status meetings to review their own work. It is so valuable to take minutes of the meetings, share those and then follow up on decisions made in the meeting with the client.



Before using the system, we didn't make adjustments on a project, or if we did, it would either be too late or not based on anything factual or scientific, just emotional reasons. Now we have the data to explain to the field why we're doing something so they can understand why we need to adjust. They make the adjustments from the data or the status meeting.

I was recently on a job site where one of our foremen pulled up the job via the Internet on its secure, password-protected site. The foreman said he constantly looks at the framing hours to see how we are doing. He can see the hours by floor, who worked on the floors and drill down to the individual employee. We rate our employees on how they do on specific tasks. He brings in his framers and shows them, on the screen, when they are not meeting the hours, for instance, and

We have everyone learning the system, not just the technology but how to use the data to update budgets and to reflect an accurate picture of progress tied to labor costs.

therefore not making their expected production rates. They can see for themselves how they are doing. This is very exciting — sharing this information and showing the employees, who are physically doing the work. It is an immediate review and feedback system of when they are doing well and when they need to adjust and improve. This sharing of information has been very successful, and the field has taken to it. They expect the status meetings to occur at regular intervals, and they often push for the meetings to see exactly where they stand.

FMI Quarterly: Tell us about the budgeting aspects of CASim.

Rapaport: Once we're in the job, our original budget becomes

obsolete since additional work is being performed. The PM has to learn to adjust budgets for this additional work. "When do you adjust budgets?" was an issue for us, and we had to go through a learning curve. Do we wait until the change order comes in, or do we go ahead and perform the work? We had to work out many technical issues around how we adjust hours and quantities of work so we're not looking at actual hours against old budgets. This has been an ongoing learning process for our PMs. We have six offices in the United States, and we've held many conferences where we bring all of our PMs together in one location to go through the procedures. We have everyone learning the system, not just the technology but how to use the data to update budgets and to reflect an accurate picture of progress tied to labor costs. One note: It's a little tougher when you're doing proposal work because you're not using the same production rates as you do with contract rates. You're slower in a proposal environment because you are coming back to do a lot of that work often on a project. We don't want to corrupt our production rates that we figured originally with this slower proposal work. CASim breaks out the original productions from the proposal productions, and

we're able to see a blended rate and a rate that's broken out to show how we are doing based on our contract and on the additional work. This is very valuable, and it took years to develop.

At the end of a project, we can share the success of the project with various foremen and people in the field who are responsible for its success. The system enables us to see who made things happen — Was it the framers, the sheetrockers, the protection guys, the foremen? By having the system, we can see clearly where we did well and where we didn't and reward the team accordingly.

FMI Quarterly: How has CASim changed business at Component?

Rapaport: We are able to track items that we could not before. The percent complete is done accurately. Pending items are analyzed. We have many jobs where we have saved The system enables us to see who made things happen — Was it the framers, the sheetrockers, the protection guys, the foremen? By having the system, we can see clearly where we did well and where we didn't and reward the team accordingly.

money for us and our customers since our clients also got the benefit of the knowledge and our ability to act on it. We have created a scoreboard where we can see what the score of the game is for the field to the office. The score is not just in dollars and gives us a way to adjust to the changing nature of the game and increase "our batting average." It is a powerful change that also has given us the ability to be comfortable bidding future work based on history. What it also does is make everyone more at ease with the idea of change and to actually model change in the software. So we are designing new screens to identify more opportunity say, for instance, in analyzing proposals and tickets related to change-order processing. This

> dynamic approach to subcontracting has energized our company to move forward with greater clarity and purpose. It has undoubtedly helped us grow, as we have a \$500 million bonding line behind us now. We are executing on another offshore in a different country to do scheduling remotely to tie into this data. While it's in its infancy, we expect this effort to evolve similarly to our estimating offshore and be another link in the data chain that gives us power to act and be on the same page.

FMI Quarterly: What advice would you give to others who want to create a similar system?

Rapaport: Know your workflow. Know how data is created and how it moves between the office and the field. We did a lot of workflow analysis to track a project from the estimate to project management to accounting and back to estimating. We created flowcharts of this information, and again, smart people were involved in this effort, including another of our Purdue graduates, Adil Cheema. The question is: How can you recreate that workflow in your systems? Computers and the Internet, especially, came into play in the 1990s, and it was a perfect time to analyze how we were going to do our work in the digital age. We tried to model best practices from our paper systems that were tried and true. Essentially, you need to know how you work. Look at all of your paper forms and redo them digitally, knowing where the data goes. Look at how you create your data. How does the material database work between accounting and estimating systems? There needs to be a link to all this data. As I mentioned, we're working on linking our scheduling into the system. All of the data needs to be analyzed to make sure that what we're calling it in estimating has some intelligence in our other systems and that it is consistent across platforms and applications.

Once we had this functionality, I knew our world had changed. We have developed a very close relationship with CF Data, and this program is going to be one of its offerings at some point. Some of the people at Component have invested in the future of CF Data, and it's great because we have an information company behind us and helping us to design these new screens. We also get new screen ideas from PMs, foremen, accounting and purchasing. It's a very dynamic





way to do business where you're getting new application ideas from a foreman, who then sees it come to fruition on the screen. Once they see that their ideas have been incorporated into the system, it feeds on itself, and they want to use the system more and make it better. It makes the company more dynamic rather than reactive — and that makes all the difference.

CAS has moved beyond commercial, off-the-shelf programming to create a proprietary system that very well may be the wave of the future in the construction industry. Since adjustments are the rule rather than the exception in construction, CAS has developed a process to see in real time if production is not being met and adjust as needed. Many contractors have to wait until the end of the job to see how they did and are not able to make adjustments along the way. CAS is able to keep its jobs on track, which makes happy and satisfied clients. ■

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Managing Uncertainty Through Strategic Thinking

It is an undeniable truth that firms today encounter more unique situations than ever before. How else do you respond to such conditions except by devising strategies to meet them?

By Louis L. Marines and Karen Newcombe

trategy is a necessary business practice during normal conditions, but it is even more essential during times of uncertainty. Many architecture and engineering firms have strategies that could be applied to any firm in the industry—strategies that do not serve them well, that sit on the shelf without being acted upon, and that lack any contingencies for addressing changing conditions.

The fix is straightforward — firms can develop strong strategies that will distinguish them competitively and focus the firm's direction on a profitable market best suited to the firm's abilities and culture.

A TIME OF TRANSITION AND UNCERTAINTY

Make no mistake. These are uncertain times. The often-predicted pop of the housing bubble has turned into more of an explosion that threatens, at the time of this writing, to take the entire economy into an extended downturn. The government has structured a massive bailout, yet Wall Street has not reacted well to the news. However this situation plays out by the time you read this is typical "weather" for the world we live in now — strange to partly odd, with a high

"If your firm's strategy can be applied to any other firm, you don't have a very good one."

> — DAVID J. COLLIS AND MICHAEL G. RUKSTAD

degree of uncertainty. Economic tumult, combined with yet another natural disaster in the Gulf Coast states, points up the risk and uncertainty that every firm faces.

On top of uncertainty in the world, professions as a whole are in transition. The high level of expert

knowledge once held secret within the guildhalls of each profession is now widely accessible to anyone with an Internet connection. A more well-educated and well-informed public is coming to view professionals more as interchangeable commodities than the nearly magical dispensers of healing, interpreters of the law or creators of cities that they were once. The cat is out of the bag, and as the old saying goes, all cats look gray in the dusk. The only thing that distinguishes each of them is the price tag.

Unless it's *your* cat, that is. Unless you have the close relationship that responds to unique needs, qualities, purpose and culture, then you are also part of the mass. Most of today's professional design firms appear to the outside world as uniform as a clowder of cats. Consequently, the need to innovate away from commoditization is urgent. Firms must put the client at the center and devise an innovative strategy that aligns so perfectly with client needs that there simply is no other choice; mutual recognition is instantaneous.

"Too often firms in the A/E industry subscribe to the prescriptive practice models developed and presented by the professional organizations they belong to," said Craig Galati, principal of Lucchesi Galati Architects Inc. and a consultant

with AMI. "These organizations, while not intentionally, have helped professional design firms become isomorphous, identical in almost every way. When you couple that with marketplace expectations (green design, BIM, etc.), standard format contracts and insurance requirements, one can see why many firms copy each other's strategic directions."

DEALING WITH UNCERTAINTY THROUGH STRATEGY

The time-honored way of dealing with uncertainty of the sort that we face today (for establishing a position of success in the marketplace) is to form a strategy for handling uncertainty. The word "strategy" comes to us loaded with military history, one of actions designed to deceive the enemy and overseen by

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the *strategos*, the general. The rising merchant class of the Renaissance adopted *strategics* as one of its business tools in the game of outwitting one another in capturing markets and clients. Fortunately for us, today's business strategies rarely involve such traditional practices as arranged marriages, poisonings or assassins.

A deep immersion in the art of strategy is not usually part of the culture of architecture or engineering firms, a condition reflected in the perception that a good business strategy for a professional design firm might be "opening an office in Tucson," or "growing our firm by hiring more staff." While these may be necessary actions to support *a* strategy, they are not in and of themselves *the* strategy.

Why not? A strategy is a plan for how your firm will "capture" clients. This strategy should be simple enough that anyone in the firm can explain it in a few sentences, and hold it in his or her mind as a daily guide to action.

The simplicity of this idea hides an innate complexity. There are hundreds of books on the business shelves explaining how to create and implement a strategy, the stories of great strategists and how to tell if your strategy has been successful. This abundance of information is due in part because strategy is often confused with either the firm's mission or its

goals. "Increasing shareholder returns" is not a strategy. At best, it may qualify as a goal. "Offering our clients the best service and our employees the best place to work" is not a strategy. The many writings offered today are an attempt to get people back on the strategic path.

AMI's director of executive development, Dr. Joseph Rei, said, "Traditionally, A/E firms' strategic planning sessions end up being little more than exercises in long-term planning. Not much strategy slips into the event, which is characterized by collecting the knowledge of the firm's senior leaders. If that knowledge does not also include representative data from clients, possible new markets and services, and a cross-section of the firm's human capital and capabilities, then there is a high risk the firm will miss the opportunity to be challenged in its thinking. Without such a broad perspective they're unlikely to do more than typical long-range planning."

WHAT DOES A GREAT STRATEGY LOOK LIKE?

So if strategy isn't opening an office in Tucson and isn't long-range planning either, then what *is* it?

Strategy can best be explained and understood by looking at a good one. In their article, "Can You Say What Your Strategy Is?", David J. Collis and the late Michael G. Rukstad offer the example of investment brokerage firm Edward Jones. The firm's objective is to provide personal service and advice via small local offices to conservative investors who prefer to delegate their financial portfolio to a professional's care. There is one financial advisor in each office, trained internally

by Edward Jones and located in strip malls — one relaxing and friendly office for each of the 10,000 advisors across the United States.

Edward Jones also decided what is *not* a part of its strategy. Part of its strategy is not to have large offices in urban centers with hundreds of advisors serving people who are largely self-directed or hands-on in managing their investments. This clarity in strategy has put Edward Jones among the top firms in the industry and clearly distinguishes it from the other investment brokerages.

The simplicity and focus of its strategy also answers every question Edward Jones advisors, their staff or customers might have about the firm, including who their clients are and what they want, how Edward Jones can serve them, where clients can be found and why Edward Jones is different from other investment firms. The strategy defines for the firm who and what falls outside its service range, so that no time is wasted on efforts that don't support the core strategy.

There are other notable aspects to this concise and elegant strategy: the complete focus on and understanding of the client and his or her needs; putting

the firm in the best locations to serve those clients; and finding appropriate people to hire regardless of their industry and providing them with a full course of training at the firm's expense. This strategy is highly innovative in that it defines a market-place that was ignored or underserved by the competition, and directly targets that market in a way that is highly attuned to the client.

That attunement is a strategic factor often missed during the required annual strategic-planning session. Such sessions often produce voluminous documents that are impossible to act on, sets of disparate action items

without a strategy to give them structure or a "feel good" report that is easy to ignore. Everyone sinks back into his/her same pre-strategy routine and all good intentions are lost. The client has little or no place in this routine, which is at best reactionary and usually focused on the micro term, i.e. getting through today's work.

An example might best illustrate this need to become fully attuned with the client and with those the client serves. A firm with a focus on hospitals is not just serving the boards of those hospitals, but an entire community of people who rely on that facility to answer its health care needs. Will the firm's best strategy be to simply find ways to win health care projects? That approach forces it into the position of being petitioners for work, one of any dozen tinkers who line up at the door and charge about the same price for about the same work.

The danger is when the doorkeeper says, "These fellows all look just alike ... isn't there someone out there who really understands what I need?" Out of the blue, Target steps up and offers to do commercial interiors. By its very uniformity and lack of understanding of its clients, the design industry is forcing its clients to seek

providers elsewhere. Those providers, such as Target Commercial Interiors, are offering the innovation and service focused on specific client needs that architects and engineers are not.

Would a hospital board be interested in working with a design firm that brings a deep understanding of its unique community's health care needs to the table? Note that we say to

the table, not to the project. For it is the table that matters — no less in business than in legend. The people you invite to break bread at your table are honored guests, partners and allies, working in concert to plan a better community, to do the best for everyone involved in a thoughtful manner.

STRATEGIES ARE LIVING SYSTEMS, NOT DOCUMENTS

This approach is even more than simply being attuned to the client; it is also being attuned to the environment. "This is a key living systems principle," said AMI Consultant Ray Lucchesi. "Attunement can't only point to the external client. Any strategy explored by the organization should also be attuned to the organization's purpose and value proposition. Strategies not attuned in this way may only provide for compliance and not commitment by the culture — something that is chronic in our profession."

A project can form, be completed and break up without much of a relationship being developed. A concrete block building can be put up in about two days, and *voilá!* — A liquor store appears overnight. When the relationship is instead at the very basis of the project, in alignment with purpose and value proposition, something entirely different results.

As design professionals, achieving that different result is the path we chose and the commitment we made when we entered our professions. We and our firms are looked to for leadership both in our areas of expertise and in the community at large. It is our chosen vocation to make those communities and their embedded environments as highly functioning, pleasant, healthy and prosperous as they can be.

We and our firms are looked to for leadership both in our areas of expertise and in the community at large.

What makes for a highly functioning strategic-planning process?

Currently, most of these processes happen in a more or less democratic way. This can serve several purposes, including to educate people, make them feel valued and to gain insights that might not otherwise surface. But it is unlikely that the democratic strategic plan will result in the best strategy: The democratic process obscures who is responsible for the strategy and who owns the risk.

Strategy means the firm and its leaders are in alignment across the board, and it means someone is responsible.

Diane Creel, CEO of Envirotek and former chairman/CEO of EarthTech, said, "Leaders must have a vision; leaders must relentlessly drive that vision. You can't dilute that effort with too many different ideas. And if you see that the vision is wrong, you have to be willing to say so, back up and try something else."

Steven Isaacs, managing director at AMI, cited an example of how the strategic planning process can bring that alignment of leaders to the forefront. "Part of the strategic planning process is making sure everyone is on the same page. One design

firm we worked with had a number of partners, and during the process the facilitator could see that one partner was totally out of alignment with the others, who were so accustomed to the misalignment that they barely noticed it anymore. The strategic-planning process presented an opportunity for everyone to put his/her design and firm management philosophy out on the table. This public sharing of

viewpoints clearly identified what was a divergence in the one partner. To the shock of the other partners, the degree of this divergence was much more than they had realized. This helped both the firm and the partner recognize that they were not really well matched, and the partner eventually left."

USING SCENARIOS TO DEVELOP STRATEGIES

A single strategy may not be enough when times are as profoundly uncertain as they are today. Using scenarios allows firms to look at a range of possible futures and design strategies not only for the most likely eventuality, but also for alternate conditions should they arise.

Steven Isaacs of AMI recently conducted a one-and-a-half-year scenario planning process with a major construction management firm. The goals of this process were twofold: 1) to recognize that without knowing the future, much value can be gained from developing a variety of potential futures and then setting strategic directions based on how each direction would operate under the various future scenarios and 2) to produce a group of strategic thinkers who would think beyond their world and industry in building the scenarios to be used in the process.

Typically, scenario planning involves researching the key elements of current conditions and trends, and those that can be projected out with some certainty, then identifying alternatives to those situations that are less likely, but possible, in the future. Typically, four scenarios will be developed. For example, one scenario might predict a calm growth situation, where market, economic, social and technological conditions sail along steadily at a slightly positive rate. The second scenario might predict an economic boom that has rapid and positive effects on the industry. The third and fourth scenarios could take less optimistic positions to prepare the firm for downturns. One might predict a slow economy and the last one a severe and lengthy downturn.

We must accept that our beautifully designed predictions of impending conditions may turn out differently or that sudden change may catch us off guard.

Firms should develop a portfolio of strategies based on these scenarios, so the firm is not caught off guard should the unexpected occur. These scenarios, fleshed out with details as to how they could come about, how they would affect clients and the marketplace, and what the warning signs would be give the firm a way of planning for varying eventualities. The scenarios become the basis for developing your portfolio of strategies — an appropriate strategy to react to each unique possible future. The most likely scenario might garner the most attention and detail, but should not necessarily be the only one you

develop. Strategies should first address the big markets and economy, and then focus down into the specific niches in which the firm operates, or wants to operate. Scenarios should be as objective as possible; our brain is, essentially, a pattern-recognition machine, and it will quickly discover patterns that reinforce our dearest beliefs, while subtly rejecting patterns that might indicate our beliefs could be mistaken. Scenario planners should be alert for their own biases and emotional predilections.

Predictions are notoriously inaccurate. Even professional futurists have been shown to score lower than random predictions in almost all cases. So in preparing strategies, we must accept that our beautifully designed predictions of impending conditions may turn out differently or that sudden change may catch us off guard. Are we now at the peak of worldwide oil use or not? Will there be a major breakthrough in alternative energies akin to the breakthrough in electronics brought about by Jack Kilby's invention of the integrated circuit? We can't know the answers to these questions; we can only make our best guess, watch for the unexpected to happen and have some plan for which way to jump when it does.

Warren Buffet recommends that firms prepare not just one strategy, but an entire portfolio of strategies that respond to a variety of possible future conditions so the firm is not caught off guard by change and can react quickly to different conditions. While he is referring to investment firms, that same wisdom is highly relevant to our industry. Few firms have a plan for how they will operate in a postdisaster situation, even though we have seen both natural and man-made disasters

in recent years that have destroyed cities and halted normal life for months or, in some cases, years. Those are the times when our profession is of urgent importance to society, and each of our firms should have a disaster strategy in place in addition to its portfolio of business strategies.

"It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is the most adaptable to change."

— CHARLES DARWIN

WHAT CAN YOUR FIRM DO TO GET STARTED?

For architecture, engineering and other design firms, the very idea of strategic planning may seem like more expensive overhead costs that are hard to justify when the result is so intangible. You don't get an amazing building or an elegantly simple freeway interchange at the end of a strategicplanning process. Yet, it is an undeniable truth that firms today encounter more

unique situations than ever before, with the unexpected lurking around every corner and with great speed and turmoil as the order of business every day. How else to respond to such conditions except by devising strategies to meet them?

The first great strategist, Alexander of Macedon, refused to rely on only one strength as was traditional during his time. He blended together, for the first time in Occidental history, engineering, logistics and intelligence with tactical maneuvers of infantry and cavalry in ways never before seen, and he created a different strategy for each unique situation he encountered. This at a time when all battles had been fought in an identical manner for some thousands of years as regular seasonal events — predictable and largely indistinguishable — like those cats in the dusk we encountered earlier.

But no one ever mistook Alexander's army for that of someone else. And no one ever need mistake your firm for another if you will create an appropriate

strategic plan, make sure everyone in the firm understands what his role in it is, and remind him of it every day.

Your first step may be simply to start asking questions:

- Do we have a strategy now?
- What is it?
- Do we act on it?
- Does it serve our needs?
- Does it serve our clients?
- Who are our clients?
- Who do we want for clients?
- What do they want from us?
- Do we have what they want?
- How can we provide it to them?
- ...and so on.

The most powerful questions are usually the simplest ones. But it is sometimes difficult to put aside everything you know and begin again

It is an undeniable truth that firms today encounter more unique situations than ever before, with the unexpected lurking around every corner and with great speed and turmoil as the order of business every day.

at such a basic level. This is where the outside perspective of a neutral and experienced third party can be of immense value.

Beginning from the position of profound simplicity can help bring fresh clarity to what may seem like an incredibly convoluted tangle of possibilities, services, needs, competitors and the temptation to accept every project whether it fits our profile or not because it is, after all, billable work.

The other thing Alexander is famous for is untangling the Gordian Knot, which he accomplished in mere seconds, after thousands of others had failed, by simply slicing through it with his sword. This is what a well-directed, strategicplanning process and a well-executed strategic plan can do for your firm. ■

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Invent Your Future

High-impact planning retreats create the opportunity to produce strategy that will build sustainable competitive advantage for your firm.

By Ken Roper

arren Buffet, Bill Gates and Walter Scott, former
CEO of Peter Kiewit & Sons, met at a castle in
Italy to discuss the future and strategic direction
of a business venture. Imagine their futuristic conversation and the
product of this process. Your organization needs the same high-level
conversation and long-term focus; but how do you pull this off?

As part of an in-depth approach to strategic planning, high-impact planning retreats excite powerful conversations that will shape the direction of your firm. The key is to create an environment ideal for these important exchanges. The following offers ideas for the logistics, structure and requirements needed to equip you and your team — prepare now to invent the future of your firm.

LOGISTICS

Logistics are important. Start preparing for your strategic-planning session by identifying a suitable facility. The facility of choice should be a site location that is convenient and comfortable for the planning team. The planning team is inventing the future of your company, so housing them accordingly makes sense. Renting a castle in Italy may not be an option, but many hotels, country clubs, conference centers and restaurants have suitable meeting rooms to accommodate

planning sessions. Do not use your own facility; removing your team from the day-to-day operations of the company is the primary reason for moving your planning session off-site. It is difficult to think about your future from "30,000 feet," when interruptions require you deal with ground-level issues, such as staffing a

project or resolving a construction issue. Constant interruptions from the office are counterproductive to the planning process.

The room size and layout is important. You want open rooms with views and sufficient space to move around comfortably. Most conference facilities and hotels can provide refreshments and meals. Retreats typically last from 7:30 a.m. to 5:30 p.m. so comfort is an important consideration. One company hosts its planning retreat at a resort in Hawaii. The retreat includes a week vacation for the planning team and their families.

Some poor facility decisions will illustrate the significance of this

preparatory item. A retreat held at a crowded and noisy restaurant posed a serious distraction to the planning team, who had difficulty concentrating in the cramped meeting room. At another retreat, the planning team was crammed into a meeting room with no windows and a low ceiling, in the interest of low cost. After encountering this dungeon-like atmosphere and complaining to the hotel, the staff set up the meeting in a portion of the ballroom on the top floor with a beautiful panoramic view of the city. This was a big boost to the planning team's psyche and contributed to the success of the planning retreat. Hotels are always willing to sell you a space that's too small for your purposes. Do not settle for these poor conditions to save money. In the end, it can be an expensive mistake.

Breakfast and lunch are also part of the required accommodations since the site location will not change during the planning retreat. A structured team-building event held on the evening of the first day helps the planning team to break the ice and bond. Dinners out with the entire team are often the only breaks in the planning routine, although some teams will rent video-game facilities, attend comedy clubs or plan golf outings or dinner cruises that provide time for solidifying the team outside of business discussions. After a planning session, some participants may choose to sit and continue the discussion of topics from the day's meeting. These ad hoc conversations can produce some interesting and out-of-the-box ideas — and some of it may provide a dose of comic relief at the next day's session. Be sure to leave time for these types of unscheduled interactions. They offer participants a reenergizing, mental escape from the agenda. The personal connection and bonding between organizational managers at the planning sessions is an important scheduling and logistical consideration.

A productive planning session would, at a minimum, require a two-day event. Several sessions may be required to complete the plan, and there can be homework in between the sessions. Complexity of issues, size of company and team dynamics dictate the number of sessions. A full two-day format is ideal since it offers the team time to focus in on the planning agenda, while also minimizing the impact on business responsibilities. Most planning teams can easily sustain their focus and concentration on key strategic issues over a two-day retreat while not compromising the requirements of their roles in operations. An agenda for each session is part of the preparation. Exhibit 1 shows a typical planning retreat agenda for the first planning session.



WHO SHOULD BE ON YOUR PLANNING TEAM?

The planning team consists of stakeholders in the business operations: business unit leaders, functional department heads, "thought leaders" (individuals with good instincts for the future and strategic focus), promising future leaders and owners. The best team size ranges from six to a maximum of 15. A large planning team presents participation obstacles. For example: Imagine if each

Planning-team members from different age groups hold different perspectives on issues, risk and planning horizons that are included in the planning session. individual discusses a topic for five minutes and there are 12 planning team members. It will take quite a while to get through the simplest agenda. The group becomes impatient to "get it done," and the quality of the product suffers without broad commentary and thoughtful reflection. Too small a group presents problems with the buy-in process that is an essential part of the planning retreat.

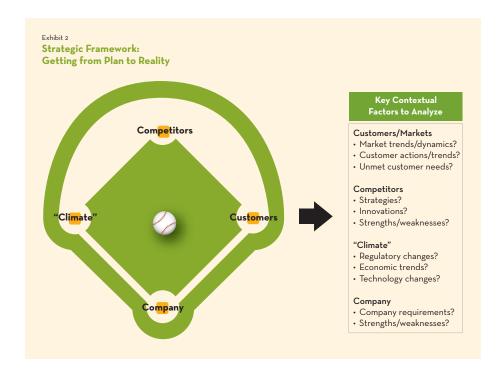
Consider also the age of planning team participants. A balance of all age groups is ideal. A recent organization's planning retreat had an average age of 56 years old. What was their long-term planning horizon and view of taking risk? While the current performance

of this organization is exceptional because of these seasoned professionals, what options will exist in five or 10 years? The only option might be to sell or liquidate the company without a comprehensive succession plan. Planning-team members from different age groups hold different perspectives on issues, risk and planning horizons that are included in the planning session. More importantly, the business will be continuously preparing and grooming its future leaders. The training value of strategic planning and strategic thinking for participants accelerates their

development. Addressing competitive advantage with senior and junior leaders is a productive conversation. Contributions can be minimal at first from participants, but through the process, they gain an understanding of strategy, and skills are built for the future.

STRATEGIC FRAMEWORK

Exhibit 2 presents the context of strategic planning. Successful strategy development that produces a sustainable competitive advantage is challenging work. The strategic framework for the conversation revolves



around the company, customers, competitors and climate. Key strategic questions include: What unique market position will you occupy with your customers? How will you exclude your competitors from competing in your market space? How will you continue to reinforce your strategic position with your customers?

An important distinction should be made between strategy and operations. While current operational issues can be productive to discuss, addressing these issues alone will not provide competitive advantage. Far too many planning retreats devote too much time to internal operational issues. Planning initiatives that address operational issues and best practices fall short of the aims of strategic planning. Conversations should focus instead on how to create a sustainable competitive advantage in your market.

FACILITATE OR NOT TO FACILITATE

Facilitators are highly recommended. While this might sound self-serving, the goal is to provide fluid, relevant conversation in a safe environment for all participants. Constructive participation includes the four Cs:

- **Commitment** of members exists to the process, to each other and to share the workload, responsibilities and accountability for getting things done.
- **Conflict** is encouraged, but viewed as healthy and progressive, not negative or as a personal attack.
- **Creativity** is emergent and a function of the process or conflict that occurs.
- **Consensus** is reached when even the strongest opponents of the decisions can support them.

Effective groups appreciate each other and have fun. These teams laugh with each other during the planning sessions and do not take each other too seriously.

The best planning experiences happen when the team is highly productive, produces an outstanding strategic plan and has a great time along the way. A skilled facilitator can ensure this occurs.

Facilitator skill requires experience and practice. Driving group conversation is largely art, not science. Facilitators provide an environment with high levels of trust, and trust is a prerequisite to the creativity and conflict resolution necessary

A seasoned facilitator addresses the issues and not the people, provides for productive conversation, diffuses confrontational issues and hostile attacks, and skillfully introduces topics that might be explosive if presented by a planning team member.

for any planning process to build participation, consensus and buy-in to the outcomes. The planning sessions are not platforms to vent individual assaults and blame others for failures. A seasoned facilitator addresses the issues and not the people, provides for productive conversation, diffuses confrontational issues and hostile attacks, and skillfully introduces topics that might be explosive if presented by a planning team member.

A word of caution here about trust and drama. If trust is low, then drama is usually high. If your organization is dealing with emotionally charged issues among participants, the chances are good that a trust issue is present. To avoid this unhealthy dynamic for planning, work to resolve these issues outside the strategic-planning process and preferably before any planning retreat. On one past retreat, a CEO attacked a participant then exited the meeting in anger, derailing the

planning session. The individual attacked will never forget this event. Facilitators can be conduits for productive conversations, but the participants remain accountable for their behavior in these sessions.

CEOs that choose to lead the planning effort have their own agenda and can suppress ideas and participation. The plan becomes the CEO's plan and not the planning team's plan. Someone knowledgeable about your business environment, your planning team, the planning process and your industry can guide you through a productive strategic-planning effort in a highly productive manner.

HIGH-IMPACT PLANNING SESSIONS

A survey of FMI consultants who facilitate planning retreats in their work identified several success stories and the elements that contributed to these successful planning retreats.

Chairman Chip Andrews: "We had developed two prior strategic plans with a specialty contractor that had produced consistent improvements in performance and market position. The CEO's new initiative was to lead the company to a

step-change improvement in strategic position. His intent for the third strategy development endeavor required a unique and intensive planning process. The strategic-analysis effort extended over a four-month period and involved researching several strategic options with the pros and cons presented for review to the strategicplanning team of 24 members. Due to size, subgroups were built to handle homework, including market research and analysis, and financial modeling of expected outcomes. The CEO's objective was to drive the business to a higher level through a significant change in market focus. He also knew that buy-in from the planning team was mandatory or the results would be suboptimized. Alignment and enthusiastic management support offered the only chance of success.

The strategic-planning team was forced out of its comfort zone of incremental growth and best-practice improvements into areas that truly were strategic. Several retreats over the four-month period produced numerous casualties of strategic ideas. Ultimately, the strategic direction that the team considered required head-to-head competition with its customers. Debate and disagreement over this position ensued. How could this possibly be a good long-term direction for the firm? Over a final three-day retreat, the team agreed to this mega-strategy of competing with its customers. Execution drove the company into a position as an overall contract manager as opposed to its comfort-zone position as a subcontractor. This new customer relationship with its former customers' customers required new skills development. Company performance has been extraordinary with exceptional results over the past six years."

CEO Hank Harris: "Performing strategic planning for a business unit located in Moscow, Russia, was one of my most memorable planning sessions. The dynamics of Russia during the late 1990s made this opportunity unique from many perspectives. The culture and external environment provided many challenges. The legal and political conditions and the growing capitalism model in that country during this period were very demanding for businesses. Figuring

out resourcing, materials and payments both to and from other businesses required creative approaches. The planning team was able to formulate a unique strategy in this market and move the business forward. It was a growth opportunity for all participants in this unique planning session."

Vice President Lanny Harer: "One CEO actively participated in the development of strategic plans for his company and its six business units. His support, participation and commitment to the process, including encouraging debate and arguments over issues, resulted in much stronger commitment and buy-in by all planning-team members. Sometimes the obvious is taken for granted, and this story underscores the importance of a CEO's support and leadership of

the planning process. A second component of this success story was the thorough preparation of the planning teams prior to the retreats. Situational analysis, customer feedback, market-sector forecasts, financial analysis, internal climate assessment and competitor profiles were available to all participants prior to the retreat. The time and encouragement devoted by the CEO to the process as well as the insistence on adequate preparation for the planning retreats resulted in practical and effective plans for all business units."

Managing Director Cynthia Paul: "Their strategic-planning team spent extensive time developing the data and background market information for the planning session. Identifying key market trends and customer preferences was a foundation of the discussion. A pre-planning retreat allowed the team to review and process questions concerning the information. The planning team did its homework prior to the planning session — each committing hours digging through the data and coming to conclusions. The planning retreat was away from the office in a country setting with comfortable accommodations for the planning

team, including side chairs, sofas and board table as needed for the planning team. Everyone fully participated in the planning session. There was time to sit and discuss issues outside of the scheduled event. The team hit the ball out of the park with its strategic thinking. This was the first time that this planning team really considered its session strategic."

Chairman Hugh Rice: "The company planned two weeks in Hawaii for the planning team and their families. From 7 a.m. until noon during the first week, the team met to prepare its strategic plan. Team members and their families were free to go and vacation the remainder of

the time during the first week and the entire second week. This practice built camaraderie not only with the planning team but also with the families. Long hours and a challenging work environment in this industry make it tough on families, and this process enhanced the team's unity and focus.

The planning team began preparing for the planning retreat three months ahead of the event. Discussion topics varied, and the planning team scrutinized analysis of markets, customers and operational practices. The planning team's expectation was out-of—the-box thinking. The goal was to have strategy drive the organization. Many large companies do not follow this practice. In one of these sessions, the preparation included having teams of future leaders develop and present their future vision for this business in 10 years. These four case presentations were the topics for discussion in the planning retreat.

A market trends presentation allowed discussion of potential target markets. Innovation was a separate topic, and the discussion centered on institutionalizing innovation in the company. All of these conversations were strategic in nature, presenting some interesting choices of strategy for the planning team.

One organization hired a Ph.D. in biology to discuss growth and evolution in the natural world. The question was how this might apply to the construction industry. This drove the planning team to evaluate its company as a living organism, producing a dynamic strategic approach."

These insights highlight just a few of the many creative approaches possible for your high-impact planning session. As part of a comprehensive approach to strategic planning, high-impact planning retreats create the opportunity to produce strategy that drives your company to excel beyond its competitors with sustainable competitive advantage.

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Market Research, Porsche 911s and Other Exciting Things

Despite some common mistruths about market research, when done effectively, it will guide powerful strategies for profitable growth.

By Randy Giggard

sk someone what comes to mind when thinking about market research, and you'll likely be greeted with yawns.

It's that geeky discipline — number crunching done behind the scenes to confirm what experienced executives probably already know. Right? That may be the unfortunate truth for the ill-informed executive as well as the bored researcher, but how we benefit from research largely depends on the tools, methods and expectations we start with.

Market research can present a very real and powerful, even exciting, tool when used properly. It can paint a picture of why your customers behave the way they do, where your competitors are vulnerable or how emerging regulations and innovations will threaten your livelihood or make you rich.

In a sense, it's strange that research is so misunderstood since it is the backbone of every decision we make, business or personal — even when we have chosen not to formally design the exploration. The human brain is conducting ongoing research at the speed of light during every waking moment and recording the results in our memory. Our decisions are then derived from interpretation of

the data comprising our frame of reference. Acceptance of the research information in our memory is very helpful to us, for example, when finding our way through our homes in the dark. But it is clearly less helpful where customers and competitors are constantly "rearranging the furniture" or when we find ourselves in unfamiliar territory. Strategic planning, business development and business/service expansions are cases where a more deliberate approach to research helps us understand the opportunities and threats of a changing landscape.

Good research starts with data collection in the same way the human brain does this unconsciously. Sometimes the sheer volume of data collected appears daunting. This data collection process seems to be the signature of market research for many — the one that initiates the yawning. If so, we are probably missing the

Market research is not about the data. It is really about interpreting the data to provide strategic guidance. real point. Market research is not about the data. It is really about interpreting the data to provide strategic guidance.

The human mind has an incredible capacity to absorb and interpret data. We have no trouble looking at the financial section of a newspaper, finding what's important to us and determining whether the news is good or bad. We have no problem digging into a sports line, team statistics or a phone book to support a decision. We can read a million characters of text in a Tom Clancy novel and fully understand how the characters are

arranged and what they say. My point is this: If we are bored by the data, it is because we have stopped short of effective interpretation. We haven't yet broken through to the "aha" of what it really means. Let me illustrate this principle with an example.

I've reached that point in my life (read: midlife crisis) where owning a sports car seems critical. I want to decide whether buying a new Porsche 911 is the right move. My brain contains one set of data points acquired over the years, but given the level of investment, I know I need to expand my knowledge through additional research. I visit the Porsche web site. I read the reviews. I plow through the postings on various blogs. I hunt down and quiz an associate who owns the same car. Then I do some digging into competitive manufacturers. The data starts to come together. My investigation leads to a spreadsheet of comparative specifications for horsepower, torque, acceleration and braking distance. I explore the cost of ownership, financing and insurance options. Still the data isn't answering my basic question: What would owning this car be like for me?

Armed with my data, I now head down to the dealership. I'm immediately struck by the car's fine lines and finish. Every panel and door is aligned perfectly. Upon climbing in, my nostrils flare with the smell of fresh leather. The engine comes to life with a throaty rumble that shakes my soul. My fingers wrap around the steering wheel. I ease it off the lot and then open it up with short strokes of the shifter. I am pushed back deep into the seat. My heart is pounding. Coming

If we find that market research is boring, red flags should be going up. It is a signal that we have not yet carried the research from a level of data to information.

up on a stop light, I notice that the young woman next to me is looking over. I finally understand. The horsepower and acceleration statistics are real. Now I can answer the question of what owning this car would be like.

Here's the point. Data and information are two very different things. Data is simply a set of pointreadings (like the Porsche specifications) that serve as our guide to answering the question. Considered independently, data is relatively useless and often misleading. To that extent, it really is boring. Information however is at a different value level. Based in part on the data, it draws on the vast faculties

of the mind to consider context and behavioral issues. This is where market research actually becomes exciting as it answers the real question: What will it be like if I make this decision?

Whether we're buying a car, company or new corporate strategy, the principles are the same. Develop accurate data to a scope that is appropriate for the decision to be made and then go to the next level of translating the data to meaningful information.

If we are taking the time to conduct market research, then the question must be important. What our customers think of us, whether we can successfully position ourselves against a competitor or be successful with a new office matters. It follows that if "it matters" then the answer, developed through well-conceived and analyzed research, must necessarily be exciting! If we find that market research is boring, red flags should be going up. It is a signal that we have not yet carried the research from a level of data to information.

WHAT TO LOOK FOR IN GOOD MARKET RESEARCH

The following represent seven hallmarks of good market research.

1. Interpretation — The data we generate through market research provides guardrails. Data is an important guide, but it is not the answer. Good market research looks through the data to answer the real question: What does it mean? Experienced interpretation takes a

significantly broader view of the context and ancillary forces to translate the data to information. An independent third party is often useful in this process to consider the broader context and avoid inherent biases.

2. Contextual Logic — Think of your market research as a giant jigsaw puzzle. In good research, all the pieces fit. No piece is forced into place. Some pieces are

probably missing, but the picture is clear. Certain caveats, assumptions and risks will be identified. The reader is left to think, "That makes sense."

- **3. Trends and Drivers** Good research tells a story. Like all good stories, good research builds up to the conclusion. In a story, that buildup involves underlying traits and evolution of the characters. In research, these underlying traits and evolutions are the trends and drivers that will define the future market.
- **4. Consistency** Good research builds the story consistently. The pieces

fit and are consistent with the findings presented in previous chapters. Liars tend to forget what they made up previously.

5. Segmentation of Data — Good market research explores alternative preferences as a part of the analysis and interpretation. These segmentations represent important, often critical subgroupings of the data. Consider the case of a candy maker exploring new product-development ideas. His researchers ask 50,000 consumers whether they prefer sweet candy or sour candy. The results say that 66% prefer sweet candy and 34% prefer sour candy. The results are averaged together, and the executive is advised that the market needs a bland, mildly sweetened candy. This flawed thinking plays out more often than you would think. For example, in today's markets we commonly see references to the "dismal performance of the residential sector." But what is actually being referred to? Single family? Multi family? High-rise? Government? Improvements? Specific geographies?

Price points? Custom homes? Urban infill? Surely, some important differences exist between these categories. Good research necessarily identifies and assesses logical segmentations.

6. Recognition of Risks — Research is seldom "all-knowing." We have no reliable crystal balls, just probabilities and contextual logic. Good research recognizes the potential pitfalls and explicitly states what assumptions are being made. Great research goes a step further, examining alternative scenarios for key assumptions.

Good research recognizes the potential pitfalls and explicitly states what assumptions are being made.

7. Alternative Explanations — Good research is inquisitive. As in the case of exploring different segmentations, researchers must raise new questions to get beyond the obvious. In doing so, good research reveals issues not considered in the original design. When steel prices spiked four years ago, research efforts commonly focused on the growth of Chinese demand. While important, Chinese demand was actually just one of five key

factors. Also occurring were shortages: of scrap metal, in the supply of coke, in the availability of transport ships, coupled with a spike in energy prices.

WHAT TO LOOK OUT FOR IN MARKET RESEARCH

Think for a moment about children. How do we know when they are not telling us the truth? Sometimes we can figure it out based on the consistency (or inconsistency) of the stories. More often, we are tipped off by their nonverbal clues the shuffling of feet, avoidance of eye contact, fidgeting and stammering. Human beings are programmed early on to recognize these clues, and we practice the art throughout our lives.

To be clear, the user of research findings has every right, indeed the obligation, to question the methods of the work before accepting its findings as a basis for critical decision making.

Recognizing the clues in written documents is far less intuitive for most of us. This is particularly true where the document is presented as an authoritative, statistically validated work of research. To be clear, the user of research findings has every right, indeed the obligation, to question the methods of the work before accepting its findings as a basis for critical decision making.

A good first step in assessing the validity of research is to review the characteristics of good research described above. Do the pieces fit in a contextually logical manner? Is the data segmented for examination in a meaningful way? Has the researcher fully explored underlying trends and drivers? Does the interpretation recognize potential risks and consider alternative explanations?

Beyond qualifying the work based on its adherence to these positive characteristics, here are seven clues that, like the fidgeting child, should tip us off that something is wrong.

- **1. Lack of Cited Sources** Research is built on scientific principles that should be repeatable and verifiable. This requires notation of what sources are being used and the date of that information. If sources are not cited, it should tip us off that either the researcher has been lazy or has forced the puzzle pieces to fit the story he wants to tell.
- **2. Biased Representation** First understand that we all have biases. The issue is not that bias exists, but rather how we manage and balance the biases. For example, if I am studying environmental impacts, I am likely to find a plethora of

accessible information from the Sierra Club. That information may be quite valuable, but over-reliance on one source will necessarily bias the data and ultimately the interpretations.

3. Lack of Clear Definitions — Effective segmentation and analysis of the data requires that we have a common understanding of the specific definitions. Is a high-rise condo project classified as residential work or commercial? How do we treat condo, retail and parking elements of a mixed-use development? What ages of

individuals do we classify as baby boomers? How do we categorize early adopters?

- **4. Two-Point Trends** Stating this as a trap seems so obvious, yet we fall for this one with startling regularity. Think about statistics for housing starts, home prices, material costs, employment or stock values. We are trained to consider the impact in terms of year-over-year or monthly changes. We are on solid ground as long as we recognize these statistics as two-point measures. We can get into serious trouble, however, when these measures are treated as trends within research.
- **5. Straight-Line Projections** If markets behaved in a straight-line fashion, we would have 2.5 million housing starts for 2009 and wouldn't concern ourselves with the Dow Jones industrials falling 800 points in one day. Unfortunately, the future is under no obligation to behave like the past. When researchers smooth out their future projections, they are hedging their bets. The disservice in this approach is that it dampens the opportunity to forecast change. Your company then has no opportunity to position for advantage in this change.

6. Assumed Portability —

Different geographic markets, both domestic and global, are driven by substantially different characteristics. Labor, material availability, buying practices, codes and regulations, tax policy, infrastructure and politics vary widely between markets. What is true in Boston may be very different in Dallas or Seattle. Beware of research findings and interpretations that seem to be painted with too broad a brush.

7. Inappropriate Contact Pool —

This is a tricky area that needs to be considered in the context of the information being sought. The field of statistics provides us with valuable tools, but they are easily and regularly misrepresented. Often we find that

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the pool of contacts qualified to address specific industry questions is very limited, making it more critical to have the right discussions with a small group of insiders rather than focusing on a particular number of respondents. The research should identify the complete pool of respondents to the study. With this information, the user can consider whether the pool of contributors is representative of the broader market.

Market research should be expected to provide a thorough and documented assessment of the issues. The data should be interpreted to tell a story that is demonstrably accurate in its basis and logic. It should build to recommendations that leave you thinking, "That just makes good sense." When done effectively, market research will guide powerful strategies for profitable growth. That is when it gets very exciting. That is when it is as rewarding as driving my Porsche. And that (excuse the pun) is where the rubber meets the road.

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Profiles in Success — How Contractors Define and Achieve Success

Far from boring, FMI's substantial research into contractor success produced complex, varied and interesting data. Analysts grouped similarities in responses to form five Contractor Success Profiles.

By Phil Warner, Art Heimbach, Sabine Hoover and Jerry Jackson

uccess is boring. There is no need to run for the exits
when someone cries, "Success!" It doesn't sell newspapers.
Then again, who wants to hire a contractor or anyone else
who doesn't know how to succeed, who rarely gets the work done
on time or who loses money on every job?

Success should be celebrated more, talked about and touted as a crowning achievement in one's career or the career of a company. It shouldn't be a secret. And it shouldn't be boring. But it can sometimes cause fear because it always hints at its loss, at success that can turn to failure. Success must become part of a company's culture; and if anyone thinks it is boring, consider the alternative. Contractors that succeed must overcome the fear of failure and conquer risk. Now, the question is, how do you define success?

FMI set forth to research the subject, with a view toward codifying ingredients of success in the construction environment. When contractors fail, it is usually unambiguous; they run out of money and go out of business. Is success then a mirror image of failure or does it have different metrics?

FMI studied why contractors fail. ["Why Contractors Fail: A Causal Analysis of Large Contractor Bankruptcies," *FMI Quarterly*, Issue 2, 2007] In that study, we discovered that failure — that is, failure to the point of going out of business — was the result of several things going wrong simultaneously, leading to a chain

reaction from which the organization could not recover. Failure was the end of the story for the organization. Some companies that failed had long records of success until things started going irretrievably wrong. While we found that many successful contractors experience setbacks at one time or another in their history,

they characteristically turn setbacks into learning experiences for building future success.

To gain a deeper understanding of success, we studied how contractors define success for their own firms. We conducted interviews with contractors and FMI senior consultants to identify a list of common attributes used to define contractor success. Those attributes formed the core list of attributes used in our subsequent broad survey. Responses to the online survey were made by 356 CEOs and top executives of construction firms from around the country and included

a wide range of contractor types and sizes as measured by annual contract revenue. FMI's aim for this research was and is to bring some organization and clarity to the variety of ways that contractors define success.

If we had hoped to find one dominant definition of success, we would have been disappointed with our results. However, from our long experience working with contractors, we expected that contractors would offer varied definitions of success. Our expectations were met. Yet, there were more similarities than differences when we began comparing and analyzing the responses.

We used both open-ended questions and forced-choice preferences chosen from our attributes of success. From those responses, we grouped similar replies into five Contractor Success Profiles.

Because of the resulting attributes, we named these profiles the Humanist, Freewheeler, Bottom-Liner, Generalist and the Tactician. All of the 356 responses fell into one of the five Contractor Success Profiles because they shared common factors in their definitions of success. The five Contractor Success Profiles are not

"If your success is not on your own terms, if it looks good to the world but does not feel good in your heart, it is not success at all."

> — ANNA QUINDLEN, Newsweek columnist and best-selling author

entirely separate and distinct from each other: To varying extents, the profiles overlap somewhat with each of the other profiles. However, each profile emphasizes different attributes, such that they present identifiably different perspectives of success in the construction industry.

We found that our research into the subject of success provides both immediately useful results as well as a store of data for further analyses and conclusions. Our immediate results include our five Contractor Success Profiles, several general

conclusions representing observations leading to success that were shared by most of the contractors surveyed, how the five profiles are distributed across our sample and examination of key attributes themselves.

ON SUCCESSFUL CONTRACTORS — GENERAL CONCLUSIONS

There is a great deal of literature aimed toward leading readers to success. Many of these publications are of the quick-fix variety; however, a number of widely read books focus on success

in business or how to build "highperforming," successful companies. From our interviews, it became apparent that many construction executives were familiar with certain literature and, at least selectively, applied the teachings of these works

"Success is not final, failure is not fatal; it is the courage to continue that counts."

- WINSTON CHURCHILL

for guiding the success of their companies. However, few of the business models studied in the mainstream "success" literature specifically cover contractors working in the construction industry.

We focused our study strictly on contractors to discover if there are unique aspects and approaches for achieving success that define this industry, even though there are clearly models applicable to many industries. We avoided the temptation to first create a model of success or a filter that would predetermine what the successful contractor looked like. We asked construction executives to tell us not only how they define success for their companies, but also how successful they think they are at achieving that success. How we asked the questions changed the levels of success reported by the participants. Rating their companies on the idea of being an "overall success," only about 2% of respondents felt they were 100% successful. However, in a question offering only a yes/no response, 95% rated their companies as an "overall success." In other words, almost all contractors studied considered their companies successful; yet, few said they were a 100% overall success. This led to one conclusion for contractor success.

First General Conclusion:

Contractors are reluctant to declare overall success for their companies.

The reluctance to declare their companies successful was detected in interviews as well as from the responses to the online survey. Thinking of success as the pinnacle of a life's work or the goal of a business implies that, once achieved, there is nowhere to go but down or out of the business. In this context, the achievement of success would be the end of the story or nearly so. In a few responses, we even detected an element of fear when viewing success as an ultimate achievement. As one contractor noted in our interviews:

"What is scary is that, once you have accomplished a level of success, you get this idea that you could lose that success. There is more at stake and more people that count on you to do well. Oftentimes you feel this pressure. It is harder but a lot of fun." (President, General Contractor, \$230M)

A more positive and common aspect of our first conclusion is that overall success is not a specific event or terminal destination, but rather something that is

achieved over a long period. This is the idea of success as a journey, with the road toward success including continual improvement. On that basis, a company is never 100% successful, but rather views itself as being on a positive track toward success. For instance, one response reflects what we heard from many contractors in our study:

"Yes, we feel like we are a success, but we do not feel like we are perfect nor are we done trying to be even better. We are constantly working on how we can improve." (President/CEO, General Contractor, \$65M)

Second General Conclusion:

Profitability is not the leading factor in defining success for contractors.

This may be a shocking conclusion for some of our readers. Participants told us that achieving above-average or higher profitability ranked 10th from a list of 15 attributes of success with only 50% of respondents selecting "achieving above-average (or higher) profitability as an ultimate achievement" for defining success. How could profitability not be the cornerstone of any success definition? After

Looking strictly at profitability can be misleading when judging the level of success for a contractor. all, profitability is how we keep score, isn't it? For successful contractors, profitability shows up on the scorecard, but it is not the sole measure of success nor for many is it a highly weighted attribute of success. Successful contractors understand they must do a lot of things other than simply achieving sustainable and respectable levels of profitability. We noted many comments similar to the following:

"The company must be profitable, but more importantly, the company must be a place where the employees feel a sense of family and belonging, and

that they have a personal stake in the success of the company. The employees should feel like their contribution is the reason for the company's success." (President, General Contractor, \$200M)

"The company must meet the following: Satisfied customers; repeat business; excellent, happy and productive employees. The company must have the highest integrity, a safety culture, and we must give back to the communities where we work. And we must be profitable." (CEO/Chairman, General Contractor, >\$1B)

Third General Conclusion:

Values play an important role in defining and achieving success for contractors.

Looking strictly at profitability can be misleading when judging the level of success for a contractor. Values are based on much more than the value of money. The values that build a strong organizational culture serve not only as the foundation for building a strong, profitable company; these values are also the reward as well as the measure of success. As noted, ideals like a "sense of family," "quality employees" and "integrity" frequently trump profitability. Success defined

by values and a values-based culture crosses generations, often stemming from the values of the company's founder(s). The value-based definition of success embraces many important aspects of community and business, for example:

"Success is the continuous re-creation of the business as a strong, prosperous and diversified organization through which lives the values of our founders." (CEO, Civil Contractor, \$85M)

Variability in definitions of success is driven by the values of the company's leadership.

"It is important to me to develop a business with a culture that embraces our core values, which include safety, integrity, professionalism and responsiveness. We get a lot of satisfaction from seeing our employees develop and being part of a community and contributing to its success." (CEO, Electrical Contractor, \$30M)

Fourth General Conclusion:

The criteria used by contractors to define their success are variable.

According to a remark from an interview with the president of a large construction firm, "Success is a nebulous topic. Everyone will have their own definition and measurement." (President, General Contractor, \$300M)

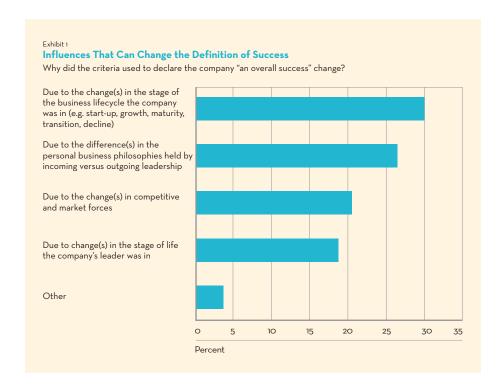
To the extent that contractors have many ways to define success, they differentiate themselves from their competitors. Even contractors that have nearly identical definitions of success can vary their focus on certain aspects of success depending on the culture they are trying to create or have inherited from the founders.

Variability in definitions of success is driven by the values of the company's leadership. Just as individuals have differing personalities, so too do the differing values of individuals provide variation in word associations, notions of hierarchies of importance and significance of personal experiences. Additionally, the leadership skills of company managers have considerable influence over the degree to which their personal values imprint their organizations ... or vice versa.

Success definitions are not always static, even within the same organization. While many of the criteria and definitions of success remain the same over the life of the business, about 55% of the contractors responding to our survey said that their definition of success changed over the years. This may be due to changes in the business cycle, changes in leadership or changes in market forces and the competitive environment. (See Exhibit 1.)

CRITERIA FOR DEFINING SUCCESS

Reviewing our initial interviews, we came up with a list of 15 criteria often used to describe or define success for contractors. All of the success criteria play a role in a contractor's success but are more or less prominent or important depending on how an individual company defines success. The general significance of these criteria in defining success as rated by the executives of construction firms responding to our survey is:



Rankings of Success Criteria

- Consistently operating with the highest level of integrity (87%)
- Being the leader in customer satisfaction (77%)
- Achieving an excellent reputation with community and/or industry leaders (74%)
- Accomplishing the company's mission (72%)
- Achieving high scores in employee satisfaction (70%)
- Having a thriving organizational culture (66%)
- Having a superior safety record (64%)
- Consistently delivering the highest-quality workmanship (61%)
- Surviving (being financially solvent; not in bankruptcy) (52%)
- Achieving above-average (or higher) profitability (50%)

(The following items were mentioned by less than 30% of respondents as strong elements of success.)

- Making a difference in the quality of the community
- Maximizing employee wealth
- Maximizing owner wealth
- Attaining above-average revenue growth
- Completing high-profile projects

BUILDING CONTRACTOR SUCCESS PROFILES

A comparison of the criteria of success noted in self-generated definitions of success (open-ended questions) with those selected from a checklist (forced choice) resulted in the identification of six Success Factors (see Exhibit 2). This process reduced the number of components for our analysis and created the building blocks for our Contractor Success Profiles.

All six of the Success Factors played a role in the definition of success for the contractors in our sample. However, there were significant differences among contractors as to the importance and focus placed on certain factors; some factors played only ancillary roles or were much less important for defining success.

Rather than force fit the data from our survey into a preconceived model, we grouped the responses by the prominence or strength of the Success Factors used to define success. This effort produced five distinct groups that we are calling Contractor Success Profiles (see Exhibit 3):

- **Humanist** Success is building strong relationships with customers, employees and community.
- Generalist Success balances all six factors.
- Tactician Success comes primarily from project and process success.
- Bottom-Liner Success is measured by financial results.
- Freewheeler Success comes from appropriate responses to changing opportunities, times or market situations.

Contractor Success Factor: Survival and Sustainability

The Success Factor we call Survival and Sustainability is composed of basic elements in a contractor's definition of success. A company must survive to be successful on any level.

In our study of contractor success, survival includes the more positive and forward-looking idea of "sustainability." On average, the companies analyzed for this survey have been in business for 57 years. Of the companies in our sample,



38 have been in business for more than 100 years. For successful companies, survival means much more than just getting by. Survival means building a sustainable legacy and leadership over generations as evidenced in the following comment on success:

"Success in a word would be sustainable. More completely, it would mean being sustainable financially outperforming an industry average margin and delivering real economic value to employees and shareholders



(public or private). It would include having a sustainable reputation, creating a brand that embodies the concept of a teammate, a tenet of uncompromising safety and delivering value to the client, employees, shareholders, industry partners and the general public. It would include leadership in creating a sustainable industry, where company leaders gave back to our industry and through innovation, improved it. And it would include creating business sustainability through ensuring prepared leadership within the next generation of employees." (Chairman/CEO, General Contractor, >\$1B)

Contractor Success Factor: Profit and Wealth

The *Profit and Wealth* success factor is composed of elements of profitability along with creation of owner and employee wealth and similarly related comments from self-generated responses. Although maximizing owner wealth was reported by survey participants to be a high necessity for determining a company's overall success, this criterion was seldom mentioned in open-ended responses as defining success for contractors.

Contractor Success Factor: Sense of Presence and Reputation

The Sense of Presence and Reputation combines elements often used to determine a contractor's position in the market or industry. Building high-profile projects and having rapidly increasing revenues are among the elements that build industry reputation. Construction news often focuses on high-profile projects. These projects make headlines and interesting reading. Rapid revenue growth is another way that success is measured, but as a sole surrogate for success, dwindling profitability can be overlooked, along with other criteria of value.

Contractor Success Factor: Improving People and Their Lives

Improving People and Their Lives is a success factor composed of a number of success criteria. Building relationships with customers and employees, building relationships based on integrity and providing support for the community are all important for achieving success in the construction industry, which is often referred to as a "local" business.

Contractor Success Factor: Progress on Mission and Preparation for the Future

Progress on Mission and Preparation for the Future reflects the importance of having a well-defined mission and working effectively to accomplish this mission. When ranking criteria on a checklist, most contractors selected "accomplishing the company's mission" as an important element in achieving success; however, it was seldom mentioned in open-ended definitions of success. While some companies

work long and hard to develop a clear mission, from our survey, it appears that few make accomplishing the mission a key part of their definition of success.

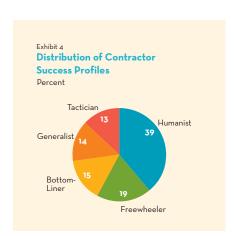
Contractor Success Factor: Project Execution

Project Execution is a factor composed primarily from responses to openended definitions of success. Some self-generated responses noted the importance of project success and creating successful work processes. Repeatedly producing successful projects is viewed by some of our participants as one key to overall success for the company.

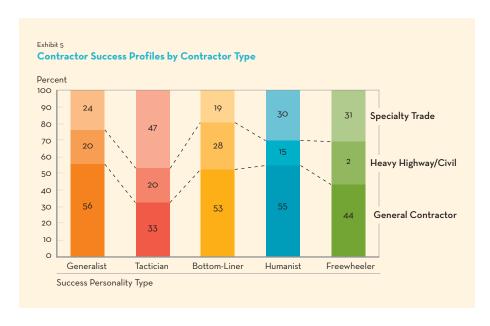
CONTRACTOR SUCCESS PROFILES

The group of companies we profiled as Humanists represent 39% of our sample, while each of the other five Contractor Success Profiles ranged from 13% to 19% of the sample. (See Exhibit 4.) Tacticians claimed the lowest distribution, although a spread of only six points separated the four profiles with lower distribution than Humanists.

We also classified responses by three broad contractor types: general contractor,



specialty trade contractors and heavy highway/civil. A significant difference was observed when the Contractor Success Profiles were separated out in this way. With that cross-tabulation, 47% of specialty trade contractors were profiled as Tacticians. (See Exhibit 5.) Not too surprisingly, trade contractors are the most likely to focus their definitions of success at the project level, likely because their business model focuses on a productive work force. However, the Tactician



trade contractors were the exception. In general, it is clear from our analysis that the Contractor Success Profiles are not specific to the type of contractor or size.

The Humanist

The Humanist, as the name implies, defines success as finding and developing people and building relationships with customers and community. The Humanist's top-two success factors are "improving people and their lives" and "progress on mission and preparation for the future." (See Exhibit 6.) Humanists also show secondary concerns for the factors "survival and sustainability" and "sense of presence and reputation." Many Humanists would agree with the following concept of success:

"We try to provide a challenging and rewarding workplace for our employees. Success is measured by the small things such as attendance at extracurricular activities



sponsored by the company, voluntary training, etc. The proud way our employees protect the company's reputation against poorly performing subs and new employees is another indication of their pride in the company. Moderate returns to the shareholders are also important but not the most important indicator of our success." (President/CEO, General Contractor, \$60M)

When contractors often make declarations like, "Our people are our most important asset," it is the Humanists that are likely to say it with the most sincerity and back it up with training programs and actions that build customer loyalty. This is also the profile most concerned about building relationships with the community through volunteering and other acts of community support. Humanists take pride in their reputations and provide support for their people to build long and successful careers. Many

Humanists define their companies as family businesses. Even if not owned by a single family, this group is most likely to treat everyone in the company as family. The Humanist profile focuses most on relationship-based activities:

- Hire the best and the brightest
- Conduct extensive ongoing training
- Develop customers by intent, not accident
- Develop positive relationships with design professionals
- Acquire knowledge of competitors

The Humanists focus on building long-term relationships and good reputations with customers in order to win repeat business. Their strategies are based on having the right people in place to do the job and training people to build their skills and work safely. They place a high value on integrity and building a thriving organizational culture. One contractor offered a thorough description of success that fits well with the Humanist Contractor Success Profile:

"My objectives when I left a promising career and joined this family business were:

- To build a company that would live on from generation to generation
- To work with people who I both liked and respected, and to provide the same environment for them
- To manage the company as if it were a public company (e.g., no eating from the company trough)
- To level out the peaks and valleys of the business cycle to avoid churning personnel
- To attract and hold managers who would otherwise be our competitors
- To leave the company in strong financial and management condition at the end of my career
- For the company to be known and respected for its excellence, and a source of pride for its employees
- To instill an ownership culture in our management team, while providing a good living for all of our employees."

(President, Mechanical Contractor, \$200M)

Building a culture where everyone feels like an owner and enjoys working for the company is laudable in any business, but increasingly lacking in the modern business world. Many contractors are demonstrating that the Humanist is a worthy profile for contractor success.

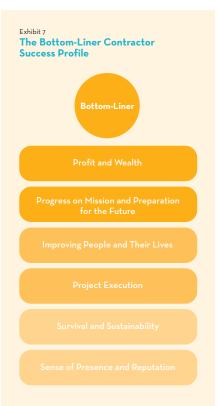
One concern for contractors that fit this profile may be that they don't lose sight of their financial condition so that they will have the profitability needed to fund their goals.

The Bottom-Liner

Companies that fit the Bottom-Liner Contractor Success Profile (See Exhibit 7) tend to keep a keen eye on the financials to gauge their level of success. The two most important factors of success are:

- · Profit and wealth
- Progress on mission and preparing for the future

As in all the Contractor Success Profiles, Bottom-Liners don't overlook other factors; for instance, "improving people and their lives" as



well as "getting the work done and done well" are both important factors for Bottom-Liners, but not the primary areas they look at to define success. According to one executive who fit the Bottom-Liner Profile:

"First and foremost is financial success. For me this means in excess of 10% operating profit. Next, and a very close second, would be that we provided career advancement opportunities for as many folks as possible. Third is that we did everything possible to provide a safe work environment for all of our people. Fourth, that we satisfy our customers such that we are their first choice." (President, Specialty Trade Contractor, \$50M)

This comment demonstrates the overlap among the various Contractor Success Profiles. The Bottom-Liner, for instance, need not be strictly focused on finances; it is just that the bottom line comes first when defining success.

Bottom-Liners tend to focus on the following activities:

- Having a well-developed plan for executing the company's strategy
- Executing business plans with discipline
- · Measuring what matters
- Hiring the best and the brightest people
- Understanding the company's core competence

There is a tendency when looking at the Bottom-Liner Success Profile to say, as one contractor interviewed did, "First, it's all about the money." However, companies with this profile will have clear missions and strategic plans for

achieving their goals. While the bottom line defines their success, they also show discipline in executing their plans for achieving profitability goals and maximizing wealth.

The danger for Bottom-Liners is that they could forget what it takes to create a sustainable bottom line. They can get into trouble if they look only in the rearview mirror at financial results. Therefore, Bottom-Liners need to maintain discipline and execute their plans to avoid being blinded by short-term gains that result in

long-term losses. For contractors who can focus on the bottom line without sacrificing long-term strategy, there is sure to be continual success.

The Generalist

For the Generalist, all of the factors of success are of equally high importance. (See Exhibit 8.) The Generalist attempts to focus on all six factors equally:

- Survival and sustainability
- Profit and wealth
- Progress on mission and preparation for future

- Sense of presence and reputation
- Project execution
- Improving people and their lives

Open-ended responses for those companies fitting this Contractor Success Profile tended to be longer and more inclusive of the various criteria of success. For instance, one Generalist's definition of success was as follows:

"I. Well-respected among owners and the design community for high level of professional services and for approaching our work with the highest level of integrity. The result would be that we are considered for every project in our area that fits our profile.

2. Recognition that we are industry leaders in adopting creative ways of thinking and adapting to the constant changes in the marketplace. The result is that we are sought out for projects



that are high 'value-added' jobs. 3. Strong contributors to the communities we live and work in, both financially and in 'sweat equity.' The result is a source of pride on the part of all members of our team. 4. We regularly exceed industry averages for net earnings and ROI. The result is a source of pride for our team, above average compensation and excellent results for our shareholders." (President, General Contractor, \$50M)

The Generalists have many areas to work on in order to meet their expectations of success. When we compared their definitions of success with selected activities that successful contractors are likely to undertake, the Generalists tended to rate the following high on the scale: (Note: The survey included a list of 20 action items, which respondents rated according to their "belief regarding its relationship to your company becoming an overall success.")

- Developing ongoing leadership succession
- Linking compensation to the company's vision
- Measuring what matters
- Differentiating their companies from competitors
- Fostering teamwork

All of the activities on the above list require well-coordinated internal processes and an eye toward the future as well as a shared vision for the company and the means to implement that vision over the long term. Building depth in leadership positions means attracting and retaining good people. Building a vision and linking compensation to that vision requires excellent communications within the company as well as solid measurement systems and clearly defined compensation

When a company focuses in many areas at once, it is challenging to maintain a common vision and sense of teamwork.

plans. Clarity of vision for the company is a good place to start when developing strategies that differentiate the company from its competitors. Teamwork throughout the company will help to carry out those plans.

The Generalist Success Profile shows signs of a mature company. On average, the companies identified as Generalists have been in business about 65 years compared with an average of 57 years for all companies answering the survey. While the term "Generalist" implies a lack of focus, we infer from the sustainability

and success of those fitting this profile that they have put many of the factors of success together more or less simultaneously.

If there is a concern for continued success for the Generalists, it is that some areas may be weaker than are others. For instance, if the Generalist fails to develop or retain leaders who are capable of stepping into key positions as the company

Exhibit 9

The Tactician Contractor

grows, the company's success may falter. When a company focuses in many areas at once, it is challenging to maintain a common vision and sense of teamwork. However, once the company finds the right mix among the factors of success, success may continue year after year.

The Tactician

The Tactician is the Contractor Success Profile that focuses most on the "project execution" and "survival and sustainability" factors for defining success. (See Exhibit 9.) The Tactician is least motivated by the "profit and wealth" factor, but shows some concern for all other success factors: "sense of presence and reputation," "progress on mission and preparation for the future" and "improving people and their lives." However, project performance is the most important focus for the Tacticians.

Getting the Work Done and Done Well

Survival and Sustainability

Sense of Presence and Reputation

Progress on Mission and Preparation for the Future

Improving People and Their Lives

Profit and Wealth

The Tactician builds success one project at a time. Tacticians place more emphasis on creating and honing processes than the other Contractor Success Profiles do. This profile may also be the one

that strives most for continual success. When it comes to implementation of its strategy, the Tactician focuses on the following areas:

- Adopt innovative ideas early
- Acquire knowledge of competitors
- Collect receivables on time
- Develop positive relationships with other partnering contractors
- Develop customers by intent, not accident

The Tactician is focused on the field, work force productivity and being competitive. It often differentiates its services at the project management level. The Tactician shows all the signs of the practical contractor that focuses on building success from the ground up by giving people the right tools and the knowledge and responsibility to be successful on every project. The Tactician is an early adopter of technologies and may be one of the most forward-looking of our Contractor Success Profiles.

Therefore, it is not too surprising that they are on average the youngest companies, having been in business an average of 49 years; yet several in this group have been in business for more than 100 years.

If there are any potential weak points in the Tactician Contractor Success Profile, it may be that this group has difficulty understanding its vision. It may also be a challenge to maintain project discipline as Tacticians grow to take on many larger projects. The Tactician's focus on project success could mean a lack of strategic direction, but combining both sound strategies with sustainable project success is sure to foster overall success.

The Freewheeler

The Freewheeler Profile can change position and color like a chameleon, to look similar to any Exhibit to
The Freewheeler Contractor
Success Profile

Freewheeler

Sense of Presence and Reputation

Profit and Wealth

Survival and Sustainability

Progress on Mission and Preparation for the Future

Improving People and Their Lives

Project Execution

of the other four Contractor Success Profiles at least for short periods in the company's history. (See Exhibit 10.) The Freewheeler does not appear to have a primary focus area. However, the secondary Success Factors include the following:

- Sense of Presence and Reputation
- · Profit and Wealth
- Survival and Sustainability

This profile is less focused on missions, people and project success. However, in some ways, the Freewheeler is like the Generalist, but perhaps less systematic. The Freewheeler does not focus on as many things at once as the Generalist but may be faster to respond to changes in the markets or more able to jump on opportunities as they present themselves. Survival and sustainability mean being nimble enough to choose the best path at a given time and to do this repeatedly over the years.

"The business is always under change. You change or slowly die." (President/CEO, Trade Contractor, \$200M)

"Our longevity is a testament to the respect we have in the industry — from our customers, suppliers and competitors. We have provided a value service for many years while at the same time providing a quality of life for our employees that is second to none." (President/CEO, Trade Contractor, \$130M)

The Freewheeler focuses on developing positive relationships with suppliers. Their relationships with suppliers may be one of their few constants over time, so the value of good relationships is rated highly by companies that fit this profile. They also seek to understand the company's core competence, collect receivables on

Survival and sustainability mean being nimble enough to choose the best path at a given time and to do this repeatedly over the years.

time, hire the best and the brightest and adopt innovation early. These are all characteristics of companies concerned about being agile and adaptable, often characteristic of specialty trade contractors that operate in numerous markets, but useful traits for all types of contractors in a changing economy. Since the Freewheeler can overlap significantly with the traits from the other Profiles, it is the most difficult to identify, and maybe the most difficult to discern for anyone comparing his own definition of success with each of our Contractor Success Profiles.

If Freewheelers have a potential for weaknesses, it is that they lack a long-term vision or mission, and

changing their focus frequently can mean that sometimes they miss out on opportunities by not sticking with a direction long enough to fully exploit that market seam. If they are prone to changing their mode of operation to suit the markets, Freewheelers must also be able to realize when they have made a wrong choice or when the market trends are changing again.

WHICH CONTRACTOR SUCCESS PROFILE MAKES THE MOST MONEY?

Although in our research most contractors did not appear to define their success by profitability levels, we expect some of our readers would like to know the relative profitability of each of the Contractor Success Profiles.

We compared each Contractor Success Profile with profit levels indicated in

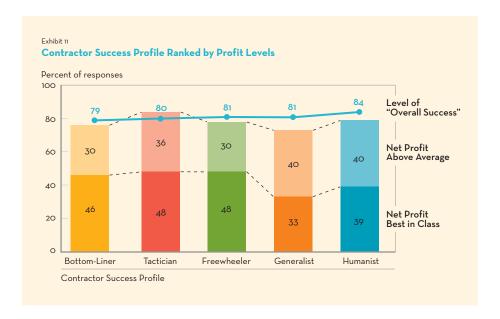
the survey response. Our information was not based on an analysis of actual financial records. We asked respondents to indicate their profit levels from incremental choices given in the survey form. We then broke the profit level data

into two categories, "best in class" and "above average" as compared with our own experience and information from CFMA ("CFMA's 2007 Construction Industry Annual Financial Survey," Construction Financial Management Association).

It turns out that the Tactician and Freewheeler Contractor Success Profiles ranked equally high when comparing the percent of each Profile as having best-in-class profit levels. (See Exhibit II.) Humanists scored themselves higher on the "overall success" scale, but profitability was generally lower than all but the Generalist at the best-in-class profitability level. The Generalist Profile reported the lowest profit levels as a group, which may result from their need to focus on so many aspects of success simultaneously.

The cultures on which each company builds its own Success Profile is perhaps one of the most distinguishing elements of success and the basis for differentiation in the market each contractor serves.

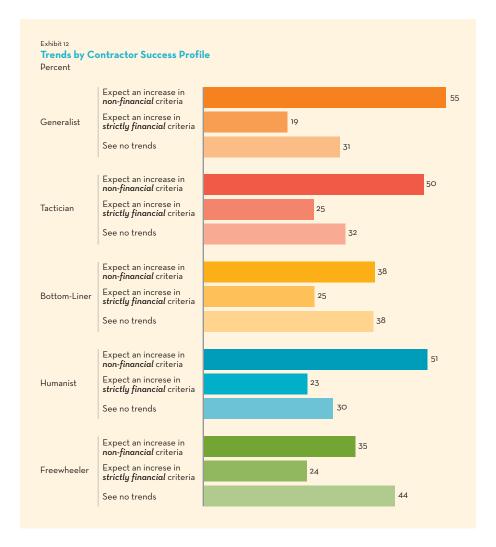
All together, there is little difference among the Contractor Success Profiles when ranking them by perceived levels of success or levels of profitability. The cultures on which each company builds its own Success Profile are perhaps one of the most distinguishing elements of success and the basis for differentiation in the market each contractor serves.



PROFILING SUCCESS FOR CONTRACTORS

According to Julia Kirby, writing in the *Harvard Business Review*, "The challenge of measuring companies' relative performance ... declaring the top performers, and finding the common drivers of their success is so daunting that it might seem a fool's errand to attempt." (Julia Kirby, "Toward a Theory of High Performance." HBR, July-August, 2005) In our first causal analysis of contractor success, we have found a deeper definition of success, and we have found that there is no single driver or set of drivers that lead to success for all contractors. Instead, we found there are many paths to success that we could summarize into five Contractor Success Profiles.

Nor do we expect these profiles to remain completely stable over time. (See trends in Exhibit 12.) Does that mean that the Bottom-Liners will all become Generalists or Humanists? No, but profile changes may reflect changes in the industry, with greater emphasis on nonfinancial measures. There are also those who think the financial aspects of success will dominate the future. They are aware of the difficulties of making and keeping profits in this industry. On the other hand, 29% of contractors surveyed do not expect the way contractors define success to change in the foreseeable future. For many, the definition of success



To achieve lasting success, a contractor has to build a culture based on its founding ideals and definition of success and keep on building success, often for many generations.

has changed little for generations. In their world, success is formed by a culture passed down from founder(s) and perfected over time.

Where does your company fall in relation to the five Contractor Success Profiles? Many readers may have already identified themselves as fitting one of the profiles. In future research and in our daily work with contractors, we will look to further refine and apply the Contractor Success Profiles to help contractors find continuing success. One lingering question that we have is, "What happens when companies seek to move from one profile to another?" This might occur when new leaders take the helm. For those companies

that said the definition of success had changed over the years, changing leaders and philosophies was one of the leading causes along with a change in the life cycle of the business. Does great risk and confusion accompany changing profiles? Is there a period of diminished profitability? Do key employees turn over more readily during such changes?

Upon closer analysis, it isn't that contractor success is boring, but it is more complex than contractor failure. One reason that stories of contractor success rarely make the headlines is that success isn't a singular event in time. Rather, overall success is an ongoing, continuous effort. To achieve lasting success, a contractor has to build a culture based on its founding ideals and definition of success and keep on building success, often for many generations. Success isn't boring. It is interesting; it is challenging, and a lot more fun than failure. As one contractor interviewed said:

"Success is not a series of static events but an accumulation of knowledge that can only occur over time. Success is a prolonged event. It is not momentary. It is not one good year or even a record year. It is a body of work, and that is how I have come to believe that the industry defines success. It is long-term." [CEO, Utilities Contractor, \$85M) ■

To receive a copy of the complete "FMI Successful Contractor Survey," e-mail Phil Warner at pwarner@fminet.com.

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Inside Out, A Fresh Look at Company Needs

Craig Galati, principal of Lucchesi Galati, shares how the firm meets its customer needs through the cross disciplines of sociology, sustainable living and architecture.

By Cynthia Paul

f you asked, customers can tell you how they buy, why they buy and from whom. Customers can even tell you how service and product providers almost won them over only to make a gaffe at the last minute and thus, lose their favorable decision.

The only problem is that they are often wrong — even dead wrong.

Certainly, we can all provide a good story about the logic behind our decisions and the people with whom we selected to do business. These stories explain why we keep doing business with someone. Our commitment remains until we don't feel like we are receiving enough value, or a better opportunity comes along. How many of us continue to do business with people while waiting for a better product, service or process?

Customers can tell you their best *understanding* of why they buy. The more difficult question for customers to answer is what it would take to start doing business with your organization. Given this, organizations need to rethink their approach to customers in terms of how we meet their stated needs as well as their unstated needs, or the ones we have to decipher for them.

Craig Galati is an architect by trade, but a pioneer when it comes to the future of customer focus and what it means for our industry. We met recently at a convention when a mutual friend introduced us. This information follows from our conversation.

Galati: We are different because as people we are different. We focus our business on what we want to do rather than what other architects or other consulting firms are doing. We've built our brand around the kind of value that we feel we should be delivering.

We have organized our firm around seeking like-minded clients. What has always been important to us is environmental stewardship and understanding the dynamics of people and organizations and how they work within the facilities we



design or help to create. We focus our efforts on analysis of the people, cultures and brand of the organizations for which we work. We really help our clients be the best at what they do by providing facilities that fit their needs.

When I was in school, people looked at architecture as a piece of art or a sculpture. I have always felt like an anomaly. To me, architecture is an enabler. People coming to us rarely say, "I want to create a sculpture to put our business in." People say,

"I have a business or an organization, and I have a mission to serve a community in a certain way, and that needs to be the basis of the facility." Now should they be aesthetic? I think so. They should connect to the environments and the places that they are in. Our purpose is to develop something that resonates with the client. We focused our business model on that purpose, and we needed a different mix of people to carry it out. So on our staff, in addition to our architects and others, we have a sociologist, an anthropologist and a biologist. Those people are looking for something different in a business setting than say an intern or a traditionally focused architect.

At the core, I think all people are looking for opportunities to learn and opportunities to grow. Our business model is structured to value learning. The only way we can deliver a high caliber of service to our clients is to learn about their business and to continue to grow in our knowledge about the human dynamic and environmental stewardship. The technical side of architecture follows.

FMI Quarterly: That is an interesting model. How did you evolve to the current business concept?

Galati: The company has been in existence since 1982. It started out as a partnership between Raymond Lucchesi and his father, Julio. In 1986 they incorporated, and that really is the basis of the company now. I joined, albeit naively, in 1988. I was working for another large firm and felt, like most other interns do, that I was getting pigeon-holed into doing one thing or into following one person's style. I was looking for an opportunity to do something different and to take an

active part in charting my future. I met Ray, and we hit it off. So I came and joined them. I was the fifth employee. We spent a lot of time in those early days trying to figure out why we were there, what we could offer to the marketplace and what it is that we really wanted to do. We had a lot of downtime to philosophize and talk about our vision for the future.

FMI Quarterly: What is your philosophy of architecture?

Galati: My philosophy is that buildings, or architecture, are places. They are enablers — enablers of culture. They are facilities designed for specific reasons to help organizations achieve their business objectives —



what they want to communicate to their market or to their customer.

I started developing this philosophy when I was very young. I've always felt that it is not what a building looks like, but what a building does that matters. If it is doing what it is supposed to be doing, then the look will be completely appropriate.

I never believed in buildings as just art. Yes, there is an art to it and an artistic quality to architectural work. If the design exists simply to play with a different material or to experiment with something, then it's shallow. It has to be much deeper than that. I try to wrap architecture around an organization's or a business' need. Solving those needs and problems gives form to the place.



We try to create opportunities for organizations to be who they want to be.

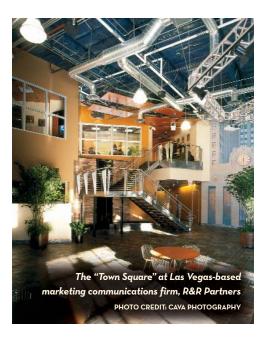
FMI Quarterly: How does the place impact an organization's culture and business?

Galati: A building or place can have tremendous impact on organizational success. Too often buildings inhibit customers from being who they are or what they want to be. A building is an external brand statement.

We did a project a few years ago for an advertising agency. What

the agency really wanted was to stitch its culture back together. The agency was fragmented across different buildings, and our client thought a move into one building would pull the groups back together. We found that we could create opportunities for those different departments to have chance encounters and to connect with each other as people. This enabled the different groups to understand the work of one another and to start mending.

The coolest part was developing a concept that reflects the agency to its customers. Who they are became transparent so that when a client walks in, he or she immediately understands the organization's creativity, collaborative nature and push to work across all audiences. When you see the space, you know that the agency values the people who work there. The public spaces belong to everyone. When you come into a place like that, it reflects well upon the organization; it is doing something physically that helps promote the mission and vision. We try to create opportunities for organizations to be who they want to be. If you focus your architectural work, or whatever kind of work you are doing, on helping organizations create places where those things can happen, you are on the right track for success. I learned through that project that there is always an espoused



culture. It's the one you tell everybody: "This is who we are." It's written in your marketing materials, used in your advertising campaign and told to new employees. Then there is the culture that plays out. In large organizations, these are two different things. We can help organizations bridge that gap so their espoused and realized cultures move closer. It is really important to spend the time to understand an organization's culture. If you go in and ask the client, "Who are you, and what do you do?", you will hear one perspective. If you go to the



organization and spend any time there observing, you will get a different answer. You need to know both sides of that coin since you are going to bring them together in one place. Sometimes cultures change just based on the physical space. The idea is to create a sense of place where an organization's preferred culture comes alive.

FMI Quarterly: How do you engage with customers to discover their realized culture?

Galati: First, we take the time to understand their culture. It is a process that involves learning who they are, understanding their challenges and developing empathy for them. You need to know the good, the bad and the ugly. Clients do not want to tell you about all those things. That is part of the reason that we hired a sociologist for the first time. Sociologists are trained to see and understand things and to be aware of the symbolic meaning. Together, we watch the people who make up the organization and how they act in order to analyze the culture. We spend time reviewing their printed materials and sit down with the principals or the managerial team. We always ask questions from many different perspectives in order to get a broad sense of who they are. We may participate in a staff meeting. The important step is bringing those things together into a discussion with your client. We did some work for a Fortune 500 company about five years ago, and I was sitting with the president one day, just having some coffee. We were not really even talking about the project when he said, "You know, Craig, we have a problem in our office. People won't go home. They are just working too much. They work all night. Their family lives are deteriorating, and that's not what we want. That's never what we wanted." So I asked him a question. I asked, "What does it take for someone to get promoted?" He turned to me and said that we had hit on the answer to his problem. They promoted people by how hard they were working, and I said, "You've created a policy that is creating a future that you don't want. The policy needs to be reviewed." It's funny how those things play out in organizations in so many different ways. The key to designing places for people is to gain a deep understanding of who they are and who they are trying to become.

FMI Quarterly: How is Lucchesi Galati's philosophy, structure and practice model different?

Galati: Our structure probably does not look tremendously different from other firms. We are a little flatter. Philosophically, we are very different. We have spent a lot of time understanding our corporate purpose, individually and collectively, and we built our practice model around that. The practice model itself is based on a high amount of individual learning and growing. That benefits our clients. We had to restructure how we view utilization rates and the number of hours spent working in the office. To put it in perspective, we budget our year



based on a 50% to 55% utilization rate. That is unheard of in our business. Every company I talk to is trying to hit 85%. If they could get to 90%, they would. We knew that to survive we had to charge more just to stay in business. We decided charging higher fees allowed us to work less on billable work and more on things

that would help us to be more effective in our billable work. We developed our organization not around profit but learning. Charging higher fees allows us to learn and grow more so we can be more helpful to our clients.

FMI Quarterly: Finding the right people is always important. What kind of people fit your culture?

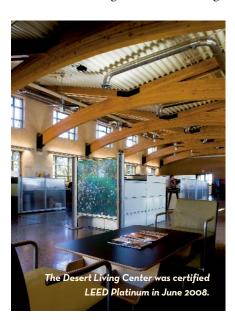
Galati: We have a diverse group of people in our office, which is important for creative tension. We don't want everybody to be the same, but we do want them to have similar values. We look for people who really care about what they do and who are passionate, self-motivated self-starters. We want people who have moved past being independent into being interdependent. People who can hang in a group dynamic. Group dynamics create opportunities to lead, to follow, to listen and to voice. They have to be comfortable being in all those places at the same time, which takes a bit of emotional maturity. So we are looking for people who know who they are and where they want to be. We jokingly ask, "Would you volunteer for this organization?" Those are the kind of people we are looking for because if you would volunteer for this organization, then you are here because you want to be and not because you are getting paid to be here. I don't want it to sound like we are not looking to pay because we do pay, and we pay very well.

The idea is that we want people who know who they are and what they want to accomplish and who will find alignment in what we are trying to accomplish. With a certain level of alignment, what the individual wants overlaps with what we want to do. Many of the people who work in our company could run their own successful businesses, but they choose to be here because of the connections to other like-minded folks. That's what gets people excited, and I hope that is what keeps them coming to work every day.

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FMI Quarterly: You mentioned having a sociologist on staff. Where else is your staffing unique?

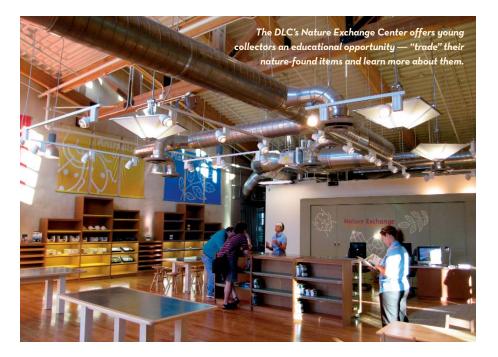
Galati: We have always had two full-time marketing folks in addition to principals focused on marketing. Our marketing folks are also billable as they occasionally provide services since we do different types of work than a traditional firm. We also fund graduate assistant positions through a local university, in areas that we think are valuable both to us and them. For instance, right now I have a graduate assistant who is a biologist studying architecture. We pay the university a fee, and the student, in turn, has his or her tuition and some salary paid for by the university. The student spends 20 hours a week in our office working on things that connect his or her disciplines to what we do. The biologist is working with us to study living systems and how environmental stewardship can be integrated better in the work that we do. We also employ a cultural anthropologist who is going back to school to get her master's degree in architecture. That's going to mean



interesting things for us. We always thought understanding the cultural side of sociology is the most interesting part. But now we will have somebody that has spent time studying ancient, modern and future cultures and who will be able to connect that understanding on our projects. That's going to be pretty amazing.

FMI Quarterly: What challenges do you see for the AEC industry?

Galati: There are a lot of challenges. If you put aside the general state of the economy right now, the AEC industry is an interesting place. We are at a crossroads. Think of buildings. It seems



like over the last 50 to maybe 100 years the building industry has become segregated. There used to be a lot more collaboration among architects, engineers, contractors and subcontractors. It seemed like everybody was there for the same reason. Over time, the profession has become so risk adverse that we have segregated ourselves. The contractors started just building, and the subs starting specializing in just a few areas of expertise. Architects began doing just architectural work and stopped engaging with the engineers like they had previously. The engineers became more narrowly focused. It has set up dynamics that aren't productive such as putting adversarial positions together. The public and our clients are going to start demanding stronger connections. We have seen this in the last 15 to 20 years in design/build. It's an approach where groups come together. It does not solve all the problems because the mind-set remains that it's a process where multiple entities come together. I think in the near future we are going to see more true collaboration and truly collaborative teams working on integrated delivery. You will see a lot of commodity-type firms just swallowed up. The architectural firms that remain will be the ones who are differentiated, collaborative and open to solving more than just technical building needs. The advent of building information modeling technology has made it very simple for people to technically develop projects and documents. What people will focus on is using that tool for collaboration and not just as a technical tool. The technical side of this business is going to become more simplified through technology. Firms are going to be more focused on solving the needs of the clients. By firms, I'm talking about integrated firms that do construction and combine the work of sub-trades, engineers, architects and even the work of organizational developers. All those elements will come together. That is where the industry is heading.

FMI Quarterly: You are also involved in helping firms outside your own organization to realize their full potential in the marketplace. Tell us what you

have discovered it takes to help a company capture its vision, recreate its culture and become more successful?

Galati: It is interesting working outside of my firm to help other organizations. I've been fortunate to have some clients who are engineers and architects that want to transform or change their business. Being from the industry gave me the credibility to work with them.

The big key is helping them dial into who they really are and what they want to become. I spend quite a bit of time with them helping to change their mind-set. Let's start with the engineering business. Engineers have been conditioned over time to think a certain way, to put their practices into place a certain way and it's not necessarily fulfilling for them. Their work has been built around speed, efficiency and profit. A lot of engineers want to do something more meaningful. They want to do things where their services are valued, but they don't know how. They have been conditioned to think of themselves the way the marketplace thinks of them. The important thing is to help them to see that there could be something different

— that there is another future they could create. We work to expand their thinking to encompass more than one worldview. My desire is for these engineers to be able to envision their future and then to help them make decisions to move closer to that preferred future.

I always say, "You are going to get a future. The question is whether that future is the one you want." If you are not thinking about the future you want, then there's a pretty good How will you know what is right for you if you haven't had a chance to try everything?

chance you are not going to get it. Again, I spend time with people to understand who they are, where they're going and where they want to go. I learned that through practicing it in our firm, and I see tremendous benefit in using this with other firms. I've been able to use this skill set to help other organizations be better and be more aligned with who it is that they want to be.

FMI Quarterly: Craig, what advice would you give a new person just coming into the AEC industry?

Galati: Question everything. Don't just follow the established means and norms that firms work within. Experiment a lot. Don't be afraid. Now is the best time of your career to experiment since your mind is still open. Work for different firms, try different things and some day you will own your own firm. How will you know what is right for you if you haven't had a chance to try everything? ■

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